

Department for Enterprise and Internationalisation
Directorate-General for the Fight Against Counterfeiting Italian Patent and Trademark Office

## COUNTERFEITING: SCOPE, CHARACTERISTICS AND IN-DEPTH ANALYSES OF THE PHENOMENON

Final report





Department for Enterprise and Internationalisation

Directorate-General for the Fight Against Counterfeiting - Italian Patent and Trademark Office

### COUNTERFEITING: SCOPE, CHARACTERISTICS AND IN-DEPTH ANALYSES OF THE PHENOMENON

FINAL REPORT



Copyright

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Department for Enterprise and Internationalisation

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Since its inception, the Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office (DGLC-UIBM) has adopted measures to protect and promote Intellectual Property and to combat counterfeiting.

The DGLC-UIBM's long-term priority is to promote a critical review of current production and consumption models while providing strong, timely signals to protect the productive fabric against the threats and negative effects of counterfeiting, all of which is preceded by intensive data gathering and analysis, in full accord with European Union priorities.

In support of this aim, a method and a tool have been developed for detecting and monitoring anti-counterfeiting activities in the form of the IPERICO database, which collects data on seizures of counterfeit goods in Italy by the Customs Agency, Italian Tax Police and other law enforcement agencies.

In parallel, several in-depth analyses of the phenomenon have been undertaken both through structured consumer and business surveys and case studies, for example on the involvement of organised crime in the trafficking of counterfeit goods, in collaboration with a leading United Nations research institute.

This report on the "Counterfeiting: Scope, Characteristics and In-depth Analyses of the Phenomenon" represents another important step in the analysis process and a requisite for any reliable public anti-counterfeiting policy.

The report, written by the authoritative CENSIS foundation in collaboration with the Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office, continuing from the previous 2009 edition, sets out to provide a solid knowledge base on counterfeiting, in terms of its negative macroeconomic impact on Italy's economy. It offers a simple yet complete analysis of all notions concerning the regulatory context, negative impacts in economic and fiscal terms (total proceeds generated by counterfeiting, its negative effect on employment and on government finances as a result of lost direct and indirect tax revenue), and includes a special focus on a number of industries particularly affected by counterfeiting such as leather goods and footwear, cosmetics and design, as well as a focus on demand in some of the most representative cities.

Without entering into detail regarding the analyses carried out by CENSIS with the support of the working group of the Directorate-General, it is worth highlighting the "innovative" scope of one of the findings of the research, namely that the market for counterfeit goods mirrors other consumption trends.

This and other topics for consideration are offered to the general public, to those working in the sector and to the scientific community, so that research does not continue as an end in itself but as a requisite for action, that is, for combating counterfeiting as a severely debilitating force for any modern economy.

Loredana Gulino

Director General

This new edition of the Censis report, which has been coordinated by the Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office, has the merit of measuring the hidden part of the counterfeiting "iceberg" – a popular yet nonetheless apt metaphor for describing the phenomenon.

First and foremost the Censis report deserves praise for measuring counterfeiting in Italy at regular intervals, making data comparable over time and offering careful readers a broader understanding of the counterfeiting phenomenon, in order to gain greater awareness of its pervasiveness in our country's economy.

The report does not gloss over the microeconomic aspect, reserving particular attention for a number of industries. One of its most commendable focuses is on the design area, in this case represented by mid-to-high-end furnishings. Counterfeiting particularly affects this area and while it is no accident that a Committee dedicated to design has been established within the National Council, the implications of counterfeiting for this sector have rarely been addressed.

Equally interesting are the knowledge perspectives produced by surveys conducted among consumers of counterfeit products. They provide essential information, as they remove any doubts regarding the nature of the counterfeiting market; a market which by now is parallel to and even follows trends in markets for genuine goods. The results of the quantitative measurement of proceeds from counterfeiting are evidence of this. Common sense suggests that such proceeds would increase as a result of the economic crisis. However, on the contrary, they seem to have decreased.

The Censis report, through the up-to-date macroeconomic – and therefore not sectoral – data it contains, together with estimates of other macro-economic variables which are particularly significant at this moment in history such as the number of jobs lost in the legal economy or lost tax revenue, makes a valuable contribution, from which the National Anti-counterfeiting Council will draw useful information in order to pursue its core goals.

Daniela Mainini

President, National Anti-counterfeiting Council

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In recent years, the range of counterfeit goods has expanded to the point that there is no good that cannot be imitated and sold. Everything is copied, from clothing accessories to jewellery, footwear, designer items, toys, cosmetics, and even medicines.

Counterfeit goods must be considered a parallel economic sector, a competitor in the true sense of the word, with which companies are forced to contend and from which they must protect their market share.

The analyses and estimates of the economic value of counterfeiting conducted during the research presented in the following pages seem to show that the market for counterfeit goods, like other economic sectors, has also suffered the consequences of the economic recession of recent years, losing ground in terms of revenue, although to a much smaller extent than markets for genuine products.

In 2008 estimated total revenue from counterfeit goods was 7.1 billion euros. In 2010 it fell to 6.9 billion euros. If we carry this figure over to the official market, it is estimated that if legitimate products of the equivalent value had been sold over the same period, 13.7 billion euros of additional output would have been produced, 5.5 billion euros of value added generated and 110,000 full-time jobs guaranteed. In fiscal terms, bringing production of counterfeit goods back onto the legitimate market would mean additional revenue from direct and indirect taxation (including induced output) of 4.62 billion euros, or 1.74% of all government tax revenue.

However, producers of counterfeit goods do not follow the same rules as others and constitute unfair competition. They do not pay taxes, they make use of undeclared labour, they do not comply with product safety legislation, violate intellectual property rights and feed a long chain of criminal activity. Organised crime especially profits from this chain, using channels of commerce opened up by other forms of trafficking in order to dedicate themselves to this equally lucrative but far less risky activity.

The existence of such a flourishing market is made possible by the existence of significant demand on the part of consumers, who are completely indifferent to the fact that they are acting illegally, while being generally convinced that they are getting a bargain, as the genuine items are too expensive and are sold at prices far in excess of their true value.

In some cases, it is the need for status which drives consumers to purchase a fake that is virtually indistinguishable from the extremely costly genuine item, and which gives its owner the illusion of belonging to an exclusive circle. In other cases, consumers are attracted by the *opportunity of saving*, even when cheaper items are purchased.

Yet it is also ease of purchase which spurs consumers to choose the counterfeit item over the genuine one. One comes across fake goods on a daily basis. There is no need to search for them: it is enough to leave the house and walk to the local market. Or *fun* may be the trigger for purchasing them, especially if we are on holiday or with friends.

Increasing diversification of goods has gone hand in hand with a multiplication of sales channels. In addition to stalls, shops and street vendors, Internet is beginning to establish itself in Italy, representing a convenient, secure means (as it is not highly regulated and is difficult to monitor) of reaching a large number of consumers and selling counterfeit goods through e-commerce and online auctions, with low costs and above all the opportunity to conceal one's identity.

In the face of this growing phenomenon, and in response to requests by the European Union, much has been done to provide Italy with a legal and institutional framework capable of lending greater force to its prevention and anti-counterfeiting capacity.

Specifically, the innovations introduced by Law no. 99 of 23 July 2009, known as the *Legge Sviluppo* (Development Law), are significant. The law has made provision for important directives for stepping up protection of industrial property rights and modified a number of articles in Italy's Criminal Code.

Among other things, the Development Law of 2009 has:

- introduced more severe criminal penalties and the mandatory confiscation of goods for the crimes involving counterfeiting, altering or using trade marks, distinguishing marks, patents, models and designs (article 473 of the Italian Criminal Code) and of introduction into the country and sale of goods bearing counterfeit signs (article 474 of the Italian Criminal Code);
- introduced new aggravating circumstances, in particular for crimes committed systematically or by setting up means and organised activities;
- introduced two new types of crime designed to penalise the manufacture and sale of goods
  which infringe industrial property rights (article 517-ter of the Italian Criminal Code) and the
  counterfeiting of Protected Geographical indications or Designations of Origin for food
  products (article 517-quater of the Italian Criminal Code);
- removed the applicability of criminal penalties to *consumers who knowingly purchase* counterfeit goods, reducing the size of administrative fines and making it a potential educational tool for the consumers in police hands.

On 1 January 2009, as part of the Ministry of Economic Development, the *Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office* was created with the mission of supporting innovation and competitive capacity of Italian companies and the "Made in Italy" label on both the domestic and foreign markets, and to tackle counterfeiting, through strategies for preventing and combating counterfeiting.

In December of last year, the National Anti-counterfeiting Council (*Consiglio Nazionale Anticontraffazione*, CNAC) was formally established under the Ministry of Economic Development. CNAC's function is to give guidelines, impulse and ensure coordination of the actions undertaken by the various administrations concerned.

The widespread belief among professionals in the field is that two main objectives must be pursued for effective enforcement:

- Raising companies' awareness of the value of their industrial property, and their right/duty to defend it. In too many cases companies including medium-sized and large companies cannot take action against those who have copied their ideas because they have not registered their trade mark, either out of ignorance or negligence;
- Raising young people's awareness of the value of ideas and intellectual property, and the importance of defending them against imitations and misuse.



PART ONE

# THE REGULATORY AND INSTITUTIONAL CONTEXT

Counterfeiting and piracy
Counterfeiting in the Development Law
Directorate-General for the Fight Against
Counterfeiting – Italian Patent and Trademark Office
Data on seizures

#### PRELIMINARY REMARKS

Knowledge that has been acquired of the significance of counterfeiting and the enormous economic and social harm that it causes has lead to major efforts being made in recent years to provide Italy with a regulatory and institutional framework capable of strengthening its capacity to prevent and combat counterfeiting.

The results of these efforts and the current situation are presented below, with particular emphasis on the two pieces of legislation that seem to have done the most to strengthen Italy's anticounterfeiting policies.

Particular reference is made to the so-called *Development Law* of July 2009 and the establishment, under the Ministry of Economic Development, of the *Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office*.

Before discussing these pieces of legislation, it is necessary to give an overview of the public *subjects* that have specific *competencies* in terms of anti-counterfeiting and anti-piracy policies and initiatives (although the latter, despite hindering the proper functioning of the market and consumer protection with serious economic and social repercussions, is a different phenomenon which is clearly distinguished from the former, including under the legal system). These subjects are listed below.

Information and Publishing Department of the Presidency of the Council of Ministers: this department includes the Committee for the Protection of Intellectual Property (Comitato per la Tutela della Proprietà Intellettuale), established by Law no. 248/2000. Its task is to develop any necessary legislation and implemented targeted measures, to dialogue with professionals in the field in order to share codes of conduct, and to adopt anti-piracy actions and initiatives to combat piracy. In addition, in January 2009, the Technical Committee against Digital and Multimedia Piracy (Comitato Tecnico contro la Pirateria Digitale e Multimediale) was established to coordinate actions to combat the phenomenon and to develop and draw up anti-piracy proposals.

Department for European Policies at the Presidency of the Council of Ministers: pursuant to article 3 of Legislative Decree no. 303 of 30 July 1999, the Prime Minister makes use of this support structure for activities regarding the implementation of the European Union's general and sector-specific policies and commitments undertaken under its aegis, as well as for coordinating actions during the drafting stages of European Union legislation. Topics relating to intellectual and industrial property and protection of information in the internal market are the responsibility of the Office for the Implementation of Internal Market and Competition Policies, which one of whose main roles has been negotiating and implementing Council Directive 2004/48/EC on the enforcement of intellectual property rights, in addition to the role of national correspondent on issues concerning the implementation of the measures contained in said directive.

Ministry of Foreign Affairs: operating through Office III – Protection of Intellectual Property, Patents and Copyright and Anti-counterfeiting of the Directorate-General for Globalisation and Global Issues, the ministry is responsible for Italy's relations with all international organisations, in particular the World Intellectual Property Organisation, the European Patent Office and the Office for Harmonisation in the Internal Market.

**Ministry of the Interior**: coordinates domestic prevention and monitoring measures and crime suppression by the police.

**Ministry of Justice**: the ministry operates through the *Specialised Sections on Industrial and Intellectual Property* which deal with disputes over trademarks, patents, designs and copyright before the courts and the Courts of Appeal.

**Ministry of Economy and Finance**: the Italian Tax Police report directly to the Ministry.

**Ministry of Economic Development**: the *Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office* is part of this ministry and deals with patents, trade marks and industrial designs and contributes to establishing EU industrial property policies. On the basis of article 146 of the Industrial Property Code, the Ministry of Economic Development also has the power to order of its own motion the administrative seizure of counterfeit goods through the Prefect of the province in question.

Ministry of Agricultural and Forestry Policies: the ministry is responsible for Protected Geographical indications at the national, European and international level. In Italy this work is performed by the Central Inspectorate for the Protection of Food Quality and Fraud Suppression which also operates through its branch offices, and the State Forestry Corps (which, with the most recent reform of 2004, has acquired police duties also in the agri-food sector. The Carabinieri also have a Agricultural and Food Policy Command under the Ministry of Agriculture and Forestry Policies. Finally, the Ministry's Directorate-General for Agri-Food Development and Quality and Directorate-General for Community and International Market Policies collaborate actively in protecting Geographical Indications outside Italy.

Ministry of Health: the *Directorate-General for Medicines and Medical Devices* provides guidelines for the activities of the Italian Medicines Agency, forming together with it, the *Istituto Superiore della Sanità* and the Carabinieri *Nuclei Antisofisticazioni* (units appointed to investigate the adulteration of beverages and foodstuffs), the "Impact Italia" task force for combating pharmaceutical counterfeiting. The Carabinieri Command for the Protection of Health reports directly to the Ministry of Health.

**Ministry of Cultural Heritage and Activities**: the *Directorate-General for Book Heritage*, *Cultural Institutes and Copyright* carries out activities relating literary property and copyright and monitors the *Società Italiana Autori ed Editori* (SIAE, Italian Society of Authors and Publishers) together with the Presidency

of the Council of Ministers. *The Permanent Advisory Committee on Copyright*, established as part of SIAE's Copyright and Supervision Service IV, examines matters relating to copyright and advises the ministry with regard to copyright-related issues.

Italian Tax Police: A special police corps reporting directly to the Ministry of Economy and Finance; it is responsible for combating crimes of an economic nature such as counterfeiting of trade marks, violation of intellectual property rights and the marketing of products which do not comply with European and domestic safety standards. In order to ensure the proper functioning of economic relations and to protect consumers and companies, the corps is supported by the Special Trademark Protection Unit which has national status and conducts risk analyses, crosschecks data bases, acts as a liaison with other operational departments and assists them in their investigations. The Tax Police Corps are responsible for tracing fake good supply streams back to their origins: import channels, warehouses, storage, etc. The Tax Police have twelve officers based at diplomatic missions overseas and in another five countries, who work to protect government and community finances and combat violations of an economic and financial character.

**Customs Agency**: an Italian State agency whose tasks concern the circulation of goods and taxation matters related to international trade. It has the power to seize goods from non-EU countries suspected of violating an intellectual property right and to commence assessment procedures which can lead to goods being seized.

**Carabinieri Command for the Protection of Health**: the command reports directly to the Ministry of Health and through its *Nuclei Antisofisticazioni* (units appointed to investigate the adulteration of beverages and foodstuffs) works to combat adulteration and fraud in the areas of food and medical/health products.

Carabinieri Command for Agricultural and Food Policies: the command works in accordance with applicable laws and the directives of the Ministry of Agriculture, Food and Forestry Policies, under whose mandatory authority it operates. It is divided into three anti-fraud units (NAC, Nuclei Antifrodi Carabinieri) located in Parma, Rome and Salerno, which are responsible for the North, Centre and South of Italy respectively, and an Operational Coordination Unit (NCO, Nucleo di Coordinamento Operativo) based in Rome. It is responsible for fraud prevention and enforcement activities in the agricultural and agri-food sectors and to protect economic actors and consumers. It supports the ROS (Raggruppamento Operativo Speciale or Special Operational Group) and the Provincial Investigation Units (Nuclei Investigativi Provinciali) in the ain specific investigations especially at the national and international level; it develops shared intervention strategies with the Carabinieri Commands for the Protection of Health, the Environment and Labour.

**National Anti-Mafia Directorate**: the directorate coordinates investigations into counterfeiting when organised crime is involved at both the domestic and international level.

**AGCOM – Communication Guarantees Authority**: an independent authority called upon to monitor the telecommunications market; as part of its role of ensuring fair competition between providers it works to protect copyright in the computer and audiovisual industries.

Continuing our overview of the context in which anti-counterfeiting actions take place, Table 1 shows the main national regulations and the main changes introduced by Law no. 99/2009 and on which the next chapter will focus.

**AIFA – Italian Medicines Agency**: a body governed by public law which based on Ministry of Health guidelines carries out chemical, pharmaceutical, biological, pharmacological and toxicological assessments in order to ascertain the quality and safety requirements of all pharmaceuticals.

**CNAC – National Anti-counterfeiting Council**: an inter-ministerial body under the Ministry of Economic Development. Operational since December 2010, it is responsible for directing, promoting and coordinating strategic actions with all of the administrations involved in the fight against counterfeiting (11 ministries – Economic Development, Finance, Economy, Justice, Interior, Defence, Agricultural Policies, Cultural Heritage, Social Policy, Foreign Affairs, Health and Public Administration – and the Association of Italian Municipalities) with the ultimate goal of improving anti-counterfeiting measures globally at the national level (article 145 of the Italian Industrial Property Code, CPI).

Parliamentary Committee of Inquiry into counterfeiting and piracy in the commercial sphere: the committee was established on 13 July 2010 by a resolution of the Chamber of Deputies for the duration of the sixteenth legislature. It is tasked with building a definite, unambiguous knowledge base on counterfeiting so that it can be countered effectively and analysing legislation and best practices trialled in Europe.

**ICE – National Institute for Foreign Trade**: a public body whose overseas offices are where the IPR (*Intellectual Property Rights*) DESKS are located (in 10 countries around the world). These offices were established by the Ministry of Economic Development and tasked with providing advice for Italian companies abroad and monitoring brand protection and indications of origin. Under Law no. 214/2011 it took on the new name "*Agenzia ICE*".

**ISS** (*Istituto Superiore della Sanità*): a public body incorporating the *Pharmaceutical Department* which, through a team of experts, conducts research into the development of innovative analytical methods that can be applied to analysing counterfeit drugs and develops national strategies for combating pharmaceutical counterfeiting.

**SIAE** – Italian Society of Authors and Publishers: a public body responsible for copyright protection. It administers economic exploitation rights in the name and on behalf of its members.

Table 1. National legislation against counterfeiting and changes introduced by Law no. 99/2009 "Provisions for the development and internationalisation of companies, and on energy"

Regulations	Provisions	Main changes introduced by Law no. 99/2009
Industrial Property Code Legislative Decree no. 30 of 10 February 2005	A body of legislation that brings together and coordinates national and EU legislation in the industrial property field, in particular dictates the rules on the protection of trademarks and other distinguishing marks, designs, geographical indications, etc.	Law 99/2009 amends a number of articles of the Industrial Propert Code. Pursuant to article 19 of Law no. 99/2009, Legislative Decree no. 131 of 12 August 2010, amendments to Legislative Decree no. 30 of 10 February 2005 containing the Industrial Property Code pursuant to article 19 of Law no. 99 of 23 July 2009 was enacted containing amendments to the Industrial Property Code, updating its contents and harmonising it with community and international legislation.
Italian Criminal Code	The relevant articles are 473 (counterfeiting, changing or use of distinctive signs or trade marks or patents, models and designs), 474 (import and marketing of products with false signs), 475 (additional penalty), 514 (fraud against domestic industries), 517 (sale of industrial products with misleading signs), 517-bis (aggravating circumstances) and 518 (publishing of the sentence).	made by misusing industrial property), 517-quater (counterfeiting
Legislative Decree no. 231 of 8 June 2001 on the administrative liability of legal persons, companies and associations, including those without legal status	Regulates the liability of legal persons and companies, associations or entities without legal status which benefit from or have an interest in committing the offences.	Regulation of administrative penalties as provided for by Legislative Decree no. 231 of 2001 is extended by Law no. 99 of 2009 to include cases of counterfeiting, violation of "Made in it aly" brands or abuse of protection rights and copy right violations.
2004 Finance Law – Law no. 350 of 24 December 2003	Provides for the establishment and use of the "Made in Italy" label to support and promote Italian production and protect industrial property rights.	
Law no. 146 of 16 March 2006. Ratification and implementation of United Nations conventions and protocols against Transnational Organised Crime adopted by the General Assembly on 15 November 2000 and 31 May 2001	Article 9 authorises the Judicial Police, the National Police, the Carabinieri or the Tax Police to conduct covert operations in relation to certain crimes.	Law no. 99 of 2009 (in article 17, paragraph 1) extends authorisation to conduct covert operations in relation to crimes provided for by article 473 and 474 of the Criminal Code.
Decree Law no. 35 of 14 March 2005. Urgent provisions concerning the Action Plan for local socio-economic development	Extends the range of the subjects that are potential recipients of administrative sanctions including informed consumers (article 1, paragraph 7: administrative sanctions for "unwise purchasing" of counterfeit products).	Criminal penalties are no longer applicable to final consumers, and administrative penalties for knowingly purchasing counterfeit goods are reduced.
Law no. 633 of 22 April 1941. Protection of Copyright and Other Rights Connected With the exercise Thereof.	Regulates the protection of all intellectual property rights of a creative nature, irrespective of means or form of expression.	
Legislative Decree no. 286 of 25 July 1998. Consolidated Act of Provisions concerning immigration regulations and immigrant status	Article 26, paragraph 7-bis provides for the revocation of the permit and deportation for the offences set out in articles 473 and 474 of the Criminal Code and under the provisions of Title III, Chapter III, Section II of the Law on Copyrights.	
Decree Law no. 135 of 25 September 2009. Urgent provisions for the implementation of EU obligations and the enforcement of judgments of the European Court of Justice	Paragraphs 1-4 of article 16 introduce a regulation concerning the use of sales information which misrepresent the product as having been entirely manufactured in Italy, making provision of criminal penalties for the misuse of such information.	
EC Regulation no. 1383 of 22 July 2003	Regulates action by Customs Agencies with regard to goods suspected of violating certain intellectual property rights and	
EC Regulation no. 450/2008 of 23 April 2008	the measures to be taken against goods found to have violated such rights.	

Source: Censis

#### 1 - COUNTERFEITING AND PIRACY

In order to define and clarify the scope of the study the results of which are presented herein, a concise definition of key terms used in the Report is provided below.

#### Intellectual property rights

The terms *intellectual property* is used to indicate the broad, heterogeneous series of legal instruments which range from the protection of works which are the fruit of artistic creativity, such as works of literature, the visual arts, music and theatre, etc., which are all grouped together for brevity under the word "copyright" in order to protect distinguishing marks such as brands, companies, logos and geographical indications, through to the protection of technical and design innovations such as inventions, utility models and plant varieties. The latter two categories, the protection of distinguishing marks and the protection of technical innovation and design make up what is known as "Industrial Law".

According to article 36 of the consolidated version of the Treaty on the Functioning of the European Union, the term "may be applied to all industrial and intellectual property rights, and specifically to copyright, patents, trade marks, designs, utility models as well as designations of origin". The attribute "industrial" must be understood in the broadest economic sense, and as such also extends to trade.

Legislative Decree no. 30 of 2005 established the Italian *Industrial Property Code* (CPI), a consolidated act which gathers all legislation concerning patents, trade marks and other industrial property rights. Subsequently, Legislative Decree No. 131 of 13 August 2010 entered into force on 2 September 2010, harmonising the Code with EU and international legislation.

#### Patents for industrial inventions

A patent is a right that takes the form of a temporary monopoly to exploit a new invention with potential for industrial application that involves an inventive activity (article 45 of the Industrial Property Code).

The term *invention* indicates a solution to a technical problem that is not part of prior technical knowledge – in other words, a solution that is neither knowable nor obvious to an expert in the specific branch on the basis of existing technical solutions – and which may consist in a new product, a new process or an improvement on an existing product or process.

#### **Utility models**

Utility models are new models – which may consist of specific conformations, arrangements, configurations or combinations of parts, and which confer a specific degree of efficiency or ease of application or use on machines or parts thereof, instruments, tools or objects of general use.

#### Trade marks

A trade mark is a sign that allows a company's products and services to be identified, distinguishing them from those produced and/or distributed by other companies.

All new signs that can be represented graphically – specifically words, names of people, graphics, letters, numbers, sounds, product shapes or packaging and colour combinations or shades – may be registered as trademarks (on condition that they are capable of distinguishing one company's goods or services from those of other companies).

#### Designs

Design is the aesthetic or decorative appearance of a product (or part thereof), consisting specifically of characteristics of its lines, contours, colours, shape, surface structure or materials themselves.

Article 31 of the Industrial Property Code establishes that a design may be registered only if it has novelty and individual character. However, characteristics of a product's appearance may not be registered as a design if they are dictated solely by the technical function of the product itself (i.e. they must be an arbitrary choice of the designer and a mere technical requirement) or if they must be reproduced in exactly such a way in order to enable the product to be joined to, connected with, incorporated within or placed in contact with another product.

#### Geographical Indications

Geographical indications (regulated by articles 29 ff. of the Industrial Property Code) consist of indications that guarantee the origin of the product from a particular area with which consumers traditionally associate consistent quality deriving from human and environmental factors.

#### - PDO

The term *Protected Designation of Origin* (PDO) can be used to distinguish foodstuffs whose peculiar characteristics depend essentially or exclusively on the area in which they are produced. Specifically, production and processing must all take place within a defined geographical area. A company producing goods with a PDO are required to comply strictly with the production rules and technical specifications set out in the production specification, which is guaranteed by an inspection body whose operations are in turn regulated by law.

#### - PGI

The term *Protected Geographical Indication* (PGI) can be used to distinguish foodstuffs for which a specific quality, reputation or other characteristic derives from their geographical origin and the production and/or processing of which takes place in a given

geographical area. To obtain a PGI, at least one of the company's production processes phases must be carried out in a specific area without in any case prejudicing compliance with production rules set out in the relative production specification, which is guaranteed by an inspection body.

#### - TSG

The Traditional Speciality Guaranteed (TSG) mark protects foodstuffs characterised by traditional compositions or production methods. In this case, the product's specific character derives exclusively from the production method used and in fact is not necessarily produced in a given area.

#### Counterfeiting

Internationally the word "counterfeiting" is used differently from country to country and the related context. In its glossary, the World Trade Organisation (WTO) endorse the following definition of counterfeiting, which the OECD takes up and included in its *Glossary of Statistical Terms* (2002):

Unauthorised representation of a registered trademark carried on goods identical or similar to goods for which the trademark is registered, with a view to deceiving the purchaser into believing that he/she is buying the original goods.

To explain what counterfeiting is, we have chosen the definition contained in Council Regulation (EC) no. 1383 of 22 July 2003, according to which counterfeit goods are:

- goods, including packaging, bearing without authorisation a trademark identical to the trademark validly registered in respect of the same type of goods, or which cannot be distinguished in its essential aspects from such a trademark, and which thereby infringes the trademark-holder's rights;
- any trademark symbol (including a logo, label, brochure, etc.), even if presented separately, if it is found in the same situation as described above;
- packaging materials bearing the trademarks of counterfeit goods, even if presented separately, found in the same situation as described above.

In actual fact, regardless of the definitions, in recent years the term has increasingly taken on broader connotations and meanings in parallel with the proliferation of all kinds of goods that are subject to being faked.

In a great deal of cases the three types of counterfeiting are conducted simultaneously: for example, a toy manufactured using toxic or otherwise hazardous materials (counterfeit product identity), bearing the mark of a company which complies with all safety standards (counterfeit company identity) and sold in a package bearing the counterfeit trademark (counterfeit packaging).

An age-old, widespread phenomenon, counterfeiting increasingly assumes the form of a veritable criminal industry, with serious economic and social repercussions and a significant capacity to impact the correct functioning of the domestic market and consumer safety.

#### Copyright

Law no. 633 of 22 April 1941, derived directly from international treaties and subsequently amended and supplemented by the implementation of 12 directives and additional reform measures, establishes the protection of original intellectual works of a creative character in the fields of literature, music, the graphic arts, architecture, theatre and cinema.

Protection consists in acknowledging a series of exclusive rights in relation to economic exploitation of the work (rights of property) and personality protection rights (moral rights), which as a whole constitute "copyright". These rights pertain first and foremost to the author, who is the creator of the intellectual work, around which the central core of the regulations set out by current legislation is developed. In order to be considered thus and to qualify for the protection provided by law, the intellectual work must be characterised by the creativity requirement: that is, by the originality that distinguishes it from all other intellectual works. An author's copyright over his work comes into being at the moment of its creation (original acquisition), as no administrative formalities need to be followed required in order to establish copyright over his/her work. As a result, relevant copyright legislation governs the evidential phase of this "paternity" relationship or, in any case, the subject's ownership of the work.

This legislation also regulates so-called "connected rights", which the law grants other connected or analogous subjects such as artists, interpreters or performers, producers of phonograms, films and audio-visual works, and radio and television stations: i.e. those that offer the work for public consumption and also rights of property and moral rights (artists, interpreters and performers).

The main economic exploitation rights granted to authors are:

- Right of reproduction, namely the right to multiple copies of the work with any means;
- Right of performance, representation, recitation or public reading of the work, i.e. the right to present the work to the public under various forms of communication;
- Broadcasting right, the right to broadcast the work remotely (via radio, television, satellite
  or cable, computer networks, etc.).
- Right of distribution, i.e. the right to market the work;
- Right to create derivative works, i.e. the right to make changes to the original work, to transform it, adapt it, reduce it, etc.

Holders of connected rights also enjoy exclusive rights which are broadly comparable to those granted to the author, except for a number of characteristics dictated by their specific nature.

In addition, it should be emphasised that economic exploitation rights last for the lifetime of the author and up to 70 years after his/her death. Once this period has elapsed, the work enters the "public domain". For collaborative works, copyright protection expires in relation to the death of the last surviving author.

Connected rights also have a specific duration, which differs according to the category of rights in question.

#### **Piracy**

An extremely important part of all countries' – and therefore also Italy's – legislation is dedicated to copyright protection and related penalties in the various cases in which copyright is subject to forms of violation. Such legislation ranges from the provision of criminal sanctions and civil measures to core legislation which provides for substantial penalties in relation to various forms of misuse of intellectual property, i.e. conduct which can complement misdemeanours, but which to a large extent also involves fully-fledged crimes, punishable with severe fines and imprisonment.

The term *misuse* may indicate use without authorisation on the part of the respective owners or in their name and on their behalf on the part of collecting societies (for copyright and connected rights) which administer their economic rights. Clearly the nature and extent of the civil, administrative or criminal sanction depend on the extent and nature of the violation, also taking into account, in the latter case, the purpose of the violation, for example – in the most serious cases – large-scale profiteering in the context of organised crime.

Piracy can be divided conceptually into two broad areas: off-line and on-line piracy.

Off-line or "physical" piracy is the production, marketing and misuse of products containing intellectual property without the required authorisations. It involves standard media such as CDs, DVDs and the like, containing musical and cinematographic works, software programs, etc., and is a phenomenon which the police make major efforts to control in Italy. In this regard the authentication and warranty system constituted by the SIAE (Italian Society of Authors and Publishers) mark placed upon media in accordance with specific legislation plays an important role in protecting authors and consumers.

On-line piracy is generally defined as the misuse, in various forms and manners, of works circulating on computer networks. As things stand, the phenomenon is widespread, because current legislation in Italy, as in other countries, the European Union and internationally, has not yet succeeded

in developing regulatory frameworks that establish, first of all, the liability of telecommunications operators in their various capacities and roles, and as a result the means of applying different forms of which effectively satisfy the copyright owners of content circulating on the Internet

#### 2. COUNTERFEITING IN THE DEVELOPMENT LAW

The innovations introduced by Law no. 99 of 23 July 2009, known as the Development Law – which in addition containing a set of strategic rules for Italy's development and competitiveness, provides important guidelines for stepping up the fight against counterfeiting – are very significant.

Decisive changes have been made to criminal legislation in order to strengthen the protection of industrial property and the "Made in Italy" label through the reformulation of a number of articles in the Italian Criminal Code, the introduction of new offences and changes to rules concerning confiscation.

Specifically, as shown in Table 2, the legislation *introduced more severe penalties* for the following offences:

- Counterfeiting, alteration or use of trade marks or distinctive signs, or patents, models and designs (article 473 of the Italian Criminal Code), which are punishable by six months to three years in prison and a fine of between 2,500 and 25,000 euros for the offences of counterfeiting, alteration or use of domestic or foreign trademarks or distinguishing marks; more stringent penalties apply in the case of comparable offences concerning domestic or foreign patents and industrial designs, with imprisonment from one to four years and fines of between 3,500 and 35,000 euros;
- Introduction into the country and sale of goods bearing counterfeit signs (article 474 of the Italian Criminal Code). Under the new legislation, introducing into the country industrial products with trade marks or other distinguishing marks, whether domestic or foreign, counterfeit or altered, is punishable with one to four years in prison and a fine of between 3,500 and 35,000 euros, while possessing for sale, selling or placing on the market such products is punishable with up to two years' imprisonment and a fine of up to 20,000 euros;
- Sale of industrial products with misleading marks (article 517 of the Italian Criminal Code):
  the law provides for imprisonment of up to two years and a fine of up to 20,000 euros for
  selling or placing on the market works or industrial products with names, trade marks or
  distinguishing marks designed to mislead consumers with regard to the product's origin,
  source or quality.

Also in relation to crimes against industry and trade, the "Development Law" introduces *two new offences* designed to punish:

• Manufacture and sale of goods misusing industrial property rights (article 517-ter of the Italian Criminal Code), which is punishable with up to two years for manufacturing, importing

or selling goods made by misusing or violating an industrial property right, subject to the application of Articles 473 and 474 of the Criminal Code;

• Counterfeiting geographical indications or designations of origin for agri-food products (article 517-quater of the Italian Criminal Code), which is punishable by up to two years' imprisonment and a fine of up to 20,000 euros for counterfeiting or altering geographical indications or designations of origin for agricultural products.

Awareness that the counterfeit goods market is increasingly linked to organised crime, for which counterfeiting provides a major source of revenue and a means of recycling capital acquired illegally back into the legitimate economy, has led to further, substantial changes in legislation by introducing measures for the counterfeiting offences that are similar to measures used to effectively combat criminal organisations.

This is the case for the mandatory confiscation of goods, the granting of special police powers, and the aggravating circumstance introduced for systematic offences or offences committed through the establishment of organised means and activities, which are now subject to more severe punishments.

In particular, the new Development Law introduces article 474-bis, which for the offences referred to in articles 473 and 474 of the Italian Criminal Code establishes the mandatory confiscation of goods or of the things used to commit the offence (machinery, premises, equipment etc.) and of the things that constitute its scope, product or profit. In cases where it is not possible to confiscate goods and proceeds directly connected to the counterfeiting offences, the court may order *confiscation by equivalent*, that is, the confiscation of goods belonging to the offender with the same value as the profit.

Similarly, in line with the provisions for Mafia-related crimes, Law no. 99 of 2009 (*article 17*, paragraph 1) extends a number of special police investigation techniques, such as undercover operations, to the crime of counterfeiting.

Article 474-ter introduces the aggravating circumstance of systematic commission of the offences referred to in articles 473 and 474 of the Italian Criminal Code through the establishment of organised means and activities, which is punishable in such cases with from two to six years' imprisonment and a fine of between 5,000 and 50,000 euros. The desire to strike against what can be considered fully-fledged criminal counterfeiting enterprises is clear.

With regard to legislation on *liability attributable to consumers who knowingly purchase* counterfeit goods, which caused such uproar at the time of its introduction and which as a result of the serious difficulties in applying the excessive penalty (of up to 10 thousand euros) and the criminal implications was ultimately not applied, the reform, in addition to and removed the applicability

of criminal penalties to the final consumer and reduced the size of administrative fines to between 100 and 7,000 euros, making it a potential educational tool for the consumers in police hands, in particular local police.

Educating and raising awareness among consumers is a particularly important, sensitive aspect in the area of anti-counterfeiting strategies, since consumers of counterfeit goods lack a real awareness of the serious implications that their purchase entails. However, there is a widespread perception, among consumers, that purchasing counterfeit goods is an excusable infringement, a habit which for many forms part of their usual purchasing patterns.

Finally, the Development Law establishes (article 19, paragraph 10 ff.) the National Anticounterfeiting Council (CNAC), which is already provided for by article 145 of the Industrial Property Code, as a further strategic anti-counterfeiting tool, which will be discussed in the following chapter.

Table 2. Penalties for counterfeiting-related offences. Changes introduced by

Law no. 99 of 2009

Article 473, Criminal Code (counterfeiting, alteration or use of trade marks or

distinguishing marks, or of

patents, models, designs)

counterfeit signs)

Regulation

Up to three years' Imprisonment and a fine of up to 2,065 euros for the offences of counterfeiting or altering trade marks or distinguishing marks and using counterfeit or altered trade marks; the same punishment for the offences of counterfeiting or altering industrial patents, designs and models or using counterfeit or altered industrial patents, designs and models.

Prior to Law no. 99 of 2009

Article 474. Criminal Code (introduction into the country and sale of goods bearing

Up to two years' imprisonment and a fine of up to 2,065 euros for introducing into the country in order to sell. possess for sale or place on the market intellectual works or industrial products bearing counterfeit or altered trade marks or distinguishing marks.

Article 517, Criminal Code (sale of industrial products with misleading signs)

Up to one year's imprisonment up to one year and a fine of up to 20 thousand euros for offering for sale or otherwise placing on the market intellectual works or industrial products bearing domestic or foreign names, trade marks or distinguishing marks designed to mislead the buyer about the origin, source or quality of the work or product.

Article 1, paragraph 7 of Decree Law no. 35 of 14 March 2005 (converted into Law no. 80 of 14 May 2005)

Except in the case of criminal offences, a fine of between 500 and 10.000 euros for purchasing or accepting items which because of their quality, the condition of the person supplying them or their price would lead the person purchasing or accepting them to suppose that legislation regarding to suggest that they are has violated the rules of origin and provenance of products and industrial property. Between six months and three years' imprisonment and a fine of between 2,500 and 25,000 euros for the offences of counterfeiting or altering trade marks or distinguishing marks and for the offence of using counterfeit or altered trade marks or distinguishing marks; between one and four years' imprisonment and a fine of between 3,500 and 35,000 euros for the offences of counterfeiting or altering industrial patents designs and models and for the crime of using counterfeit or altered industrial

Following Law no. 99 of 2009

Between one and four years' imprisonment and a fine of between 3,500 and 35,000 euros for introducing products with counterfeit marks into Italy for profit motives; up to two years' imprisonment and a fine of up to 20 thousand euros for possessing for sale, placing on sale or otherwise placing on the market for profit motives

New articles added:

patents, designs and models.

474-bis (confiscation)

474-ter (aggravating circumstances)

474-quater (extenuating circumstances).

Up to two years' imprisonment and a fine of up to 20,000 euros for offering for sale or otherwise placing on the market intellectual works or industrial products bearing domestic or foreign names, trade marks or distinguishing marks designed to mislead the buyer about the origin, source or quality of the work or product.

#### New articles added:

517-ter (manufacture and sale of goods realized by usurping industrial property)

517-quater (counterfeit geographical indications or designations of origin for food products)

517-d (extenuating circumstances).

The applicability of criminal penalties to the final consumer's conduct is removed. Administrative fines of between 100 and 7,000 euros for the end purchaser who acquires in any way items which because of their quality, the condition of the person supplying them or their would lead the person purchasing or accepting them to suppose that legislation regarding to suggest that they are has violated the rules of origin and provenance of products and industrial property.

## 3. DIRECTORATE GENERAL FOR THE FIGHT AGAINST COUNTERFEITING – ITALIAN PATENT AND TRADEMARK OFFICE

The major innovations introduced by Law no. 99 of 2009, which it is hoped will produce concrete, positive results, are also the result of the work and the contribution of *Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office* which as of 1 January, 2009, pursuant to Presidential Decree no. 197 of 28 November 2008 concerning the reorganisation of the Ministry of Economic Development, has been placed under its Department for Enterprise and Internationalisation, which is part of the latter.

The Directorate-General is not a new body, as it has inherited the functions formerly performed by *Italian Patent and Trademark Office* under the same Ministry, as well as the *High Commission to Combat Counterfeiting*, a body constituted by Law no. 80 of 14 May 2005 with the task of coordinating monitoring functions related to the violation of industrial and intellectual property rights and monitoring activities to prevent and suppress counterfeiting, and abolished by Decree Law no. 112 of 2008.

The intervention in question is an innovative one, which has led to the creation of a *single strengthened entity* compared with those whose functions it has assumed.

The mission of the Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office is therefore twofold:

- on the one hand to support innovation and competitiveness of Italian companies and of Italian-made goods on the domestic and foreign markets, first and foremost by ensuring ease of access to the Industrial Property system;
- on the other hand to combat counterfeiting through coordinated action which includes a stronger regulatory framework, a new and more effective strategic direction, and coherent, well-defined operations to prevent and combat counterfeiting.

This dual mandate stems from the consideration that protecting Italian companies with a policy of promoting their intangible assets while increasing their awareness of and encouraging them to protect their industrial property rights cannot but be the necessary prerequisite for any anti-counterfeiting strategy.

Hence the Directorate-General's commitment to fostering and sustaining an industrial property culture ever more effectively, with direct assistance in Italy and abroad, and mechanisms for encouraging the filing of patents and registration of trade marks aimed especially at small and medium-sized enterprises: a commitment which may in part help to stem the phenomenon of misuse of intellectual property which threatens Italian enterprises' competitiveness at its root.

Complementary to this commitment is the Directorate-General's role in preventing and combating counterfeiting which it performs through a series of activities, including:

- steering and promoting anti-counterfeiting policies;
- systematically monitoring counterfeiting systems and methods with a view to constantly updating anti-counterfeiting systems and methods;
- collecting data held by the competent authorities, trade associations and companies concerned regarding the fight against counterfeiting;
- managing a database (IPERICO), which gathers and standardises data on seizures carried out by the Customs Agency, Tax Police, Military Police, National Police and Municipal Police, analysing the data and preparing annual reports on trends in the phenomenon;
- initiatives to raise awareness, inform and educate consumers in order to develop collective awareness of issues relating to industrial and intellectual property rights, their protection and combating counterfeiting;
- link-up initiatives with other Directorates-General under the Ministry of Economic Development and other Ministries as well as with the police, the Customs Agency and other public bodies involved in the fight against counterfeiting.

The Directorate-General for the Fight Against Counterfeiting – Italian Patent and Trademark Office also acts as technical secretariat to the CNAC, the National Anti-Counterfeiting Council, which is based at the Ministry of Economic Development (Table 3).

The CNAC is the place where the actors involved in various ways in the fight against counterfeiting link up and coordinate their activities: first, the public administration at central level (through the eleven ministries that are members) and the local public administration bodies (through ANCI, the National Association of Italian Municipalities, also a CNAC member), and also the business and consumer associations represented in the Council's Permanent and Theme-based Advisory Committees.

The CNAC's role is to progressively bring together the strategic actions implemented by several administrations under a unified framework, and to give further impetus and direction to national policies in the fight against counterfeiting.

#### Table 3. The National Anti-counterfeiting Council – CNAC

CNAC is the inter-ministerial body provided for by article 145 of the Industrial Property Code (*Codice di Proprietà Industriale*, CPI) with the tasks of directing, promoting and strategically coordinating initiatives undertaken by all administrations in the fight against counterfeiting, in order to improve the overall anti-counterfeiting work conducted at the national level.

Established by article 19, paragraph 10 ff. of Law no. 99 of 2009, CNAC was formally instituted on 22 December 2010 by the then Minister of Economic Development, Paolo Romani, who appointed Daniela Mainini to preside over it

Members of CNAC include 11 Ministries (Economic Development, Economy and Finance, Justice, Interior, Defence, Agriculture, Culture, Social Policy, Foreign Affairs, Health and Public Administration) and the Association of Italian Municipalities (Associazionie dei Comuni Italiani, ANCI). Its members participate in the council's work through their formally appointed representatives.

In the first few months following its institution, the council focused on developing *governance* mechanisms aimed at encouraging dialogue and cooperation between all actors (institutions and associations) – in addition to the members listed above – concerned with combating counterfeiting.

Specifically, two Permanent Advisory Committees were established within the council, representing the police and industry, both with strategic support functions:

- The Permanent Multi-agency Advisory Committee, which brings together law enforcement agencies and institutions: Guardia di Finanza (Italian Tax Police), Carabinieri, local/municipal police forces, Polizia Postale (Postal Police), Corpo Forestale dello Stato (State Forestry Corps), Agenzie delle Dogane (Customs Agencies), and the Ispettorato Centrale della tutela della Qualità e Repressione Frodi dei prodotti agroalimentari (Central Inspectorate for the Protection of Food Quality and Fraud Suppression):
- The Permanent Advisory Committee of Industry and Consumers, which brings together the following trade associations and consumer representation groups: Confederazione Italiana Agricoltori, Coldiretti, Confagricoltura, Confartigianato, Confapi, Confcommercio, Confesercenti, Confindustria, CNA, Unioncamere and CNCU-Consiglio Nazionale dei Consumatori e degli Utenti.

A group of legal experts specialising in defending intellectual property rights and the fight against counterfeiting has also been set up in order to support the Presidency at a strategic level.

At a more operational level, 13 Subject Committees have been set up in order to examine in more detail the impact of counterfeiting in specific industries (agri-food, design, electronics, pharmaceuticals and cosmetics, fairs, toys, engineering, fashion/textiles/clothing accessories, artworks, piracy and sport) or regarding cross-cutting themes (Internet, anti-counterfeiting devices), and to help develop appropriate lines of action..

To this end, between 14 September and 4 October 2011 the various Theme-Based Advisory Committees worked to identify priority actions regarding the fight against counterfeiting and the resulting action proposals. The results of this work were published in a volume and shared with all council participants.

More than 150 experts appointed by over 70 bodies, associations and institutions took part in identifying priorities and relative action proposals. They were brought together for the work by a coordinator for each Theme-based Committee appointed by CNAC's president or selected by experts taking part.

Source: Censis

#### 4. DATA ON SEIZURES

Every day a very large number of counterfeit goods are produced, transported and sold all over the world.

The actual number of these goods is unknown, since they are the product of illegal activities that leave no trace, except when they are intercepted by customs authorities or police as part of operations to prevent and combat counterfeiting.

Although data on seizures provide only a proxy measurement of the actual size of the phenomenon, they should be analysed with particular attention as they make it possible to learn about and monitor qualitative and quantitative trends in counterfeit goods, their origin, the routes that they follow and their final destination.

For this reason, Italy has long made efforts to harmonise the various data sources on seizures, since several organisations operate in the field of preventing and combating counterfeiting: the Customs Agency, the Tax Police, the Carabinieri, the National Police and Local/Municipal Police forces.

Specifically, the Ministry of Economic Development has set up a database, IPERICO ("Intellectual Property-ELaborated Report of the Investigation on Counterfeiting"), which gathers data from various sources into an integrated database and carries out an initial harmonisation process on them. It is not yet possible to make all available data "interface" with each other, and harmonisation has only been completed with reference to the seizures made by the Tax Police and the Customs Agency, which are engaged in anti-counterfeiting activities in Italy and at its borders.

A number of incongruities in the Carabinieri, National Police and Local/Municipal Police databases (which through the Ministry of the Interior's Criminal Analysis Service pertain to the same statistical survey model and converge in the SDI – Criminal Investigation System database) have prevented them from being integrated with other forces' databases as yet.

These elements essentially concern:

- The lack of distinction between seizures carried out for "counterfeiting" offences and "copyright violation" offences, which are aggregated at the source;
- The lack of available data on the "number of seizures" in relation to the number of "items seized".

#### 4.1. Tax Police and Customs Agency

Harmonisation of the Customs Agency and Tax Police databases has led to the creation of a single database which merges data produced by both organisations and offers a complete picture of activities to stem the flow of counterfeit goods into and out of Italy.

Overall, in the three years from 2008-2010, over 56,000 seizures were carried out, with over 174,000,000 counterfeit items seized: an average of over 3,000 items per seizure (Table 1).

Table 1. Seizures and number of items seized for counterfeiting offences(\*) by Tax Police and Customs Agency, years 2008-2010 (absolute values and percentage changes)

Seizures	2008	2009	2010	Total	% change 2008-2010
Number of seizures	18,041	19,683	18,331	56,055	1.6
Number of items seized	42,056,701	68,142,885	64,008,000	174,207,586	52.2
Average size of seizures	2,331	3,462	3,492	3,108	49.8

Source: Censis, based on IPERICO (DGLC-UIBM) data

An examination of the figures for three years in question, considering that the sharpest increase in the number of counterfeiting-related seizures was recorded in the early 2000s, followed by a stabilisation, then 2009 can be considered an exceptional year, in which a significant increase in the number of seizures and goods seized took place, and did not spark a growing trend; on the contrary, the 2010 figures are broadly in line with those for 2008.

Overall, during the three years the number of seizures carried out by the Customs Agency and Tax Police rose by 1.6%, from 18,041 in 2008 to 18,331 in 2010, while a more substantial increase, 52.2%, was seen in the number of items seized, from 42 million in 2008 to 64 million in 2010. The result is that the *average number of items seized* increased over the three years, from 2,331 in 2008 to 3,492 in 2010, indicating *an intensification of anti-counterfeiting activities* on the part of the various bodies concerned.

The geographical distribution of seizures carried out over the three years in question shows that the phenomenon is particularly concentrated in certain regions, with an absolute preponderance of seizures in the Lazio region (12,156 seizures, more than one fifth of the national total), followed by Lombardy (8,664, representing 15.5% of the total), with large metropolitan areas constituting an important market for counterfeit goods (Table 2).

A smaller yet still significant number of seizures were carried out in Campania (6,760, 12.2% of the total), Puglia (5,358, 9.6%), Tuscany (3,865, 6.9%) and Liguria (3,696, 6.6%). Overall, the top six regions were the scene of more than 70% of the seizures carried out on the domestic front.

Table 2. Number of seizures<sup>(1)</sup> for counterfeiting offences by Customs Agency and Tax Police, by region. 2008-2010 (absolute and percentage values)

Region	absolute value	%
azio	12,156	21.7
_ombardy	8,664	15.5
Campania	6,760	12.1
Puglia	5,358	9.6
Гuscany	3,865	6.9
Liguria	3,696	6.6
Veneto	2,746	4.9
Sicily	2,600	4.6
Emilia Romagna	1,950	3.5
Marche	1,534	2.7
Calabria	1,514	2.7
Sardinia	1,418	2.5
Piedmont	1,185	2.1
Abruzzo	864	1.5
Basilicata	490	0.9
Friuli	424	0.8
Molise	310	0.6
Jmbria	291	0.5
Γrentino	201	0.4
Aosta Valley	29	0.1
Гotal	56,055	100.0

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

The number of items seized during operations is closely linked to the number of seizures. In this case, too, Lazio is first (with over 40 million items, 23.1% of the total), followed by Campania and Lombardy (both with over 30 million items). Next is Tuscany, with a significantly lower figure of just over 15 million items seized, closely followed by Liguria, with 12 million items seized (Table 3).

Table 3. Number of items seized(\*) for counterfeiting offences by Customs Agency and Tax Police, by region. 2008-2010 (absolute values)

Region	absolute value	%
Lazio	40,324,302	23.1
Campania	31,200,860	17.9
Lombardy	30,220,164	17.3
Tuscany	15,268,236	8.8
Liguria	12,202,127	7.0
Puglia	8,092,160	4.6
Calabria	7,518,661	4.3
Sicily	7,482,878	4.3
Marche	6,501,920	3.7
Veneto	3,007,959	1.7
Emilia Romagna	2,940,465	1.7
Piedmont	2,660,738	1.5
Friuli	2,490,232	1.4
Trentino	2,371,842	1.4
Sardinia	1,105,424	0.6
Abruzzo	352,435	0.2
Aosta Valley	268,924	0.2
Basilicata	104,946	0.1
Umbria	63,838	0.0
Molise	29,475	0.0
Total	174,207,586	100.0

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

In Calabria, Sicily and Marche too, anti-counterfeiting activities led to the seizure of a considerable number of counterfeit goods: approximately 7 million in Calabria and Sicily, and over 6.5 million in Marche.

It is interesting to note that some regions, despite not recording a large number of seizures, were the scene of major operations which led to several thousand items being seized. An example is Trentino, where only 201 seizures, 0.4% of the total, were carried out, yet with over 2 million items, or 1.4% of the total, seized (an average of almost 12,000 items per seizure); Friuli also stands out, with just 424 seizures (0.8% of the total) which nonetheless led to the seizure of nearly two and a half million counterfeit items (1.4%), an average of nearly 6 thousand items per seizure.

If the type of goods seized over the last three years is analysed, it is evident that *clothing* accessories (bags, belts, wallets, etc.) and *clothing* are the *product category most heavily* affected by counterfeiting; more than 56% of total seizures during the three years in question regarded one of these types of good. Specifically, 20,587 seizures of clothing accessories were made, 36.7%, of the total, while the figure for clothing was 11,701 (Table 4).

In addition to these, the period 2008-2010 saw a high number of seizures of footwear (8,112, over 14% of the total), followed by eyewear (3,466 or 6.2%), and watches and jewellery (3,303 or 5.9%).

A large number of seizures also involved electrical equipment, totalling 2,357 over the three years.

Although three years is a limited timeframe for evaluating possible trends underway, it may be noted that it was above all the number of seizures of electrical and computer equipment which grew constantly over the period: indeed, seizures of the former rose by 133.5% while for the latter the figure was 121.3%. An increase, albeit smaller, was recorded in the number of seizures involving product categories such as toys and games (58.4%) and watches and jewellery (49.3%).

Seizures of footwear, on the other hand, showed the opposite trend, falling by 33.4%, as did eyewear, seizures of which fell by 25.1%.

Table 4. Number of seizures<sup>(\*)</sup> for counterfeiting offences by Tax Police and Customs Agency, by product category. 2008-2010 (absolute and percentage values)

Product category	2008	2009	2010	Three-year total	% change over three years	% change 2008-2010
Clothing access ories	6,914	7,287	6,386	20,587	36.7	-7.6
Clothing	3,724	4,094	3,883	11,701	20.9	4.3
Footwear	2,828	3,401	1,883	8,112	14.5	-33.4
Eyewear	1,338	1,126	1,002	3,466	6.2	-25.1
Watches and jewellery	867	1,142	1,294	3,303	5.9	49.3
Electrical equipment	489	726	1,142	2,357	4.2	133.5
Toys and games	238	311	377	926	1.7	58.4
CDs, DVDs, audio and video cass ettes	84	100	100	284	0.5	19.0
Computer equipment	61	76	135	272	0.5	121.3
Perfume and cosmetics	54	64	53	171	0.3	-1.9
Other goods	1,444	1,356	2,076	4,876	8.7	43.8
Total	18,041	19,683	18,331	56,055	100.0	1.6

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

An analysis of the number of *items seized by product category* shows that – particularly for some of them – large quantities were seized during the three-year period.

Although clothing-related items (i.e. clothing, clothing accessories and footwear) remained those most frequently seized by police (overall representing more than half of all goods seized), seizures of toys and games and of cosmetics and perfumes led to the seizure of 23 million items in the former category (approximately 3,300 seizures, an average of over 25,000 items seized) and over 5

million items in the latter (just 171 seizures, an average of nearly 30,000 items per seizure); these large cargos – which fortunately were intercepted – were ready to flood the Italian market and put consumers' health and safety at risk (Table 5).

Large-scale operations, which led to the seizure of large quantities of goods in a single seizure, makes an analysis of trends for product categories over time fairly meaningless: major discontinuities in data from year to year should not be interpreted as a trend but rather as the result of any large-scale seizures carried out.

Table 5. Number of items seized<sup>(\*)</sup> for counterfeiting offences by Tax Police and Customs Agency, by product category. 2008-2010 (absolute values, percentage values and percentage changes)

Product category	2008	2009	2010	Three-year total	% change over three years	% change 2008-2010
Accessories	8,257,589	29,983,001	4,975,004	43,215,594	24.8	-39.8
Clothing accessories	1.1837.392	12,753,112	12,781,043	, ,		8.0
Toys and games	1,499,532	11,284,521	10,406,511	, ,		594.0
Footwear	5,529,665	4,143,310	1,807,529	, ,		-67.3
Perfumes and cosmetics Electrical equipment	662,157	1,251,725	3,108,766	, ,		369.5
	1,629,368	1,197,981	681,837	3,509,186	2.0	-58.2
Eyewear	1,387,536	699,188	542,757	2,629,481	1.5	-60.9
Watches and jewellery	407,220	326,568	1,356,597	2,090,385	1.2	233.1
CDs, DVDs, audio and video cassettes	277,812	291,236	1,330,625	1,899,673	1.1	379.0
Computer equipment	75,703	81,336	183,099	340,138	0.2	141.9
Other goods Total	10,492,727 42,056,701	6,130,907 68,142,885	26,834,232 64,008,000	, ,		155.7 52.2

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

It is interesting to note the estimate, drawn up by the Ministry of Economic Development and contained in the IPERICO database, on the economic value of goods seized (exclusively, it should be remembered, by the Customs Agency and Financial Police): in other words, the estimate of the value that the goods would have had if they had been sold on the market.

The value estimated by the Customs Agency for the different types of goods, deemed the most reliable, has been taken as a reference value.

Thus goods seized during the three years had a value estimated at almost 1.8 billion euros, most of which is represented by clothing accessories (with an estimated commercial value in excess of 831 million euros, or 46.5% of the total), clothing (393 million euros or 22%) and footwear (266 million euros or 14.9%) (Table 6).

A sizeable, albeit much lower, value is constituted by the value of perfumes and cosmetics (over 95 million euros), electrical equipment (over 46 million euros) and toys and games (33 million euros).

Table 6. Estimated economic value of seizures for counterfeiting offences\* by Customs Agency and Tax Police by product category. 2008-2010 (absolute values in euros and percentage values)

Product category	absolute values in euros	% value
Clothing accessories	831,423,992	46.5
Clothing	393,861,917	22.0
Footwear	266,580,768	14.9
Perfumes and cosmetics	95,538,196	5.3
Electrical equipment	46,597,775	2.6
Toys and games	33,196,791	1.9
Watches and jewellery	21,074,444	1.2
Eyewear	18,933,854	1.1
CDs, DVDs, audio and video cassettes	5,925,244	0.3
Computer equipment	720,298	0.0
Other goods	72,574,235	4.1
Total	1,786,427,515	100.0

<sup>(\*)</sup> Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

#### 4.2. National Police, Local Police and Carabinieri activities

In addition to Customs Agency and Tax Police activities, which they carry out mainly at the borders, it is necessary to consider the activities of other police forces operating mainly throughout Italy, in particular the Local Police, who intercept counterfeit goods sold on the street, at stalls and in markets.

In the three years 2008-2010, over 5.5 million items were seized by the various police forces. If these are added to those seized by the Customs Agency and the Tax Police, which, as we have seen, totalled in excess of 174 million items, it emerges that the total number of counterfeit items (including "pirated" goods for the police and the Carabinieri) seized by the various bodies involved in the fight against counterfeiting in the three-year period under consideration was nearly 180 million.

More than half of the 5.5 million pieces seized by the police were seized by the Carabinieri, a total of 2.9 million items over the three years. The National Police seized approximately 1.5 million items and the Local Police just over one million (Table 7).

In contrast to the Customs Agency and the Tax Police, the number of items intercepted and seized by these three police forces over the three-year period saw a downward trend (-63%). Notice that while in 2008 the Carabinieri seized more than one and a half million items, two years later this figure had fallen to just over 420,000 (-72.5%). The National Police

seized 685,000 counterfeit items in 2008 and 371,000 in 2010 (-45.8%). For the Local Police, too, the amount of goods seized fell significantly, from 547,000 to 231,000 counterfeit items (-57.8%).

Table 7. Number of items seized<sup>(\*)</sup> in anti-counterfeiting and anti-piracy activities by Carabinieri, National Police and Local Police. 2008-2010 (absolute values and percentage changes)

Police Force	2008	2009	2010	Total	% change 2008 -10
Carabinieri	1,530,013	950,394	420,376	2,900,783	-72.5
State Police	685,445	486,008	371,691	1,543,144	-45.8
Local Police	547,574	308,231	231,010	1,086,815	-57.8
Total	2,763,032	1,744,633	1,023,077	5,530,742	-63.0

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

At the regional level, Campania ranks first for the quantity of goods seized over the three-year period (2.3 million or 42.3% of the total, of which little more than half was the result of operations carried out by the Carabinieri), followed with significantly lower numbers by Liguria (815,000 items or 14.7%) and Lazio (615,000 items or 11.1%; here most items were seized by the Local Police, with almost 257 thousand items and the National Police with almost 225,000 items) (Table 8).

In Sicily, over 530,000 items were seized, 9.6% of the total, in particular by the Local Police. This was also the case in Lombardy, where most of the total of 257,000 items were seized during operations conducted by the same police force.

Table 8. Number of items seized (\*) for counterfeiting and piracy offences by Carabinieri, National Police and Local Police by region. 2008-2010 (absolute and percentage values)

Region	Carabinieri	National Police	Local Police	Total	% of total
Campania	1,406,331	786,108	144,602	2,337,041	42.3
Liguria	754,618	50,682	9,907	815,207	14.7
Lazio	133,501	224,872	256,939	615,312	11.1
Sicily	110,518	108,645	312,125	531,288	9.6
Lombardy	85,191	65,439	107,117	257,747	4.7
Emilia Romagna	70,063	53,914	70,311	194,288	3.5
Tuscany	54,729	30,182	81,578	166,489	3.0
Piedmont	3,834	105,468	39,236	148,538	2.7
Marche	80,492	18,680	18,152	117,324	2.1
Abruzzo	57,248	23,338	27,974	108,560	2.0
Puglia	48,511	30,285	12,141	90,937	1.6
Veneto	26,523	32,263	3,470	62,256	1.1
Calabria	35,461	1,527	1,812	38,800	0.7
Sardinia	28,113	6,247	222	34,582	0.6
Friuli	1,650	2,603	564	4,817	0.1
Umbria	2,623	131	326	3,080	0.1
Basilicata	1,246	813	-	2,059	0.0
Molise	125	1,798	-	1,923	0.0
Trentino	6	149	339	494	0.0
Total	2,900,783	1,543,144	1,086,815	5,530,742	100.0

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data

With regard to data on seized goods broken down by product category, *audio-visual material* clearly predominates, as the offence of piracy is included. Thus CDs, DVDs and videocassettes account for about half of all material seized, totalling over 2.7 million items, mainly intercepted by the Carabinieri (over 1.6 million items) (Table 9).

Clearly most of this material is sold on the street, especially through illegal street trading, and for this reason is seized above all by those organisations that act mainly through local checks and seizures.

The same can be said for *clothing accessories* (handbags, belts, wallets, often displayed alongside CDs, DVDs, cassettes, on the same improvised "stalls" found along shopping streets). This is the second category in terms of number of items seized, totalling over 1.6 million, or around 30% of the total. Once again the Carabinieri carried out the largest number of seizures (990,000).

The remaining 20% of the goods seized by the police over the three years includes clothing (230,000 items or 4.2% of the total), eyewear (slightly below 162,000 or 2.9%), toys and games, footwear, and watches and jewellery.

Table 9. Number of pieces seized<sup>(\*)</sup> for counterfeiting and piracy offences by Carabinieri, National Police and Local Police by product category. 2008-2010 (absolute and percentage values)

Product category	Carabinieri	National Police	Local Police	Total	% total
CDs, DVDs, audio and video cassettes	1,649,695	672,485	392,154	2,714,334	49.1
Clothing accessories	990,335	274,891	380,566	1,645,792	29.8
Clothing	98,675	54,006	78,395	231,076	4.2
Eyewear	53,011	33,654	75,325	161,990	2.9
Toys and games	17,008	23,143	39,596	79,747	1.4
Footwear	33,944	33,896	9,661	77,501	1.4
Watches and jewellery	16,205	28,327	11,993	56,525	1.0
Perfumes and cosmetics	544	601	7,100	8,245	0.1
Computer equipment	5,893	618	207	6,718	0.1
Electrical equipment	217	560	30	807	0.0
Other goods	35,256	420,963	91,788	548,007	9.9
Total	2,900,783	1,543,144	1,086,815	5,530,742	100.0

<sup>(\*)</sup> excluding food, drinks, tobacco and medicines Source: Censis, based on IPERICO (DGLC-UIBM) data



**PART TWO** 

# THE ECONOMIC AND FISCAL IMPACT OF COUNTERFEITING

SECTION 1

The economic impact

SECTION 2
The fiscal impact

#### SECTION I - THE ECONOMIC IMPACT

#### PRELIMINARY REMARKS

Like any criminal activity, counterfeiting eludes any type of statistical measurement: police data on seized goods represent just the tip of the iceberg of a phenomenon that remains largely hidden. There are, if truth be told, surveys conducted by national and international research institutes, trade associations and consumer movements. However, such surveys provide partial observations and contain analyses only of selected product categories, and therefore do not allow definitive conclusions to be drawn.

As with the 2009 report by Censis, the purpose of the current study is to provide an estimate of the counterfeiting phenomenon both at an aggregate level and in relation to each sector concerned, updating to 2010 the estimate made two years previously for 2008.<sup>1</sup>

Here too it is necessary to specify that the geographical area of reference is restricted to Italy's domestic borders; as a result the estimate only includes the total amount *spent by Italian consumers on purchasing counterfeit products*. It does not consider counterfeit Italian counterfeit products sold abroad, while it does examine products that are manufactured abroad and subsequently imported into and purchased in Italy.

Furthermore, it should be pointed out that the terms "proceeds from counterfeiting" and "consumer spending on counterfeit products" will be used interchangeably in the text, as the two items coincide and represent the amount of transactions between the consumer and the producer/trader or retailer.

With no up-to-date national or sector-specific studies available regarding how the phenomenon of counterfeiting has evolved over the last two years, the study estimates proceeds from counterfeiting by relating it to the macro-economic variables which are most able to explain its evolution in recent years.

Specifically, starting from the data and information drawn up by the OECD and related to the time series for 2000-2007 illustrating the trend in counterfeit products sold in member countries, the closest indicators from a statistical point of view for which up-to-date data is available through to 2010 – GDP and household consumption – were identified in order to estimate the proceeds generated by the "counterfeiting" sector as of 2010.

Once the overall value had been obtained, in order to determine the internal composition of these proceeds broken down by expenditure item, the same methodology as the one adopted in 2008 was followed, that is, an analysis

<sup>&</sup>lt;sup>1</sup>Censis, Ares - Aico "The phenomenon of counterfeiting in the world and the impact on the Italian market", 2009.

of studies and information contained in literature on the subject, at both the international and national level. In conjunction with this work, key witnesses were interviewed for the purpose of estimating the true capacity of "counterfeiting" to penetrate trade channels in all fields considered to be under attack from this phenomenon. Once revenues from counterfeiting by individual sector had been reconstructed, the impact of the production, marketing and illegal consumption of counterfeit products on the economy, employment and tax revenues at the domestic level was estimated.

The methodology is set out in detail in the next chapter of this report.

#### 1. METHODOLOGY AND RESULTS OF THE ANALYSIS

As stated previously, the purpose of this study is to highlight the development of and any changes in the phenomenon of the consumption of counterfeit products in Italy between 2008 and 2010, starting from the estimate made two years ago.

In order to avoid any confusion in interpreting the methodology used, it should be noted that whereas the previous report aimed to provide a disaggregated quantification by sector of the domestic market for counterfeit goods, this study aims first and foremost to estimate trends during the two-year period 2008-2010, starting from the estimate for 2008, and then to estimate the economic impact of counterfeiting by individual sector.

This explains why the first study took data from national studies and opinions of experts as the basis for constructing the estimate, while in this report it was decided to make an international comparison and then move on to an analysis of the domestic market.

Indeed, the hypothesis from which the estimate sets out is that the production and sale of counterfeit products can be construed in the same way as any other economic phenomenon and has strong implications for what is happening at the international level and consumer spending power. What is more, counterfeiting is a business involving large criminal organisations that operate at the international level.

It is for this reason that, in order to analyse trends in the market for counterfeit goods over the last two years, it was decided to take the study drawn up by the OECD on the evolution of trade in counterfeit products in European Union countries as the basis for this report and to correlate the result obtained with trends in the main economic variables in those countries and in Italy relating to Gross Domestic Product and household consumption.

Once the total value as of 2010 had been estimated, in order to estimate the structure of the domestic market, the values of household consumption per sector were considered.

As no comprehensive information is available on either the phenomenon itself – since, as is well known, it operates in the shadows of the productive and economic fabric and thus eludes any systematic statistical measurement – or on a timescale consisting of a sufficiently long period to draw any qualitative and quantitative conclusions, data provided by the OECD (Organisation for Economic Cooperation and Development) and set out in "Magnitude of counterfeiting and piracy of tangible products: an update" (2009) of the 2008 study on counterfeiting, "The economic impact of counterfeiting and piracy". The study presents the estimate of trade in counterfeit products within OECD Countries between 2000 and 2007 as shown in Figure 1.

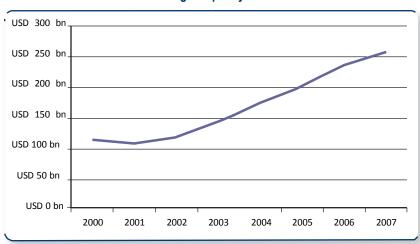


Fig. 1. Evolution of trade in counterfeiting and piracy - 2000-2007

Source: OECD, Magnitude of counterfeiting and piracy of tangible products, 2009

As can be seen, with the exception of a decrease in 2001, the phenomenon has been characterised by practically constant growth. This growth, moreover, is in line with the trend observed in Italy up to 2008 and set out in the analysis previously carried out by Censis.

It should be added that in recent years the global economy has contracted sharply, which has inevitably affected the major western economies. Between 2007 and 2010, all macroeconomic indicators – such as GDP (Gross Domestic Product), consumption, investment, imports and exports – fell in many western economies.

How has this crisis impacted the counterfeiting sector? What *rational* behaviour have consumers displayed, faced with a reduction in their own purchasing power, instability and uncertainty regarding

their future? products that are less costly yet still able to meet their needs or have they turned instead to the counterfeit market, which can offer apparently identical products and at a lower price?

In other words, in the face of declining production, purchasing power and consumption, what changes have there been in the turnover of the counterfeit product sector?

To answer these questions, data for GDP and GDP expenditure items between 2000 and 2010 have been taken into account; these data were interpolated in order to establish any statistical relationships between trade in counterfeit products and macro-economic variables.

Table 1 shows the time series between 2000 and 2010 for GDP, consumption, investment, imports and exports of all OECD countries. Particular attention has been given to the "household consumption" variable, which best represents consumer behaviour.

Tab. 1. GDP: total and broken down by expenditure item – OECD countries – time series 2000-2010 (millions of constant - 2000 dollars)

Year	GDP	Final consumption totals	By: Private consumption	Investment	Exports	Imports	Statistical discrepancy
2000	28,056,815.4	22,120,956.2	17,080,845.3	6,201,999.7	6,726,289.7	6,986,599,7	-5,830,
2001	28,426,066.5	22,651,836.5	17,461,171.8	6,002,103.1	6,761,098.1	6,981,117,5	-7,853,
2002	28,907,142.5	23,234,581.3	17,857,821.9	5,959,983.0	6,899,980.3	7,187,189,2	-212,
2003	29,481,891.4	23,766,725.1	18,260,573.4	6,113,637.8	7,096,325.0	7,507,207,6	12,411,
2004	30,441,724.9	24,420,880.0	18,821,729.3	6,464,406.3	7,743,993.4	8,209,420,2	21,865
2005	31,269,225.3	25,055,746.0	19,380,380.3	6,721,905.8	8,206,212.6	8,744,584,8	29,945
2006	32,250,785.0	25,715,604.0	19,915,654.0	7,037,290.7	8,935,362.0	9,469,182,7	31,711
2007	33,123,871.1	26,340,896.2	20,424,504.2	7,221,197.1	9,540,555.6	10,004,053,1	25,275
2008	33,236,074.7	26,541,108.7	20,464,466.7	6,968,335.0	9,758,752.6	10,047,406,8	15,285
2009	32,066,405.8	26,389,195.5	20,165,112.8	5,794,927.1	8,644,993.4	8,793,338,2	30,628
2010	33,017,937.5	27,172,262.8	20,763,488.0	5,966,884.5	8,901,523.1	9,054,269,8	31,536

Source: OECD Statistics (database)

Table 2 shows the index numbers (year 2000 = 100) for the same variables as those shown the table above. The index numbers show the change in relation to the base year.

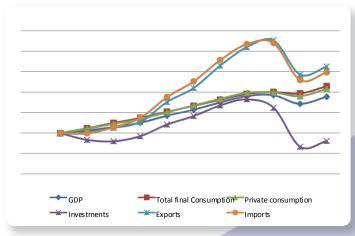
Table 2. GDP: total and broken down by expenditure item in OECD countries – time series 2000-2010

Year	GDP	Total final consumption	Private consumption	Investments	Exports	Imports
2000	100.0	100.0	100.0	100.0	100.0	100.0
2001	101.3	102.4	102.2	96.8	100.5	99.9
2002	103.0	105.0	104.5	96.1	102.6	102.9
2003	105.1	107.4	106.9	98.6	105.5	107.5
2004	108.5	110.4	110.2	104.2	115.1	117.5
2005	111.4	113.3	113.5	108.4	122.0	125.2
2006	114.9	116.2	116.6	113.5	132.8	135.5
2007	118.1	119.1	119.6	116.4	141.8	143.2
2008	118.5	120.0	119.8	112.4	145.1	143.8
2009	114.3	119.3	118.1	93.4	128.5	125.9
2010	117.7	122.8	121.6	96.2	132.3	129.6

Source: OECD Statistics (database)

The following figure represents the index numbers for GDP and expenditure components graphically.

Fig. 2. Trend in main expenditure items in OECD countries, 2000-2010



Source: OECD, Statistics database

As can be seen, between 2008 and 2009 the effects of the global economic crisis have affected all the indicators considered. Given that

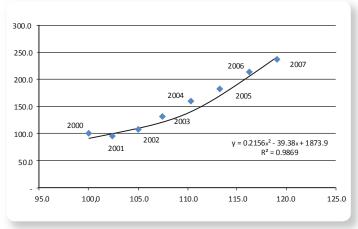
it follows that the current economic situation is characterised by a sharp reduction in investment, imports and exports attenuated by a contraction in total (public + private) consumption which is certainly smaller than for the variables mentioned previously.

Private consumption (or consumption by resident households) taken by itself has also recorded an even smaller reduction than the remaining GDP items.

The next step of the analysis identified the statistical relationships between the time series for international trade in counterfeit products and the time series for consumption (once again within the OECD countries). Specifically, bearing in mind that in statistics correlation is a relationship between two random variables in which each value for the first variable corresponds, with a certain degree of consistency, to a value for the second and that this does not necessarily imply a cause-and-effect relationship but merely the tendency of one variable to change with another, both *overall consumption* and *household consumption* have been taken into consideration.

As the graph below shows, and considering that each point of the graph corresponds to the index numbers for the variables under examination for each year (the bottom right-hand point corresponds to the year 2000 and the values of the indicators correspond to the values expressed on the X and Y axes), the relationship between trade in counterfeit products and household consumption is even stronger than the relationship between trade in counterfeit products and total (public + private) consumption.

Fig. 3. Correlation between pattern of trade in counterfeit products and public and private consumption in OECD countries, 2000-2007



Source: Censis, based on OECD data

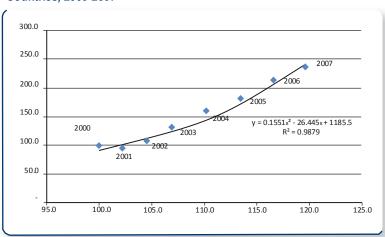


Fig. 4 Correlation between trade in counterfeit products and private consumption in OECD Countries, 2000-2007

Source: Censis, based on OECD data

As expected, trade in counterfeit goods is accounted for more by household consumption than by total consumption. In fact, for the entire 2000-2007 period, the parameter  $R^2$  for the former accounts for 98.8%, as opposed to 98.7% for the latter (public + private consumption)<sup>2</sup>.

Once parameters defining the relationship between household consumption and trade in counterfeit products in OECD countries had been identified, the estimate for Italy was made.

Starting from Italian household consumption over the last decade, and applying the function indicated in the footnote, it was possible to estimate the trend in counterfeit products at the domestic level.

Table 3 below shows the results of this operation. The first column shows consumption by Italian households (expressed in millions of constant 2000 euros). The second column shows the index numbers, (2000 = 100), while the third column contains the index numbers for counterfeit products in Italy as the result of the second-degree polynomial with the parameters derived from the international-level analysis described above.

In other words, it was conjectured that the trend in counterfeit products in OECD countries was representative of the phenomenon in Italy.

b=26.455 c=0.9879

<sup>&</sup>lt;sup>2</sup> Thus the parameters that characterise the  $2^{nd}$ -degree function  $Y = ax^2 + bx + c$  are a=0.1551

Tab. 3. Estimate of trend in counterfeit products in Italy, 2000-2010 (2000 = 100)

Year	Private consumption (millions of constant 2000 euros)	Private consumption (2000 = 100)	Counterfeiting (2000 = 100)
2000	709,830.1	100.0	100.0
2001	714.699.8	100.7	103.5
2002	715.861.3	100.8	104.3
2003	722.845.5	101.8	109.7
2004	728.265.5	102.6	114.1
2005	736.628.8	103.8	121.2
2006	745.774.5	105.1	129.5
2007	753.779.5	106.2	137.3
2008	747.889.8	105.4	131.5
2009	734.083.0	103.4	119.0
2010	741.178.8	104.4	125.3

Source: authors, based on ISTAT

As the table shows, the counterfeiting sector contracted by 4.76% in 2008, with a consequent decrease in the index number from 131.5 in 2008 to 125.3 in 2010. This figure is the result of a significant decrease between 2008 and 2009 of -9.54% and a recovery of 5.29% between 2009 and 2010.

Therefore, although trade in counterfeit products contracted during the first two years of the period in question, a not insignificant recovery was seen during the final year of the period.

Starting from the mean value of the proposed 2008 estimate, 7.107 billion euros, and applying the currency revaluation parameters as measured by ISTAT and the estimated decrease for 2008-2010, it was possible to estimate a market value for counterfeit goods of 6.9 billion euros (expressed in 2010 euros).

Table 4. Estimate of the counterfeit goods market in Italy, 2008 and 2010 (millions of 2008 and 2010 euros)

Year	Currency 2008 euros 2010 euros	
	2000 Euros	2010 euros
2008	7,107.0	7,270.5
2010	6,768.7	6,924.4

Source: Censis estimate

In addition, if the percentage changes in the two variables in question (household consumption and counterfeiting) are observed individually and their ratio is calculated, it is possible to determine elasticity.

Elasticity refers to one sector's sensitivity to a change in the other. The following table shows the percentage changes (annual and for 2008-2010) in both variables with the respective elasticity values<sup>3</sup>.

Table 5 Percentage changes in and elasticity of counterfeiting in relation to household consumption, 2008-2010

Years	9	6 change	Elasticity of counterfeiting
	Household consumption	Counterfeiting	in relation to household consumption
2008-2009	-1.85	-9.54	5.2
2009-2010	0.97	5.29	5.5
2008-2010	-0.90	-4.76	5.3

Source: Censis, based on ISTAT data

The elasticity of the counterfeiting sector in relation to changes in consumption by resident households is positive and in the cases in question ranges between 5.2 and 5.5 with an average in 2008-2010 of 5.3. This means that any positive change in consumption brings about a positive change in the counterfeit goods market but one which is more than 5 times greater. What emerges from these figures is extremely high sensitivity; indeed, while consumption decreased by a "mere" 0.9% between 2009 and 2010, the turnover of counterfeit products decreased by 4.76%.

Therefore, in contrast to the widely-held view that in the face of economic difficulties consumers would tend to direct their own purchasing choices away from quality, higher-priced goods to less expensive counterfeit goods that are only apparently of comparable quality, the results of this study reveal how the trend in the counterfeit goods mirrors the trend in household consumption very closely. In other words, faced with a crisis in consumption, the counterfeit goods trade declines, with greater percentage changes than changes in consumption.

$$\begin{split} \eta_{yx} &= \frac{\% \Delta y}{\% \Delta x} = \frac{\Delta y}{\Delta x} \frac{x}{y} \\ \% \Delta x &= \frac{x_1 - x_0}{x_0} \times 100 \end{split}$$

Elasticity is therefore a measure of the sensitivity of y to changes in x and since it is a relationship between percentage changes.

<sup>&</sup>lt;sup>3</sup> Elasticity in economics is defined as the ratio between percentage changes in two variables. In formal terms, given two variables *x* and *y*, the elasticity of *y* with respect to *x* is given by:

In conclusion, while keeping in mind that the counterfeiting sector includes an enormous variety of products, with different degrees of substitutability with respect to the equivalent legitimate products, that such purchases are not always made knowingly by consumers, and that the current economic crisis affects different social groups in different ways, it might reasonably be claimed that consumers tend to rationalise their expenditure, purchasing fewer things but characterised by a certain degree of reliability rather than risk purchasing goods of a lower price but of uncertain quality.

Indeed, the abovementioned elasticity of purchases of counterfeit products compared with legitimate products is an indicator of informed consumers' lack of confidence in counterfeit goods: given the reduced spending power of a typical consumer of counterfeit goods, expenditure on counterfeit products will be reduced by five times compared with expenditure on legitimate products.

Nevertheless, it should be pointed out that this contraction in purchases of counterfeit goods is not necessarily persistent over time. The counterfeiting "sector", as is well known, is extremely flexible and capable of transforming its market strategies faster than any other economic activity. Operating through production and distribution facilities that are parallel to the legitimate system and thus unconstrained by any health or legal consideration, counterfeiters can quickly introduce new products onto different target markets.

Therefore one cannot rule out the possibility that, in response to currently falling sales, counterfeiters may regain significant market shares in the near future.

### 2. ANALYSIS BY PRODUCT SECTOR

Once the market value of counterfeit products had been estimated, its distribution among the various product sectors concerned was analysed. In the absence of sector-based studies with up-to-date figures for the last two years of the period in question, and in order to maintain consistency with the approach adopted for the estimate, it was decided to take trends in consumption for households broken down by sector, which was deemed also to be the representative indicator for trends in "illegal" consumption, as the basis for the estimate.

Before proceeding with the description of the methodology used and the results obtained, it should be pointed out that available data, as is well known, are characterised by their completeness and frequency of measurement; in other words, household consumption figures are neither estimates nor sample surveys, but actual data relating to consumer expenditure for each sector collected annually by ISTAT<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup>National Accounts, ISTAT - 2010

The following section provides a description of the data sources and methodology used in order to trade in counterfeit products broken down by sector.

### 2.1. Data sources and methodology

As mentioned in the introduction, in order to estimate the turnover of counterfeit goods in Italy, broken down by economic sector, household consumption – in turn broken down by sector – and the time series for 2000-2010 were considered. This made it possible to highlight trends in consumption over recent years. Considering that estimating consumption is the same as estimating turnover for the sector in which household consumption is concentrated, the steps taken were as follows:

 establishing the correspondence between the sectors in which trends in turnover of counterfeit goods are to be estimated and the economic activities into which ISTAT breaks down household consumption.

These sector-based correspondences are illustrated in the following table. The first column shows the sectors for which the estimates were made, while the second column shows the ISTAT sectors in relation to household consumption.

- b) Once the correspondences had been determined, the percentage changes in ISTAT household consumption, broken down by sector between 2008 and 2010, were calculated.
- c) The elasticity of counterfeit product sales estimated at 5.3 over the two years in question was applied to these rates of change in relation to consumption trends.
- d) Subsequently, the results obtained were "normalised". In statistics, normalisation consists of limiting the range of a set of values within a predefined interval.
  - In the case under examination it was necessary to adjust the sector-based results in order to remove any statistical error and to obtain homogeneous results at the sectoral level with respect to the overall result at the national level.
- e) Once the totals for each sector had been normalised, the rates of change for individual sectors were recalculated, as illustrated in Table 7.

## Table 6. Correspondence between ISTAT sectors and sectors affected by counterfeiting

Sectors affected by counterfeiting	ISTAT sectors – household consumption
Food products, alcoholic and non- alcoholic beverages	Bread and cereals Meat Fish Milk, cheese and eggs Oils and fats Fruit Vegetables, including potatoes
	Sugar, jam, honey, syrups, chocolate and pastry Other food products Coffee, tea and cocoa Mineral water, carbonated drinks and juices Alcoholic beverages
Perfumes and cosmetics	Appliances, articles and personal care products
Clothing and clothing accessories	Clothing Footwear, leather goods
Electrical equipment and material	Cooking equipment, refrigerators, washing machines and other major domestic appliances, including accessories and repairs Small appliances, including accessories and repairs
Computer equipment	Audio-visual and photographic items, computers and accessories, including repairs
CDs, DVDs, audio and video cassettes	Audio-visual and photographic items, computers and accessories, including repairs
Watches and jewellery	Personal effects
Games and toys	Other recreational items and equipment
Medicinal	Medicinal products, sanitary items and therapeutic material
Auto parts	Vehide running costs, excluding fuel

Source: Censis

As the correspondence is not perfect, the most representative sectors have been taken into consideration.

Table 7. Estimate of revenue from counterfeiting in Italy by sector, 2008 and 2010 (absolute and percentage values)

Sector	Counterfeiting 2008 (millions of 2000 euros)	Counterfeiting 2008 (millions of 2010 euros)	Weight in % per sector (2008)	Counterfeiting 2010 (millions of 2010 euros)	Weight in % per sector (2010)	% change 2008- 2010 (2010 euros)
Food products alcoholic & non-alcoholic b	everages 1,153.7	1,180.3	16.2	1,084.9	15.7	- 8.08
Perfumes and cosmetics	114.2	116.9	1.6	108.2	1.6	- 7.40
Clothing and accessories	2.608.2	2,668.2	36.7	2,488.9	35.9	- 6.72
Electrical appliances and material	688.7	704.5	9.7	608.3	8.8	- 13.65
Computer equipment	224.1	229.3	3.2	243.0	3.5	5.98
CDs, DVDs, audio and video cassettes	1,646.7	1,684.6	23.2	1,785.4	25.8	5.98
Watches and jewellery	508.5	520.2	7.2	449.0	6.5	- 13.67
Toys and games	31.2	31.9	0.4	29.4	0.4	- 7.72
Medicines	19.4	19.9	0.3	20.1	0.3	0.93
Auto parts	112.3	114.9	1.6	107.1	1.5	- 6.76
Total	7,107	7,271	100.0	6,924	100.0	- 4.76

Source: Censis

With regard to the "Food and beverages" sector, an 8.08% reduction in consumption of counterfeit goods was recorded in Italy. Overall, the weight of this sector as a percentage of total revenues from counterfeit goods fell from 16.2% in 2008 to 15.7% in 2010.

Consumption of counterfeit goods in the "Perfumes and cosmetics" sector fell by 7.4%, from 117 million euros (2010) to 108 million euros (in 2010 euros). The weight of this sector as a percentage of total revenues did not change significantly.

Similarly, purchases of counterfeit goods in the "Clothing and accessories" sector fell by 6.72%, with a decrease in revenues from 2,668 million euros in 2008 (measured in 2010 euros) to 2,489 million in 2010. Mention should be made of the absolute value of sales of these types of products, which account for 35.9% of the total counterfeit market.

For "Electrical appliances and material" the estimated decrease in the absolute value of sales of counterfeit goods was approximately 97 million euros, a percentage change of -13.7%, falling to around 608 million euros in 2010.

Sales in counterfeit products in the "Computer equipment" and "CD, DVD, audio and video cassettes" sectors recorded an increase of approximately 6% of the overall market. For the former sector, this represents an increase in sales of counterfeit goods of 14 million euros, with a total value in 2010 of 243 million euros, while for the latter the increase in absolute value is 100 million euros, with a total value of 1.785 billion euros.

The "Watches and jewellery" sector saw a decrease of approximately 13% over the two-year period, from 520 million euros in 2008 (in 2010 euros) to 449 million euros in 2010.

The "Toys and games" sector likewise recorded a decrease in revenue of 7.7%, with revenues in 2010 of 29 million euros.

An increase – albeit slight – was estimated for "Medicines", from 19.9 million euros in 2008 (2010 euros) to 20.1 million euros, an estimated increase of 0.3%.

Sales of counterfeit "Auto parts" saw a reduction of 7.8 million euros, a fall of -6.76% and an estimated value of 107 million euros in 2010.

As a whole, over the 2008-2010 period, it can be observed that increases in sales of counterfeit goods were recorded only in the sectors of "Computer equipment", "CD, DVD, audio and video cassettes" and "Medicines". There may be many reasons for this, which differ from sector to sector.

For example, with regard to computer equipment, given that the sector includes all components required in computer assembly as well as replacement parts, it cannot be ruled out that sellers and purchasers of counterfeit products include computer maintenance specialists or individual purchasers who in order to upgrade electronic devices turn to components which are of apparently high quality but sold at considerably lower prices through illegal channels of commerce.

For the most part, the "CD, DVD, audio and video cassettes" sector includes digital media for music and films generally for recreational purposes. It may reasonably be supposed that in times of crisis people prefer to save on quality without giving up listening to new album or movie releases.

Different considerations must be made for "Medicines" sector, where channels of commerce are much more tightly controlled. Nevertheless, as is well known, medicines are also distributed through different channels, such as online shopping, which elude any form of local control.

# 3. ESTIMATE OF THE IMPACT OF COUNTERFEITING ON THE ITALIAN ECONOMY

In order to consider the impact of the counterfeit goods market on Italy's economy, this study set out from the assumption that in the absence of said market, consumer expenditure would be constant; in other words, the purchase of a counterfeit product would correspond to the purchase of an identically-priced genuine product (1/1).

A second assumption was that the entire production chain for counterfeit products is illegal, without considering those cases – which are impossible to identify – in which part of the process follows legal avenues.

Finally, no attention has been given to the "positive" economic effects which the presence of counterfeiting on the market has in terms of jobs, imports, and so on.

The next step consisted in implementing the input/output model in order to estimate the domestic economy's performance if the same expenditure had been made on legitimate goods.

This estimate was made using one of the most common methods in this type of analysis: analysis of interdependencies between sectors/industries, "input-output analysis" or the "Leontief model" (see Appendix 1).

This method is suitable for strategic economic policy choices or for knowing the direct impact of spending in a given sector and measuring the results of the knock-on effects on other sectors. In schematic terms these effects can subdivided into:

- direct effects:
- indirect effects.

A specific characteristic of expenditure is that its impact may extend far beyond the limited scope of its direct application, and consequently allow other sectors that are more or less strongly connected to the one directly concerned to enjoy benefits deriving from it.

The *direct effects* of expenditure are those which are directly connected to it and consist of all expenditure made in order to put the desired action into effect. In general, direct effects include all the results of the action that immediately affect the local economic system by triggering or increasing operations by the various economic actors that form an integral part of it, with positive effects on the overall social, economic and employment context.

In contrast, the term *indirect effects* refers to effects brought about indirectly by expenditure in the sector in question. They are represented by the production of goods and services used as intermediate inputs required for the action to be put into effect. They can be quantified by estimating the Leontief multiplier which, in fact, as already mentioned, evaluates the indirect impacts on levels of productive activity resulting from an exogenous increase in demand.

As already mentioned, the analysis of interdependencies between sectors (or input-output analysis) is associated with the name of the economist Wassily Leontief. Leontief's model is

a model of general economic equilibrium in the Walras-Pareto tradition. However, unlike the abstract notions of general economic equilibrium, input-output analysis (I-O below) was developed in order to give rise to empirical applications: that is, to measure relations between the various sectors of an economic system.

The decision to use such a complex, intricate tool as the Leontief input-output model for the purposes of the analysis was determined by the following factors:

- I-O analysis ensures a high degree of reliability of the results not only in terms of direct
  effects, the results of which are easily derived from quantitative variables drawn from
  individual accounts, but also in relation to the multiplier caused by the assumed increase in
  demand:
- Analysis of interdependencies between sectors is a rich tool for interpreting and illustrating economic output variables and breaking them down by sector.

With regard to the use of the analysis tool just described, an ad hoc simulation model was created to provide indications of a quantitative nature in relation to the activation of sectors connected to the one in which an increase in demand is simulated. In other words, a change in demand on the part of the community for goods and services provided by the companies under consideration will correspond to an increase in value added and output with a consequent increase in employment in the sector itself (direct impact), and an increase in the same economic and employment variables for economic activities upstream and downstream from the sector in which the increase of demand is assumed to have taken place (indirect impact).

The following section sets out the results of the simulations, supposing that consumers' *knowing* or *unknowing* expenditure on counterfeit products had been spent on legitimate goods.

## 3.1. Methodology and results of the analysis

Before describing the results of the simulations, it should be pointed out that, as has already been said, the productive, distribution and commercial structure and relations, in terms of economic flows (sales and purchases of raw materials, semi-finished products and services) between the sectors that make up the domestic economy) have been considered. In other words, total domestic output is the sum of the final output of each sector, which for the purpose of wealth creation use the output of other sectors in the economy.

Moreover, the basic assumption that (in the absence of parallel markets) consumer spending on these types of product will decrease, if not in terms of the number of products, but not in terms of monetary flows, constitutes an extremely cautious behavioural scenario. In other words, in subsequent simulations, it is assumed that consumers spend the same amount, but not that they purchase the same number of

products. In the latter case, the figure would be markedly higher in monetary terms. However, in order not to overestimate the phenomenon, it was decided to assume that only the sum spent in parallel markets is – in their absence – directed towards legitimate channels of commerce.

Taking the initial assumptions into account and applying the method set out above, the following results were obtained at the domestic level: if official, non-counterfeit products had been sold, 13.7 billion euros of value-added production would have been obtained, with approximately 5.5 billion euros in value added as a result (0.35 % of Italy's GDP); this additional output would have generated purchases of raw materials, semi-finished products and/or services from abroad, with imports of 4.2 billion euros; total production of goods which counterfeiting takes away from legitimate channels would have absorbed about 110,000 jobs, or 0.41% of total domestic employment (it should be borne in mind that this value is calculated on the basis of the average productivity for workers in each sector, calculated at the national level and refers to full-time employment. In other words, if part-time jobs are taken into account, the number of individuals employed would be greater).

The numbers set out above and illustrated in Table 8 appear to describe an economic sector which is parallel to legitimate sectors.

Table 8. Estimate of the impact generated by counterfeiting on the domestic economy, 2010

Items	2010
Proceeds from counterfeiting (in millions of euros)	6,924.4
Impact on value-added production (in millions of euros)	13,682.7
Impact on value added (in millions of euros)	5,449.1
Production generated per euro of investment (multiplier)	1.976
Value added generated per euro of investment (direct impact coefficient)	0.787
Imports generated (in millions of euros)	4,249.3
Imports generated per euro of investment	0.614
Impact on employment (work units)	109,346
Demand per work unit activated/generated (in billions of euros)	63,325.6
Work units generated per million euros of investment	16

#### Source: Censis estimate

The following table shows the estimated impact broken down into direct impact, i.e. on economic activities directly involved in the phenomenon of counterfeiting, and indirect impact, i.e. on areas "upstream" and "downstream" of the ones involved in the study.

Table 9. Estimate of the direct and indirect impact of counterfeiting on the domestic economy, 2010 (absolute and percentage values in millions of euros)

Impact	Final demand	Production generated	Estimate of value added generated	Employment generated				
		Absolute value						
Direct	6,924.4	9,182.8	3,081.6	61,757				
Indirect	-	4,499.9	2,367.5	47 <i>,</i> 589				
		% value						
Direct	100.0	67.1	56.6	56.5				
Indirect	-	32.9	43.4	43.5				

#### Source: Censis estimate

As the table shows, while for production over 67% of the impact is direct (i.e. within the sectors themselves), the figures for value added and employment assume percentage weights of 56% and 57% respectively. As is well known, it is extremely incorrect and misleading to limit the consequences of such phenomena to the sector directly involved. An advanced economy's productive systems are characterised by economic ties and interrelations that can cause repercussions on much wider portions of the business fabric.

Below is a table summarising the same impact indicators, broken down by sector.

The tables in the Appendix show the results of the same simulations, but with an emphasis on sector-based detail upstream and downstream from each sector.

Table 10. Estimate of impact of counterfeiting on the main economic variables of individual sectors - Year 2010

Items	Food and beverages	Perfumes and cosmetics	Clothing and accessories	Electrical appliances and material	Computer equipment and material	Audio-visual, CDs, DVDs	Watches and jewellery	Toys and games	Medicines	Auto parts	Total
Lost demand (in millions of euros)	1,084.9	108.2	2,488.9	608.3	243.0	1,785.4	449.0	29.4	20.1	107.1	6,924.4
Impact on production (in millions of euros)	2,472.1	190.9	5,072.3	1,174.3	33.1	3,446.5	694.6	58.8	35.4	206.8	13,682.7
Impact on value added (in millions of euros)	1,012.6	74.2	2,026.3	460.0	84.5	1,350.2	323.8	22.8	13.8	81.0	5,449.1
Energy production per euro of lost demand (multiplier)  V.A. generated per euro € of lost demands (direct impact	2.279	1.764	2.038	1.930	1.363	1.930	1.547	2.000	1.764	1.930	1.976
coefficient)	0.933	0.686	0.814	0.756	0.348	0.756	0.721	0.776	0.686	0.756	0.787
imports generated (in millions of euros)	298.4	97.0	1,145.4	384.8	676.7	1,129.3	414.2	17.7	18.0	67.8	4,249.3
Imports generated per euro of lost demand Impact on employment ( <i>work units g enerated</i> )	0.275 23,530	0.896 1,008	0.460 41,552	0.633 8,505	2,785 1,999	0.633 24,963	0.922 5,704	0.602 399	0.896 187	0.633 1,498	0.614 109,346
Demand per work unit generated (in thousands of euros)	46,108.3	107,343.0	59,898.0	71,522.3	121,547.3	71,522.3	78,714.5	73,751.2	107,343.0	71,522.3	63,325.6
Work units generated per million euros of lost demand	22	9	17	14	8	14	13	14	9	14	16

Source: Censis, based on ISTAT data – Inter-industry table for the Italian economy, 2000

# SECTION II – THE FISCAL IMPACT PRELIMINARY REMARKS

One of the main negative effects of counterfeiting is lost tax revenue: in other words lower tax receipts as a result of non-payment of taxes on incomes generated and in any case involved in the phenomenon; the harm done to government finances means that society as a whole suffers economic and social harm.<sup>5</sup>

This part of the study sets out to estimate tax revenues lost to counterfeiting in Italy and determine its impact on government finances.

In general, for any type of activity, whether legal or illegal, estimating the lost tax revenue that it may generate means identifying the income category to which it belongs, determining the tax base and subsequently applying the relative tax.

Although counterfeiting takes many forms, all of them can be associated with a specific income category under Italy's tax system. The Consolidation Act on Direct Taxation and the Presidential Decree concerning VAT provide the legislation with regard to this matter, in addition to a large amount of case law, which on several occasions has stated in brief that "incomes in any case generated by illegal activities can be associated with and classified on the basis of the categories included in the Consolidation Act" 6.

Thus, like any other business activity, counterfeiting will be affected on the one hand by direct taxes with regard to profits accrued, wages paid to employees and other business profits and on the other hand by VAT on items traded.

<sup>5</sup> Loss of tax revenue has negative economic effects on GDP, production generated and employment, due to a long-term multiplier effect for the whole economy.

In departure from article 3 of Law no. 212 of 27 July 2000, the provision referred to in paragraph 4, article 14 of Law no. 537 of 24 December 1993 is interpreted in the sense that the illegal proceeds indicated therein, if not classifiable in accordance with the income categories set out in article 6, paragraph 1 of the Consolidation Act on Income Tax, pursuant to Presidential Decree no. 917 of 22 December 1986, are considered as "other income".

<sup>&</sup>quot;The income categories set out in article 6, paragraph 1, of the Consolidation Act on Income Tax, as approved by Presidential Decree no. 917 of 22 December 1986, are understood to include, if they can be classified thereunder, proceeds from events, acts or activities that may be classified as tort, criminal or administrative offences if they are not already subject to seizure or criminal confiscation. Any related incomes are calculated in accordance with the provisions for each income category and are also subject to VAT, by virtue of the principle established in article 14, paragraph 4 of Law no. 537 of December 24, 1993, proceeds from illegal activities ... statement of principle according to which proceeds from illegal activities are not subject to tax is manifestly incorrect. It is at odds with the specific provision of article 14, paragraph 4, of Law no. 537 of 24 December 1993, according to which "proceeds from events, acts or activities which may be classified as tort, criminal or administrative offences" must be understood to be included under the income categories set out in article 6 of The Consolidation Act on Income Tax. Although the legislation regulates income tax, it is unequivocally a rule of principle, by virtue of which exemption from taxation cannot be claimed for proceeds from illegal activities". Finally, the Court of Cassation has clearly stated that said rule of principle extends to indirect taxation. Thus in the light of the precepts consistently espoused by the Supreme Court (see also Decisions 16504/2006, 21746/2005 and 13335/2003), the aforementioned article 14 constitutes a rule of principle under Italy's legal system, a systematic basis for interpretation which applies both to direct taxation and VAT.

Here the estimate will be made separately for:

a) Direct taxes:

IRES (company income tax on business profits)
IRE (personal income tax on employee income)

IRAP (regional income tax on productive activities)7

b) Indirect tax:

VAT on trade

Minor indirect taxes and supplementary regional and local/municipal taxes are disregarded.

From an economic perspective, the phenomenon requires a number of clarifications relating to both supply and demand.

On the supply side, in some cases counterfeiting involves all phases of the production chain both upstream and downstream from the production cycle; in other cases, it involves only the finishing and sale of products. In addition, enterprises engaged in counterfeiting sometimes earn their revenues directly in Italy, while in other cases – see the food sector – they are mainly earned overseas, yet in any case cause harm to Italian exporters. Given the lack of available detailed official information and data on the phases concerned broken down by product sector, here it is assumed counterfeiting in the strict sense involves "all the links of the production chain upstream and downstream from the production cycle". Assuming this to be the case, counterfeiting enterprises undermine the profits and revenues of legitimate companies by a ratio of at least 1 to 18.

On the demand side, consumers' propensity to purchase counterfeit products may take several forms, according to their subjective choices, spending power and motivations<sup>9</sup>.

For the purposes of the estimate, here a marginal substitution rate between goods sold and consumed legally and counterfeit products of 1 has been assumed 10.

This assumption, based on available information, is necessary and more consistent than a methodological approach that takes into account purchasing behaviour and consumer choices and which as a result could invalidate the estimate as a whole or in any case render it subjective.

<sup>&</sup>lt;sup>7</sup> Although not strictly a direct tax, for the tax base and calculation methods it is considered as such.

Beautiful Having to estimate in this context unpaid tax revenue – albeit while taking into account the different price of counterfeit products compared with legitimate goods – it can be assumed that the reduction in profits for legitimate companies determines a reduction in government revenue exactly equal to at least the value of the tax applied to fiscal profits eroded by the phenomenon of counterfeiting.

<sup>&</sup>lt;sup>9</sup> Treatment as inferior goods, purchasing power, disposable income.

As the starting figure is represented by final expenditure, it is assumed here that the purchase of a counterfeit product substitutes a non-counterfeit, legitimate product on a one-to-one basis.

#### 1. THE METHODOLOGY USED

Estimating lost revenue generated for government finances by the counterfeiting understood in its general sense requires that the basic assumptions in part already set out be clarified, and that the essential components (variables) that describe the content be identified.

The model described here makes it possible to isolate the components and variables that represent determinants of price, which in this context constitutes the starting value for carrying out the analysis.<sup>11</sup>

On the supply side, counterfeiting of products can interfere across all or some of the stages in the production chain, from manufacturing production through to sale of the final product. In turn, production and marketing of the goods may be carried out in whole or in part by companies located in Italy.

Available data does not allow us to determine objectively what products are counterfeit and starting from what stage of the production cycle a product is to be considered counterfeit or becomes such and if this, in turn, is the result of activities wholly or partly carried out by companies located in Italy. Often counterfeit products are sold through legitimate channels, and therefore only at the retail stage, which can even prevent them from being identified as such. For the purposes of the estimate, here it is assumed that goods intended for the Italian market – whether wholly or partly counterfeit – are produced exclusively by companies located in Italy and that they are counterfeit from the first stage of the cycle (production) all the way through to the final stage (retail)<sup>12</sup>. We believe that this approach is correct, firstly because it is likely that players in the counterfeit goods market adopt techniques and strategies aimed at selling a product which is necessarily counterfeit and designed to serve a market which, knowingly or unknowingly, is able to absorb the supply of such products, and secondly - for the purpose of estimating lost revenue - because "lost demand", whether stemming from a product wholly produced and sold in Italy or from a product wholly or partly imported from another country, harms Italian companies in economic terms by a value which is at least equal to the potential tax revenue attributable to the same demand satisfied by companies located in Italy<sup>13</sup>.

Within the I-O model, the components of demand by sector and the share of production generated by the sectors involved (so-called "activated production") are made explicit.

Starting from the concept of "lost demand", in order to estimate the economic and fiscal impact that this aggregate has on the Italian economy, the assumption does not distort the estimate. In the I-O model and the resulting fiscal model applied, the item relating to "imports activated" – which nonetheless generates lost demand of equal value for Italian enterprise and which makes its is ignored in an entirely prudent manner- that still generates a demand lost of equal import for the Italian companies-and that allows focusing only on aggregates (the direct demand is activated) and on relative effects that they represent to the Italian State according to a concept closer to the GDP that is not to the GNP.

The marginal rate of substitution between counterfeit and non-counterfeit products on the demand side has been assumed to be 1, as this makes it possible to assume that the substitution effect between imported and domestic products, in relation to the Italian economic system, generates the same negative effect for Italian companies in at least a 1:1 ratio.

In keeping with the above, on the demand side the model assumes a marginal rate of substitution between counterfeit and non-counterfeit products of 1.

This aspect has implications on both the economic side (in terms of supply and demand) and the fiscal side (in terms of tax revenues).

With regard to the economic aspect, counterfeit products take profits away from the market for non-counterfeit goods, in the sense that it eats into the revenues of companies that make and/or sell equivalent non-counterfeit products; consequently, all things being equal, it erodes the profit margins of companies producing non-counterfeit goods to at least the same extent as the percentage of profit on turnover.

The degree to which counterfeiting erodes legitimate producers' profits constitutes a minimum limit, as the different cost structures for counterfeit and non-counterfeit goods (take for example the lack of research and development costs) over the long term means that companies' profits are reduced to a proportionately greater degree than their revenues.<sup>4</sup>.

Lost tax revenues are at least equal to the tax revenue generated by companies operating legitimately and/or under normal business conditions in the same sector (the reader is referred to the sector-based studies below) and producing non-counterfeit goods. In this case tax revenues foregone constitute a maximum limit, representing the amount that the government would have received if the supply of counterfeit goods had been absorbed by demand for non-counterfeit goods. The value of this tax revenue may vary according to whether all or part of the cycle of production is carried out illegally (this information is not available).

The model used to explain the variables that come into play is therefore simply based on price and on the components that regard it, while disregarding any analysis of consumer demand.

This approach makes it possible to disregard marginal utility and therefore the subjective factors that lead consumers to purchase counterfeit products, and focus instead on the price variable.

The unit price incorporates both the economic and fiscal cost components which constitute a cost for the company and which are therefore endogenous variables and determinants of price.<sup>15</sup>

For production purposes, a company which conducts business in a legitimate manner and is not involved in counterfeiting combines factors of production optimally and then sets the selling price by considering the costs of these factors of production as already inclusive of the tax burden – take for example personal expenses, vehicle costs, etc.

<sup>14</sup> In the long term, in order to maintain their market share, companies must increase costs. As a result profits – turnover remaining equal - decrease by a proportionally greater amount.

<sup>&</sup>lt;sup>15</sup> See explanation of the model in the Appendix.

For this reason, supposing that the production and marketing stages take place in a wholly or partly illegal manner and are therefore directed towards producing a counterfeit product, and taking the model's basic assumptions, the tax component increasingly tends towards zero and therefore the price, conditions and product being equal, is considerably lower compared with the equivalent non-counterfeit product generated under normal business conditions in a legal market.

Therefore, conditions being equal, the price of the counterfeit product is different from the price of the non-counterfeit product, not least because of the percentage of VAT on sales which is not applied on the value added, in addition, of course, to the differences in costs borne by companies due to non-payment of direct taxes (on net profit as well as on non-deductible costs, on income from employment and similar income).

Finally, the basic assumptions described above make it possible to make some remarks of a fiscal nature.

From a macroeconomic perspective, the absence of fiscal components relating to fixed and variable business costs<sup>16</sup> (which summed together represent the amount of direct taxes generated per unit of output), corresponding to a total absence of direct tax revenue on the one hand and the a lack of an indirect tax burden (VAT) on the other hand, affects the market and tax revenues generated in at least three ways:

- Loss of short-term direct tax revenue: in this connection, the reduction is twofold. On the
  one hand, direct tax receipts are reduced, as neither counterfeiting companies' income
  nor income from employment and similar income (as they employ workers illegally) is
  taxed, while on the other VAT is not paid;
- 2) Loss of medium-term indirect revenue: the product substitution effect and the price effect which constitute an integral part of consumer surplus lead (at least in the medium term) to a reduction in the price of non-counterfeit products, eroding profits and therefore taxation on legally generated income (product substitution effect);
- 3) Loss of long-term direct and indirect revenue: the two aspects mentioned above act in conjunction with a long-term cyclical effect by determining the need for continuous market adjustments on both the supply and demand side, generating costs for businesses which they pass on to consumers as well as the community as a whole.

<sup>&</sup>lt;sup>16</sup> See explanation of the model in the Appendix.

# 2. CALCULATION OF THE TAX BASE AND OF TAXATION BY INDIVIDUAL INCOME CATEGORY

#### 2.1. Business income

The estimation of business (corporate) income tax – IRES – began with the calculation of business income and the resulting tax base on which to calculate the tax.

The starting point was the figure for direct and induced demand as calculated by means of the input-output (I-O) model.

The model makes it possible to identify two essential components for determining:

- 1) direct demand;
- 2) induced demand.

Each macro-sector of interest referred to in the I-O matrix was broken down into its constituent sub-sectors. Thus by using data from companies' income statements it was possible to determine the section, subsection, division, class group and category for each link in the supply chain, from production through to sale of the goods. Specifically, for each sector the classifications – divisions, sections and subsections – of activities concerning the four stages listed below were taken as reference for each sector:

- 1) production;
- 2) wholesale;
- 3) retail (including itinerant sellers);
- 4) intermediation.

This analysis made it possible to identify economic actors within each macro-sector, by their ATECO (*ATtività ECOnomiche*, economic activity) codes, each of them with a level of turnover, value added, profitability and viability.

Table 1. Data used to calculate the tax base

Denomination	Source	Interest Variables
I-O matrix	Inter-industry table for the Italian economy, 2000	Direct demand, induced demand, imports activated (generated), work units activated (generated)
Company income statements Company structure and size	ISTAT, 25 March 2010 ISTAT, June 2011	Turnover, costs by category, business activity, employees, legal status, characteristic indicators or value added.
IRES and/or "UNICO" tax returns	Revenue Agency, 2010	total revenues, costs, taxpayer characteristics, business income as a going concern, corporate loss, tax base
VAT return and/or "UNICO" tax return	Revenue Agency, 2010	Average tax rate on sales, average tax rate on purchases, value-added tax, value-added tax/purchases and imports,
Sector-based study models	Revenue Agency, 2010	Companies and individuals corresponding and not in line and not in line with sector-based studies, turnover amount, income/revenues, tax base and tax by approved sector-based study; indicator of tax profitability

Once the sub-sectors included in the macro-sector had been identified, companies' income statements were used to extrapolate data on the absolute values and the characteristic relations of enterprises. These values made it possible to determine the weight of each individual stage – activity – in the process as a share of the production cycle. This aspect is of considerable help in estimating the contribution made by each individual stage to the final income generated, both as a weighting for the purpose of calculating the tax burden on the basis of data drawn from the sector-based studies and for the purpose of subsequently calculating the VAT tax base (see below).

Once all actors in the macro-sector concerned had been identified, data from income tax returns – in particular IRES – were used to provide information about amounts, absolute values and average values of declared income, turnover and tax bases according to companies' legal status and business activities.

Finally data from the sector-based studies was used, which for the present purpose we believe represent a decisive aid in determining income and tax revenue.

The decision to use sector-based studies for the purpose of making the estimate was based on two reasons.

The first has to do with the fact that the sector-based studies are linked to individual ATECO codes, whereas company income statements only provide information at the aggregate level. Therefore this choice makes a more detailed analysis of the individual stages of the activity.

In addition, as it was necessary to estimate taxable income and related taxes in connection with counterfeiting, it seemed reasonable to use sector-based studies since they make it possible to observe not only data on income but also and above all regarding company behaviour, with indicators of consistency, coherence and normal business conditions. In other words, the sector-based study data provide useful information on how a standard company in a given sector can stay on the market under normal, and not marginal, business conditions.<sup>17</sup>

This choice is perfectly consistent with the assumptions underlying the model adopted, the purpose of which, it should be recalled, was to determine the lost tax revenue generated by sectors operating illegally (counterfeiting) and with a market presence based on the assumptions regarding the marginal rate of substitution and the entire supply chain. This is not to say that a company exhibiting behaviour that is consistent and in line with the sector-based studies is certainly legitimate. However, in the context of business activities conducted legitimately for a given sector, consistency and coherence with the approved sector-based study is an indicator of efficiency, viability, and (above all) operation under normal business conditions.<sup>18</sup>

Once the relevant sector-based study had been identified for each ATECO code in the supply chain, two indicators were applied:

- 1) taxable income/turnover;
- 2) taxable income/value added;

which represent the main indicators for the purpose of calculating the tax burden.<sup>19</sup>

Sector-based studies, through the application of statistical techniques, make it possible to calculate indicators of consistency and coherence. The formed regard accounting aspects and are therefore linked to cost and turnover data, while the latter regard overall information on business operations (field of specialisation, working conditions, technical characteristics, and so on; the concept of normal business conditions differs slightly from the one used in the sector-based studies and aims exclusively to identify companies operating in the various sectors, ensuring turnover in line with the relevant sector).

<sup>&</sup>lt;sup>18</sup> See the Censis Ares-AICO report, 2009.

<sup>&</sup>lt;sup>19</sup> The report represents a crucial indicator of the tax return relating to companies included in the main findings reported for the sector-based studies for the 1998-2005 tax years. (*Documenti di lavoro ufficio studi Agenzia delle Entrate Ministero Economia e Finanze 2008/1*).

Once the tax base had been calculated, the average marginal rate for company income tax (IRES) for limited-liability companies and commercial entities was applied, calculated at a rate for all sectors of approximately 27.5%.

In the same way, starting from taxable income, as defined above for the purpose of direct taxes, in order to calculate IRAP (regional income tax on productive activities) the indicator IRAP tax base/IRES tax base by sector (likewise derived from sector-based studies) was taken into account.

Once the tax base had been calculated, the average rate for the sector – approximately 4.25% on average – was applied and the resulting tax calculated.

#### 2.2. Income from employment

In addition to IRES revenue calculated on company income, revenue from IRE (income from employment) was calculated by sector.

As already mentioned previously, this tax revenue refers to total withholding tax not paid by employers as lieu tax and the amount of IRAP not paid by the employers on allowances, since such income constitutes a non-deductible cost for the company for the purposes of the tax. While the latter component is already included in the IRAP calculation described in the previous section, this section describes the methodology used to calculate IRE tax revenues.

The main sources of data used for the estimate and relevant variables are set out in the table below:

Table 2. Data used to calculate IRF tax revenue

Name	Source	Variables		
I-O matrix	Intersectoral matrix of the economy, 2000	Annual work units (AWUs) directly and indirectly activated (generated) by sector		
National economic accounts	ISTAT for 1997-2010 period: published on 15 April 2011	Total work units, employees and self- employed workers by sector; income from employment, gross wages and salaries social security contributions borne by employers, provision for severance indemnity by sector		
Income tax returns, 2009 tax period	Revenue Agency – tax statistics, tax period 2009	Income category, gross tax, deductible contributions, net tax, average rate, total tax by income category		
INPS (National Social Security Institute)	INPS – compulsory contribution rates by sector for 2009-2010	Average rate per sector borne by the worker and employer; SSN (National Health Service) rate; benefits		

Source: Censis

Starting from the estimate of work units directly and indirectly activated (generated) by the business sector concerned and by other sectors affected by the demand, the following aggregates were determined:

- average gross wage per annual work unit by sector;
- average income from employment per annual work unit by sector;
- social security contributions borne by the company;
- social security contributions borne by the worker;
- taxable income:
- tax payable by applying the average rate per income bracket, taking into account deductible contributions and the so-called *no-tax area* and *family area*.

#### 2.3. VAT

Potential VAT revenue is estimated by starting from data drawn from the I-O matrix. Specifically this revenues is calculated according to two different bases:

- 1) final expenditure for the sector;
- 2) final demand activated (generated) in the sectors bearing the expenditure.

Calculating VAT revenue on the basis of the first aggregate makes it possible to determine the VAT which is payable yet not paid exclusively with regard to the expenditure stage.

Calculating VAT revenue on the basis of the second aggregate makes it possible to determine overall revenue generated by the sector concerned during all stages of the production cycle upstream and downstream from production.

In order to carry out the estimate, Ministry of Economy and Finance (Revenue Agency) data drawn from VAT returns for the 2009 tax period were considered. These include the following aggregates:

characteristics of taxpayers; Main VAT variables: Turnover; Main VAT variables; Total purchases and imports; Value added tax; Tax base; VAT for tax period; Tax payable, Input tax; Total VAT payable; Total input VAT; Total refunds requested; Input tax used as setoff and the following year; Total tax paid; Taxable operations: Taxable operations according to rate; Total taxable operations; Total charged to final consumers; Total charged to VAT-registered subjects.

For the purpose of the calculation, the average rate applied to sales for the sector concerned was considered.

## 3. RESULTS

The results of the analysis based on the methodology adopted are set out below. These results are illustrated separately for each type of revenue, tax category, sector and considering whether they relate to direct or induced demand. Potential revenue is regarded as "lost revenue" for government finances. In addition, potential revenue is calculated with reference to 2010 on an accrual basis.

#### 3.1. Direct tax revenue

The following table shows the tax revenue generated for each business sector affected by counterfeiting separately.

Total direct tax revenue lost to counterfeiting in Italy was on direct taxes amounts to approximately 1.476 billion euros.

Total lost direct tax revenue was 632 million euros for IRES (company income tax), around 324 million for IRAP (regional income tax on productive activities). IRE (tax on income from employment) on income tax not paid by employers for themselves and on behalf of employers must be added. Total revenue from IRE (tax on income from employment) was 522 million euros.

Table 1. Lost direct tax revenue generated by counterfeiting in Italy by sector and item of expenditure, 2010 (in millions of euros)

Expenditure items	Total IRES (company income tax) on final demand	Total IRES (company income tax) on activated production	Total IRES	Total IRE (tax on income from employment) Direct and activated demand (calculated per annual work unit) <sup>20</sup>	Total IRAP (regional tax on productive activities) on final demand	Total IRAP on company revenue Activated production	IRAP	Total direct taxes
Food, alcoholic and non-alcoholic beverages	s 30.541 95.158	75.51 179.86	106.05 275.02	73.02 175.80	14.57 51.86	33.78 90.67	48.34 142.53	227.41 593.35
Clothing and clothing accessories Perfumes, cosmetics and medicines	2.860	5.27	8.13	9.11	1.29	2.33	3.62	20.85
Toys and games	0.968	1.83	2.80	2.52	0.40	0.78	1.18	6.50
Computer equipment	6.054	8.549	14.60	12.99	3.465	4.754	8.22	35.81
Electrical appliances and material	15.532	32.11	47.64	51.55	8.81	16.60	25.41	124.60
CDs, DVDs, audio and video cassettes	45.586	94.243	139.83	151.29	25.865	48.710	74.58	365.69
Watches and jewellery	10.235	17.39	27.62	34.46	5.70	9.01	14.71	76.80
Auto parts	2.735	5.65	8.39	9.08	1.55	2.92	4.47	21.94
Medicines	0.531	0.98	1.51	1.69	0.24	0.43	0.67	3.87
Total	210.20	421.40	631.60	521.50	113.75	209.98	323.73	1,476.83

<sup>&</sup>lt;sup>20</sup> In addition to IRE (tax on income from employment) not paid by employers, total compulsory social security contributions calculated on gross salary should be added. On average, 8.18% of these contributions is bome by employees, while 41.67% is borne by the employer. According to the estimate these contributions total approximately 1.016 billion euros.

Tab. 2. Lost revenue from withholding taxes on income from employment and other similar income generated by counterfeiting in Italy by sector and item of expenditure, 2010 (in millions of euros)

Expenditure item	IDE /t	IRE (tax on income	TataLIDE
Experial circ item	IRE (tax on income from employment)	from employment	Total IRE
	Direct demand	Activated demand	
	(calculated per	(calculated per	
	annual work unit)	annual work unit)	
Food alaskalis and as a slaskalis	26.2	46.0	72.022
Food, alcoholic and non-alcoholic	26.3	46.8	73.022
beverages			
Clothing and clothing accessories	105.9	69.9	175.801
Perfumes, cosmetics and medicines	6.8	2.3	9105
Toys and games	1.4	1.2	2.520
Computer equipment	10.5	2.5	12.991
Electrical equipment and material	33.0	18.6	51.547
CD, DVD, audio and video cassettes	96.7	54.6	151.287
Watches and jewellery	25.9	8.5	34.463
Auto parts	5.8	3.3	9.077
Medicines	1.3	0.4	1.690
Total	313.4	208.1	521.50

#### 3.2. Indirect tax revenue

The estimate of VAT revenue regarded both the final expenditure for the sector concerned – so-called final demand – and demand in sectors affected by this expenditure – so-called induced demand. One third of lost revenue comes from direct expenditure for each sector, while two thirds comes from induced demand.

The following table shows lost VAT revenue by sector of expenditure.

Table 3. Lost indirect tax revenue generated by counterfeiting in Italy by sector and expenditure item, 2010 (in millions of euros)

Expenditure I tem	VAT on final demand	VAT on activated production	Total VAT
Food, alcoholic and non-alcoholic	110.76	280	391
beverages			
Clothing and clothing accessories	414.42	807	1,221
Perfumes, cosmetics and medicines	15.36	27	43
Toys and games	4.88	9	14
Computer equipment	40.46	55	95
Electrical appliances and material	99.95	189	289
CDs, DVDs, audio and video cassettes	293.34	554	848
Watches and jewellery	73.08	112	185
Auto parts	17.60	33	51
Medicines	2.85	5	8
Total	1,072.7	2,070.7	3,143.4

As the table shows, VAT revenue lost during the final expenditure stage was over 1 billion euros. If tax not paid due to induced demand, over 2 billion euros, is taken into account, the figure would be more than 3.1 billion euros.

#### 4. THE IMPACT OF COUNTERFEITING ON GOVERNMENT FINANCES

Once the value of the revenue from direct and indirect taxation generated by counterfeiting had been estimated, the focus in this section is on evaluating the burden that such an aggregate constitutes for government finances.

In order to determine the incidence of this value, figures according to tax category were compared with a number of Revenue Agency aggregates for 2010. Estimated revenue was compared in particular with assessed tax revenue<sup>21</sup> since it is likely that overall taxes potentially generated by the counterfeiting market, under normal business conditions and on the legitimate market, would have contributed to tax revenues, each with respect to its individual category (direct and/or indirect) according to a temporal principle of accrual and not cash accounting.

<sup>&</sup>lt;sup>21</sup> Ministry of Economy and Finance, *Monthly Bulletin of Tax Revenues* for January-December 2010. March 2011 bulletin. Assessment is a modified accrual accounting operation which represents the first stage in the acquisition of revenue data for the purpose of government budgeting/finances used to verify the reason for the credit, the person who owes it and the amount to be assigned to the reporting period. It precedes and thus differs from the collection stage, which represents the next stage of acquisition of revenues, with amounts being paid by tax collection agencies into the state treasuries.

In addition, company income tax (IRES) revenues estimated in this context were compared with overall IRE and IRES revenue generated by companies, thus also taking into account revenue from business activities not necessarily conducted in the form of limited-liability companies<sup>22</sup>.

The following summarises the connection between the tax items included in estimated revenue and government budget items with which they have been compared.

Table 3. Connection between calculated taxes and designated government budget categories/subcategories - 2010

Tax generated	Cause	Designated budget category	Subcategory
Direct taxes		Direct taxes	
Personal income tax (IRE)	Taxes generated by income from employment	IRE – juridical-accounting balance and advance payment (Cat.1023, articles 3,17,18,21 and 25)	IRE – withholding taxes on private-sector employee income
Tax on corporate revenue  — IRES	Taxes generated by company income	Company income tax (IRES) (Cat. 1024, articles 2 and 8)	IRES – total balance and advance payment
Regional tax on productive activities	Taxes generated by company income	Regional tax on productive activities	IRAP – total balance and advance payment
<i>Indirect taxes</i> Value Added Tax – IVA	Generated by demand For counterfeit products	Indirect taxes Value Added Tax – VAT (Cat. 1023, articles 1 and 2)	VAT – total on domestic tra – VAT on imports

#### Source: Censis

As Table 4 shows, total direct expenditure on counterfeit products – 6.924 billion euros in 2010 – generated approximately 1.7 billion euros of lost revenue, 37.3% of which derived from direct taxation and the remainder from indirect taxes.

If taxes from induced production in other sectors of the economy, almost 3 billion euros, are considered, total lost revenue would rise to 4.62 billion euros.

Revenue deriving from counterfeiting activity has been calculated, by way of example, by assuming that all economic actors involved in counterfeiting are limited-liability companies and thus subject to the IRES tax regime; this aspect does not mean the tax revenue need not be compared with total taxes generated by company income, which also include IRE for business activities conducted in the form of sole proprietorships or partnerships.

Table 4. Tax revenue generated by counterfeiting in Italy by tax category - 2010 (in millions of euros)

Tax	On direct demand	On activated production	Total direct and activated tax revenue
Direct taxes			
Revenue from IRES and IRE tax on company income	210.20	421.40	631.60
Revenue from IRAP on company income	113.75	209.98	323.73
Revenue from IRE on employment income	313.42	208.08	521.50
Total direct taxes	637.37	839.45	1,476.83
Indirect taxes			
Revenue from VAT on sales	1,072.71	2,070.72	3,143.44
Total indirect taxes	1,072.71	2,070.72	3,143.44
Total	1,710.09	2,910.18	4,620.26

Lost government tax revenue generated by counterfeiting is 1.74% of the total revenue considered here.

Table 5. Potential revenue by tax category from counterfeiting in Italy – government revenue assessment, 2010 (absolute values in millions of euros and percentage values)

Taxes	Revenue generated by counterfeiting (in millions of euros) (A)	Government revenue assessment, 2010 (in millions of euros) (B)	% (A/B)
Direct taxes			
IRE - IRES (companies)	631.60	61,871	1.02
IRAP (companies)	323.73	23,347	1.39
IRE (income from employment)	521.50	64,027	0.81
Total direct taxes	1,476.83	149,245	0.99
Indirect taxes			
Value Added Tax:	3,143.44	115,674	2.72
Domestic trade		101,120	3.11
Imports		14,554	
Total indirect taxes	3,143.44	115,674	2.72
Total direct and indirect taxes	4,620.26	264,919	1.74

Source: Censis

Specifically, operators on the counterfeit market generate 631 million euros in lost IRES and 323 million euros in lost IRAP revenue, calculated on the basis of income earned from their activities; in percentage terms, this represents 1.02% of total taxes in the same category.

Annual work units activated by the sector, 109,346 in total, account for a further 521.5 million euros in lost revenue, which represents approximately 0.89% of the value of withholding taxes on private-sector employee incomes; to this figure one must add compulsory social security contributions estimated at roughly 1.016 billion euros, in addition to severance Indemnity and other allowances.

The economic channel generates potential but unpaid VAT revenue of as much as 3.1 billion euros, or 2.72% of total VAT assessed by the government and over 3% on resulting VAT if domestic trade is considered exclusively.<sup>23</sup>

It should be noted that the revenue estimated above constitutes potential and therefore assessable government revenue, assuming that counterfeiting in all of its forms and stages were carried out under legitimate conditions, including tax filing obligations, i.e. declared value for the purpose of Direct Taxes (Income tax) and Indirect Taxes (Turnover).

<sup>23</sup> See note 15.



# PART THREE

# ANALYSES BY PRODUCT SECTOR

Leather and footwear Cosmetics Counterfeiting in the design sector

#### PRELIMINARY REMARKS

The product sectors examined were selected in agreement with the contracting administration. In some cases, this choice was guided by the objective scope of the phenomenon of counterfeiting (for example leather goods, shoes, and to a lesser but growing extent cosmetics), while in the case of design, with particular reference to the furniture sector, it was decided to examine a sector for which specific analyses do not exist.

In order to perform the analyses, a mix of methodologies was employed, including desk and field research. With regard to desk research, available structural data on trends in the sector and on seizures made by the police, specific legislation, studies of counterfeiting by organisations in the field or consumer associations and information from the most significant news items were consulted, in order to construct as accurate a picture as possible of the characteristics and scope of the counterfeiting phenomenon with reference to the products in question. Next semi-structured, open-ended interviews – in some cases face-to-face and in others by telephone or email – were conducted with experts in the business fields or with representation associations and/or experts with proven expertise in the matter. The findings of the survey were brought together in case studies which were submitted to respondents for their attention and approval and are reported on the following pages.

The three case studies have the same structure:

- Firstly, the area of interest of the research was established and delimited by defining which
  products to consider. The economic size of each sector in the Italian economy was taken
  into account, as was the legislative framework that regulates its operation, by analysing
  any regulations designed to protect products against counterfeiting and other violations;
- Counterfeiting was then examined in specific detail, by establishing the forms that it takes, distribution and sales channels, perception with regard to the size of and trends in the phenomenon. Whenever possible, it was also attempted to estimate turnover from the sale of counterfeit goods.

The analysis also aimed to establish what systems and procedures for protecting products exist, such as traceability, certifications of guarantee, constant monitoring of the market and attempts to adapt legislation.

#### A list of the experts consulted follows:

- Filippo Bongiovanni Design, Models and Trademark Protection Office, Federlegno Arredo
- Lorenzo Braccialini –Marketing and Communications Manager, Braccialini
- Giovanni Casucci Casucci Stp, a law firm specialising in Intellectual Property Rights
- Andrea Calistri President, Consorzio Centropercento Italiano, Scandicci
- Marcella Marletta Director General, Directorate General of Medical Devices, Pharmaceutical Services and Safety in Healthcare, Ministry of Health
- Elio Mignini President, SICC (Società Italiana di Chimica e Scienze Cosmetologiche)
- Rossella Miracapillo Chief and General Secretary, Osservatorio Farmaci e Salute del Movimento Consumatori
- Mauro Muzzolon and Fabrizio Solè Director and Deputy Director, AIMPES (Associazione Italiana Manifatturieri Pelle e Succedanei)
- Gian Andrea Positano Head of Communication and Study Centre, Unipro (Associazione Italiana delle Imprese Cosmetiche)
- Lidia Sautebin Department of Experimental Pharmacology of the University of Naples Federico II and collaborating with the Centre of Pharmacovigilance and Pharmacoepidemiology of the Second University of Naples
- Matteo Scarparo Head of the Economics and Business Services Area, ANCI (Associazione Nazionale Calzaturifici Italiani)
- Claudia Simionato ACRIB (Associazione calzaturifici Riviera del Brenta)
- Emanuela Testai Research Director, Istituto Superiore di Sanità
- Vittorio Virgili Owner, Vittorio Virgili s.r.l. (footwear), and member of the Board of Governors of ANCI, with specific responsibility for anti-counterfeiting policies.

#### 1. LEATHER AND FOOTWEAR

#### PRELIMINARY REMARKS

This chapter analyses in depth the characteristics and scope of counterfeiting in the leather goods sector (which includes a wide variety of products, from handbags to suitcases, briefcases, belts, small leather items such as wallets, key cases, and so on), which on the request of the commissioning administration was also connected to the footwear sector.

#### 1.1. Size of the sectors in the Italian economy

Fashion, food and wine, furniture: key areas of Italian manufacturing industry, strengths of our economy, but also a guarantee of a quality which has always distinguished Italian products and which is exported all over the world.

In the fashion industry (which as well as clothing includes clothing accessories, footwear, jewellery and eyewear), in particular, the "Made in Italy" label has asserted itself on all the main global markets thanks to creativity, high-quality materials and craftsmanship, becoming, at the global level, not merely a "geographical indication", but a veritable byword for design and innovation, style and luxury.

Nevertheless, the crisis that has affected the global economy in recent years has not spared fashion. Initially it was leather goods and footwear industries that bore the brunt of the recession. They began to recover in terms of output and turnover in early 2010, although they have not yet returned to pre-crisis levels.

According to data produced by trade associations – in 2010 total production of leather goods<sup>24</sup> was worth 3.778 billion euros, in an industry that numbers 6,350 companies and 32,000 workers – the situation in 2010 showed a marked improvement on 2009, when output levels fell sharply. Compared with the previous year 2010 recorded an 18% increase in production, and the number of firms in the industry also increased (although employee numbers remained steady) (Table 1).

This recovery was mainly due to a growth in exports, which increased by 21% in 2010 to 3.26 billion euros, after the unprecedented collapse of 2009. Exports of leather goods accounted for 60% of overall export volumes; here, women's handbags were the leading product, accounting for over 70% of the volume of sales.

<sup>&</sup>lt;sup>24</sup> Includes handbags, small leather goods, wallets, suitcases, travel articles, belts, musical instrument cases, briefcases, document holders and Morocco leather goods...

The recovery regarded virtually all of the industry's major markets, both in the European Unions (where France, as a market which generates significant trade on a subcontracting basis, especially with Tuscany in the luxury segment, and Germany stand out) and outside the EU, with positive trends recorded by the USA (+26.7%), Hong Kong (+37.7%), and among emerging markets, Russia (+12.6%).

Imports grew by 19.1% between 2009 and 2010 to 1.782 billion; it should be pointed out that these imports, taken as a whole, include overseas outsourcing, i.e. a part of domestic production which is wholly or partly manufactured abroad and mostly re-imported. It is estimated that this kind of delocalisation of production to "low-cost" countries increased by 18.3%.

"Pure" imports, i.e. those that are not the result of delocalisation, are essentially sold through large-scale retail distribution channels, major retailers of clothing and accessories, import wholesalers and promotional channels; for these, an increase of 4.8% was estimated at the end of 2010.

In general the sector underwent a two-speed recovery in 2010: the most rapid recovery was seen among he most supported registered by producers of luxury and affordable luxury goods, along with subcontracting firms, which exploit the vitality of foreign markets to the full, while a slower recovery was experienced by companies which present themselves on the market without a brand and without the competitive strength that would allow them to overcome any remaining market weaknesses, in particular in the domestic market.

 Table 1. Leather goods sector in Italy, 2008-2012 (absolute and percentage values)

Sector	2008	2009	2010	% change 2008-2010	% change 2009-2010
Companies Employees Production in value (in millions of euros)	6,300 32,700 3,900	6,000 32,000 3,200	6,350 32,000 3,778	0.8 -2.2 -3.1	5.8 - 18.1
Exports in value (in millions of euros)	3,326	2,695	3,260	-2.0	21.0
Imports in value (in millions of euros)	1,638	1,496	1,782	8.8	19.1

Source: Censis, based on AIMPES data

The footwear sector, after being severely affected by the economic crisis and recording a fall of over 12% in production between 2008 and 2009 and -16% in terms of revenue from exports, made a very strong, mainly export-driven recovery in 2010 (+15.2% in volume and +13.7% in value); however imports also strengthened, growing by 16.3% in value, mainly led by Chinese imports, which account for almost half of footwear entering Italy (Table 2).

The value of production in 2010 was still far below the 2008 figure, at around 6.7 billion euros, with 5,804 companies and 80,153 direct employees: a decline of over 400 companies and 5,000 employees compared with 2008.

Table 2. Footwear sector in Italy, 2008-2010 (absolute values and percentage changes)

The sector	2008	2009	2010	% change 2008-2010	% change 2009-2010
Companies	6,263	6,028	5,804	-7.3	-3.7
Employees	85,918	82,907	80,153	-6.7	-3.3
Production	•	•	,		
value (in millions of euros)	7,319	6,468	6,756	-7.7	4.4
pairs (millions)	225	198	202	-10.1	2.3
Exports					
value (in millions of euros)	6,915	5,815	6,612	-4.4	13.7
pairs (in millions) Imports	222	192	221	-0.2	15.2
value (in millions of euros)	3,350	3,184	3,703	10.5	16.3
pairs (in millions)	353	310	355	0.7	14.6

Source: Censis, based on ANCI data

Although the European Union remains the area from which most demand for Italian products comes (accounting for 61% of the total value of exports), in 2010 exports to two emerging countries, Russia (+19% in export volume terms compared to 2009) and China (+ 50% on the previous year) grew significantly.

Despite signs of recovery, a negative signal came from employment, which continued to decline, recording a -3.3% change on 2009, with the loss of 2,754 jobs.

But it is not only the economic crisis of recent years that has threatened these two mainstays of the Italian economy. A far more insidious danger now comes from the challenges posed by globalisation, above all by increasing competition from developing countries, in particular in Asia.

This poses serious questions regarding the capacity and the future of Italian industry, especially taking into account the fact that there is not only *legitimate*, *fair* competition, but also competition which uses "grey" or illegal instruments in order to make even larger profits: without a doubt, counterfeiting is one of the markets that can severely impact the turnover of these sectors.

# 1.2. Legislation: the fight against counterfeiting and defending the "Made in Italy" label

In Italy no specific anti-counterfeiting legislation exists for leather goods and footwear. Accordingly, reference is made to the articles in the Italian Criminal Code concerning counterfeiting crimes (articles 473 ff. and subsequent amendments).

In the sector that is the subject of our focus, however, a problem which is not counterfeiting in the technical sense is particularly keenly felt: that of false or misleading indications of origin (see also pages 97-100 of this report) in relation to place of manufacture.

The problem stems from the fact that today, because companies decide to transfer production overseas the manufacturing processes for a given product can be performed in different countries, and because international trade is facilitated by more efficient transport and lower customs tariffs, raw materials used in producing a particular good can come from many different countries.

The combination of these two factors – delocalisation and globalisation – makes it difficult to attribute a place of origin to the finished products. This said, however, identifying their origin is vital, not only in customs terms in order to apply trade policy and tariff measures, but also in terms of the information value that the indication of origin has in guiding consumers' choices as well as in enhancing a country's enterprise system and supporting its competitiveness.

This is particularly true of goods produced by Italy's leather and footwear sectors (in addition, naturally, to products in the textiles sector), which are ascribed greater value in terms of style, quality and craftsmanship merely by virtue of being Italian-made. The concept of the "Made in ..." origin marking is significant in this context. The "Made in Italy" label is therefore indicative of such symbolic and at the same time tangible value of quality.

In order to defend the "Made in Italy" mark of origin specifically in the leather goods, footwear and textiles sectors, the Italian Parliament approved Law no. 55 of 2010 entitled *Provisions concerning the marketing of textile products, leather goods and footwear*, known as the "Reguzzoni-Versace-Calearo" law after the first parliament members to sign the initial bill). Pursuant to this law, in order for products belonging to the abovementioned categories to be classed as "Made in Italy", at least two

manufacturing stages must take place in Italy, while the traceability of the other stages must be verifiable. The law also institutes a system of mandatory labelling of finished and intermediate products in the same sectors which highlights the place of origin of each stage in their manufacture and ensures the traceability of the products themselves.

This law, while formally in force, has remained essentially inapplicable in the absence of the implementing regulation, and its adoption by the government is hampered by the European Commission for two reasons, one of a procedural nature (the bill was approved by the Italian Parliament before the advance notification required by Directive 98/34) and the other of a substantive nature. With regard to the latter, the Commission has not only deemed the principle of the "primacy of manufacturing stages" to be in conflict with the principle of the "last substantial operation" as provided for by the Community Customs Code (see later on in this report), but has also noted a conflict with the principle of free movement of goods between Member States.

As things currently stand, therefore, under national and European legislation – except for obligations in certain specific areas – there is no general obligation to indicate "Made in" as a mark of origin on products or goods, in contrast with the situation of some of Italy's international trading partners with much stricter legislation and detailed rules regarding the compulsory indication of country of origin (this is the case, for example, in China, Canada, the United States and Japan).

With regard to indication of origin, the following legislation currently applies:

- Madrid Agreement Concerning the International Registration of Marks of 1891 (revised in Lisbon in 1958 and enforced in Italy by Law no. 676 of 1967 implemented by Presidential Decree no. 656 of 1968), which prohibits the use of false or misleading indications of origin and grants customs officers the power to order the seizure of the goods bearing them;
- Law no. 350 of 2003 (2004 Finance Law), which enacts criminal proceedings to cases of import, export and marketing of products bearing false or misleading indications of origin. Specifically, it makes article 517 of the Italian Criminal Code applicable (up to two years' imprisonment and fine of up to 20,000 euros). For enforcement purposes, the Customs Agency's own circulars state that:
  - False indication means marking products and goods which are not of Italian origin as "Made in Italy", where "Italian origin" means that reference must be made to EU customs provisions regarding non-preferential origin;
  - False indication of origin consists of the affixation of marks, figures, or any other such indications to products which do not have an indication of origin in order to lead the consumer to believe that the product or merchandise is of Italian origin, or the affixation of marks, figures, or any other such indications to goods on which a foreign origin or provenance is indicated in order to induce the consumer to believe that the product or merchandise is of Italian origin.

- Law no. 166 of 2009 (Development Law), which introduced the offence of the misleading use of company trade marks, which happens when the company trade mark affixed to the product is misleading in nature or in any case may lead the consumer to believe that the product is of Italian origin. The offence is punished with an administrative fine (of between 10,000 and 250,000 euros) only where such behaviour does not constitute misleading commercial practice (in which case it is punishable by a criminal fine pursuant to article 517 of the Criminal Code);
- Community Customs Code, under which, goods whose production has involved more than
  one country shall be deemed to originate in the country where they underwent their last,
  substantial, economically justified processing or working in an undertaking equipped for
  that purpose and resulting in the manufacture of a new product or representing an
  important stage of manufacture.

However, the implementing provisions of the Community Customs Code specifically set out what processing activities may confer the origin of the products in a number of product categories. For footwear, for example, Annex 11 of the implementing provisions of the Community Customs Code makes provision for a specific rule: *Manufacture from materials of any heading except for assemblies of uppers affixed to inner soles or to other sole components falling within CN code 6406*. In other words, to ensure that a finished shoe can bear the "Made in Italy" mark of origin, the upper must be affixed to the sole and the subsequent processing must take place in Italy.

Finally, with regard to the correct indication of product origin:

- article 6 of Legislative Decree no. 206 of September 6, 2005 (Consumer Code), which, with reference to the indications which must be included in a clearly visible and legible manner on consumer products or their packaging, provides for compulsory indication of the product's country of origin if outside the European Union (in addition to the name, business name or trade mark and registered office of the producer or of an importer located in the European Union);
- The proposal for a regulation of the European Parliament and of the Council on the indication of the country of origin of certain products imported from third countries: The regulation provides for the establishment of a pan-European system of labelling on the Country of origin for goods imported from third countries, in order to allow consumers to make an informed choice, and provides for penalties in the event of a violation of the rule. The text is awaiting approval by the Council of Ministers of the European Union for the draft regulation to become law.

# 1.3. The scope of counterfeiting

Analysing the impact of counterfeiting on the leather goods and footwear sectors is of fundamental importance, as available data (consumer surveys, data

on seizures of counterfeit goods by police, estimates, etc.) all concur in highlighting that it is precisely for these kinds of articles that the *demand for fake items is particularly high*, and, as a result, supply is particularly plentiful and sophisticated, representing one of the most profitable areas of business for counterfeiters.

A very recent Censis survey of Italian consumers' purchasing habits shows that of those who purchased fake goods over the previous year, 39.4% had bought *handbags and accessories* and 18% *shoes* (the latter category being exceeded only by clothing items, purchased by 34.2%, and glasses, purchased by 18.9%).

These figures are consistent with data on seizures contained in the IPERICO database maintained by the Ministry of Economic Development, which gathers data on seizures by the various bodies engaged in combating counterfeiting, and contains data on activities to suppress other types of offences such as piracy, violation of regulations regarding "Made in Italy" origin marking and product safety.

As yet it has only been possible to "normalise" – that is, group together under the same classification system – seizures carried out by the Italian Tax Police and Customs Agency, since specific data exclusively regarding counterfeiting from Carabinieri, National and Local Police are not available, although it is analysed and reported in the IPERICO database. Tax Police and Customs Agency figures were added together, with steps being taken to avoid duplication as the result of joint operations and consequent double counting of the same seizure.

Seizures as a result of anti-counterfeiting operations during 2008-2010 period by the Tax Police and Customs Agency, analysed by product category, clearly show a preponderance of seizures of clothing accessories (which accounted for as much as 36.7% of the total and 20,587 seizures in absolute terms, with 6,386 conducted in 2010) (Table 3). Seizures of footwear accounted for 14.5% of the total (8,112 in absolute terms, of which 1,883 were conducted in 2010), and were exceeded only by seizures of clothing items, which represented 20.9% of the total.

Table 3. Seizures of clothing accessories and footwear by Customs Agency and Tax Police for counterfeiting violations. 2008-2010 (absolute and percentage values)

Number of seizures	3-year total 2008-2010	% of total	of which in 2010
Clothing accessories	20,587	36.7	6,386
Footwear	8,112	14.5	1,883
Total	56,055	100.0	18,331

Source: Censis, based on IPERICO data (DGLC-UIBM)

An analysis of the *number of items seized* in three years indicates that counterfeiting continues to be highly concentrated in the sectors in question, which altogether account for 33.4% of the 174,207,586 items seized in total between 2008 and 2010. Accessories, with over 43 million items, clearly outnumbered footwear, with over 11 million items (Table 4); here seizures of footwear were exceeded by clothing items (37 million items seized over the three years) as well as toys and games (with over 23 million items). The latter increased sharply as a result of the high average size of the seizures (27,000 items per seizure for games in 2010, compared with fewer than one thousand items on average per seizure for footwear and accessories).

Table 4. Seizures of clothing accessories and footwear by Customs Office and Tax Police for counterfeiting violations. 2008-2010 (absolute and percentage values)

Number of items seized	3-year total 2008-2010	of which in 2010	% of 3-year tota	
Clothing accessories	43,215,594	4,975,004	24.8	
Footwear	11,480,504	1,807,529	6.6	
Total	174,207,586	64,008,000	100.0	

(\*) Excluding food, beverages, tobacco and medicines Source: Censis, based on IPERICO data (DGLC-UIBM)

In addition, the IPERICO database provides an estimate of the economic value of seized goods, which was made starting from the value estimated by the Customs Agency based on the quality of the counterfeit products and the presumed response with which the goods would have met on the market.

The estimated value of goods seized for counterfeiting over the three years was nearly 1.8 billion euros, the largest slice of which is accounted for by clothing accessories, with a value of more than 831 million euros, while for footwear the estimated value was over 266 million euros.

An indicative measure of the counterfeiting phenomenon for leather goods was provided by AIMPES, which estimated turnover from fake goods in this sector in Italy at over 1.2 billion euros, or about one third of the sector's annual turnover, with a total of around 30 million counterfeit items sold annually, compared to approximately 20 million items on the legitimate market

Volumes of counterfeit products were high especially for handbags (with a turnover of approximately 70% of the estimated turnover), followed by belts, wallets and small leather goods (approximately 20%). The remaining figure was accounted for by suitcases, travel bags, backpacks and briefcases.

#### 1.4. Characteristics of counterfeiting

From what has been said so far, it is clear that a strong interest surrounds the world of fashion accessories and footwear, and certainly, in this area, the articles that exert a greater appeal are luxury items bearing the main Italian and foreign designer labels and naturally not accessible in the "original version", as a result of objective economic constraints for most consumers. This evident fact was largely confirmed by the focus group conducted as part of this research, and by interviews with industry experts.

Interest on the part of consumers makes the market for articles in the fashion sector, in particular leather accessories, extremely attractive and profitable for counterfeiters. This market is thus undermined by a series of violations, ranging from fully-fledged counterfeiting – that is, reproducing and selling items which illegally bear a brand that is identical to a trade mark (trademark infringement) or which unlawfully reproduce products covered by registered models or designs (design counterfeiting) – to the misuse of indications of origin ("Made in ..." or comparable indications).

With reference to what is certainly the most familiar, visible offence, trademark infringement, it should be pointed out one of the reasons that this type of violation exists lies in the fact that in these specific sectors brand names are not only a distinguishing mark indicating the manufacturer but also take on the additional, important value of status symbol which is highly prized by consumers.

Thus huge quantities of leather goods are sold in markets, on stalls, on the pavement and on Italy's beaches, in plain sight. The prime example, experienced by every one of us daily, are handbags and accessories with the most well-known, fashionable and desirable luxury brands – Italian or otherwise – such as Prada, Louis Vuitton, Armani, Gucci, etc., which can be found on any street corner of any city, over the arm of foreign sellers or on sheets spread out on the pavement.

Yet luxury brands are not the only ones targeted by counterfeiters: there is a series of midrange and mid-to-high range brands (Alviero Martini's range of leather goods, for example) whose products are highly desirable on the market and thus reproduced and sold as copies which are more or less similar to the genuine article and bearing an illegally affixed brand.

Generally aware – for reasons relating to price, place of purchase and their own and other people's previous experience – that they are purchasing a more or less well-made copy of the article they desire, consumers of counterfeit accessories are often very happy to be able to pay a fraction of the price they would pay for the genuine article in order to possess the "object of their desire".

Prices of counterfeit goods vary depending on their quality and their similarity to the genuine item, and the eye of a expert buyer (who is very familiar with the original product, whether it be a Prada bag or a pair of Hogan shoes) is able to choose the copies on which it is worth spending a larger amount. Paradoxically, there appears to be a differentiated product market also for counterfeit goods,

where Italian-made copies are generally of better workmanship compared with copies of Chinese or foreign manufacture and for which consumers are willing to pay higher amounts.

As will be seen later on, purchasers are not always aware that what they are buying is a fake: it may be the case that counterfeit goods are distributed without the knowledge or with the complicity of the merchant to legitimate commercial enterprises and then sold to the public.

## The supply chain of counterfeit goods

Investigation activities and expert testimony make it abundantly clear that the *production of* the counterfeit goods takes place as much abroad as in Italy, and that in Italy it involves Italian and foreign citizens alike.

Investigations and seizures conducted indicate that most fake leather goods come from China (the European Commission's 2010 report on counterfeiting indicated that 84.92% of counterfeit goods seized at customs are of Chinese origin), where low labour costs combine with the presence of enterprises that have relocated and where a less stringent system of controls than elsewhere is in place.

Goods produced overseas generally enter the European Union by air or sea, and subsequently Italy without encountering any obstacles; the favoured route for large shipments is via customs posts at Northern European coastal ports, which are more permeable than Italian customs posts, due among other things to the higher workloads.

Counterfeiters consistently adopt new means of avoiding customs control equipment and new "damage limitation" techniques. In some cases, for example, shipments are split up in order to minimise the economic damage of seizures, or the various counterfeit items are separated and then shipped in several batches.

The part of the production which takes place within national borders happens in hidden workshops run by foreigners and which are often located in manufacturing districts where the same goods are produced legally: data on seizures and experts on the sector point to the area between Florence and Prato, some parts of Lombardy and Marche and the area around Naples as being scattered with clandestine workshops which make their fortune on the backs of undeclared workers and tax evasion and constitute out-and-out veritable *hidden counterfeit manufacturing districts*.

There is also a kind of counterfeiting which is defined as "high-quality fakes", produced by well-equipped factories run by Italians, where counterfeit items are produced in high-quality leather which very closely resembles the genuine items.

Investigation evidence shows how manufacturing in these districts has become increasingly sophisticated. The workshops are equipped to provide the goods with all the necessary credentials, such a as certificate of guarantee and authenticity, coupons with product codes, boxes and pouches with the actual brand imprinted on them and booklets explaining the history of the brand, making fake items less and less recognisable.

As for manufacture production, *selling* requires complex organisation which often takes place through several intermediaries, and may be in the hands of Italians or foreigners.

There is no doubt that the favoured channel for selling counterfeit goods are the streets or the market, which are controlled by criminal organisations using a country-wide network of foreigners who handle sales of illegal products to the end consumer.

The online channel is also growing rapidly. Through e-commerce and online auctions, it constitutes a convenient, safe means of reaching a large number of consumers – especially as it is unregulated and difficult to control – and selling counterfeit goods to informed and uninformed consumers alike, with low costs and above all the possibility to conceal one's identity.

The online channel makes it easier to contact both informed consumers, thanks to the convenience of choosing and purchasing the merchandise, and uninformed consumers, who may become easy victims. The number of cases has multiplied in which uninformed consumers – attracted by lower-than-normal prices but not so low as to arouse suspicion regarding the authenticity of the products, and justified by traders as being for "end-of-line" or "liquidation" stock, and by the guarantees offered by supposed certificates of authenticity and photographs testifying to the quality of the workmanship – purchase items believing that they are receiving a genuine product and then discover that they have been scammed.

Fraud against consumers can also occur on the primary market: in other words, through official sales channels. In recent years, information from investigations has shed light on how the expansion of counterfeiting and the strength of the criminal organisations that control it have also placed official distribution channels at serious risk. Indeed, the objective difficulty of penetrating them, which stems from the need to deceive or come to an agreement with the retailer as well, counterbalances the fact that in such contexts the consumer is less liable to make thorough checks regarding the authenticity of the product.

This phenomenon is particularly common with shoes: a number of Tax Police operations have succeeded in uncovering trade in shoes bearing false trade marks such as Hogan, Prada, and Tod's, produced in clandestine workshops in the Naples area and sorted in hidden depots, from which wholesalers who would sell the goods on to retailers across Europe were supplied. In this case, the main end market was shops in Germany.

Fake-branded Hogan shoes destined for Italian shops were produced in Naples in a fully-fledged industrial facility consisting of two factories equipped with expensive, sophisticated equipment for manufacturing soles with the Hogan trade mark and two factories in which the shoes were packaged. Investigations also identified a box factory in Naples where packaging products resembling the original packaging for the finished products were manufactured, and an aluminium mould factory in the province of Macerata which produced the aluminium moulds necessary for the manufacture of soles with the Hogan name.

# Consequences for the economy

The spread of counterfeiting has serious consequences for the Italy's economy; above all, and contrary to what one might suppose, it is eroding a significant market share which once belonged to small and medium-sized enterprises which manufacture leather products in compliance with legislation, paying taxes and contributing to Italy's economic growth.

In fact, counterfeiting takes liquidity away from consumers in the middle-income bracket, potential purchasers of well-made but unbranded products; thus cutting into the market for Italy's small and medium-sized manufacturers of leather goods in the Tuscany, Marche and Campania regions and the Vicenza area.

One interviewee recalled how the market has changed: until the 1980s, leather goods and finishing firms proliferated, especially in the Florence area, and consumers aspired to own well-crafted *yet anonymous* articles. Then came the *brand era* and only those companies which succeeded in making their own brand recognisable were able to assert themselves on the market: the brand, the designer label, became an indispensable status symbol, and many companies found themselves having to close as they offered products that no longer appealed to consumers.

Thus, with time, the market share for non-branded products gradually diminished, abetted by the increasing availability and accessibility of products that can provide consumers with the illusion of "designer labels at bargain prices".

Experts agree that the major luxury designer labels, whether Italian or foreign, whose leading products are copied and sold illegally in huge quantities, both in Italy and around the world, are not drastically affected by counterfeiting, as they can count on a loyal, elite clientele who would never relinquish purchasing the genuine article from a boutique or authorised retailer.

Instead, they may lose a slice of the "non-loyal consumer" market, made up of those consumers who purchase original products but who, given lower prices, would be willing to substitute them with fake products. This category of consumer, who in order to save money are willing to substitute an original product (which they could aspire to buy without too much difficulty) with a fake one, emerged clearly from the focus groups conducted during this research.

In non-EU markets, too, where a large number of Italian leather products are sold (some Italian footwear manufacturers, for example, produce collections exclusively for overseas markets, such as Russia, where Italian products are highly appreciated), the spread of counterfeit products is significant – as a result of less strict legislation and less stringent controls – and harmful, as it is able to erode very substantial market shares.

Small-scale producers cannot recover the resources taken away from them by counterfeiting in the same way as the major fashion labels can, through marketing strategies and

advertising, nor can they recover them by raising retail prices. The loss of these resources constitutes real damage to these companies.

With regard to major Brands, however, there is an additional kind of damage beside the economic damage, which concerns potential detriment to the brand and the product's "aura of exclusivity", which, with counterfeiting, suddenly becomes accessible to all, and loses its luxury good status.

# Violation of design rights

Similar subjects, channels and dynamics are observed with regard to the other kind of counterfeiting that particularly affects the leather goods sector: the *violation of design rights*.

Design is the decorative, aesthetic appearance of an object, its *form*, which is an essential element when one is discussing style, fashion and accessories. Design counterfeiting occurs when the form of an object is copied or imitated illegally: in other words, when registered models are copied and sold. Bags are the most frequent case.

In this case, too, fake models may be manufactured abroad (as in the example reported by Braccialini discussed in the following pages) or in Italy (skilled leathercrafters who create perfect reproductions of the most in-vogue models by the French fashion house Hermès, for example); sales channels include shops and the Internet, and less frequently travelling traders.

A typical example of how this supply chain operates is the one involving Braccialini, based in the Florence district, which since 2001 has produced the "Temi" collection, which consists of particularly original bags and fashion accessories depicting animals, objects, places, and so on in a fun, creative way, inspired by a different theme each year.

Exploiting the success with which these bags have met and taking advantage of their fame and market appeal, counterfeiters began to reproduce (not faithfully, of course, as the materials are not as fine and they are not hand-crafted) and distribute the most popular models of handbags.

In this case the fake product does not bear the Braccialini brand. Invented, non-existent names are used instead, as it is the model that intrigues and attracts the general public more than the appeal of the *designer label*.

The company reports entire shipments of counterfeit "Temi" bags, mainly from China, seized at customs, and shop windows in the major cities with fake Braccialini handbags on display. Yet that is not all: the company also says – with a certain degree of incredulity – that their official multibrand resellers sell the cheaper counterfeit article alongside the genuine item.

Shops (with or without authorisation to sell the genuine article) are not the only sales channel that the company mentions; it also adds itinerant traders and the Internet, although these are employed less frequently.

with regard to model counterfeiting, many other examples may be cited. The most notorious case involves bags made by the French fashion company, Hermès handbags. This company produces a series of ever-popular models, which are a must-have item for women the world over (take, for example, the Kelly or Birkin handbags). These models have been copied and reproduced by leathercrafters from Italy's leather districts, who sell them illegally as genuine products, affixing the fake Hermès brand to them (thus counterfeiting the trade mark) or engaging in activities bordering on the illegal by reproducing just the model (in some cases making some minor modifications, in others producing a completely faithful reproduction).

Here too the web provides an easy distribution and sales channel for these "high-quality" copies: dedicated sites exist, with images of entire sets of samples (of bags in particular, but also belts, wallets and so on) "inspired by" the most well-known popular models, which are successful thanks to their similarity to the original items (although they are not sold as such) and far lower prices.

In these cases, it is often difficult even for police to access the headquarters of the manufacturers/distributors in order to carry out the necessary checks, as the products do not bear exact addresses and the headquarters change constantly or are inaccessible. They are ghost companies, and commerce based on copies of well-known models may continue undisturbed for months or even years on the web.

## Misuse of "Made in ..." origin markings

As already noted in Section 1.2, a type of violation that is a cause for great concern in Italy is the illegal use of indications of product origin ("Made in ..." and suchlike). It is detrimental as it exposes consumers to false, misleading indications concerning the origin of goods which, in the case of Italian products, refers to a real production model with the accent on excellence and guaranteed consumer appeal.

Protecting products' *mark of origin* is an issue that is particularly keenly felt among footwear manufacturers and manufacturers' associations, who deem falsification of origin as a problem of equal level to the infringement of a trademark. The entry into Italy of goods labelled "Made in Italy" but not manufactured either wholly or partly in Italy as required by law is considered to be a form of unfair competition and is extremely detrimental to domestic producers, who undoubtedly bear higher costs.

As has already been noted, the indication of product origin is governed by a source of law which takes precedence over Italian law: the Community Customs Code, which stipulates that products that have undergone processing in several countries are deemed to originate in the country in which the last substantial manufacturing or processing occurred. Therefore, in order for the "Made in Italy" label to be legitimate, it is sufficient to apply the handle to a bag in Italy, despite the fact that the rest of the bag was manufactured abroad, or to assemble the different parts of a shoe in Italy.

Manufacturers whose operations are based entirely in Italy regard this provision as extremely simplistic and inadequate. But sometimes not even this (in the eyes of many) "tame" provision is observed

when goods manufactured entirely overseas yet bearing a false indication of Italian origin enter Italy fraudulently. The media have drawn attention to this risk by reporting on a number of serious cases in which shoes treated with toxic substances have gone on sale in Italy.

With regard to the specific problem of illegal indications of Italian origin, the IPERICO database counts 3,611 seizures carried out (with a total of 45,783,139 items) by the Customs Agency and Tax Police between 2008 and 2010; 23% of these seizures were of clothing accessories, while 44% were of footwear.

As ANCI (Associazione Nazionale Calzaturifici Italiani, the National Association of Italian Footwear Manufacturers) points out, the footwear sector, like the food sector, is extremely susceptible to the misleading use of "Italian-sounding" brand names. It is enough to use a name that suggests "Italianness" or use Italian words, slogans or other explicit references to Italy on products sold on overseas markets without indicating the place of production in order to mislead consumers regarding the product's origin and persuade them to buy it.

As the "Made in Italy" label – uniquely in Europe – gains its prestige from the system of values connected with products' country of origin, this type of fraud poses a serious threat to consumers' confidence in Italian producers, as well as the reputation and the strength of those who invest and produce in Italy in order to guarantee the highest quality.

Obligations regarding country of origin already exist for other major commercial powers (for example the United States, Canada, China and Japan). However, within the European Union, until now the mass retail lobby has ensured that low-cost, imported products have prevailed over the interests of countries with a strong manufacturing industry to be protected against the risk of forgery and counterfeiting.

Law no. 55 of 2010 – which, as we have seen, provides for the compulsory labelling of textile, leather and footwear products destined for sale, indicating their place of origin and ensuring the traceability of the products themselves, as well as the requirement that at least two stages in the manufacturing process be carried out domestically in order to earn the "Made in Italy" label – has been abruptly blocked by the European Commission and is still on standby, as it is seen to contain a potential distortion of the principle of free movement of goods, making it incompatible with the Community Customs Code.

In parallel to the legislative debate on the protection of the "Made in Italy" label and in response to the current lack of legislation for protecting domestic products, a number of processes relating to product traceability and certification of origin for Italian-made goods have been developed in Italy in recent years which aim to provide consumers with information that can guide them in their purchasing decisions.

An example is the *Consorzio Centopercento Italiano*, a consortium that brings together 70 Italian companies from various industries, including fashion and luxury leather goods, with manufacturing operations based entirely in Italy and which apply a collective

mark with a holographic seal as a guarantee for the consumer. The consortium's mark is the only one in Italy which certifies a 100% domestic, transparent production chain.

However, even this brand has not been free from counterfeiting: during the interviews it transpired that a major producer of bags in the Veneto region had faked the consortium's "Centopercento italiano" and applied it to its products.

This habit of counterfeiting everything, from brands and models to trade marks and collective certifications, has also been confirmed by the Association of Italian Footwear Manufacturers, which reported several cases of falsification of its familiar "I love Italian Shoes" mark applied to low- and mid-range shoes sold in markets or large-scale retail outlets and which was devised by ANCI itself as a way of certifying the Italian origin of footwear in accordance with the Community Code and of raising consumer awareness with regard to the purchase of domestically produced, high-quality footwear.

Italian manufacturers (for example Nero Giardini with regard to footwear) are also acting individually to introduce origin marking on a voluntary basis in order to certify the production stages and where they took place for the benefit of the consumer and to attest to their quality.

To this end, the Ministry of Economic Development has implemented a provision under which funds will be made available to Italian textile, clothing and footwear manufacturers to encourage them to adopt a product labelling system (a kind of voluntary compliance with the requirements of Law no. 55 of 2010). At present such a system requires considerable expenditure, which the companies must shoulder completely.

Some of the largest companies in the leather and footwear sectors have begun to trial product traceability systems, and ANCI itself is pursuing a project to develop a product traceability system for the footwear sector. Specifically, the RFID (Radio Frequency Identification) method is currently undergoing trials. It consists of inserting a microchip in the product (for example in the lining of a leather bag), which, when read, makes it possible to reconstruct the product's history, providing details about the origin of each individual part, right back to the initial leather.

This type of traceability is certainly a useful way of ascertaining that products are genuine and a mark of transparency on the part of companies in relation to their own distribution and sales networks and also in relation to consumers, as it provides them with information about the product manufacturing stages as well as the companies involved in manufacturing it. It also helps to protect companies themselves, as it provides a convenient warehouse management system and a way of checking the processes which the product has undergone. On the other hand, it is not seen as a solution that can significantly curb production of counterfeit goods, firstly as it intervenes downstream from production, and secondly because in many cases, for leather and footwear goods, consumers are more abetters of counterfeiting than they are victims. The system would therefore

act solely to protect consumers who are tricked into purchasing fake goods which are passed off as genuine.

## What to do in order to stop counterfeiting

In discussing actions that need to be implemented – both now and in the future – in order to stem the rising tide of counterfeiting, interviewees placed a good deal of stress upon consumer awareness. This is a particularly crucial and sensitive point, as it enables the *lack* of any true awareness of the consequences of our actions for the Italian economy to be highlighted. The interviewees believe that this situation needs to be remedied not simply by suppressing and punishing counterfeiting but also and above all by providing information.

Counterfeiting is not seen as a social problem by consumers who knowingly purchase fake goods. Quite the opposite: purchasing fake goods in many cases is the only way for people to have what they want: in other words, what helps them to feel that they are adequate in the company of others and enables them to acquire a certain status.

As many have pointed out, such superficial purchasing decisions are not the exclusive preserve of the middle- or low-income brackets or the poor. They are generalised, and involve those who would have the financial means to buy genuine products but who choose fake goods instead, just for fun or purely on impulse, to show solidarity and sympathy toward the sellers, or to challenge the big designer labels whose prices are adjudged to be unjustifiably high.

According to experts, such casual purchasing of fake items is a veritable cultural problem which stems from a lack of awareness of the consequences of one's own actions, from not being clear in one's mind that the damage caused by each single counterfeit item purchased is not only to large companies but to the nation as a whole, and benefits criminal organisations which make their profits on the backs of the public at large and those who work and produce in compliance with the rules.

While the very high prices charged for luxury designer labels are capable of arousing strong indignation ("... the worst that can happen is that they'll buy one yacht less, what do I care? Actually, so much the better"), there would be even more anger if it were clearly understood who profits from the fake goods market (beside how and how much) and what other illegal activities are funded out of these profits. For this reason, a clear, intensive information campaign, one not made up of mere slogans but also one which enables a clear understanding of the phenomenon in its entirety.

People should also be encouraged to have greater respect for legitimate domestic production: it is important to make clear why genuine products cost so much (research and development costs, professional skills and expertise, high quality of materials and workmanship which are certainly not harmful to consumers and the taxes that are paid, thus benefiting the community as a whole.

#### 2. COSMETICS

#### 2.1. Definition and standards

The general definition of cosmetics includes a wide category of mass consumption goods, considered essentials.

Law no. 713 of 1986 defines that cosmetic products are "substances and preparations, which are different than medicines, designed to be applied on the external surfaces of the human body or on teeth and mucous membranes of the mouth with the exclusive or predominant purpose of changing the aspect, correcting body odours, protecting the body or keeping the body in good health".

Thus, cosmetic products are not to be confused with pharmaceuticals or medical devices as they do not have therapeutic purposes and cannot claim to perform actions of this kind or have names connected with diseases.

The following main categories fall under the definition of "cosmetics": detergents, deodorants, perfumes, face, body, hair and scalp treatment products, shaving and make-up products, sunscreens and oral hygiene products.

In Italy, the production and sale of cosmetic products is *regulated by Law no. 713 of 11 October 1986*, implementing Council Directive 76/768/EC, the purpose of which is to harmonise legislation on the production and sale of cosmetics at the European level.

Law no. 713 of 1986 regulates aspects concerning the composition, labelling and packaging of cosmetics and the steps required to put them into production and sale or proceed with the imports of these products.

It is mandatory for all cosmetics to list ingredients on the packaging; the substances that make up the preparation are indicated using the International Nomenclature of Cosmetic Ingredients (INCI), which is common for all European Countries and contained, in its up-to-date version, in Commission Decision 2006/257/EC.

A cosmetic product with a composition that does not comply with the indications is illegal and the manufacturer or distributor of the product is liable to the penalties provided for by Law no. 713 of 1986.

Council Directive 76/768/EC has undergone several significant changes over the years. It has thus been consolidated into a single text, which exhaustively harmonises rules within the European Union in order to create an internal market for cosmetic products, ensuring a high, uniform level of health protection: the resulting text is Regulation (EC) no. 1223/2009 of the European Parliament and of the Council of 30 November 2009, which will only come into force on 11 July 2013 in order to allow companies to adapt to the changes which it introduces. Changes include the strengthening of controls on the internal market, which are required given the constant increase in imports from non-EU countries.

A system which is already fully operational, which is designed to ensure the safety of non-food products at the European level is RAPEX (European Rapid Alert System for non-food consumer products) and which was implemented on the basis of Directive 2001/95/EC of the European Parliament and of the Council with regard to general product safety. RAPEX applies to all dangerous consumer products, with the exception of food products, pharmaceuticals and medical devices.

The implementing directive for RAPEX was implemented in Italy by Legislative Decree no. 172 of 2004, and was then added to Legislative Decree no. 206 of 6 September 2005 (Codice del Consumo or Consumer Code).

RAPEX is essentially designed to enable rapid information exchange between Member States in the event of serious risk, and requires that national authorities notify the European Commission of products that represent a danger for consumer health and safety.

The Commission then publishes, on a weekly basis, a list of RAPEX alerts which can be accessed by consumers, containing all of the information concerning the individual products, the potential risks and the measures adopted by the relevant countries. The RAPEX procedure requires that the national Authorities ascertains the danger of a product and takes the suitable measures to eliminate the risk.

According to RAPEX, topping the list of products which pose a health hazard are toys, electrical products, motor vehicles and cosmetics, although the latter category does not represent a significant percentage of the total number of notifications.

2,244 alerts were recorded in 2010, with cosmetics accounting for 3% of them, or 66 cases in all. Figures for January-June 2011 show that 726 notifications were received and that, of these, 59 related to cosmetic products.

The alerts naturally did not relate only to "counterfeit" or presumably counterfeited cosmetics (or other products), but were also related to a broad spectrum of potential problems with specific products for a large variety of reasons: in the case of cosmetics, this may include non-compliance with requirements laid down by the law, ingredients which are unauthorised or present in abnormal quantities, which may be because the cosmetic is a counterfeit product and therefore generally produced with poor-quality materials and methods.

Thus, the RAPEX database contains multiple risk phenomena, due to different causes, which are ascertained by the competent authorities.

In addition to the rapid alert system, European regulations apply to the production and import of chemical substances contained in consumer goods through the *REACH* system, implemented by Regulation (EC) no. 1907/2006 of the European Parliament and the Council of 18 December 2006 which entered into force on 1 January 2007.

The *REACH* system requires companies that manufacture and import chemical substances to assess risks arising from their use and to take any steps required to manage any risks that are identified. Specifically the regulation requires all substances of which one tonne or more is produced or imported into the European Union. Registration of the substances entails an obligation on the part of manufacturers and importers to submit a series of basic information about on the characteristics of the substances.

## 2.2. Economic size of the cosmetics industry

The cosmetics sector in Italy counts approximately one thousand enterprises and 35,000 employees, with a turnover of more than 8 billion euros.

The Italian cosmetics industry is one of the sectors that have held up well in recent years, despite the critical international economic scene. In fact, after a negative results in 2009, 2010 closed with a positive trend thanks to strong growth in exports and rising domestic consumption, especially in a number of sales channels, including pharmacies and herbalist's shops (Table 5).

Table 5. Cosmetics sector in Italy. 2008-2010 (absolute values and percentage change)

Sector	2008	2009	2010	2011*	% change 2010-2011
Total turnover for sector in value terms (in millions of euros)	8,427.1	8,172.0	8,601.0	9,000.0	4.6
value (in millions of euros)	2,328.3	2,053.9	2,403.2	2,720.0	13.0
	373,315.8	367,914.1	403,112.9	450,000.0	11.6
Imports value (in millions of euros) quantity (in tonnes)	1,581,311.6	1,409,489.0	1,576,927.0	1,690,000.0	7.0
	239,793.1	221,876.5	234,631.8	245,000.0	4.4

<sup>\*</sup> Estimated values. Source: UNIPRO

On the production side, there was a significant upturn in turnover, +4.6% in 2011, rising to a value of 9 billion euros.

Although concern persists regarding Italian households' propensity to consume, consumption exceeded 9.6 billion euros in 2011, an increase of around one per cent on the previous year: a more than satisfactory result in light of the considerable impact that the crisis has had on consumer spending behaviour in other sectors.

Exports indubitably played a significant part. After several years of decline, exports increased by 13% to over 2.7 billion euros (with a growth in volume terms of +11.6%, likewise showing a very strong trend compared with previous years). In addition, the export-to-turnover ratio for 2011 was one of the highest of the decade: over 30% in percentage terms.

The solid recovery of the cosmetics sector on foreign markets confirms the quality of the products offered by Italian firms, which have adapted to recovery in consumption on the new international markets.

Imports also increased both in volume (+4.4%) and value (+7%) terms.

UNIPRO, the Italian Association of Cosmetics Companies, has stressed that efforts made by companies in recent years, including in terms of industrial investment, have failed to adapt to developments in consumption in the various sales channels and increasing differentiation in terms of consumer choice; the crisis seems to have been exploited by companies as a genuine lever in order to reposition themselves on the market, to restructure, and to develop new products and processes.

According to UNIPRO, the first quarter of 2012 also recorded a positive trend – albeit one which was not uniform across the various sectors – and forecast a stable situation by the end of the year, although the domestic market continued to be penalised in part by a still sluggish propensity to consume.

Once again it was exports (expected to have grown by 10% in 2012) which ensured a positive overall trend.

## 2.3. The many faces of illegal activities

The counterfeiting of cosmetics is a relatively new phenomenon, a new frontier for crime which did not exist until a few years ago and which is still growing.

Cosmetics have come to be seen as essential goods which in some cases may represent an "exclusive" good, or at least one which is not within everybody's reach (take for example special creams or perfumes). This has triggered a rush to make illegal copies, which has stopped at counterfeiting high-end products to be sold at high prices but has gone further, moving into more ordinary consumer products sold at much lower prices (toothpaste, shampoo, soaps, detergents, and so on).

Thus not only famous brands are copied – cut-price imitations sold on stalls, guaranteeing a tidy profit margin – but trade in counterfeit goods has expanded its scope to take in mass consumption products, the most widely copied one being perfumes and toothpaste, according to the experts interviewed.

The main reason that has impelled and continues to impel counterfeiters to expand their illegal operations in this sector is certainly the fact that it is a growing market sector, unaffected by downturns either for "luxury" or other items, which have come to be regarded by both women and men as essential goods on which they are willing to spend considerable sums.

And where economic interests are strong, interest in counterfeiting is generated.

Counterfeits of major brands, which are sold at competitive prices but produced using less careful methods and lower-quality or even harmful ingredients, provide counterfeiters with easy, substantial gains. The same can be said for more commercial products which have their own large, safe market (for example, personal hygiene products of the most popular brands): such goods run no risk of remaining unsold, especially if they are offered in the "right" places and at lower prices than the genuine items.

Before proceeding, a clarification must be made: when discussing cosmetics, there is a risk of confusing the two distinct phenomena of *counterfeiting* and *parallel imports*. Although both of them provide cause for concern and need to be countered, they are two very different types of illegal activity.

UNIPRO states that the alarming reports in the national media sometimes superficially and generically refer to seizures of "counterfeit" cosmetics by customs officers, in warehouses, at fairs, and so on. However, following checks, the true nature of the counterfeit goods is not always reported, so it is never known whether the goods in question are really counterfeit goods or parallel imports of genuine goods. They thus remain counterfeit goods in the minds of all.

However, the true nature of the two processes requires clarification. If the cosmetics in question are parallel imports, they are products destined for sale in another country and sometimes found at lower prices, then sold in Italy via unofficial channels at lower prices than those normally applied. Thus goods produced by domestic companies and sold at a higher recommended price in Italy for a number of reasons – economic, marketing, advertising costs and so on – are sold on stalls or via alternative channels, as opposed to official channels.

As these products do not meet labelling requirements and do not have warnings in Italian, they are always *non-compliant* with current legislation; in addition, their composition may differ from those used in Europe and/or contain unauthorised substances or quantities of substances, since legislation in force in non-EU countries is different from European (and therefore Italian) legislation, an internationally recognised reference model for developing new domestic legislation concerning cosmetics.

Counterfeit products are another matter. They may be a complete counterfeit (product and packaging) or may regard a single component (for example, the original packaging may have been stolen from the supplier and contain a counterfeit product).

If counterfeiting means the manufacture of a product that violates industrial property rights, this violation for cosmetics takes several forms, from the non-authorised use of patented formulas to the illegal use of registered industrial designs and models (for packaging, packages and containers) and the improper use of registered trademarks.

Counterfeit cosmetics are usually placed on the market by improperly using a registered trademark. However, they are not original in terms of components (ingredients, materials, etc.) and production technologies: production variables which can affect their intrinsic characteristics of quality, safety, effectiveness, pleasantness and stability.

Thus, when one speaks of counterfeit cosmetic products, the reference is to goods which are deliberately manufactured in such a way as to mislead the consumer and which may pose a health risk.

The counterfeit goods resemble the genuine article, but may contain substances which are different from those expected or contain them in different forms and dosages. They may also not have the intended effect (scent, clean, colour, etc.). For example, they may contain heavy metals, preservatives and colouring agents which irritate the skin or toxic substances, or may not contain antibacterial substances, because of their high cost.

With regard to the potentially fine line between what is counterfeit and what is not, a study conducted between 2010 and 2011 by the *Movimento Consumatori* at markets in major cities in the North, Centre and South (Rome, Milan, Venice, Bari and Palermo) found cosmetic products by major brand names on sale at below cost price. Initially they were suspected of being counterfeit.

After the manufacturers were contacted to perform checks and had carried out the appropriate analyses, it was found that *none of the products was counterfeit*. In some cases they turned out to be the result of an aggressive marketing strategy, in which the articles – which are offered at higher prices through other channels – were sold at a reduced price, on stands and in cut-price outlets, in order to establish them on the market. In other cases they were genuine products which were nearing their expiry date, damaged or poorly preserved. In these cases, as the *Movimento Consumatori* reported, the companies concerned were unable to provide explanations concerning the process by which their products had ended up in the places where they had been purchased. However, there are strong grounds for suspecting that there are "storage agencies" which buy up surplus stock approaching its expiry date from perfume shops, health stores or other retail outlets and sell it on at lower prices through channels which have not been authorised by the manufacturer.

In light of the above, counterfeiting seems to be just one of the illegal activities that affect the cosmetics sector. Yet this does not mean that the problem should be underestimated or not dealt with by means of specific measures.

UNIPRO estimates that the market for counterfeit cosmetics has grown by at least 15 times over the last 10 years. Using estimates provided by companies, UNIPRO also seeks to quantify not only counterfeit products but also the "parallel" market (which potentially includes counterfeit items) for the most commonly targeted products, that is, toothpastes and perfumes: of the 9.261 billion euros' worth of cosmetics consumed in Italy in 2010, 900

million euros was accounted for by perfumes and 450 million euros by toothpastes. UNIPRO estimates that the value of the parallel market is 10%, or around 90 million euros, of the total market for perfumes, while it is 5%, or 20 million euros, for toothpastes (rising to 20% in the regions of the South).

However, the severity of the problem is shown not only by the numbers but also by continual news reports, from the well-known case of the alarm over Colgate toothpaste in 2007 to seizures carried out by Italian police, one of which took place at the most recent edition of Cosmoprof, the largest exhibition of cosmetics and beauty products, held every year in Bologna, where products illegally bearing major brand names were found.

Data from the IPERICO database, which is managed by the Ministry of Economic Development, shows that seizures of cosmetics and perfumes for counterfeiting alone by the Italian Tax Financial Police and Customs Agency between 2008 and 2010 totalled 171, out of a total of 56,055 seizures, and yielded a total of 5,022,648 items.

Given an average value of each item of approximately 19 euros (DGLC-UIBM estimate for the IPERICO database), the estimated value of seizures for the three years under consideration (2008, 2009 and 2010) was over 95 million euros.

As regards the manufacture of counterfeit cosmetics, it can be said – and is confirmed by experts in the sector – that it takes place both in Italy and abroad.

At the national level, apart from cases of "misappropriation" of strategic materials (such as finished products, primary packaging or fragrances), production takes place in well-equipped, clandestine workshops or with complicit subcontractors who cooperate – in good faith or otherwise – with manufacturers of other required materials, such as packaging or essences.

In other cases, the counterfeit products come from Asia (China in particular), although they often follow complex routes, including Asia, Africa and Europe.

Distributors and suppliers of counterfeit goods in Italy, as police investigations and seizures confirm, may be either Italian or foreign, and operate throughout the country.

By the time the counterfeit products reach their potential purchasers, they are not easy to recognise, so much so that only a very experienced eye is able to distinguish between fake and genuine goods by its cosmetic package: in fact, the packaging is, generally, very similar and differs in tiny details: for example, as the *Movimento Consumatori* reports, the brand of the vial may be different from the official supplier's, a detail which is known only to the manufacturer and not the consumer.

Thus consumers have little chance of ascertaining the nature of the product "at face value", and the only advice that the experts interviewed were able to offer regarded *checking the label, price and sales channel*. In fact, an excessively low price could point to an article

that is not totally safe, as it is counterfeit, or distributed through parallel import channels. The same applies to labelling which does not contain the information required by law or contains poorly translated instructions, which could indicate article of uncertain provenance. Finally, purchasing through secure sales channels (perfume shops, supermarkets, pharmacies, specialised stores and official websites) can ensure that products are genuine and have been stored correctly, in contrast to stalls, cut-price stores and online "clearance sales", which are channels to avoid

Consumer protection which does not start out from informed, considered purchasing decisions on the part of consumers is objectively difficult, as chemical and microbiological analyses of any illegal products which are placed on the market cannot be preventive but instead can only be subsequent to anomalous situations (for instance atypical reactions reported to the Ministry of Health or directly to the product manufacturer).

It should be said that despite the news reports and the growing awareness that non-genuine products can have health consequences as they come into direct contact with the skin (in this regard there seems to be greater consumer awareness in relation to creams and skin cleansing products than to make-up products), a recent Censis survey shows that over 11% of Italian purchasers of counterfeit products reported having bought counterfeit perfumes and cosmetics, with the percentage rising to 15.7% for women.

Clearly consumer awareness-raising activities need to be stepped up regarding the risk that consumers run when they:

- purchase goods through unverified sales channels, as it is easy to unknowingly come across fake goods;
- intentionally purchase counterfeit products in order to save a few euros and be able to
  acquire the item they want, perhaps a nail varnish by one of the top brands and of the
  latest colour, a product that might seems one of the most innocuous but which like all other
  cosmetics comes into contact with a part of our body.

Insisting on the extent of the damage done to businesses and to the economy in general by counterfeiting is not very effective; the most persuasive issue to leverage (and in the case of cosmetics in an entirely legitimate, justified way), is the issue of health hazards.

Nevertheless, companies in the sector suffer the consequences of counterfeiting, both in economic terms and (even more so) in terms of their image. If a product causes adverse reactions (such as red or sore skin), even if the product does not have the desired effect (for example low-quality fragrances used to imitate the original scent), the counterfeited brand suffers a serious blow to its reputation.

The larger companies are fully aware of this and closely monitor their own distribution and counterfeiting incidents and pursue their perpetrators through their own dedicated offices. This is less true of small and medium-sized companies who see the phenomenon of counterfeiting as exclusively or mainly affecting large companies.

Discussion so far in the sector has led to the realisation that in order to combat counterfeiting a system of measures and relationships between the various stakeholders need to be established, since there is no one single solution or single entity to call upon to intervene.

For their part, the companies have investigated and begun to adopt precautions and techniques to discourage counterfeiting and make it more difficult. They include:

- introducing both pre- and post-sales customer care and support services in order to discourage consumers from purchasing counterfeit products for which assistance would not be provided by the manufacturer;
- continuous product and packaging innovation, and in particular using top-quality materials and complex manufacturing processes which discourage counterfeiters from seeking techniques for imitating the authentic product;
- setting up freephone numbers to enable consumers and retailers to report counterfeiting, so that illegal and unfair behaviour can be monitored;
- continuous monitoring of products on the market, so that any anomalies can be promptly identified:
- including codes, markers or holograms on the products for the purpose of identifying counterfeit goods.

Product traceability systems are also being developed in light of the fact that Regulation (EC) no. 1223/2009, which is due to come into force in 2013, states that product traceability it must be ensured throughout the production chain in order to simplify market monitoring and improve efficiency.

All of this nevertheless does not appear to be sufficient in order to limit episodes of counterfeiting, and firms in the sector increasingly feel the need to demand and obtain action on the part of institutions responsible for combating the phenomenon.

## 3. COUNTERFEITING IN THE DESIGN SECTOR

## 3.1. Design and furniture

Italian products have always encapsulated a vast wealth of research, innovation, know-how and design: so much so that the expression "Made in Italy" has universally become synonymous with quality craftsmanship, innovation, refined forms and continuous search for aesthetic perfection.

Italian product design has established itself as a guarantee of innovation not only in terms of form but also the substance and functionality of the objects themselves, becoming an element which "makes the difference" for a wide range of crafts, decor, fashion, and one which in many cases represents a key value for Italian companies' commercial strategy. Design can lend products appeal, create new market niches through the originality, quality and "identity" that it bestows upon them and strengthen the image of the brand with which it is associated.

Design has thus become an integral part of the entire company production process. It constitutes its heart and soul and helps create the product's original and recognisable aspect.

This is why protecting a work of design means acknowledging the creative effort as well as the entrepreneurial commitment to investments in quality control, research and development and, not least, protecting the image and reputation of the manufacturer's trade mark.

However, little attention has been paid to the counterfeiting of design, a phenomenon which is not new but has only recently begun to be fully recognised as something to be prevented and countered. It would therefore be opportune to begin working to gain adequate knowledge through systematic studies and analyses of a phenomenon about which little is known in reality: its peculiarities, its impact on the sector and how it might potentially be countered.

In this section, which represents an initial attempt to take stock of the problem, at the client's request it was decided to deal with counterfeiting in design with particular reference to the furniture sector, a veritable flagship for Italian design the world over, as well as a sector of strategic importance for the national economy.

The wood and furniture production chain is, in fact, the second-largest sector in terms of companies, which numbered around 74,000 in 2010, employing 400,000 workers. The sector accounts for 15% of manufacturing firms and 8% of employees in the manufacturing sector. The turnover of the entire supply chain stood at 33.5 billion euros, 36% of which regarded woodworking and 64% the production of furniture items.

Despite having been adversely affected by the global economic crisis of recent years, which led to declining sales in 2008-2009, companies in the sector fought back

and in 2010 recovered slightly, recording a 1.5% increase in furniture production, thanks to an increase in domestic demand and a larger increase in overseas demand, particularly in European markets. This recovery however was not sufficient to return the sector to pre-crisis production levels.

Italy is still the largest manufacturer of furniture in Europe and the third-largest in the world, and exports 36% of its turnover, making it the second-largest exporter of furniture in the world. The fact that Italy is at the forefront with regard to product aesthetics and that Italian design has taken on a trendsetting role at the global level has undoubtedly played a major role in achieving these positions.

## 3.2. Protection of design under Italian law

In Italy, legislation for protecting designs and models, as set out by national and European Union law, is complex, considering (*inter alia*) that European Community provisions have introduced protection for *unregistered* designs and models, which supplements and intersects with the protection offered by registering patents at the national level.

In brief, as things stand, industrial design can essentially be granted two types of protection: registration of models and designs (registration in Italy provides protection for a period of five years which can be renewed up to a maximum of five times. However it is also possible to register models and designs at the EU level with the same maximum duration, as well as at the international level under the Hague Agreement), and protection through copyright (for the author's lifetime and up to 70 years after his/her death).

## 3.2.1. Protection for registered models and designs

Registration in Italy takes place after the designer or company has submitted an application and relevant documentation to one of the Chambers of Commerce or the Italian Patent and Trademark Office established under the Ministry of Economic Development, upon payment of the registration fees.

Articles 31 ff. of the Industrial Property Code establish that the design and/or model, understood to refer to the appearance of a product, i.e. industrial or handicraft object, considered as a whole or one of its parts, may be registered if it is characterised by:

- Novelty (i.e. no identical design or model has previously been made available to the public);
- *Individual character* (i.e. the impression it produces on the informed user differs from the impression produced by any other design that has previously been made available).

The design and/or model must also be characterised by legality, it must not be contrary to public order or morality, nor constitute an improper use of signs, emblems, escutcheons or the national flags or international organisations included

in the Paris Convention, or of other signs, emblems or escutcheons of particular public interest in the country.

Protection is guaranteed for 5 years, with the option of renewal every 5 years up to a maximum of 25; upon payment of fees for the five-year extension, companies can make use of a one-year period, starting from the first moment that the product is made available to the public, within which they must evaluate (based on the item's success on the market) whether or not to invest in registering it.

## 3.2.2. Copyright

An alternative form of protection (in combination with the first) is provided by copyright, which protects intellectual works: protected categories also include figurative works under which industrial design falls, and which in itself confers creative character and artistic value on products.

Copyright protection comes into effect automatically when the work becomes public, without any formalities or fees. However, it provides less strong protection insofar as it presupposes acknowledgment – which is not uncontroversial and "subjective" – of the creative character and artistic value of the work. The work is protected for the whole of the author's lifetime, until the seventieth calendar year after his/her death.

The protection of industrial design through copyright is a relatively new addition to Italian law, as it was ratified for the first time by Legislative Decree no. 95 of 2001, enacted in implementation of Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs.

The provisions of Legislative Decree no. 95 of 2001 are merged in particular in articles 44 and 239 of the Industrial Property Code, which introduced a gradual system of enforcement of the new regulations.

Specifically, it initially provided for:

- guaranteed copyright protection for *works of industrial design* with artistic character for a period of up to and not beyond the twenty-fifth year after the death of the creator (article 44, Industrial Property Code);
- The non-applicability of legislation relating to works which as of 19 April 2001 (the date on which Legislative Decree no. 95 of 2001 entered into force) had been in the public domain for a period of 10 years (article 239, Industrial Property Code).

Thus, at least initially, a grace period of ten years was provided for, which allowed producers who up to that time – in the absence of explicit prohibitions patent rights – had manufactured and sold more or less faithful copies of design objects, such as tables, chairs, lamps (which acquired protected status as creative and valuable works

only in 2001) and had made it their main business to continue to do so, without consequences.

The *inadmissibility* of this grace period, however, was almost immediately ratified by a series of verdicts pronounced by Italian courts which, from 2003 onwards, began to acknowledge copyright protection for a number of objects (including the Panton Chair, Wagenfeld lamps and Vitra cases) and to punish unauthorised copies with seizures and injunctions, on the grounds of breach of copyright.

Furthermore, Italian legislation was not in line with European Union legislation, not only as a result of the existence of this "grace period", for which the European Directive made no provision, but also as a result of the duration of protection, which was limited to 25 years as opposed to 70 years after the death of the author.

This gave rise to a number of revisions which initially led – through Decree Law no. 10 of 15 February 2007 – to the protection period being extended to 70 years from the death of the author, and subsequently to the repeal of the grace period.

This amendment came about in part as a result of the well-known case known as *Flos-Semeraro*, which went before the European Court of Justice. The case concerned production of the celebrated Arco lamp by the Castiglioni brothers, to which Flos owned the rights, and a copy (imitating its stylistic and aesthetic characteristics) which Semeraro had produced for years in China, imported into Italy and marketed under the "Fluida" brand.

Against this background, the Court of Justice ruled that national legislation does not comply with European law, and called for a more protective formulation to be introduced for design. In the meantime, however, further amendments had been made to Italian legislation (with Legislative Decree no. 131 of 2010, in force as of the beginning of September), which essentially anticipated the Court of Justice decision. In order to prevent likely infringement proceedings against Italy by the EU, Legislative Decree no. 131 of 2010 prohibited copying product designs, thus bringing it fully into line with European Union legislation.

The level of protection enjoyed by products of design is strong, since, in addition to traditional patent-based protection instrument, the mechanism provided for by the Industrial Property Code and copyright law can be invoked for products that have "artistic" value.

It should be added that, recently, with Judgement no. 6254 of 21 February 2011, the Court of Cassation determined that the offence of marketing industrial products with misleading marks, according to article 517 of the Criminal Code, may also apply to goods which are categorisable as "design objects", regardless of whether or not they bear a trade mark.

According to the Supreme Court, design objects contain *per se* the distinguishing mark of "the strict correlation between purely industrial aspects and the artistic sensibility of their creator, which

determine their originality and recognisability on the part of consumers". This distinguishing mark "enables them to be precisely identified and, consequently, guarantees their originality and their provenance from a specific manufacturer".

In light of this, it is clear that the marketing of non-original products of design can constitute an offence under article 517 of the Criminal Code, regardless of the presence or absence of a trade mark.

## 3.3. Characteristics of counterfeiting

Despite the multiple, strengthened protection afforded to design objects, in Italy the sector is seriously affected by the phenomenon of counterfeiting, which regards both the "great design classics" and contemporary furnishing items that achieve market success.

In the furniture sector, the *most common type is the counterfeiting of designs and models*, which usually takes concrete form in the manufacture of products that are identical or similar in terms of the essential characteristics of their appearance by subjects other than those who hold the rights to them.

In order for a design product to be deemed counterfeit, it must be:

- an identical imitation of the product;
- an imitation with variations which are not likely to create an overall impression that the product differs from the registered design item.

Although this is not the only form of counterfeiting, but it is the most common in this sector. Sometimes, in fact, *trademark infringement* is found, especially the exploitation of the most well-known trade marks by counterfeiters seeking to take advantage of the reputation that they have gained on the market. In actual fact this phenomenon affects Italy only marginally, and mainly takes place abroad in countries where well-known luxury brands, Italian or otherwise, have an appeal which makes it profitable to copy them by exploiting the attraction that they have for consumers.

More rarely *patent infringement* in relation to inventions or utility models is encountered, which sees companies attempting to reproduce a technical procedure that has already been patented by other companies.

According to the experts interviewed, the phenomenon of marketing counterfeit design products, that is, goods whose peculiar characteristics are imitated (generally without the use of a fake brand) is increasing significantly, especially in the furnishing, household goods and lighting sectors.

Proof of this is also provided by the 2010 data concerning goods confiscated at customs (TAXUD-EU report) which indicate a certain increase on the previous year: while in 2009, only around 1% of goods seized by customs in the European Union were accounted for by infringement of design and model rights, in 2010 the figure rose to 3%.

Maturally the figure is purely indicative, as the fact that these statistics include a wide range of products, including accessories, footwear and consumer electronics should be taken into account.

According to the experts interviewed, the number of actions brought against counterfeiters in the sector has increased over the years, indicating that the phenomenon has intensified. This trend has been accompanied by *greater attention on the part of companies with regard to protecting their rights*. Until a few years ago, when faced with the problem of unauthorised copies, these companies tended to "let things ride", either out of disregard for the phenomenon or because they were unwilling to bear the costs of registering their products, which small and medium-sized enterprises in particular deemed to be an excessive expense.

With the escalating economic crisis, particularly in the last 2-3 years, companies in the sector have gained a new awareness of the importance of protecting their products. They have also been driven to do so by the fact that economic difficulties have led to a proliferation in the number of companies, including "sound" companies – that is, not dedicated to counterfeiting as their main activity – which seek to increase their profits by exploiting ideas which are not their own but which are a guaranteed success, thus moving into the too-easy land of imitations.

Unfortunately, for models that have already fallen into the public domain (in other words are not subject to registration within one year of their first becoming available to the public, as provided for by law), such awareness has developed belatedly, while it may still safeguard other products by protecting industrial property rights as well as the profits of the companies which hold the rights to them.

Another aspect to note is the efficient functioning of the civil justice system in this matter. Since 2003 it has made use of sections specialising in the area of industrial property rights, thus engendering greater confidence in protection and anti-counterfeiting instruments on the part of companies in the sector which for this and other reasons resort to them with increasing frequency.

Imitations of design objects are produced – like other kinds of counterfeit goods – in Asian countries (China in particular). Nevertheless, many of the cases that have recently come to light have shown that some production is domestic.

It is certain however that also when the goods are of foreign origin, *customers are anything but foreign*: most products made in Asia in fact are specifically ordered by Italian customers who demand more or less exact copies of the design product that they plan to sell.

Indeed, in China and other Asian countries, production costs are at their lowest and most affordable levels, which is precisely why copies of products which the customer knows have the potential to be commercially successful yet which at times are completely unknown to their Asian producers are produced there (the fact that the products are sold – often with no brand – exclusively in Italy by Italian resellers is proof that they are commissioned by Italian customers.

The finished products or their individual components manufactured abroad then reach Italy, where, if necessary, they undergo the final stages of production, and where they are distributed and sold.

As mentioned above, some of the cases that have come to light in recent years attest to the existence of *domestic production*, probably using raw materials imported from non-European countries which are transformed by Italian companies which knowingly choose to produce copies of other companies' products, often twisting their interpretation of the legislation to their advantage and often aided by the inertia of the holders of the exclusive rights.

Sometimes it is the producers themselves who are authorised by the parent company to increase production beyond the pre-established limits (overrun) and market the products through alternative channels.

The distribution network for these goods generally uses the large-scale retail channel, the large furniture stores which are very popular in Italy: this is the main channel for this type of business, which gives even greater cause for concern, as it attracts the general public thanks to very competitive prices. An example of this (already mentioned above) is Semeraro's "Fluida" lamp, the imitation of the celebrated Arco lamp, or Mondo Convenienza for its copies of the Miniforms table, to name just two notorious episodes from the past few years.

Less frequently they are sold not through mass retailers but through individual *stores*: indeed, retailers may include in their range original products alongside counterfeit products, with a view to earning higher profits by selling a larger quantity of the cheaper imitation products.

Trade fairs themselves often represent an opportunity to exhibit imitation products: for example MACEF, the International Home Show held every year in Milan and a symbol of Italian furniture and homeware, has repeatedly been involved in reports, inspections and police seizures of imitation of famous design items, as happened some years ago with the Arco lamp, imitations of which were found on the stands of two Italian retailers.

Specifically as a result of such overt episodes of counterfeiting which occur every year, the organisers of MACEF have decided to introduce an industrial and intellectual property information service for exhibitors and to draw up a guide which provides practical advice about legal instruments designed to protect industrial creations and about how they can protect themselves before and during the event. In addition to this, the *Guardia di Finanza* (Tax Police) have set up an office at the fair.

As in other sectors, the online channel is increasingly important with regard to the sale of imitations in the designer furniture and furnishings sector. This is a cause for increasing alarm as it is a very difficult channel to control, which uses distributors located anywhere in the world and is able to reach a very large number of consumers.

In this regard, perhaps it goes without saying that counterfeiting of design products, like counterfeiting in general, is a global phenomenon, and is certainly not exclusive to Italy.

Other countries are having to deal with the problem of the spread of illegal copies of design items, especially in the furniture sector, with small companies which operate on the edge of or outside the law and which try to make their way on the market by parasitically using the reputation of better-known competitors and their highly-successful products.

Industry experts report, for example, that in Germany there are several sites offering copies of furniture items defined as "classics", and a controversy recently reported in the British press – sparked by a photograph of the wife of Prime Minister Cameron with a fake reproduction of an Arco lamp – on the inappropriateness of purchasing copies of designer furniture items. Such behaviour was the target of bitter criticism which centred around the consideration that a sound saving policy cannot be based on purchasing copies simply because they are cheaper.

Who buys these kinds of products? According to the experts, those who purchase copies of design classics are mainly consumers that are fully conscious and aware of their purchasing choices. The market is fuelled by demand for copies of design objects of which the original is targeted at the high end of the market, at undeniably high prices, certainly not within everyone's budget, while fake versions become accessible to a broader public.

Generally, in fact, fakes are offered on the market at a markedly lower price than the genuine article, and this detail alone makes it clear that they are not original items; the buyer is aware but is motivated to take possession of the prestigious product, even though it is just an imitation, while paying a fraction of the price that he or she would have had to pay for the original.

Naturally, making do with an imitation means accepting lower quality too, especially in terms of the raw materials used, on which corners have generally been cut, as well as the manufacturing process, which is less exacting, although the product closely resembles the original.

One cannot rule out the possibility that there are less discerning consumers who may mistake the fake product for a genuine one, especially in cases where the fake is well disguised or offered at a slightly lower price than the original. These are the cases in which, more than counterfeit copied in the strict sense, the products are overruns, in other words goods produced by subjects with authorisation from the copyright owner who produce extra undeclared copies and sell them illegally.

Only a minority of consumers buy without being familiar with the original, simply because they are struck by the fine designer item that they see a shop or department store.

Counterfeiting in the field of furniture design has similar implications to those in other fields. Firstly, manufacturers may

experience a decline in sales of their products, resulting in lower sales and the risk of lost profits; however, it should be pointed out that since they are usually valuable items sold at high prices, the target market for the genuine items are generally different from the buyer of the most affordable imitations.

Potential loss of market share causes a great deal of concern for companies. However, what producers fear the most is *damage to their image and credibility* due to a perception on the part of the buying public that there is a *relationship of collusion between the parent company and the manufacturer of the lower-quality product* when confronted with an inferior copy of a design classic; such a perception may undermine the aura of exclusivity that characterises the product and the company that produces it.

A serious consequence, moreover, which compromises the Italian production system more than the individual companies this sector is the *lower propensity to invest in research and innovation*.

If, indeed, the system is undermined by the increasingly pervasive presence of fake products that take market share away from those who invest in design, product and manufacturing quality, serious questions are raised about the future of our production system: one wonders what company would be willing to risk investing in the work of the designer (which is often a decisive factor for the success of a product, company, and, in a broader sense, the "Made in Italy" label) if the presence of individuals who limit themselves to dishonestly exploiting the success of products without any risk on their own part, with extremely low costs and therefore predatory prices – were always tolerated, or indeed encouraged, by demand on the part of consumers for low-cost, fake goods.

A company that pays to produce a work of design should not expect other companies to be able to produce similar goods in a parasitical manner without paying royalties. What companies assert is that copiers do not innovate, and if anything kill creative talent, while innovation and creativity, the promotion and protection of industrial property represent crucial assets for businesses' economic growth, and hence for the innovative, competitive development bring innovation and competitive development of the economy as a whole.

Something has been done in recent years, but much more needs to be done in order to seek to curb the problem.

One of Italy's strengths, experts point out, is certainly its legislation, especially in the civil sphere, which is adequate and up to date, and represents an advance on much other European legislation. What needs perfecting is – as always – its application, which, at least in the case of civil proceedings, was made easier and aligned with the establishment in 2003 of the Specialised Sections on Intellectual Property at the courts and Courts of Appeal in twelve Italian cities.

These Specialised Sections, with their specifically trained judges and legal professionals, have reinforced the shared foundation which aims to make penalties more consistent and achieve a greater degree of deterrence. Thanks to these specialised sections, the judge's first ruling can be made in less than fifteen days: considering the general timescales on which the Italian justice system operates, this is already a step forward.

Similarly, the application of criminal law should be made simpler, faster and unambiguous.

In addition, since counterfeiting is not only an Italian phenomenon but also an international one, the emphasis is placed on the need to make further efforts to harmonise EU and international legislation, which would allow more effective protection of intellectual and industrial property.

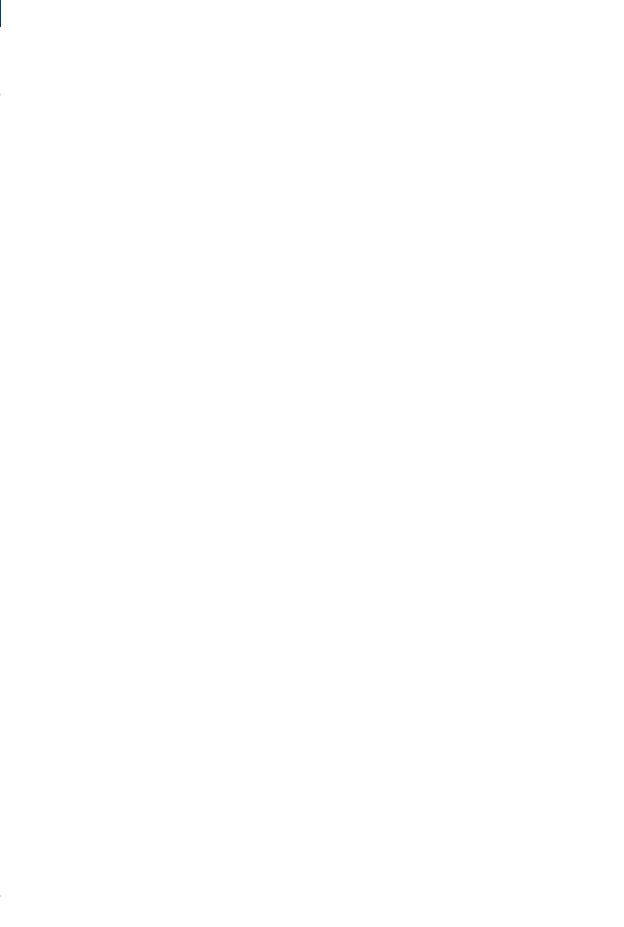
On a positive note, a greater degree of coordination has been achieved between the various law enforcement agencies operating on the national territory to prevent and combat counterfeiting, as is also evidenced by their cooperation in creating the IPERICO database on seizures maintained by the Ministry of Economic Development.

The main effort at the institutional level, however, should be directed at *raising awareness* among consumers who in the final analysis create the final demand for these kinds of goods. Consumers are aware and deliberately choose imitations over originals that are beyond their means.

In some ways, this makes the use of sophisticated product traceability technologies – which nonetheless exist – useless: the purchaser acknowledges and consciously chooses the nongenuine product. However, such technologies can be of help in identifying cases of overruns authorised by manufacturers, which are sold in illegal markets and not verified by the parent company.

It is not just consumers but also *companies who must be made aware of their responsibilities in this sector*, as either through carelessness or greed they tolerate the phenomenon and do not adequately protect themselves against it. Despite growing awareness of the pervasiveness of counterfeiting, and despite companies' growing awareness of the importance of protecting industrial property, a large share of companies – particularly small to medium-sized firms – have an unstructured approach to managing what should in contrast be considered a strategic business asset, especially in the global market.

Indeed, while some companies, generally the largest and most highly organised, decide to take action at the customs level and are active in supporting customs officers in identifying of counterfeit goods, have recourse to law firms and legal protection of their rights, or even hire private investigators in the production and distribution "hot spots", many others do not even consider the problem and do not take sufficient action to defend their know-how, which can only encourage the problem to proliferate.



# DEMAND ANALYSIS

The purpose of the focus group General considerations Milan: expertise and credibility Naples: reliability and originality Rome: anarchy and pragmatism

## 1. THE PURPOSE OF THE FOCUS GROUP

In order to investigate a social phenomenon such as counterfeiting, which has often been analysed in a superficial and sometimes uninformed way, of the many social research available the focus group was deemed the most useful. The focus group has been used as a research method for over thirty years and includes a group discussion led by a facilitator specialising in such techniques with the purpose of identifying people's attitudes and behaviour in relation to a specific phenomenon and exploring and explaining the reasons behind them (reasons which are rarely revealed through traditional tools such as surveys or questionnaires).

In contrast to individual interviews and – even more so – to simple questionnaire-based interviews – focus groups in fact allow group dynamics to be triggered, and consequently produce interaction which enables greater spontaneity, less "resistance" on the part of those taking part, and as a result more dialogue and a better understanding of issues, expectations and real opinions about the topic under discussion. They also make it possible to verify working hypotheses directly; experience shows that these groups are a very useful tool for obtaining spontaneous reactions which, in turn, make it possible to evaluate in the right perspective how prevailing opinions are formed. The focus group makes it possible, in other words, to reveal the "public self": that is to say, the public and social aspect of the opinions held by those involved. Thus it is not so much a matter of investigating the psychological reasons which induce a given individual to purchase counterfeit goods, but the way in which social knowledge processes are activated, the way in which the "ideas" which cause the phenomenon are formed.

Three focus groups were set up in three major Italian cities. They were evenly distributed, with one in the north, one in the centre and one in the south of the country. After careful selection, the focus groups consisted exclusively of purchasers of counterfeit goods, with no distinction between regular and occasional customers, and involved both males and females of different ages. The focus groups were led by a facilitator aided by an assistant with the role of external observer and reporting the session. The rooms were equipped with a one-way mirror which enabled the commissioner of the research to attend the focus group without being seen and if necessary interact with the facilitator.

## 1.1. Knowledge aspects examined

The purpose of the focus groups was to investigate, as already mentioned, the public and social dimension of the phenomenon of counterfeiting as seen by those involved in it. In the knowledge that the most delicate moment for the outcome of the focus group is the initial one, which is essential for creating a climate of trust within the group and between group and facilitator, it was decided (jointly with the study's commissioner, with whom the entire procedure was planned) to start the session by having each participant fill in a form in which,

after ensuring the anonymity of the responses, they were asked to describe their last purchasing experience.

The form asked about the following aspects:

- a. What type of good did you purchase?
- b. Were you alone or in the company of others?
- c. Were you in the places you usually frequent (near your home/office) or were you somewhere else?

The responses were aggregated and kicked off the discussion.

The discussion then continued by enquiring about the following areas:

- 1. Fake merchandise is everywhere: seeing it makes us want to buy it, vs. No, you have to "know" in order to get to the "right" suppliers, if you don't want to make do with the usual trash.
- 2. What feelings do you experience after buying counterfeit goods?
- 3. I try to buy outside of my local area: you feel a bit ashamed to be seen buying counterfeit goods, vs. You can buy useful things at a lower price: why be ashamed?

Another additional aspect was asked about in only the Naples and Rome focus groups:

- 1. What would prevent you from buying counterfeit goods?
  - A reserve topic, to be used if any time was left over or if the dynamics of the discussion permitted, was the following:
- Buying counterfeit goods helps organised crime and causes economic damage to Italian industry, vs. Yes, but it allows many disadvantaged people to make a living, even if it's not much ...

## 2. GENERAL CONSIDERATIONS

In rereading the following pages, a summary of the main cases that emerged from listening to purchasers of counterfeit goods can be attempted. For a more detailed discussion and to compare the views expressed in the North, Centre and South of Italy, reference should be made to the relevant sections.

## 2.1. Three types of counterfeit goods

There is widespread awareness that the "market" offers a variety of counterfeit goods which can be grouped into three main categories. The first consists of *cheap*, *second-rate goods*, which are the most common, found in markets, on the streets, on the beach or set out on the pavements. The quality is not high because of the materials used as well as the manufacturing process. They are cheap, blatantly

fake, and customarily involves haggling with the seller in order to agree on the price.

Next is *high-quality merchandise*: the same as the first type but with better workmanship, greater attention to detail and better quality materials. This merchandise can also be found in the markets and on the street, but it is more likely to reach the consumer through privileged channels from trusted suppliers who sell from their warehouses or own homes. This type of merchandise also uses the home channel, *improvised* sales: the girls meet up on the pretext of having a coffee and a chat before appraising the goods and perhaps buying a bag or a top. On average this merchandise costs more than the first but without going over 100 euros. Haggling is always hinted at, but it is limited, and the seller has a strict minimum price limit.

Finally, highly cherished but really known by a select few, are the *indistinguishable goods*, which are so similar to the original item that even an expert eye could mistake them for the genuine article. Here the level is markedly superior. The quality of materials is excellent, as is the workmanship, so much so that buyers are led to believe that it is original merchandise that has "taken a parallel road" or because the workshop that makes it has put it on the market without "going through" the brand, or because it "fell off the back of a lorry". Getting hold of this kind of good is complicated, but not impossible. Prices are higher and can be anything up to 200 euros, which in any case would have been as much as 10 times higher for the equivalent product purchased in a boutique.

## The first two types can be bought for fun and in the company of others, while for indistinguishable goods you need to be an expert and alone

Purchasing strategies change depending on the type of good purchased. The first two categories (second-rate and high-quality merchandise) would appear not to require any special skills, while near-specialist skills are required for the third. In order to accomplish goods that are "indistinguishable" from the original, there are those who embark on a medium-to-long-term process, which entails visiting brand-name stores in order to inspect the original model (with which they familiarise themselves down to the smallest detail) and then use their knowledge to examine what the parallel market has to offer and decide whether or not it is worth purchasing. Anyone who is drawn to this type of product is so precisely because they want to flaunt the branded product and pass it off as authentic. This has two corollaries: the first is that it is necessary to have a social status which is appropriate to the items purchased: to be credible (so absolutely no exclusive brand items which would cost a fortune for an office clerk if they were genuine); the second is that one must never let others know that one is purchasing fake merchandise, so purchases must be made alone while knowing the right channels.

None of this applies to the other two categories: purchasing these fake items is something to be done in the company of friends, both because there is an element of fun and because people rely on other people's opinion and experience when choosing what to purchase.

## Satisfaction, no shame and no damage to companies

Purchasers of fake goods have a sense of satisfaction and pleasure after buying them: satisfaction at having been able to seek out what one was looking for, satisfaction with having stumbled upon something nice which led us to buy it, and pleasure at having got a bargain, at spending little. These, without exception, are the feelings experienced after purchasing counterfeit goods. Some participants also included the element of the "game" and the entertainment factor, but none of them felt any shame or thought they were doing anything blameworthy or even committing an offence. They were not at all ashamed about purchasing counterfeit goods and drew up ever more elaborate self-justification strategies to convince themselves and others that the was no reason to speak of shame. Only the Rome focus group cast aside such hypocritical self-justification in order to boast of a practice that lies outside moral considerations.

Nor was it felt that the counterfeit market harms the economy. In this regard, too, they sought to justify their behaviour by claiming that the originals are too expensive, far beyond their real value, and that major brands often exploit child labour. However, most of them were convinced that these brands do not suffer economic damage at the hands of those who purchase fake merchandise (and who would never bought the genuine article) and that on the contrary they might actually benefit in terms of market reach and visibility.

#### Awareness of crime

There are few deterrents that might lead people to reduce their purchases of counterfeit goods. Leaving aside the most obvious ones, which cannot be countered (cost and quality of merchandise, showiness), the focus groups highlighted widespread awareness of the role played by organised crime throughout the supply chain. Purchasers of fake goods may feel sorry for the final seller; they may not have the slightest faith in the deterrent effect of the police; yet the idea that they are aiding organised crime might cause some of them to rethink their position. More aggressive sales strategies on the part of the major brands could also reduce the phenomenon, for example by increasing the number of outlets or discounting last year's range by 50%.

#### When in Rome, do as the Romans do...

While Milan stands out for the expertise of consumers in search of items that are indistinguishable from the genuine article and the credibility that is required (including in terms of social status) to pass them off as authentic, consumers is Naples tend to look more for *originality*, even at the expense of resemblance to the original (with which few are familiar). If anyone happens to be seeking something different, something of *higher quality*, then they place their trust in the seller who will make the necessary enquiries on the purchaser's behalf. In Rome, consumers' attitudes are marked by a *pragmatic "couldn't-careless" attitude* where practicality counts over appearance: the practicality of the item purchased and the practicality of a way of purchasing which puts the product right there under your nose. No attention is paid to the *brand*, because it is not the brand that makes the difference. You make the difference in the way you are and how you do things.

## 3. MILAN: EXPERTISE AND CREDIBILITY

The first focus group was held in Milan on 31 May 2011. It consisted of 15 people: 7 men and 8 women.

Most of them were aged between 35 and 50, with three aged under 30 and three over 60.

Purchases were mainly made in other people's company (10 as opposed to 5) and away from the places usually frequented by the participants (9 as opposed to 6). Reading the forms immediately opened the discussion by highlighting two types of purchasers: those who act on their own and buy in places other than their habitual places (not to mention abroad) and those who buy in the company of others, mainly friends. The former group were in the minority and were characterised by their expertise about the entire counterfeiting supply chain, while the latter group, the majority, in addition to purchasing mainly in the company of friends, do so partly for fun, especially on holiday, but have no objection to buying fake goods from their local market.

The first group was made up mainly of women in the predominant age group with a social status that could be defined as Milanese middle-class.

Right from the start, the participants showed that they were familiar with the counterfeit or – as they call it – "tarocco" (literally "tarot") market, with the internal variety that characterises it in terms of quality ("you come to realise over time and as you gain just a little experience that there are products that match the original almost perfectly") and consequently price. This variety is also reflected in the places where the goods are purchased; the low-quality, low-priced items are usually found on the street ("on stalls along Corso Buenos Aires") while the higher-quality goods up to the indistinguishable goods have privileged places which are often unknown to the majority of people and have international reference points (Thailand, Bangkok, the Balearic Islands and Morocco were mentioned knowledgeably).

Purchasing strategies are different, too: as well as costing more, the prices of *high-quality* merchandise are rarely haggled over: the asking price is paid, with a small discount: "as if you were buying in a shop".

## Counterfeit goods are everywhere, but you have to know ...

The group were unanimous in remarking that counterfeit merchandise is everywhere, and is easy to find just by stepping out of the front door, which inevitably generates creates a propensity to purchase: "maybe you haven't gone out with the idea of buying something, and then occasionally you see something you like, it catches your eye and you buy it". What seems to be crucial in these cases is being able to pick the object up, examine it and evaluate its quality; but for the most part the members of the group look on the goods on display on the market stalls or pavements with disdain, they consider them to be goods for suckers since for the most part, they do not consider them goods with any value, far inferior to the original that they seek to imitate: "but this is the Moroccan guy from the market, not the one who comes to your door, the ones with the rags in Corso Buenos Aires

don't have the real bag, they are all fake, I don't look at them, and there is a difference. You won't find the real belt on the sidewalks". This, by transference, also reflects upon the buyer: people who buy on the streets are seen as belonging to a lower social class, are not familiar with brand name goods because: "I sometimes see girls in front of the Moroccan doing his shift, but they're poorly-made items and they don't understand because they are unfamiliar with the brand".

## ... where the good stuff is

A kind of expertise in the purchase of counterfeit goods clearly emerges. In other words, one becomes convinced that for a part of the group (who soon obtained the others' assent) buying counterfeit merchandise is a serious business, made up of expertise acquired "in the field" (so to speak), detailed knowledge of the genuine items, having the necessary time at one's disposal, a network of trusted suppliers, waiting times and at the end of the process, a meticulous inspection of the item found. If it passes the final inspection it is purchased, otherwise it is not.

In short, what is exhibited is fully-fledged "professional know-how" which requires time management that leaves nothing to chance: "before buying fake goods I go to the store and take a good look at the originals [...] I do months and months of painstaking research, then I buy it or don't buy it. So, my purchase is the same as the genuine items, if you put them together here you can't tell which is the real one and which is the fake."

The discussion and approval which this statement triggers in the group uncovers a kind of initiatory journey through the process involved in purchasing counterfeit goods: a journey which initially proceeds normally with the occasional purchase from street stalls and, subsequently, leads consumers to products with a different quality of workmanship, which are increasingly accurate both in choice of materials and resemblance to the original until they are identical to and indistinguishable from the original product, at least when not examined too closely.

One participant used the metaphor of drugs to explain the mechanism: "in my view it's like drugs, at first you buy anywhere and anything, then you get into the circuit, you shop around and make different purchases because they gratify you and give you pleasure because you've got one over on everyone; you've spent your money well and bought top-quality items for nothing or next to nothing. You feel like a winner and carry on buying, but raise the bar each time."

So it is not just satisfaction at having purchased a quality item but also (in a considerable percentage of cases) satisfaction at having entered an exclusive circuit which sets you apart from others: a sort of peculiar race, a treasure hunt with few clues and thus all the more rewarding for those who manage to get their hands on the "treasure".

Only a few in the focus group have scaled such dizzy heights. However, the admiration – envy, even – of all the others who you can bet will seek to emulate them is evident to an attentive eye.

Such expertise even includes familiarity with legislation and the different risks encountered when buying different types of counterfeit goods: "I even have friends in the Tax Police. For them there are 2 categories of goods: counterfeit and similar articles, that is, counterfeit merchandise found which the Moroccans have, and then there is the series of articles which are 90% identical to the original. These are the ones that are prosecuted differently at the criminal level."

## Buying for fun ...

There is a type of "fake" purchase that seems to closely follow the rules of a board game. This is what one member of the group (who could be defined middle-class) said; she talked about a holiday during which, for fun, she would occasionally purchase an item and show it off just for the duration of the holiday. She stopped and then said: "if you're at the seaside you might do it for fun. My husband sometimes gets a groups together to buy watches; they all buy Rolex watches but when they get back to the city they don't use them and give them to the kids, but it's fun at the time" or "last year in Costa Smeralda, the 2,000-euro white ceramic Chanel watch was in, but there were people who bought it for 200 euros. The lucky ones still have it, while the less lucky ones have thrown it away."

## ...and "credible" purchases

The discussion about "expert" purchasing produced an unexpected corollary which turned out to be one of the most interesting of the entire focus group, the *credibility* of the counterfeit good in relation to the social status of the consumer who exhibits it. This concerns everyone, from younger consumers who would never buy a Rolex because it is not credible on their wrist (but have no objections to wearing a pair of "fake" Hogan shoes) to the more expert buyers who purchase goods that are more in line with their social status and thus manage to be up to date with the latest trends but without the burden of the excessive price tag: "even if a fake is well made, if you don't have the social status to be able to afford it, you can't be identified with it, you are not credible". This is an important aspect for a some members of the group and explains why they prefer to purchase counterfeit goods alone, as nobody must know whether what they are "showing off" is genuine or fake, indeed, they must be led to believe that it is genuine (and this requires the "professional" expertise described above). On the other hand, according to them, only those who frequent certain milieus can distinguish between a fake and a fake that is absolutely identical to the original, because they live in the midst of genuine products (or wellmade fakes?). For this type of merchandise people are willing to spend up to 200 euros, which is deemed a reasonable figure (approximately 10% of the value) and in these cases there is no haggling over the price: if customers are satisfied they fork out the sum demanded.

## Satisfaction and gratification: no shame

When it came to feelings experienced after purchasing, the group was unanimous with regard to "satisfaction", although this presented itself with different facets, ranging from satisfaction "at having found a bargain" or "having found what you I was looking for". There are those who return to the metaphor of drugs and talk of "gratification" and those who reiterated that their feeling of satisfaction is due to knowing that they have saved

a fortune. "satisfaction and fulfilment, even when you go out with friends are wearing the item. Maybe there's the woman who's putting on airs and graces because they've spent 900 euros on a bag while I've got a nicer one that cost me a quarter of the price". The ones who bought fake goods on holiday highlighted the fun aspect, but nobody, even when pushed, admitted to feeling even a vague sense of shame. On the contrary, it sparks off a bragging match and self-acquittal in the group: "it's the designer labels that should be ashamed of themselves for charging 200 times the true value of an item".

It was also interesting to hear what those who expressed regret had to say, but only because they purchased an item from a boutique: "I paid a fortune for my Prada bag and cried about it for 2 months, but I bought it in a shop because I couldn't find a counterfeit one". In the same vein, the group did not feel that counterfeit goods can really harm companies: "their clients have one anyway and actually if we carry their brand around we're even advertising for them" (precisely because they are credible, as mentioned before). Participants were more sensitive to the subject of crime; people who buy counterfeit merchandise help organised crime. They were all aware of and sorry about it, but at the moment of purchase this thought did not even cross their mind.

## 4. NAPLES: RELIABILITY AND ORIGINALITY

The second *focus group* was conducted in Naples on 9 June 2011, made up of 15 people: 7 men and 8 women.

Most of them were aged between 30 and 50, with four aged under 30 and four aged over 50, although all of them were aged between 50 and 58.

They usually made purchases of counterfeit goods in other people's company (10 as opposed to 6: one form indicated both responses) and near the places usually frequented by the participants (9 as opposed to 6). Looking beyond the responses provided in the forms, the group was decidedly for purchasing in other people's company; this was the prevailing view even among those who said that they had made their most recent purchase alone, but more for circumstantial reasons than for any actual propensity.

## The search for originality

The main thrust of the group was to make casual purchases in the company of others. It thus becomes a sort of game that is better when "played" socially, especially with friends: "a taste of fun, you treat yourself to a little something because you allow yourself to buy one more thing, a souvenir, and you do so in someone else's company" and "you do it in the company of friends because it gives you more pleasure and because your friends help you choose".

The justification provided by those who admit making purchases far from home (often on holiday) similarly seems to be motivated by factors that go beyond imitation and are based more on the search for something new: "often out of town because here we're surrounded

and so a mechanism is triggered which makes you buy things you think are original, which you haven't seen on stalls in Naples".

The others too frequently returned to this concept: in Naples you are literally surrounded by street vendors offering counterfeit goods and, as the result of a distinct mechanism, this discourages purchase: goods are often all the same, in any area of the city, inflated, and so when you come across anything different, as often happens out of town or on holiday, you are encouraged to buy it: "when I see that everyone's got something, let's say a well-made bag, on their stalls, it makes me turn away, it doesn't tempt me any more, I'd like to get something I like for a good price but it has to be a bit original too, something that I don't see on everyone or, worse still, on every pavement in the city."

## The choice is tempting, but if you want something specific you need to know it and place your trust in the seller with the doubt that the item might even be authentic

There is no question, however, that coming across sellers of counterfeit goods on a daily basis makes it tempting to buy them. Even if the foregoing observations are true, it must be acknowledged that we are not always on holiday or in town, and the pervasive presence of goods is an incentive to buy, especially on an occasional basis: "seeing it tempts me to buy it, for example on the beach I might see a particularly well-made bag, even if I have never considered it before purchasing it, if I like it I buy it". Consumers do not go out especially to buy, but if they come across a seller and thus consider doing so, they try the item, evaluate its quality, and if they like it they buy it.

When looking for something specific, on the other hand, the network mechanism, which is not necessarily a structured one, needs to be set in motion. You ask around, there is always someone you know who knows someone who can get you to the "right" supplier or place to find it: "you have to know the right people to get hold of higher-quality merchandise, which the black sellers don't have. Not accessories but if you want quality clothes you have to know the right people, you can't find it on the street".

However, the Naples group seem to lack the expertise in evidence in Milan. Anyone looking for a specific item does not seem to have such specialised knowledge of the original. They boast a more highly-developed eye for details and for understanding if the item is well made, but less so with regard to being familiar the item and its resemblance to the original. So they rely on the supplier, the one they trust, who assures them that they are making a good purchase, about the quality and the faithfulness to the original: "the supplier already knows what to do, and will also tell you about the differences from the original".

No meticulous checks: if he says it's okay, it's okay, not least because he is told that a lot of the merchandise is made in Naples workshops and is the same as what you find in the shops in the centre: "one of these people told me that the ones in the stores, those are

our ones, they're the ones we make, and so sometimes in the shops you find the stuff that they make in the Naples workshops but they charge you more for it. So you might as well find the way to get to the workshop that makes them directly".

They are convinced that when the merchandise is good, it's good. They cite Saviano (the author of Gomorra) and the route the goods follow once they are unloaded from the container; when some of those goods take a secondary route and you find them on the parallel market. This also creates the doubt that the goods in question might even be authentic, both because they are well made and because they cost more than the goods found on the streets.

There are other reasons too: similarity to the original does not seem to matter, and purchasers choose according to the item's intrinsic quality, materials and workmanship ("you should pay for the quality, not the brand name"). Little attention is paid to the item's resemblance to the original, often because (the focus group admitted) they are not very familiar with the genuine item that the good is attempting to emulate. They appear to be not particularly sensitive to brands.

During the discussion they also talked about the places where the better merchandise can be had (*they never talk about identical products*) and they mention under the stairs in semi-hidden buildings or backshops, as well as meetings at home where a female friend invites a lady round to sell high-quality merchandise over coffee and a chat.

## Showing off is a game, being credible is not the point and purchasing brings pleasure and satisfaction at having got a bargain

Everyone in the focus group agreed that often (fake) brand name goods are in the hands of unlikely people, who would never be able to afford the original, but this did not shock them ("here nobody pays attention or pays less attention to it"). If anything, they were amused by it; they agreed on the fact that they bought fake goods for fun and were not ashamed to be seen with "improbable" items. The issue of credibility did not arouse their passion and was dropped.

Regarding their feelings after purchasing, they all agreed that it is about the pleasure, satisfaction and relish of not having to pay for the brand name. This issue was also taken lightly. When they expressed feelings of satisfaction, they were because of having found "a bargain" or having paid a fair price for the merchandise, in the belief that the higher prices in shops do not reflect "the true value of the merchandise".

When questioned about what the right price for the "merchandise" would be, it emerged that they would be willing to pay up to 150-200 euros for the good stuff, but that the average price that they were willing to pay for goods purchased from stalls should not exceed 50 euros and that they spent 25 euros on average.

## No shame and no damage to the economy

When pressed regarding the criminal mechanism that lies behind the counterfeit market, the focus group members acknowledged its existence, but also admitted that this thought never crossed their minds at the moment of purchase.

If anything, they think more about the seller, often of African origin, whom they are doing a favour in order for him to make ends meet.

When the conversation turned to the economic damage done by counterfeiting to the "Made in Italy" label, the group's reaction was more united, believing that there is no damage to the economy, at least that part of the economy consisting of the brands being imitated. In Naples, too, there is the "self-acquitting" belief that shop-bought merchandise is too expensive and that brands benefit from the spread of imitations: "the brand profits from it, it gets known, it's advertising".

The group was not ashamed to purchase and show others that they have bought counterfeit items. None of them mentioned any embarrassment, even about their choosing to purchase them far away from the places they usually frequent: they do so more in order to find something different than because they are ashamed to be seen. In any case they all stated that they purchased counterfeit goods in other people's company and that they were not interested in passing something off as genuine even if it is not. Embarrassment did not even enter their minds, they all seemed very cool about the whole thing.

## A campaign designed to highlight the role of crime may serve as a deterrent

As mentioned in the preliminary remarks, in Naples participants were also asked what might prevent them from buying counterfeit goods. The first responses were the most obvious and the least interesting: if the price of the goods is too high or their quality too low.

However, when the topic was subsequently explored in more depth, other factors emerged, such as the "fear of being caught" and fined, if there were more checks and the awareness that by purchasing counterfeit goods one is helping organised crime. In their view, a campaign that gets this point across strongly and is emotionally involving would be a sure deterrent. But it has to be a pervasive campaign. A campaign launched during the Football World Cup was mentioned, but nobody remembered it.

## 5. ROME: ANARCHY AND PRAGMATISM

The third focus group was held in Rome on 13 June 2011. It consisted of 15 people: 7 men and 6 women.

All of the participants were aged between 30 and 50, except one who was 63 years old.

The Rome focus group was the most homogeneous of the three, not just in terms of age: socially speaking, in fact, they could all be defined white-collar middle class, with the sole exception of the oldest member.

The group mainly purchased counterfeit goods in other people's company (9 as opposed to versus 4) and away from the places they usually frequented (8 as opposed to 5).

#### rurchasers buy in other people's company and in the places they usually frequent

Purchasers buy counterfeit goods (almost exclusively) in other people's company. They might find sellers of counterfeit goods along their usual route, and when they are with friends or colleagues discussion of the goods on display is inevitably sparked, they "try them on" or check the quality of the materials. In this case friends help them choose and give advice: "if you see something perhaps there's the friend who encourages you and says: go on, buy it".

For the same reason purchases are mainly made near the places they usually frequent, at markets close to home or from the stalls on the way to work. They certainly have nothing against holiday locations either, but not so much to look for something different or not be seen as because they are more disposed to do so ("you're more relaxed and get carried away by the holiday atmosphere").

For several of the participants it does not matter whether they are alone or in company, or near or far away from the usual places they frequent. What counts is the type of article they come across; they decide on the spur of the moment regardless of where they are and who they are with: "it makes no difference, though if I find something I like, if I think it's a bargain I'll buy it, but it doesn't matter if I'm alone or with friends; of course when you're out with friends you have the time and you can, but you find the time if need be."

#### The police ignore counterfeiting

Some in the group buy counterfeit goods in other people's company because it reassures them, makes them feel protected, especially from the possible arrival of the police: "it's better with others because as it isn't legal it's better to have someone looking out. Being with others makes it safer", although this comment left most of the group puzzled. In contrast, most of them said that although the police are present, they completely ignore the phenomenon, leading them to think that all in all it is illegal but it is a phenomenon that is tolerated: "the local police are often present, in the same places as these sellers, they put parking tickets on cars but completely ignore the people selling fake goods. It makes you think that it isn't a problem, you forget that it is illegal", a notion repeated by others. It's true, some of them pointed out, that they often come and confiscate the sellers' goods, but they've never fined purchasers, at most "they'll say don't you know that it's illegal? But then they leave them alone."

# Different goods but not necessarily in different places

The participants in the Rome focus group are also clearly aware of a varied market for counterfeit products, with different merchandise and prices, but this variety of products can be found easily on the same pavement a few meters apart: "in my experience goods of all kinds, whether good quality or not, can be found on the street too; there is different merchandise 50 metres further along which costs more too. This makes you curious and so you compare them and the more expensive ones in fact are better". They mentioned goods of different quality, ranging from the "coarsely made and ordinary, with the G for Gucci that looks more like a 6 and you can see a mile off that it is fake" to Louis Vuitton bags which "when placed beside the genuine article look no different."

Often the place of purchase changes. One of the woman mentioned that she had been told about a vendor who had merchandise like the genuine article, but she went to this sort of warehouse only to find that they had the same things she could get on the street. Others spoke about more exotic places, such as warehouses in Puglia or in Istanbul, where "they hand you the Louis Vuitton catalogue, you choose the one you want, and when you have made your choice, a boy leaves, and a little while later returns with the bag."

Nevertheless, the prevailing view is that you do not necessarily have to know anyone to get hold of high-quality fake goods. You find them mixed in with others; you have to be able to understand the differences yourself. So it becomes essential to be able to pick items up, "to be able to feel them, look at corners, whether the glue can be seen. It's from these things that you can tell the true value of what you've got in your hand."

Everyone occasionally buys on the street. If someone points them to "the right place", they will go and have a look and check it out, but no one usually sets out to find it.

Home selling was mentioned too, but they did not seem particularly convinced, as they force you to spend time in a place and you get a feeling of being coerced: "when they invite you you're practically obliged to buy something. I go from time to time but I'm not happy to go, I prefer to be free to choose and not buy if I don't want to".

#### Satisfied at finding a bargain, regardless of the brand

Satisfaction at having got a bargain. This, everyone agreed, is the feeling the purchaser has after purchasing counterfeit goods. There is nothing else, but digging a bit deeper into the answers given, one finds that the feeling of having grabbed a bargain is there almost regardless of the actual value of the merchandise. A bargain is not just when you purchase a well-made item while spending less than the original, but virtually always "where am I going to find a bag for 20 euros? Fake or genuine, if it's well-made I buy it" or "I'm spending little, but it's not that I'm spending little compared to the original, I'm spending little full stop! So, I'm ok with that and if it doesn't last long, I'll choose better next time, but fake all the same".

Some of the participants would buy hand-crafted items, not necessarily branded ones, but are put off by the difficulty of finding them and by the fact that, if they did, they would pay more for them: "if I found a well-made hand-crafted bag for the same price, I would buy it; but you don't find them while you find the counterfeit ones on the street and they're often well made."

# A pragmatic, unashamed "couldn't-care-less" attitude

Gradually the true mark of buyers of counterfeit goods from Rome emerges: a sort of pragmatic "couldn't-care-less" attitude that seems to pervade everything, even brands. They are not interested in the brand: anything goes unless it's very poorly made and especially if it's cheap. They were even less interested in credibility. They believe that the Milan group is more provincial because they are too attached to appearance while in

Rome everything is mixed, they are free to re-invent their look: "Milan is more provincial, they have to make it seem that ... here people are much less concerned with appearance, it's all more mixed and you never know who you are dealing with. Some people you see on the streets who look like tramps and then you discover that they are filthy rich. You are not judged for what you are wearing, it does not matter". They went on to mention famous people, well-known faces on television, who they have seen buying things in the markets of Piazza Mazzini, or lawyers and professionals who regularly shop there, without worrying about being seen or wearing that kind of merchandise. It is not, as one lady from the "well-to-do neighbourhoods" says, just about saving: "it's really convenient, what attracts me is that it's easy, you don't have to go from place to place looking for the store that sells it, but you always find it to hand when you need it. This fascinates me, you have everything at your fingertips when you need it, like when it rains and the umbrella-sellers miraculously appear".

It goes without saying that nobody in the group was ashamed to buy counterfeit goods ("ashamed of what?"). The respectable ladies (who like the others were not ashamed) said that their daughters were much more demanding and could never endure going out wearing fake items. Can we place hope in the new generations? They were not convinced, and thought that their daughters, in time, would change their behaviour. Once again, they launched into the usual rants ("they are the ones who should be ashamed for selling a handbag for 600 euros", "they should be ashamed for making children work for a pittance") but it sounds like a half-hearted defence rather than outrage. Even the mention of organised crime seems to make little difference. The feeling is that they do not care one bit, that they feel no need to justify or acquit themselves like the other focus groups.

# More outlets to challenge sales of fake goods

In view of the above, it is tough to come up with any effective deterrents to prevent the group from purchasing counterfeit goods. In fact, two characteristics emerge: the poor quality of counterfeit goods in general (regardless of their similarity to the original) and tacky counterfeits, when it is blatantly obvious that the item is a fake (the the Gucci G that looks like a 6).

Obviously price: "the excessive cost: the savings have to be substantial, otherwise I'll wait for the sales", a remark which led the group to consider outlets and factory stores: if there were more of them and there were guaranteed 50% reductions on last year's items, many more people would be willing to wait and buy the genuine article as opposed to the fake one.

In addition stricter checks by the police were mentioned, although this does not seem particularly credible: "fines for buyers, but do you know of any? The police never blame the buyer, they just say 'don't you know it's illegal?' They take the item away but never fine them".

It seems that a campaign would not work either. Nobody recalls the campaign during the World Cup and, although some were sensitive to aspects connected with organised crime and thus would consider a targeted campaign, the argument was immediately shot down by the others "it's like with smoking: they say it isn't good for you, that it causes cancer, but if you're a smoker you ignore them."



# **APPENDICES**

# APPENDIX 1 THE INPUT/OUTPUT MODEL

Analysis of interdependencies between sectors (or input-output analysis), as is well known, is linked to the name of the American economist Wassily Leontief. The Leontief model is a general model of equilibrium in the Walras-Pareto tradition; however, unlike the conceptual constructions of general economic equilibrium, input-output (I-O below) was developed for empirical applications: i.e. to provide the degree of the interdependency between sectors in an economic system.

The decision to use a complex, detailed instrument, such as the Leontief model, for the purposes of the analysis, was taken because:

- I-O provides reliable the results, not only in terms of direct effects but also in relation to the multiplier effects "induced" by the original investment;
- Analysis of interdependencies between sectors is a very important tool for interpreting and displaying other economic outputs and their breakdown by sector.

As mentioned above, the impact effects evaluated are activated (generated) output, value added, imports and employment, both in terms of the direct investment and the indirect effects triggered within the domestic economic system by the expenditure activated.

The Leontief model consists of a pattern that, as already mentioned, has its foundations in general equilibrium theory. This, although based on rigorous theoretical concepts, gives it an immediate practical applicability, which makes it a useful model for quantitative analysis. The I-O model makes it possible to measure trade between an economy's various branches (either businesses or industries) and, thus quantify the effects of economic policy decisions on the economy as a whole.

Each industry gives rise to two types of products (output) and uses two types of resources (inputs). Outputs can be divided into intermediate and final goods. The former consist of all those products which are then used in other production processes, as input, while the latter consist of all those products intended for final consumption. Inputs are divided into intermediate goods and original resources. The original resources are defined as exogenous to the economic system: for example durable goods, as they were produced in previous periods but continue to have value over the period of time referred to in the analysis, and natural resources, as they are not the output of any other branch (e.g. land or labour).

The diagram that summarises flows of inputs and outputs between the branches of an economy is the I-O transaction table, cross-sector interdependencies or flow diagram.

The cross-sector interdependencies table is divided into three sections (see Figure A): a square section, nxn, where inter-industry flows are represented, a rectangular section, nxm, showing final uses, and lxn, showing primary resources.

Fig. A. Table of cross-sector interdependencies

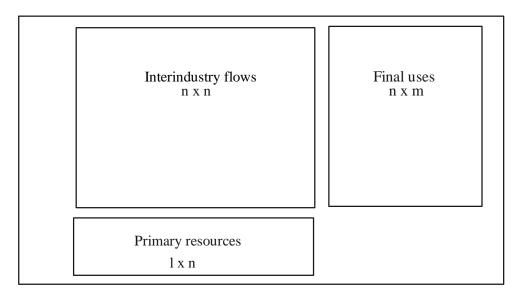


Figure B shows a table of transactions whose sizes are measured in terms of value. The first row and the first column of the table show the branches that constitute the economic system. The table can be read both in the direction of the rows and in the direction of the columns: sales for the i<sup>th</sup> branch to all of the other n-1 branches are measured along the i<sup>th</sup> row, while purchases by the j<sup>th</sup> branch from the rest of the economy are measured along the j<sup>th</sup> column. xij measures the output flow of the i<sup>th</sup> branch absorbed by the j<sup>th</sup> branch as input.

xii measures re-employment, i.e. the quantity of output of the i<sup>th</sup> branch absorbed as its own input.

Purchaser Sector Selling Sector	1	2	3		n	Final consumption	Gross output
1	X 11	X 12	X 13		X 1n	C1	X1
2	X 21	X 22	X23		X 2n	C 2	X 2
3	X 31	X 32	X33		X 3n	C 3	Х3
· ·				· · ·			
n	X n1	X n2	X n3		Xnn	Cn	Xn
Labour	L 1	L 2	L 3		Ln		

Fig. B. Table of cross-sector interdependencies

# The Leontief equation

It is possible to define the production of each branch both as the value of inputs absorbed, and as the value of the output distributed. From the point of view of resources absorbed, the output of the j<sup>th</sup> branch is given by the sum of the j<sup>th</sup> column of the transactions table. In the second case, the value of the output of the i<sup>th</sup> branch is given by the sum of the i<sup>th</sup> row of the transactions table.

It is possible to think of the transactions table as a matrix and use all the properties of matrix algebra. In this case the Leontief equation has the following form:

$$X u' + d' = x'$$
 [1]

Where X is the matrix of inter-industry flows, u' is the transposed unit vector, d the end-use vector and x the production vector, the value of output of the i<sup>th</sup> branch is given by the value of the output intended to be reused as input within the inter-industry sector, plus the value of goods for final consumption.

If the transactions table is read in the direction of the columns, the value of output of the j<sup>th</sup> branch is given by the sum of the j<sup>th</sup> column, i.e. by the sum of resources absorbed

by the individual production processes, hence by the intermediate inputs originating from other branches plus the value added (the remuneration of the original resources used) by the i<sup>th</sup> branch.

The second Leontief equation is as follows:

$$u X + v = x$$
 [2]

Where v is the vector of value added and all other terms retain the same meaning as in [1].

#### The matrix of expenditure coefficients and its inverse

From the cross-sector interdependencies table it is possible to derive the expenditure coefficient matrix, where the generic element aij is obtained from the ratio between the value of output produced by the i<sup>th</sup> branch (used as input by the j<sup>th</sup> branch) and the value of production of the j<sup>th</sup> branch.

The sum of each column represents the cost of inputs required to produce one monetary unit of the good j, the sum of the generic column j must be less than a unit; from an economic perspective, in fact, a value of production that is entirely absorbed by the factor cost is unjustified.

From the matrix algebra we know that any non-singular matrix pre-multiplied by its inverse gives rise to the identity matrix; [1] can be rewritten as follows:

$$X /x/-1 /x/ u' + d' = x$$
 [3]

where /x/ is the diagonal output matrix, and the matrix of expenditure coefficients is given by the product of the matrix of inter-industry flows and the inverse of the diagonal output matrix.

As mentioned above, the Leontief model is based on an assumption of general equilibrium; for equilibrium to exist, the output level of the j<sup>th</sup> branch must necessarily match the demand for intermediate factors from other branches, plus the final demand for the good produced.

$$x1 = ai1 x1 + ai2 x2 + .... + ain xn + di$$
  
(1 - ai1)  $x1$  - ai2  $x2$  -.... - ain  $xn$  = d [4]

Where aij xj measures the input requirements of the  $j^{th}$  industry purchased by the  $i^{th}$  industry and the final demand for the  $i^{th}$  product. As with the output of branch i, the output of the other n-1 branches may be represented as in [ 4 ]; i.e. by n linear equations which [ 5 ] represents with the following matrix notation:

$$(I - A) x = d$$
 [5]

where x is the vector of production, d is the vector of final demand, A is the matrix of expenditure coefficients and i is the identity matrix. If the matrix (I - A) is invertible, there is only one [5] solution.

$$x = Z d$$
; with  $Z = (I - A)-1$ ;  $xij \ge 1$ ; [6]

The Z matrix is the inverse matrix of expenditure coefficients. The coefficient zij measures the value of the i<sup>th</sup> inputs required directly and indirectly for the production of one monetary unit of the i<sup>th</sup> good.

The sum of each column of Z is called the "activation coefficient" because it measures the effects induced by a change of one monetary unit of output of the i<sup>th</sup> branch on the other n-1 branches. For this reason, zij must be greater than or equal to one unit; the increase in production will require, in fact, intermediate inputs originating from other branches.

As an example, if we assume an increase in the coal production, the coal industry will purchase intermediate goods, such as trucks; the automotive industry, to meet the increase in final demand, will require more energy input, the electricity industry will demand larger amounts of coal than previously. For the same reason, a negative activation would not make sense from the economic point of view.

# Activation of production

The input-output model, besides being an extremely useful descriptive model, is a forecasting and simulation model and therefore a useful instrument for economic policy choices. For example, it assesses the effects of increased or decreased fiscal pressure on the entire economic system.

Applied to this study, it enabled the effects of counterfeiting on production, value added, imports and employment due to an exogenous increase in final demand to be measured.

Equation [6] is applied to calculate output at time zero (t0) and production at time one (t1), measured following the change that has occurred in final demand.

$$x0 = Z d0$$
 for  $t = 0$ ;

$$x1 = Z d1$$
 for  $t = 1$ ;

The change in of output ( $\square x$ ) is given by the difference between output at time one and output at time zero.

$$x = (x1 - x0) = Z(d1 - d0) = Z < d$$
 [7]

National economies are systems which are open to the global economy and it is not plausible to think that the entire extra demand will draw on the domestic market. Part of it will draw on foreign markets, in the form of demand both for final goods and intermediate goods. At this point in the explanation, it is useful to introduce the concept of the import coefficient, i.e. the share of final demand that will draw directly on the foreign market; this is obtained from the ratio between the total imports of goods intended for consumption and the total resources available. Let M be a matrix with, on its main diagonal, import coefficients for the branches and all other elements equal to zero. The system formalised by [5] now takes the following form:

$$(I-A)x=d-Md$$

$$(I-A)x = (I-M)d$$
 [8]

The value of actual output is obtained as the solution of the system represented by [8]:

$$x = (I - A) - 1 (I - M) d [9]$$

while the value of production triggered by an autonomous increase in final demand is now calculated thus:

$$< x = (I - A) - 1 (I - M) < d [10]$$

From [ 10 ] it can be seen that the multiplier effect on national income depends on the autonomous or exogenous demand, stripped of the share which draws directly on the foreign market

#### Value added induced

Each monetary unit of available resources contains a share of value added; therefore, it is possible to determine the value added activated by an autonomous increase in final demand.

The share mentioned above is given by the ratio of the value added and available resources relative to each branch at time t.

Let r be the vector of available resources, v the vector of the value added and /r/-1 the inverse of the diagonal matrix of available resources. Thus the vector t relative to the ratio above is given by [11]:

$$v/r/-1 = t$$
 [11]

The increase in value added is given by the increase induced in final production by a monetary unit of the incremental final demand, multiplied by the value added contained in one unit of available resources.

$$< v = < x / t / [12]$$

Where <v is the vector of induced value added and <x is the value of incremental production calculated using [ 10 ].

#### Indirect effects on imports

In the discussion regarding actual production activated in response to an exogenous increase in final demand, the concept of the import coefficient has already been defined as the share of imported final goods in relation to available resources in each branch. It was not considered necessary to analyse the activation of exogenous demand on imports of intermediate goods (given the areas of demand under consideration); nevertheless, the methodology is presented here. N is the matrix of intermediate import coefficients, obtained by post-multiplying the matrix of import flows of intermediate goods B by the inverse diagonal matrix of available resources /x/-1.

We know that an economy's total imports are given by the sum of imports of intermediate goods and final goods. T is the vector of total imports:

$$T = B u' + M d$$
 [13]

And, proceeding by way of linear transformations:

$$T = B / x / -1 / x / u' + M d [14]$$

By making N (the intermediate imports coefficient matrix) equal B/x/-1, total imports are given by the following equation:

$$T = N x + M d$$
 [15]

The first element on the right of the equation is the vector of intermediate imports (s). By substituting [9] for x, total imports can be obtained as in the following equation:

$$T = N (I - A) - 1 (I - M) d + M d.$$
 [16]

The value of imports of intermediate products, activated by an autonomous change in final demand is calculated thus:

$$< s = N Z (I - M) < d [17]$$

To understand the economic significance of [17], it is convenient to analyse a system in which imports of intermediate goods are expressed in terms of demand for final goods, without considering the amount of demand that will draw directly on the foreign market:

$$s = N Z d [18]$$

It is pointed out that the purpose remains the calculation of the value of imports of the generic good j activated directly and indirectly by an exogenous change in final demand. If matrix S is equal to NZ, the element s1j is given by [19]:

In order to obtain one unit of gross output of good 1 to be allocated to final demand, z11 units of gross output are required for sector 1, z21 units for sector 2, and so on. Now, since the economy is open to foreign markets, it is necessary to consider the share of intermediate goods that sectors receive from foreign economic branches corresponding to domestic sector 1. Therefore, we must consider the value of the quantity of good 1 imported from branch 1 (n11), the value of the quantity of good 1 imported from branch 2 (n12) and so on. The generic element of matrix S (sij) expresses the value of the imports of good i which are required directly and indirectly in order to produce the value of one monetary unit of good j. The sum of the column j in matrix S is the value of imports (from the foreign economic system) that is directly and indirectly needed for the production of one monetary unit of good J. the sum of the i<sup>th</sup> row in matrix S is the value of the imports of good i required by the economy.

# Definition of the system of labour and impact on employment

In order to obtain one unit of gross output, a series of inputs of intermediate products and original resources are required. The latter category certainly includes labour.

Therefore, it is necessary to determine labour's share of input in the production of the generic good i, from which the volume of additional labour generated by an exogenous increase in final demand can be calculated.

The aim is to obtain the volume of employment of the n branches into which the economy is divided as a function of final demand (d).

L is the vector of employees per branch. The problem may be expressed in terms of the determination of a matrix H so that:

X is the production vector, A the matrix of expenditure coefficients and Z its inverse. From [5] and [6], we obtain:

$$Ax + d = x$$
 [21a]

$$Zd = x \quad [21b]$$

Pre-multiplying the systems referred to in [21] for the inverse diagonal matrix of actual output /x/-1, we obtain:

$$/x/-1 \text{ A/x/ }/x/-1x + /x/-1d = /x/-1x;$$
 [22a]  
 $/x/-1 \text{ Zd} = /x/-1x$  [22b]

from which we derive:

$$/x/-1 \text{ A/x/ u + /x/-1d = u}$$
 [23a]  
 $/x/-1 \text{ Zd = u}$  [23b]

We can now multiply the two systems by the matrix /L/, which shows the volume of employees per branch on the main diagonal and zero for the other elements:

$$/L//x/-1 \text{ A }/x//L/-1 /L/ \text{ u + }/L//x/-1 \text{ d = }/L/ \text{ u } [24a]$$

$$/L//x/-1 \text{ Z d = }/L/\text{ u } [24b]$$

$$/L//x/-1 \text{ A/x/}/L/-1 \text{ L + }/L//x/-1 \text{ d = L } [25a]$$

$$/L//x/-1 \text{ Z d = L } [25b]$$

The problem shown in [20] is resolved by:

$$H = \frac{L}{x}-1 A/x / L/-1$$
 [26]

The system [25a] can be rewritten in the following form:

$$H L + \frac{L}{x} - 1 d = L$$
 [27]

and the volume of employment is determined as follows:

$$L = (I - H)-1/L//x/-1 d$$
 [28]

If /P/-1 is the inverse diagonal matrix of productivity, system [28] can be rewritten as follows:

$$L = (1-H)-1/P/-1 d$$
 [29]

/P/-1 can be substituted into system [ 25b ]

$$/P/-1 Z d = L [30]$$

[ 30 ] provides the quantity of labour required by each branch according to final demand d; therefore a second solution to the problem posed in [ 20 ] is:

$$H = /P/-1Z$$
 [31]

In order to better decipher the economic significance of the matrix H, its generic element is considered:

$$h\,ij = \frac{\underline{Li}\ \underline{x}\,ij}{x\,i\ L\,j} \qquad \qquad \hbox{[ 32 ]}$$

which is equivalent to:

h ij = 
$$\frac{x \text{ ij } 1}{x \text{ i/L}_j}$$
 [33]

The first term on the right side of [ 32 ] represents the relationship between the quantity of good i absorbed by the j<sup>th</sup> industry, and the productivity of the i<sup>th</sup> industry This is, in essence, the quantity of the labour factor of the i<sup>th</sup> branch contained in the flow of goods absorbed by the j<sup>th</sup> branch so that the latter can use a specific unit quantity of labour.

#### Induced employment

Employment effects generated by an increase in demand are dependent – as seen previously – on the volume of autonomous demand that that stems from it.

For [29], indirect employment induced by investment is defined as:

$$< L = (1 - H)-1 /P/-1 < d [34]$$

If we use [ 30 ], which measures the activation of labour induced directly and indirectly, we obtain:

$$< L = /P/-1 Z < d [35]$$

In order to consider only the demand that actually draws on the domestic market, the vector of incremental demand ( $\square$ d) is pre-multiplied by the matrix (I - M), i.e. by a diagonal matrix which shows, on the main diagonal, the share of final goods produced in the domestic economic system (see [ 10 ]).

$$< L = /P/-1 Z (I - M) < d [36]$$

The labour system defined above is based on the assumption that, in the short term, labour productivity remains unchanged, thus the only event that changes the state of the pre-existing equilibrium lies in the change in final demand.



# APPENDIX 2 SUMMARY OF RESULTS OF ECONOMIC IMPACT ANALYSIS BY SECTOR

# General impact of counterfeiting on Italy's domestic economy

		ADSOIUL	e values			Percentage '		
Sectors	Final demand	Activated production	Estimated activated added value		Final demand	Activated production		e d Activated employee
Agriculture, forestry and fishing	-	479.9	329.3	14,217	-	3.5	6.0	13.0
Coal, oil, natural gas, uranium, extraction of minerals	-	109.7	96.8	462	-	0.8	1.8	0.4
Food and beverages	1,084.9	1,441.6	386.6	5.891	15.7	10.5	7.1	5.4
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	2,165.3	2,900.0	998.4	22,599	31.3	21.2	18.3	20.7
Leather and leather goods	323.6	433.3	149.2	3.377	4.7	3.2	2.7	3.1
Wood, wood and cork products (excluding furniture)	-	37.3	13.8	423	-	0.3	0.3	0.4
Paper, publishing and printing	-	165.9	51.8	941	-	1.2	1.0	0.9
Coke and refined petroleum products	-	82.8	11.4	115	-	0.6	0.2	0.1
Chemical products and man-made fibres	128.3	537.1	181.6	2,147	1.9	3.9	3.3	2.0
Rubber and plastic products	29.4	237.6	80.9	1,638	0.4	1.7	1.5	1.5
Other non-metallic minerals	-	93.5	38.1	780	-	0.7	0.7	0.7
Alloys, metals and metallic products	-	716.5	236.2	4,044	-	5.2	4.3	3.7
Machines and mechanical devices	-	82.9	27.4	475	-	0.6	0.5	0.4
Office machines and computers	243.0	271.1	56.8	1,511	3.5	2.0	1.0	1.4
Other machines and electrical devices	2,500.8	2,871.9	1,000.2	20.485	36.1	21.0	18.4	18.7
Radio and television devices		79.8	27.4	457	-	0.6	0.5	0.4
Medical, precision and optical instruments and watches	449.0	490.2	228.0	4,109	6.5	3.6	4.2	3.8
Motor vehides and trailers	-	12.7	2.9	44	-	0.1	0.1	0.0
Other means of transport		9.8	4.4	88		0.1	0.1	0.1
Furniture and other manufactured goods	_	13.9	4.4	110	_	0.1	0.1	0.1
Salvage	_	17.0	4.9	127	_	0.1	0.1	0.1
Electricity, gas and steam	_	220.0	113.1	488	_	1.6	2.1	0.4
Water collection and distribution		19.2	7.1	30		0.1	0.1	0.0
Construction		47.9	22.1	531		0.3	0.4	0.5
Sale, maintenance and repairs of motor vehicles and motorcycles		34.7	19.2	441		0.3	0.4	0.4
Wholesale trade, excluding motor vehicles and motorcycles		432.4	257.2	4,361		3.2	4.7	4.0
Retail trade, excluding motor vehicles and motorcycles		147.0	96.5	2,935		1.1	1.8	2.7
Hotels and restaurants	-	43.4	23.8	654	-	0.3	0.4	0.6
	-	259.8	146.7	2,414	-		2.7	2.2
Land transportation Sea and air transportation	-	259.8 46.9	146.7	2,414	-	1.9 0.3	0.3	0.3
•	-				-			
Ancillary transportation; travel agencies	-	79.5	35.7	588	-	0.6	0.7	0.5
Mail and telecommunications	-	75.3	53.0	490	-	0.6	1.0	0.4
Financial intermediation, insurance and auxiliary services	-	264.4	153.2	1,334	-	1.9	2.8	1.2
Real estate activities	-	76.9	67.0	608	-	0.6	1.2	0.6
Renting of machinery	-	48.7	30.2	31	-	0.4	0.6	0.0
Computers and connected services	-	60.7	39.0	728	-	0.4	0.7	0.7
Research and development (R&D)	-	14.4	9.5	178	-	0.1	0.2	0.2
Professional activities	-	607.5	364.0	7,884	-	4.4	6.7	7.2
Public Administration, education and health care	-	3.4	1.8	34	-	0.0	0.0	0.0
Na ste disposal, sanitation and similar services	-	29.4	10.7	279	-	0.2	0.2	0.3
Membership organisations	-	13.8	10.2	184	-	0.1	0.2	0.2
Recreation, culture and sports activities	-	66.5	37.5	680	-	0.5	0.7	0.6
Domestic services and other services	-	6.5	5.0	157	-	0.0	0.1	0.1
Total	6,924.4	13,682.7	5,449.1	109,346	100.0	100.0	100.0	100.0

# Impact generated on the domestic economy: Food and beverages

		Absolute val	ues			Perce	entage Values	
	F		Estimated a				stimated acti	
Sectors	Final demand	Activated production	ted added value	Activated employees	Final demand	Activated production	ted added value	Activated employee
Agriculture, forestry and fishing	-	393.0	269.7	11,643	-	15.9	26.6	49.5
Coal, oil, natural gas, uranium, extraction of minerals	-	19.0	16.8	73		0.8	1.7	0.3
Food and beverages	1,084.9	1,340.1	359.4	5,477	100.0	54.2	35.5	23.3
Tobacco industry		0.0	0.0	0		0.0	0.0	0.0
Textiles, clothing and fur		4.2	1.4	32		0.2	0.1	0.1
Leather and leather goods	-	0.6	0.2	5		0.0	0.0	0.0
Wood, wood and cork products (excluding furniture)		6.4	2.4	73		0.3	0.2	0.3
Paper, publishing and printing	-	42.3	12.5	227		1.7	1.2	1.0
Coke and refined petroleum products	-	16.1	2.2	22		0.7	0.2	0.1
Chemical products and man-made fibres		34.2	11.6	137		1.4	1.1	0.6
Rubber and plastic products	-	23.8	8.1	164		1.0	0.8	0.7
Other non-metallic minerals		27.9	11.4	233		1.1	1.1	1.0
Alloys, metals and metallic products		26.2	8.6	148		1.1	0.9	0.6
Machines and mechanical devices		10.7	3.5	61		0.4	0.3	0.3
Office machines and computers		0.3	0.1	1		0.0	0.0	0.0
Other machines and electrical devices		4.8	1.7	34		0.2	0.2	0.1
Radio and television devices		2.4	0.8	14		0.1	0.1	0.1
Medical, precision and optical instruments and watches		1.2	0.6	10		0.0	0.1	0.0
Motor v ehicles and trailers		2.8	0.6	10		0.0	0.1	0.0
Other means of transport		2.6	1.2	24		0.1	0.1	0.0
Furniture and other manufactured goods		1.1	0.3	9		0.0	0.0	0.0
Salv age		0.8	0.2	6		0.0	0.0	0.0
Electricity, gas and steam		36.8	18.9	82		1.5	1.9	0.3
Water collection and distribution		4.3	1.6	7		0.2	0.2	0.0
Construction		8.0	3.7	89		0.3	0.4	0.4
Sale, maintenance and repairs of motor vehicles and motorcycles		6.8	3.7	86		0.3	0.4	0.4
Wholesale trade, excluding motor vehicles and motorcycles		105.3	62.6	1.062		4.3	6.2	4.5
Retail trade, excluding motor vehicles and motorcycles		44.7	29.4	893		1.8	2.9	3.8
,	-			893 94	-			
Hotels and restaurants  Land transportation	-	6.2 62.6	3.4 35.4	582	-	0.3 2.5	0.3 3.5	0.4 2.5
•	-	7.4	2.7		-	0.3		0.2
Sea and air transportation Ancillary transportation; travel agencies	-	16.6	7.5	45 123	-	0.3	0.3 0.7	0.2
Mail and telecommunications		11.8	8.3	77		0.7	0.7	0.3
			29.3	257		2.0	2.9	
Financial intermediation, insurance and auxiliary services Real estate activities	-	50.5 12.9	11.2	102	-	0.5	1.1	1.1 0.4
	-				-			
Renting of machinery  Computers and connected services		6.5 9.6	4.0 6.2	4 115		0.3	0.4	0.0
Research and development (R&D)		1.1	0.8	14		0.4	0.6	0.5
Prof essional activities		93.6	56.1	1,215		3.8	5.5	5.2
Public Administration, education and health care		1.1	0.6	1,215		0.0	0.1	0.0
					-			
Waste disposal, sanitation and similar services	-	5.6	2.0	53	-	0.2	0.2	0.2
Membership organisations		3.0	2.2	39	-	0.1	0.2	0.2
Recreation, culture and sports activities	-	16.7	9.4	171	-	0.7	0.9	0.7
Domestic services and other services	-	0.3	0.2	6	-	0.0	0.0	0.0
Total	1.084.9	2.472.1	1.012.6	23.530	100.0	100.0	100.0	100.0

# Impact generated on the national economy: Perfumes and cosmetics

		Absolut	e values			Percentage	Values	
Sectors	Final demand	Activated production	Estimated activated added value			Activated production	Estima activate added value	ted ed Activated employee
Agriculture, forestry and fishing		1.2	0.8	36		0.6	1.1	3.5
Coal, oil, natural gas, uranium, extraction of minerals		3.4	2.8	15	-	1.8	3.7	1.5
Food and beverages	-	2.5	0.7	10	-	1.3	0.9	1.0
Tobacco industry		0.0	0.0	0	_	0.0	0.0	0.0
Textiles, clothing and fur		0.0	0.0	2	-	0.0	0.0	0.0
	-			0	-			
Leather and leather goods	-	0.0	0.0	4	-	0.0	0.0	0.0
Wood, wood and cork products (excluding fumiture)	-	3.8	1.2	22	-	0.2 2.0	1.7	2.2
Paper, publishing and printing	-			4	-			
Coke and refined petroleum products	-	2.5	0.4			1.3	0.5	0.4
Chemical products and man-made fibres	108.2	133.0	45.0	532	100.0	69.7	60.6	52.7
Rubber and plastic products	-	2.0	0.7	14	-	1.0	0.9	1.4
Other non-metallic minerals	-	2.7	1.1	23	-	1.4	1.5	2.3
Alloys, metals and metallic products	-	2.1	0.7	12	-	1.1	0.9	1.2
Mechanical machines and devices	-	0.8	0.3	5	-	0.4	0.4	0.5
Office and computer machines	-	0.0	0.0	0	-	0.0	0.0	0.0
Other machines and electrical devices	-	0.6	0.2	4	-	0.3	0.3	0.4
Radio and television devices	-	0.2	0.1	1	-	0.1	0.1	0.1
Medical, precision and optical instruments and watches	-	0.1	0.0	1	-	0.0	0.1	0.1
Motor vehides and trailers	-	0.2	0.0	1	-	0.1	0.1	0.1
Other means of transport	-	0.2	0.1	2	-	0.1	0.1	0.2
Furniture and other manufactured goods	-	0.1	0.0	1	-	0.0	0.0	0.1
Salvage	-	0.1	0.0	0	-	0.0	0.0	0.0
Electricity, gas and steam	-	4.2	2.2	9	-	2.2	2.9	0.9
Water collection and distribution	-	0.3	0.1	0	-	0.1	0.1	0.0
Construction	-	0.7	0.3	8	-	0.4	0.4	0.8
Sale, maintenance and repairs of motor vehicles and motorcycles	-	0.7	0.4	9	-	0.4	0.5	0.9
Wholesale trade, excluding motor vehicles and motorcycles	-	4.4	2.6	45	-	2.3	3.6	4.5
Retail trade, excluding motor vehicles and motorcycles	-	1.0	0.6	20	-	0.5	0.9	1.9
Hotels and restaurants	-	0.9	0.5	13	-	0.5	0.7	1.3
Land transportation	-	3.8	2.2	36	-	2.0	2.9	3.5
Sea and air transportation	-	1.4	0.5	8	-	0.7	0.7	8.0
Ancillary transportation; travel agencies	-	1.5	0.7	11	-	8.0	0.9	1.1
Mail and telecommunications	-	1.1	0.8	7	-	0.6	1.1	0.7
Financial intermediation, insurance and auxiliary services	-	2.6	1.5	13	-	1.4	2.0	1.3
Real estate activities	-	1.0	0.8	8	-	0.5	1.1	0.8
Renting of machinery	-	0.6	0.4	0	-	0.3	0.5	0.0
Computers and connected services	-	0.8	0.5	10	-	0.4	0.7	0.9
Research and development (R&D)	-	0.9	0.6	11	-	0.5	0.8	1.1
Professional activities	-	7.1	4.3	93	-	3.7	5.8	9.2
Public administration, education and health care	-	0.0	0.0	0	-	0.0	0.0	0.0
Waste disposal, sanitation and similar services	-	0.5	0.2	4	-	0.2	0.2	0.4
Membership organisations	-	0.3	0.2	4	-	0.1	0.3	0.4
Recreation, culture and sports activities	-	1.0	0.6	10	-	0.5	0.8	1.0
Domestic services and other services	-	0.0	0.0	1	-	0.0	0.0	0.1

# Impact generated on the national economy: Clothing and accessories

<u>_</u>		Absolute				Percentage \		
Contrar	E:!	A attitude of	stimated acti		Final		stimated acti	
Sectors	Final demand	Activated production	ted added value	Activated employees	demand	Activated production	ted added value	Activate employe
Agriculture, forestry and fishing	_	79.2	54.4	2,347	_	1.6	2.7	5.6
Coal, oil, natural gas, uranium, extraction of minerals		39.3	36.0	136		0.8	1.8	0.3
Food and beverages		88.8	23.8	363		1.8	1.2	0.9
Fobacco industry		0.0	0.0	0		0.0	0.0	0.0
Fextiles, clothing and fur	2,165.3	2,888.0	994.2	22,505	87.0	56.9	49.1	54.2
eather and leather goods	323.6	431.5	148.6	3,363	13.0	8.5	7.3	8.1
Vood, wood and cork products (excluding furniture)		14.4	5.3	164		0.3	0.3	0.4
Paper, publishing and printing		55.5	17.7	321		1.1	0.9	0.8
Coke and refined petroleum products		30.9	4.3	43		0.6	0.2	0.0
Chemical products and man-made fibres		193.8	65.5	775		3.8	3.2	1.9
Rubber and plastic products		75.5	25.7	521		1.5	1.3	1.3
Other non-metallic minerals	-	12.2	5.0	101	-	0.2	0.2	0.2
	-							
Alloys, metals and metallic products	-	73.5	24.2	415	-	1.4	1.2	1.0
Machines and mechanical devices	-	21.3	7.0	122	-	0.4	0.3	0.3
Office machines and computers	-	0.6	0.1	3	-	0.0	0.0	0.0
Other machines and electrical devices	-	11.5	4.0	82	-	0.2	0.2	0.2
Radio and television devices	-	5.4	1.8	31	-	0.1	0.1	0.1
Medical, precision and optical instruments and watches	-	2.4	1.1	20	-	0.0	0.1	0.0
flotor vehicles and trailers	-	3.9	0.9	14	-	0.1	0.0	0.0
Other means of transport	-	2.7	1.2	24	-	0.1	0.1	0.1
urniture and other manufactured goods	-	8.9	2.8	71	-	0.2	0.1	0.2
Salvage	-	6.4	1.8	48	-	0.1	0.1	0.1
Electricity, gas and steam	-	99.0	50.9	220	-	2.0	2.5	0.5
Vater collection and distribution	-	11.4	4.2	18	-	0.2	0.2	0.0
Construction	-	19.1	8.8	212	-	0.4	0.4	0.5
Sale, maintenance and repairs of motor vehicles and motorcycles	s -	11.3	6.2	143	-	0.2	0.3	0.3
Wholesale trade, excluding motor vehicles and motorcycles	-	157.0	93.4	1,584	-	3.1	4.6	3.8
Retail trade, excluding motor vehicles and motorcycles	-	76.8	50.4	1,534	-	1.5	2.5	3.7
Hotels and restaurants		14.4	7.9	217		0.3	0.4	0.5
and transportation	-	83.0	46.9	772	-	1.6	2.3	1.9
Sea and air transportation		15.6	5.5	90	-	0.3	0.3	0.2
Ancillary transportation; travel agencies		27.7	12.4	205	-	0.5	0.6	0.5
Mail and telecommunications		28.4	20.0	185	-	0.6	1.0	0.4
Financial intermediation, insurance and auxiliary services		105.9	61.4	533		2.1	3.0	1.3
Real estate activities		31.3	27.3	247		0.6	1.3	0.6
Renting of machinery		20.6	12.8	13	-	0.4	0.6	0.0
Computers and connected services		21.4	13.8	257		0.4	0.7	0.6
Research and development (R&D)		3.7	2.4	45		0.1	0.1	0.1
Prof essional activities		245.8	147.3	3,190		4.8	7.3	7.7
Public administration, education and health care		1.1	0.6	11		0.0	0.0	0.0
Vaste disposal, sanitation and similar services		15.5	5.6	147		0.3	0.3	0.4
Membership organisations		5.2	3.9	70	-	0.3	0.3	0.4
					-			
Recreation, culture and sports activities	-	27.9	15.7	285	-	0.5	0.8	0.7
Omestic services and other services	-	4.3	3.4	106	-	0.1	0.2	0.3
otal	2,488.9	5,072.3	2,026.3	41,552	100.0	100.0	100.0	100.0

# Impact generated on the national economy: Electrical appliances and material

Agriculture, forestly and flahing Agriculture, forestly and flahing Cool, col, natural gasu, unnium, estraction of minerals			Absolute v	alues			Percentage V	Estimated activated add   Activate ted added   Activate ted added   Activate ted added   Activate   Activate				
Agriculture, forestry and fishing												
Coal of, natural gas, uranium, extraction of minerals	Sectors								Activated employed			
Coal of, natural gas, uranium, extraction of minerals	Agriculture, forestry and fishing		1.3	0.9	37		0.1	0.2	0.4			
Food and beverages  - 2.0 0.5 8 - 0.2 0.1 1  Frestles, clothing and fur  - 1.4 0.5 11 - 0.1 0.1 0.1  Ceather and leather goods  - 0.2 0.1 1 2 0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		_										
Testices, idinhing and fur		-										
Textiles, clothing and fur Leather and leather goods	•											
Leather and leather goods   - 0.2		-										
Wood, wood and cork products (excluding furniture)   3.4   1.2   38   - 0.3   0.3   0.7		-										
Paper, publishing and printing Coke and refined petroleum products - 7.0 1.0 10 - 0.6 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0												
Coke and refined petroleum products												
Chemical products and man-made fibres		-										
Rubber and plastic products		-										
Other non-metallic minerals	•	-										
Alloys, metals and metallic products  136.0  44.8  768  - 11.6  9.7  48.8  Alloys, metals and mechanical devices - 10.9  3.6  63  - 0.9  0.8  0.0  0.0  0.0  0.1  - 0.0  0.0  0.0  0		-										
Machines and mechanical devices		-										
Office machines and computers  - 0.2 0.0 1 - 0.0 0.0 0.0 1		-				-						
Other machines and electrical devices 608.3 693.2 241.4 4,945 100.0 59.0 52.5 58. Radio and television devices - 10.0 3.4 57 - 0.8 0.7 0.7 0.9 0.9 0.4 8 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1		-				-						
Radio and television devices		-										
Medical, precision and optical instruments and watches  1.9 0.9 16 - 0.2 0.2 0.2 0.0 0.0 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1		608.3			,	100.0						
Wotor vehicles and trailers         -         1.2         0.3         4         -         0.1         0.0		-				-						
Other means of transport  - 0.9		-				-						
Furniture and other manufactured goods Salvage		-				-						
Salvage - 2.1 0.6 16 - 0.2 0.1 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	Other means of transport	-	0.9	0.4		-	0.1	0.1	0.1			
Calculation	Furniture and other manufactured goods	-	0.6	0.2	4	-	0.0	0.0	0.1			
Water collection and distribution         -         0.7         0.2         1         -         0.1         0.4         0.7         0.2         0.1         0.2         0.3         0.4         0.4         0.7         0.2         0.1         0.2         3.0         4.6         4.6         0.1         0.2         0.2         0.2         1.2         360         0.4         0.7         0.2         0.6         0.7         0.2         0.8         1.1         0.5         0.4         0.5         0.2         0.8         0.4         0.5         0.4         0.5         0.2         0.8         0.7         0.0         0.0<	Salv age	-	2.1	0.6	16	-	0.2	0.1	0.2			
Construction	Electricity, gas and steam	-	17.3	8.9	38	-	1.5	1.9	0.5			
Sale, maintenance and repairs of motor vehicles and motorcycles	Nater collection and distribution	-	0.7	0.2	1	-	0.1	0.1	0.0			
Wholesale trade, excluding motor vehicles and motorcycles	Construction	-	4.0	1.8	44	-	0.3	0.4	0.5			
Retail trade, excluding motor vehicles and motorcycles	Sale, maintenance and repairs of motor vehicles and motorcy cles	-	3.2	1.8	41	-	0.3	0.4	0.5			
Hotels and restaurants - 4.5 2.5 68 - 0.4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Wholesale trade, excluding motor vehicles and motorcycles	-	35.7	21.2	360	-	3.0	4.6	4.2			
Land transportation - 22.8 12.9 212 - 1.9 2.8 2.8 2.8 2.9 2.12 - 1.9 2.8 2.8 2.9 2.12 - 1.9 2.8 2.8 2.12 - 1.9 2.8 2.8 2.12 - 1.9 2.8 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.8 2.12 - 1.9 2.1	Retail trade, excluding motor vehicles and motorcy cles	-	4.8	3.1	95	-	0.4	0.7	1.1			
Sea and air transportation - 4.5 1.6 26 - 0.4 0.3 0.4 Ancillary transportation; travel agencies - 6.8 3.1 50 - 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Hotels and restaurants	-	4.5	2.5	68	-	0.4	0.5	0.8			
Ancillary transportation; travel agencies - 6.8 3.1 50 - 0.6 0.7 0.8 Mail and telecommunications - 6.9 4.9 4.5 - 0.6 1.1 0.9 2.9 Financial intermediation, insurance and auxiliary services - 22.7 13.1 114 - 1.9 2.9 Real estate activities - 6.4 5.5 50 - 0.5 1.2 0.6 0.5 1.2 0.6 0.5 1.2 0.6 0.5 1.2 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Land transportation	-	22.8	12.9	212		1.9	2.8	2.5			
Mail and telecommunications - 6.9 4.9 45 - 0.6 1.1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sea and air transportation	-	4.5	1.6	26		0.4	0.3	0.3			
Financial intermediation, insurance and auxiliary services - 22.7 13.1 114 - 1.9 2.9 Real estate activities - 6.4 5.5 50 - 0.5 1.2 0.8 Renting of machinery - 4.3 2.6 3 - 0.4 0.6 0.5 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.8 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Ancillary transportation; travel agencies	-	6.8	3.1	50		0.6	0.7	0.6			
Financial intermediation, insurance and auxiliary services - 22.7 13.1 114 - 1.9 2.9  Real state activities - 6.4 5.5 50 - 0.5 1.2 0.8  Renting of machinery - 4.3 2.6 3 - 0.4 0.6 0.6  Computers and connected services - 6.0 3.8 72 - 0.5 0.8 0.8  Research and development (R&D) - 1.2 0.8 114 - 0.1 0.2 0.8  Professional activities - 53.5 32.0 694 - 4.6 7.0 8  Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0  Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1  Wembership organisations  Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0.5	Mail and telecommunications	_	6.9	4.9	45		0.6	1.1	0.5			
Real estate activities - 6.4 5.5 50 - 0.5 1.2 0   Renting of machinery - 4.3 2.6 3 - 0.4 0.6 0   Computers and connected services - 6.0 3.8 72 - 0.5 0.8 0   Research and development (R&D) - 1.2 0.8 14 - 0.1 0.2 0   Professional activities - 53.5 32.0 694 - 4.6 7.0 0   Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0   Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1 0.1   Membership organisations - 1.1 0.8 15 - 0.1 0.2 0   Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0   Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0		_	22.7	13.1	114		1.9	2.9	1.3			
Renting of machinery - 4.3 2.6 3 - 0.4 0.6 0 Computers and connected services - 6.0 3.8 72 - 0.5 0.8 0 Research and development (R&D) - 1.2 0.8 14 - 0.1 0.2 0 Professional activities - 53.5 32.0 694 - 4.6 7.0 0 Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1 0.2 Waste disposal, sanitation and similar services - 1.1 0.8 15 - 0.1 0.1 0.2 Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0.5	· · · · · · · · · · · · · · · · · · ·	_	6.4	5.5	50			1.2	0.6			
Computers and connected services - 6.0 3.8 72 - 0.5 0.8 0 Research and development (R&D) - 1.2 0.8 14 - 0.1 0.2 0 Prof essional activities - 53.5 32.0 694 - 4.6 7.0 8 Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0 Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1 Wembership organisations Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0.5		_		2.6	3			0.6	0.0			
Research and development (R&D) - 1.2 0.8 14 - 0.1 0.2 0 Professional activities - 53.5 32.0 694 - 4.6 7.0 8 Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0 Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1 Wembership organisations - 1.1 0.8 15 - 0.1 0.2 0.6 Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0.5		-							0.8			
Professional activities - 53.5 32.0 694 - 4.6 7.0 694 Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0 Waste disposal, sanitation and similar services - 1.6 0.6 15 - 0.1 0.1 0.1 Wembership organisations Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 0.5									0.2			
Public administration, education and health care - 0.2 0.1 2 - 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0									8.2			
Waste disposal, sanitation and similar services     -     1.6     0.6     15     -     0.1     0.1     0.2     0.0       Membership organisations     -     1.1     0.8     15     -     0.1     0.2     0.0       Recreation, culture and sports activities     -     4.1     2.3     42     -     0.3     0.5     0.0									0.0			
Wembership organisations         -         1.1         0.8         15         -         0.1         0.2         0           Recreation, culture and sports activities         -         4.1         2.3         42         -         0.3         0.5         0					_				0.0			
Recreation, culture and sports activities - 4.1 2.3 42 - 0.3 0.5 (									0.2			
		-				-			0.2			
						-			0.5			
Total 608.3 1,174.3 460.0 8,505 100,0 100.0 100.0 100	Fotal	608.3	1 17/1 3	460.0	8 505	100.0	100.0	100.0	100.0			

# Impact generated on the domestic economy: Computer equipment

		Absolute value	s			Percenta	age Values	
Sectors	Final demand	Activated production		d Activated employees	Final demand	Activated production	Estimated activated added value	Activated employee
Agriculture, forestry and fishing		0.1	0.1	4	-	0.0	0.1	0.2
Coal, oil, natural gas, uranium, extraction of minerals	-	0.6	0.6	2	-	0.2	0.7	0.1
Food and beverages	-	0.3	0.1	1	-	0.1	0.1	0.1
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	-	0.1	0.0	1	-	0.0	0.0	0.0
Leather and leather goods	-	0.0	0.0	0	-	0.0	0.0	0.0
Wood, wood and cork products (excluding furniture)	-	0.2	0.1	2	-	0.1	0.1	0.1
Paper, publishing and printing	-	1.5	0.5	9	-	0.5	0.6	0.5
Coke and refined petroleum products	-	0.6	0.1	1	-	0.2	0.1	0.0
Chemical products and man-made fibres	-	1.5	0.5	6	-	0.4	0.6	0.3
Rubber and plastic products	-	1.8	0.6	12	-	0.5	0.7	0.6
Other non-metallic minerals	-	0.7	0.3	6	-	0.2	0.3	0.3
Alloys, metals and metallic products	-	2.5	0.8	14	-	0.7	1.0	0.7
Machines and mechanical devices	-	0.6	0.2	3	-	0.2	0.2	0.2
Office machines and computers	243.0	269.4	56.5	1,502	100.0	81.4	66.8	75.1
Other machines and electrical devices	-	1.8	0.6	13	-	0.6	0.8	0.7
Radio and television devices	-	21.5	7.4	123	-	6.5	8.7	6.2
Medical, precision and optical instruments and watches		0.5	0.3	5		0.2	0.3	0.2
Motor vehicles and trailers		0.1	0.0	0		0.0	0.0	0.0
Other means of transport		0.1	0.1	1		0.0	0.1	0.1
Furniture and other manufactured goods		0.2	0.1	1		0.0	0.1	0.1
Salvage	-	0.0	0.0	0	-	0.0	0.0	0.0
Electricity, gas and steam		1.0	0.5	2		0.3	0.6	0.1
Water collection and distribution	_	0.1	0.0	0		0.0	0.0	0.0
Construction		0.7	0.3	7		0.2	0.4	0.4
Sale, maintenance and repairs of motor vehicles and motorcycles		0.7	0.4	9		0.2	0.5	0.5
Wholes ale trade, excluding motor vehicles and motorcycles		3.5	2.1	35		1.0	2.4	1.8
Retail trade, excluding motor vehicles and motorcycles	_	2.7	1.8	55		0.8	2.1	2.7
Hotels and Restaurants		0.8	0.4	12		0.2	0.5	0.6
Land transportation		3.4	1.9	32	_	1.0	2.3	1.6
Sea and air transportation		0.7	0.3	4	_	0.2	0.3	0.2
Ancillary transportation; travel agencies		1.0	0.5	8	_	0.3	0.5	0.4
Mail and telecommunications		1.0	0.7	7	_	0.3	0.8	0.3
Financial intermediation, insurance and auxiliary services		1.8	1.0	9		0.5	1.2	0.4
Real estate activities		0.8	0.7	6		0.2	0.8	0.3
Renting of machinery		0.3	0.2	0		0.1	0.2	0.0
Computers and connected services	-	0.3	0.2	9	-	0.1	0.2	0.0
Research and development (R&D)	_	0.1	0.1	1		0.0	0.0	0.4
Professional activities	-	6.6	4.0	86	-	2.0	4.7	4.3
Public administration, education and health care		0.0	0.0	0	_	0.0	0.0	0.0
Waste disposal, sanitation and similar services	-	0.0	0.0	1	-	0.0	0.0	0.0
Membership organisations	_	0.1	0.1	1		0.0	0.1	0.1
Recreation, culture and sports activities		0.1	0.1	5		0.0	0.1	0.1
Domestic services and other services	-	0.5	0.0	0	-	0.1	0.0	0.2
DOTTIGORIC GET VICES CITIE SET VICES	-	0.0	0.0	U	-	0.0	0.0	0.0
Total	243.0	331.1	84.5	1,999	100.0	100.0	100.0	100.0

# Impact generated on the national economy: CDs, DVDs and audiovisuals

		ADSO	lute v alues			Percenta	age Values	
Sectors	Final	Activated	Estimated acti-		Final	Activ ated	Estimated acti	
	demand	production	vated added value	employ ees	demand	production	v ated added v alue	employ e
Agriculture, forestry and fishing	-	3.7	2.5	110	-	0.1	0.2	0.
Coal, oil, natural gas, uranium, extraction of minerals		30.3	26.0	151	-	0.9	1.9	0.
Food and beverages	-	5.9	1.6	24	-	0.2	0.1	0.
Fobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.
Textiles, clothing and fur	-	4.1	1.4	32	-	0.1	0.1	0.
Leather and leather goods	-	0.6	0.2	5	-	0.0	0.0	0.
Nood, wood and cork products (excluding furniture)	-	9.8	3.6	112	-	0.3	0.3	0
Paper, publishing and printing	-	38.5	12.1	221	-	1.1	0.9	0
Coke and refined petroleum products		20.6	2.8	29		0.6	0.2	(
Chemical products and man-made fibres		93.9	31.7	375		2.7	2.3	1
Rubber and plastic products		67.7	23.0	467		2.0	1.7	1
Other non-metallic minerals		31.8	13.0	265		0.9	1.0	1
Alloys, metals and metallic products		399.2		2,253		11.6	9.7	9
Machines and mechanical devices		32.1	10.6	184		0.9	0.8	
Office machines and computers		0.5		3	-	0.0	0.0	
Other machines and electrical devices	1,785.4	2,034.7	708.6	14,513	100.0	59.0	52.5	58
Radio and television devices	.,	29.2		167	-	0.8	0.7	31
ledical, precision and optical instruments and watches		5.6		47		0.8	0.7	
lotor vehicles and trailers		3.6		13		0.2	0.2	
other means of transport		2.7	1.2	24		0.1	0.1	
urniture and other manufactured goods		1.7	0.5	13		0.0	0.0	
urniture and other manuractured goods salvage		6.3		47	_	0.0	0.0	
lectricity, gas and steam		50.8		113	_	1.5	1.9	
lectricity, gas and steam /ater collection and distribution		2.0		113	-	0.1	0.1	
vater collection and distribution		11.7		129		0.1	0.1	
onstruction ale, maintenance and repairs of motor vehicles and motorcy cles		9.5		129		0.3	0.4	
		104.7	62.3	1,056		3.0	4.6	
/holesale trade, excluding motor vehicles and motorcycles				1,056	-	0.4	4.6 0.7	
etail trade, excluding motor vehicles and motorcycles	-	14.0 13.2		280 199	-	0.4	0.7	
otels and restaurants					-		2.8	
and transportation		67.0		623	-	1.9		
ea and air transportation		13.2		77	-	0.4	0.3	
ncillary transportation; travel agencies		20.0		148	-	0.6	0.7	
ail and telecommunications		20.3		132	-	0.6	1.1	
nancial intermediation, insurance and auxiliary services		66.6		335	-	1.9	2.9	
eal estate activities	-	18.7		148	-	0.5	1.2	
enting of machinery		12.5		8	-	0.4	0.6	
omputers and connected services	-	17.5		210	-	0.5	0.8	
esearch and development (R&D)	-	3.4		42	-	0.1	0.2	
rofessional activities	-	156.9		2,036	-	4.6	7.0	
ublic administration, education and health care	-	0.7		7	-	0.0	0.0	
laste disposal, sanitation and similar services	-	4.8		45	-	0.1	0.1	
Membership organisations	-	3.2	2.4	43	-	0.1	0.2	
tecreation, culture and sports activities		12.0		122	-	0.3	0.5	
omestic services and other services	-	1.2	1.0	30	-	0.0	0.1	

# Impact generated on the national economy: Watches and jewellery

		Absolute va	alues			Percenta	age Values	
Sectors	Final	Activated E:	stimated activ	a- Activated	Final	Activated Es	stimated activa- ted added	Activated
Sections		production	value	employees	demand	production	value	employee
Agriculture, forestry and fishing	-	0.6	0.4	17	-	0.1	0.1	0.3
Coal, oil, natural gas, uranium, extraction of minerals	-	3.6	3.2	18	-	0.5	1.0	0.3
Food and beverages	-	0.9	0.2	4	-	0.1	0.1	0.1
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	-	1.2	0.4	9	-	0.2	0.1	0.2
Leather and leather goods	-	0.2	0.1	1	-	0.0	0.0	0.0
Wood, wood and cork products (excluding furniture)	-	1.8	0.7	21	-	0.3	0.2	0.4
Paper, publishing and printing	-	6.9	2.3	42	-	1.0	0.7	0.7
Coke and refined petroleum products		2.9	0.4	4		0.4	0.1	0.1
Chemical products and man-made fibres	-	8.9	3.0	35	-	1.3	0.9	0.6
Rubber and plastic products		7.4	2.5	51		1.1	0.8	0.9
Other non-metallic minerals	_	4.6	1.9	38	_	0.7	0.6	0.7
Alloys, metals and metallic products	_	51.2	16.9	289	_	7.4	5.2	5.1
Machines and mechanical devices	_	4.1	1.3	23	_	0.6	0.4	0.4
Office machines and computers	_	0.1	0.0	0	_	0.0	0.0	0.0
Other machines and electrical devices	_	2.9	1.0	20	_	0.4	0.3	0.4
Radio and television devices	_	9.3	3.2	53	_	1.3	1.0	0.9
Medical, precision and optical instruments and watches	449.0	478.1	222.4	4,007	100.0	68.8	68.7	70.3
Motor vehicles and trailers	445.0	0.6	0.1	2	100.0	0.1	0.0	0.0
Other means of transport	-	0.4	0.1	4	-	0.1	0.0	0.0
Furniture and other manufactured goods		1.3	0.2	10		0.1	0.1	0.1
Salvage		0.8	0.4	6		0.1	0.1	0.1
•	-	5.2	2.7	12	-	0.1	0.8	0.1
Electricity, gas and steam Water collection and distribution	-	0.3		0	-	0.0	0.0	0.2
	-		0.1	-	-			
Construction		2.6	1.2	29	-	0.4	0.4	0.5
Sale, maintenance and repairs of motor vehicles and motorcy	cles -	1.6	0.9	20	-	0.2	0.3	0.3
Wholesale trade, excluding motor vehicles and motorcycles	-	13.3	7.9	135		1.9	2.4	2.4
Retail trade, excluding motor vehicles and motorcycles	-	1.5	1.0	31	-	0.2	0.3	0.5
Hotels and restaurants	-	2.2	1.2	34	-	0.3	0.4	0.6
Land transportation	-	10.9	6.2	101	-	1.6	1.9	1.8
Sea and air transportation	-	2.6	0.9	15	-	0.4	0.3	0.3
Ancillary transportation; travel agencies	-	4.0	1.8	30	-	0.6	0.6	0.5
Mail and telecommunications	-	4.0	2.8	26	-	0.6	0.9	0.5
Financial intermediation, insurance and auxiliary services	-	9.0	5.2	46	-	1.3	1.6	8.0
Real estate activities	-	4.3	3.8	34	-	0.6	1.2	0.6
Renting of machinery	-	2.8	1.7	2	-	0.4	0.5	0.0
Computers and connected services	-	3.3	2.1	39	-	0.5	0.6	0.7
Research and development (R&D)	-	3.5	2.3	43	-	0.5	0.7	0.7
Professional activities	-	31.0	18.6	402	-	4.5	5.7	7.1
Public administration, education and health care	-	0.1	0.1	1	-	0.0	0.0	0.0
Waste disposal, sanitation and similar services	-	8.0	0.3	8	-	0.1	0.1	0.1
Membership organisations	-	0.6	0.4	8	-	0.1	0.1	0.1
Recreation, culture and sports activities	-	3.2	1.8	32	-	0.5	0.6	0.6
Domestic services and other services	-	0.1	0.0	2	-	0.0	0.0	0.0
Total	449.0	694.6	323.8	5.704	100.0	100.0	100.0	100.0

# Impact on the national economy: Toys and games

		Absolute				Percenta	age Values	
Sectors	Final demand	Activated production	Estimate activated added value	d Activated employees	Final demand	Activated production	Estimated activated added value	Activated employees
Agriculture, forestry and fishing	-	0.3	0.2	10	-	0.6	1.0	2.6
Coal, oil, natural gas, uranium, extraction of minerals	-	0.7	0.6	3	-	1.2	2.7	0.7
Food and beverages	-	0.3	0.1	1	-	0.4	0.3	0.3
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	-	0.5	0.2	4	-	0.8	0.7	0.9
Leather and leather goods	-	0.1	0.0	1	-	0.1	0.1	0.1
Wood, wood and cork products (excluding furniture)	-	0.2	0.1	2	-	0.3	0.3	0.6
Paper, publishing and printing	-	1.2	0.4	6	-	2.0	1.6	1.6
Coke and refined petroleum products	-	0.5	0.1	1	-	0.8	0.3	0.2
Chemical products and man-made fibres	-	9.6	3.3	39	-	16.4	14.3	9.7
Rubber and plastic products	29.4	31.8	10.8	220	100.0	54.2	47.5	55.0
Other non-metallic minerals	-	0.4	0.2	4	-	0.7	0.8	0.9
Alloys, metals and metallic products	-	1.6	0.5	9	-	2.6	2.2	2.2
Machines and mechanical devices	-	0.3	0.1	2	-	0.5	0.4	0.4
Office machines and computers	-	0.0	0.0	0	-	0.0	0.0	0.0
Other machines and electrical devices	-	0.3	0.1	2	-	0.5	0.4	0.5
Radio and television devices	-	0.1	0.0	0	-	0.1	0.1	0.1
Medical, precision and optical instruments and watches	-	0.0	0.0	0	-	0.1	0.1	0.1
Motor vehicles and trailers	-	0.1	0.0	0	-	0.1	0.1	0.1
Other means of transport	-	0.0	0.0	0	-	0.1	0.1	0.1
Furniture and other manufactured goods	-	0.0	0.0	0	-	0.1	0.1	0.1
Salvage	-	0.1	0.0	1	-	0.1	0.1	0.1
Electricity, gas and steam	-	1.7	0.9	4	-	2.9	3.8	0.9
Water collection and distribution	-	0.0	0.0	0	-	0.1	0.1	0.0
Construction	-	0.3	0.1	3	-	0.4	0.5	0.7
Sale, maintenance and repairs of motor vehicles and motorcy	cles -	0.2	0.1	2	-	0.3	0.4	0.5
Wholes ale trade, excluding motor vehicles and motorcycles	-	1.3	0.8	13	-	2.2	3.3	3.2
Retail trade, excluding motor vehicles and motorcycles	-	0.3	0.2	7	-	0.6	1.0	1.7
Hotels and restaurants	-	0.2	0.1	3	-	0.3	0.5	0.8
Land transportation	-	1.3	0.7	12	-	2.2	3.2	3.0
Sea and air transportation	-	0.4	0.1	2	-	0.6	0.6	0.6
Ancillary transportation; travel agencies	-	0.4	0.2	3	-	0.7	0.8	0.7
Mail and telecommunications	-	0.3	0.2	2	-	0.6	1.0	0.5
Financial intermediation, insurance and auxiliary services	-	0.9	0.5	5	-	1.5	2.2	1.1
Real estate activities	-	0.3	0.3	2	-	0.5	1.1	0.6
Renting of machinery	-	0.2	0.1	0	-	0.4	0.6	0.0
Computers and connected services	-	0.2	0.1	3	-	0.4	0.6	0.7
Research and development (R&D)	-	0.1	0.1	2	-	0.2	0.4	0.4
Professional activities	-	2.2	1.3	28	-	3.7	5.7	7.1
Public administration, education and health care		0.0	0.0	0	-	0.0	0.0	0.0
Waste disposal, sanitation and similar services		0.1	0.0	1	-	0.2	0.2	0.3
Membership organisations		0.1	0.0	1	-	0.1	0.2	0.2
Recreation, culture and sports activities		0.2	0.1	2	-	0.4	0.6	0.6
Domestic services and other services	-	0.0	0.0	0	-	0.0	0.0	0.0
Total	29.4	58.8	22.8	399	100.0	100.0	100.0	100.0

# Impact generated on the national economy: Medicines

		Absolute va	lues			Percentage	Values	
Sectors	Final demand	Activated production		d Activated employees	Final demand	Activated production	Estimated activated added value	Activate employe
Agriculture, forestry and fishing	-	0.2	0.2	7	-	0.6	1.1	3.5
Coal, oil, natural gas, uranium, extraction of minerals	-	0.6	0.5	3	-	1.8	3.7	1.5
Food and beverages	-	0.5	0.1	2	-	1.3	0.9	1.0
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	-	0.0	0.0	0	-	0.1	0.1	0.2
Leather and leather goods	-	0.0	0.0	0	-	0.0	0.0	0.0
Wood, wood and cork products (excluding furniture)	-	0.1	0.0	1	-	0.2	0.2	0.4
Paper, publishing and printing	-	0.7	0.2	4	-	2.0	1.7	2.2
Coke and refined petroleum products	-	0.5	0.1	1	-	1.3	0.5	0.4
Chemical products and man-made fibres	20.1	24.7	8.3	99	100.0	69.7	60.6	52.7
Rubber and plastic products		0.4	0.1	3	-	1.0	0.9	1.4
Other non-metallic minerals		0.5	0.1	4		1.4	1.5	2.3
Alloys, metals and metallic products		0.4	0.1	2		1.1	0.9	1.2
Machines and mechanical devices		0.4	0.0	1		0.4	0.9	0.5
	-	0.0	0.0	0	-	0.4	0.4	0.0
Office machines and computers			0.0	1	-	0.0	0.0	0.0
Other machines and electrical devices		0.1		0		0.3		
Radio and television devices		0.0	0.0		-		0.1	0.1
Medical, precision and optical instruments and watches	-	0.0	0.0	0	-	0.0	0.1	0.1
Motor vehicles and trailers	-	0.0	0.0	0	-	0.1	0.1	0.1
Other means of transport	-	0.0	0.0	0	-	0.1	0.1	0.2
Furniture and other manufactured goods	-	0.0	0.0	0	-	0.0	0.0	0.1
Salvage	-	0.0	0.0	0	-	0.0	0.0	0.0
Electricity, gas and steam	-	8.0	0.4	2	-	2.2	2.9	0.9
Water collection and distribution	-	0.0	0.0	0	-	0.1	0.1	0.0
Construction	-	0.1	0.1	1	-	0.4	0.4	0.8
Sale, maintenance and repairs of motor vehicles and motorcycles	-	0.1	0.1	2	-	0.4	0.5	0.9
Wholes ale trade, excluding motor vehicles and motorcycles	-	0.8	0.5	8	-	2.3	3.6	4.5
Retail trade, excluding motor vehicles and motorcycles	-	0.2	0.1	4	-	0.5	0.9	1.9
Hotels and restaurants	-	0.2	0.1	2	-	0.5	0.7	1.3
Land transportation	-	0.7	0.4	7	-	2.0	2.9	3.5
Sea and air transportation	-	0.3	0.1	2	-	0.7	0.7	0.8
Ancillary transportation; travel agencies	-	0.3	0.1	2	-	0.8	0.9	1.1
Mail and telecommunications	-	0.2	0.1	1	-	0.6	1.1	0.7
Financial intermediation, insurance and auxiliary services	-	0.5	0.3	2	-	1.4	2.0	1.3
Real estate activities	-	0.2	0.2	1	-	0.5	1.1	0.8
Renting of machinery	_	0.1	0.1	0		0.3	0.5	0.0
Computers and connected services	_	0.1	0.1	2	_	0.4	0.7	0.9
Research and development (R&D)	-	0.2	0.1	2	-	0.5	0.8	1.1
Professional activities	_	1.3	0.8	17	_	3.7	5.8	9.2
Public administration, education and health care	_	0.0	0.0	0	_	0.0	0.0	0.0
Waste disposal, sanitation and similar services	_	0.0	0.0	1	_	0.0	0.0	0.4
Membership organisations	-	0.0	0.0	1		0.2	0.2	0.4
Recreation, culture and sports activities	-	0.0	0.0	2	-	0.1	0.8	1.0
Recreation, culture and sports activities  Domestic services and other services	-	0.2	0.0	0	-	0.0	0.0	0.1
Total	20.1	35.4	13.8	187	100.0	100.0	100.0	100.0

# Impact generated on the national economy: Auto parts

Sector	Absolute values				Percentage values			
	Final demand	Activated production		d Activated employees	Final demand	Activated production	Estimated activated added value	Activated employees
Agriculture, forestry and fishing	-	0.2	0.2	7	-	0.1	0.2	0.4
Coal, oil, natural gas, uranium extraction of minerals	-	1.8	1.6	9	-	0.9	1.9	0.6
Food and beverages	-	0.4	0.1	1	-	0.2	0.1	0.1
Tobacco industry	-	0.0	0.0	0	-	0.0	0.0	0.0
Textiles, clothing and fur	-	0.2	0.1	2	-	0.1	0.1	0.1
Leather and leather products	-	0.0	0.0	0	-	0.0	0.0	0.0
Wood, wood and cork products (excluding furniture)	-	0.6	0.2	7	-	0.3	0.3	0.4
Paper, publishing and printing	-	2.3	0.7	13	-	1.1	0.9	0.9
Coke and refined petroleum products	-	1.2	0.2	2	-	0.6	0.2	0.1
Chemical products and man-made fibres	-	5.6	1.9	23	-	2.7	2.3	1.5
Rubber and plastic products	-	4.1	1.4	28	-	2.0	1.7	1.9
Other non-metallic minerals	-	1.9	0.8	16	-	0.9	1.0	1.1
Alloys, metals and metallic products	_	24.0	7.9	135	_	11.6	9.7	9.0
Machines and mechanical devices	_	1.9	0.6	11	_	0.9	0.8	0.7
Office machines and computers		0.0	0.0	0		0.0	0.0	0.0
Other machines and electrical devices	107.1	122.1	42.5	871	100.0	59.0	52.5	58.1
Radio and television devices		1.8	0.6	10	-	0.8	0.7	0.7
Medical, precision and optical instruments and watches	_	0.3	0.2	3	_	0.2	0.2	0.2
Motor vehides and trailers	_	0.2	0.0	1	_	0.1	0.1	0.1
Other means of transport	_	0.2	0.1	1	_	0.1	0.1	0.1
Furniture and other manufactured goods	_	0.1	0.0	1	_	0.0	0.0	0.1
Salvage	_	0.4	0.1	3	_	0.2	0.1	0.2
Electricity, gas and steam	_	3.1	1.6	7	_	1.5	1.9	0.5
Water collection and distribution	_	0.1	0.0	0	_	0.1	0.1	0.0
Construction	_	0.7	0.3	8	_	0.3	0.4	0.5
Sale, maintenance and repairs of motor vehicles and motorcycles	_	0.6	0.3	7	_	0.3	0.4	0.5
Wholesale trade, excluding motor vehicles and motorcycles	_	6.3	3.7	63	_	3.0	4.6	4.2
Retail trade, excluding motor vehicles and motorcycles		0.8	0.6	17	_	0.4	0.7	1.1
Hotels and restaurants		0.8	0.4	12		0.4	0.5	0.8
Land transportation		4.0	2.3	37		1.9	2.8	2.5
Sea and air transportation	_	0.8	0.3	5	_	0.4	0.3	0.3
Ancillary transportation; travel agencies		1.2	0.5	9	_	0.6	0.7	0.6
Mail and telecommunications		1.2	0.9	8		0.6	1.1	0.5
Financial intermediation, insurance and auxiliary services		4.0	2.3	20		1.9	2.9	1.3
Real estate activities		1.1	1.0	9		0.5	1.2	0.6
Renting of machinery		0.7	0.5	0		0.3	0.6	0.0
Computers and connected services		1.1	0.7	13		0.4	0.8	0.8
Research and development (R&D)		0.2	0.1	3		0.1	0.2	0.2
Professional activities		9.4	5.6	122		4.6	7.0	8.2
Public administration, education and health care	-	0.0	0.0	0	-	0.0	0.0	0.0
Public administration, education and health care  Waste disposal, sanitation and similar services	-	0.0	0.0	3	-	0.0	0.0	0.0
waste disposar, sanitation and similar services  Membership organisations	-	0.3	0.1	3	-	0.1	0.1	0.2
Recreation, culture and sports activities	-	0.2	0.1	7	-	0.1	0.5	0.2
Domestic services and other services	-	0.7	0.4	2	-	0.0	0.5	0.5
Total	107.1	206.8	81.0	1,498	100.0	100.0	100.0	100.0

# **APPENDIX 3**

#### GLOSSARY OF ECONOMIC IMPACT INDICATORS

The variables explained herein assume that the economic system is made up of numerous sectors; the production process in each one of these consists of a series of relations between sectors characterised by financial flows in exchange of goods and/or services. These exchanges contribute to the production of the final good for the consumer.

With counterfeit goods, these monetary flows originate from obscure areas of the economy, initiate production and distribution processes outside the tax system at prices which are very often below market prices. This study aims to provide an estimate of what the impact on the domestic economy would be if consumers had spent the same amount but on legitimate goods and services.

Below is an explanation of the key economic impact indicators used:

#### Lost demand

The amount that consumers have spent on the counterfeit market. If counterfeiting did not exist, consumers would have spent that money on the legal market.

#### Impact on production

The sum total of production both by the sector in question and the remaining areas activated upstream by that specific production process. In other words, it corresponds to the sum total amount of the value which those products (the good produced during that year) if they had been produced legally. As observed above with regard to lost demand, this would be effective production only if counterfeiting was adequately countered.

# Impact on value added

Wealth generated by the increase in market demand. If consumers had purchased the equivalent legitimate goods, the production processes of the sectors under consideration and those upstream would have generated value added or wealth, and contributed to Italy's GDP growth.

- Output generated for each euro of demand lost
  - The ratio between the value of output (production) and lost demand, it is an index that shows how much output increases for each euro of demand. The table detailing all of the sectors involved in counterfeiting shows which ones are more sensitive to market demand in terms of output generated.
- Value added generated for each euro of lost demand

The ratio between the value of output (production) and value added generated, it is an index that

shows how much value added increased for each euro of additional demand on the part of consumers. The table detailing all the sectors involved in counterfeiting shows which ones are more sensitive to market demand in terms of value added.

#### Imports activated

The value of the goods which the Italian economy (in particular sectors affected by counterfeiting) would have had to import to produce the equivalent goods legally.

· Imports activated for each euro of demand lost

An indicator of the quantity of goods which are imported, or would be imported if there were no counterfeiting, for each euro of demand.

#### Impact on employment

The total number of workers generated by consumer expenditure if they spent the same amount on legitimate goods as they do on goods parallel markets.

- · Demand for each unit of lost employment
  - The increase in consumer demand for goods and services required to activate a new job (work unit).
- · Work units generated for each euro of lost demand

The number of jobs which would be activated for each additional euro spent by consumers on legitimate products if counterfeiting did not exist.



### APPENDIX 4 THE FISCAL IMPACT MODEL

#### Methodology

#### Basic assumptions of the model

An estimation of tax revenue lost to counterfeiting (in its general sense) in terms of government finances requires an explanation of the assumptions already partly set out and the identification of the fundamental components (variables) that describe its content.

The model described herein makes it possible to isolate the components and variables which constitute price determinants, which in this context is the value from which the analysis is conducted.<sup>25</sup>

On the supply side, the effect of counterfeiting can cut across all or some of the stages in the production chain, from manufacture to sale of the final product. Production and marketing, in turn, may be carried out either wholly or partly by companies located in Italy.

Available data does not allow us to determine objectively what products are counterfeit and starting from what stage of the production cycle a product is to be considered counterfeit or becomes such and if this, in turn, is the result of activities wholly or partly carried out by companies located in Italy. Often counterfeit products are sold through legitimate channels, and therefore only at the retail stage, which can even prevent them from being identified as such. For the purposes of the estimate, here it is assumed that goods intended for the Italian market – whether wholly or partly counterfeit – are produced exclusively by companies located in Italy and that they are counterfeit from the first stage of the cycle (production) all the way through to the final stage (retail).<sup>26</sup> We believe that this approach is correct, firstly because it is likely that players in the counterfeit goods market adopt techniques and strategies aimed at selling a product which is necessarily counterfeit and designed to serve a market which, knowingly or unknowingly, is able to absorb the supply of such products, and secondly – for the purpose of estimating lost revenue – because "lost demand", whether stemming from a product wholly

Within the I-O model, the components of demand by sector and the share of production generated by the sectors involved (so-called "activated production") are made explicit.

Starting from the concept of "lost demand", in order to estimate the economic and fiscal impact that this aggregate has on the Italian economy, the assumption does not distort the estimate. In the I-O model and the resulting fiscal model applied, the item relating to "imports activated" – which nonetheless generates lost demand of equal value for Italian enterprise and which makes its is ignored in an entirely prudent manner- that still generates a demand lost of equal import for the Italian companies-and that allows focusing only on aggregates (the direct demand is activated) and on relative effects that they represent to the Italian State according to a concept closer to the GDP that is not to the GNP.



produced and sold in Italy or from a product wholly or partly imported from another country, harms Italian companies in economic terms by a value which is at least equal to the potential tax revenue attributable to the same demand satisfied by companies located in Italy.

In keeping with the above, on the demand side the model assumes a marginal rate of substitution between counterfeit and non-counterfeit products of 1.

This aspect has implications on both the economic side (in terms of supply and demand) and the fiscal side (in terms of tax revenues).

With regard to the economic aspect, counterfeit products take profits away from the market for non-counterfeit goods, in the sense that it eats into the revenues of companies that make and/or sell equivalent non-counterfeit products; consequently, all things being equal, it erodes the profit margins of companies producing non-counterfeit goods to at least the same extent as the percentage of profit on turnover.

The degree to which counterfeiting erodes legitimate producers' profits constitutes a minimum limit, as the different cost structures for counterfeit and non-counterfeit goods (take for example the lack of research and development costs) over the long term means that companies' profits are reduced to a proportionately greater degree than their revenues.<sup>28</sup>

Lost tax revenues are at least equal to the tax revenue generated by companies operating legitimately and/or under normal business conditions in the same sector (the reader is referred to the sector-based studies below) and producing non-counterfeit goods. In this case tax revenues foregone constitute a maximum limit, representing the amount that the government would have received if the supply of counterfeit goods had been absorbed by demand for non-counterfeit goods. The value of this tax revenue may vary according to whether all or part of the cycle of production is carried out illegally (this information is not available).

The model used to explain the variables that come into play is therefore simply based on price and on the components that regard it, while disregarding any analysis of consumer demand.

In order to analyse the behaviour of consumers of a counterfeit product compared to the same non-counterfeit good, in addition to price it is necessary to consider the following equations:

$$(um / Xm) / (uc / Xc) = -pm / pc or$$
  
 $Um / pm = Uc / pc$ 

The marginal rate of substitution between counterfeit and non-counterfeit products on the demand side has been assumed to be 1, as this makes it possible to assume that the substitution effect between imported and domestic products, in relation to the Italian economic system, generates the same negative effect for Italian companies in at least a 1:1 ratio.

<sup>&</sup>lt;sup>28</sup> In the long term, in order to maintain their market share, companies must increase costs. As a result profits – turnover remaining equal - decrease by a proportionally greater amount.

which represent the point of equilibrium for the consumer (under the budget constraint constituted by disposable income), resulting from the equal marginal utilities of and relative prices of non-counterfeit and counterfeit products, on the one hand, and their marginal rate of substitution. Thus the following factors should be evaluated:

- marginal utility, i.e. the relation that links the utility deriving from the consumption of a counterfeit good in relation to the price paid under the same conditions with an equivalent non-counterfeit good.
- 2) the components of total utility U\*(x1; x2;....xi; ....xn) of a subjective nature;
- 3) the substitution effect: given by the increased consumption of counterfeit products due to their lower price compared with the equivalent non-counterfeit good, incomes being equal. The marginal rate of substitution in fact equals Pm/Pc, and the more the value of Pc decreases in relation to Pm the more marked it is
- 4) the *income effect*: connected to the so-called consumer surplus, which is the effect of the increase in disposable income (purchasing power) deriving from the purchase of a good at a lower price.

Here, components 3) and 4) are considered to be independent of 1) and 2), for the simple reason that in the case of consumption of counterfeit products by aware or unaware consumers, we are likely to meet with a kind of "compensated demand curve".

Usually, along a normal demand curve, a consumer's well-being increases as the price of the good consumed decreases. This is because the decrease in the price has a twofold effect: a) it encourages higher consumption of the goods at the expense of other goods, which become less advantageous; b) it makes the consumer wealthier in terms of purchasing power (depending on the share of income absorbed by purchasing the good).

However, taking into account the substitution effect and excluding the income effect, our model explains the behaviour of counterfeit product consumers exactly, since the consumption of a counterfeit product at a lower price than the same non-counterfeit product has the effect of leaving the welfare of the consumer the same compared to the purchase of a non-counterfeit good, for the simple reason that the change in marginal utility is more than offset by the reduction in income in the opposite direction which leaves his/her well-being unchanged.

This approach makes it possible to ignore marginal utility analysis and thus the subjective aspects of consumers' behaviour which induce them to consume a counterfeit product, and allows us to focus on the price variable.

The unit price incorporates cost components both of an economic and

fiscal nature which in case constitute a cost for the company and therefore endogenous variables and price determinants<sup>29</sup>.

For production purposes, a company which conducts business in a legitimate manner and is not involved in counterfeiting combines factors of production optimally and then sets the selling price by considering the costs of these factors of production as already inclusive of the tax burden – take for example personal expenses, vehicle costs, etc.

For this reason, supposing that the production and marketing stages take place in a wholly or partly illegal manner and are therefore directed towards producing a counterfeit product, and taking the model's basic assumptions, the tax component increasingly tends towards zero and therefore the price, conditions and product being equal, is considerably lower compared with the equivalent non-counterfeit product generated under normal business conditions in a legal market.

Therefore, conditions being equal, the price of the counterfeit product is different from the price of the non-counterfeit product, not least because of the percentage of VAT on sales which is not applied on the value added, in addition, of course, to the differences in costs borne by companies due to non-payment of direct taxes (on net profit as well as on non-deductible costs, on income from employment and similar income).

Finally, the basic assumptions described above make it possible to make some remarks of a fiscal nature.

From a macroeconomic perspective, the absence of fiscal components relating to fixed and variable business costs (which summed together represent the amount of direct taxes generated per unit of output), corresponding to a total absence of direct tax revenue on the one hand and the a lack of an indirect tax burden (VAT) on the other hand, affects the market and tax revenues generated in at least three ways:

- Loss of short-term direct tax revenue: in this connection, the reduction is twofold. On the
  one hand, direct tax receipts are reduced, as neither counterfeiting companies' income
  nor income from employment and similar (as they employ workers illegally) is taxed, while
  on the other VAT is not paid;
- 2) Loss of medium-term indirect revenue: the product substitution effect and the price effect which constitute an integral part of consumer surplus lead (at least in the medium term) to a reduction in the price of non-counterfeit products, eroding profits and therefore taxation on legally generated income (product substitution effect);

<sup>&</sup>lt;sup>29</sup> See explanation of the model in the Appendix.

3) Loss of long-term direct and indirect revenue: the two aspects mentioned above act in conjunction with a long-term cyclical effect by determining the need for continuous market adjustments on both the supply and demand side, generating costs for businesses which they pass on to consumers as well as the community as a whole.

#### Categories of taxes considered

Having established the basic assumptions of the model, the method used to estimate taxes for each income category is described below.

The method is based on the results of the analysis previously made using the I-O model, which include:

- 1. Final demand per sector
- 2. Total final demand
- 3. Production activated per sector
- 4. Total production
- 5. AWUs activated per sector
- 6. Total AWUs activated

While reference should be made to the relevant section for a detailed description of the individual components, for the present purposes, the analysis conducted with the previous model has produced four fundamental pieces of information regarding players in counterfeiting, which are, respectively:

- a) Direct demand: the turnover of companies involved in counterfeiting;30
- b) Indirect and/or induced demand: production activated in sectors upstream and downstream from each sector affected by counterfeiting as referred to in point a);
- c) Direct AWUs activated: total annual work units activated by the sector affected by counterfeiting;
- d) Indirect AWUs activated: total annual work units activated by the sectors upstream and downstream from the sector concerned:

Like any economic activity, those dedicated to counterfeiting also produce for the market by using work units and indirectly activating a series of sectors with which, in part, they directly a direct exchange of production factors takes place and from which they purchase goods and services – take, for example, transport for the marketing of counterfeit products –

<sup>&</sup>lt;sup>30</sup> This aggregate coincides with demand and also incorporates direct taxes.

In this analysis, in order to identify the contribution made by each sector involved in the phenomenon – in terms of lost revenue – more accurately, the analysis was carried out separately for demand and the AWUs directly or indirectly activated on the one hand and for direct and indirect taxes on the other.

Table 1 – Logical diagram of demand, type of revenue, taxes

Aggregate	Type of income/revenue	Taxes
Direct taxes		
Direct demand	Company income	IRES - IRAP
	Income from employment	IRE - IRAP
Activated demand	Company income	IRES - IRAP
	Income from employment	IRE - IRAP
Indirect taxes		
Direct demand	Value added tax	IVA
Activated demand	Value added tax	IVA
		IVA

#### Source: Censis

(IRES = Company income tax; IRAP = Regional income tax on productive activities; IRE = personal income tax on employee income)

As minor and additional taxes have been left out of this analysis, from a strictly fiscal perspective attention was focused in particular on the main direct taxes and on VAT.

#### **Direct taxes**

For the purpose of estimating direct taxes generated by the phenomenon, the following components need to be identified:

- a) Income category.
- b) Tax base.
- c) Tax burden by determining taxes and tax rates in relation to income.

Here income types are considered on the basis of the principle according to which proceeds from illegal activities are taxable for tax purposes and therefore taxable. The principle applies to the offence in all of its forms, whether civil, administrative or criminal. In cases where the proceeds of illegal activities are classifiable as "disposable income" (see article 6 of Presidential Decree no. 917 of 1986) are considered for fiscal purposes and subject to the same treatment as the related income category. If illegal proceeds cannot be placed in a

category as provided for by law, they must nevertheless be considered "different income" and as such be subject to taxation.

By virtue of this principle, the main income categories generated by counterfeiting activities, in terms of direct taxes, are "company income tax" for the business conducted and "income tax on employee income" for overall wages, salaries and company benefits paid to workers involved in the production process.

#### Company income

As the economic actors in question generate income from primarily commercial activities as referred to in article 2195 of the Italian Civil Code, albeit conducted in a partially or wholly illegal manner, it can be classified as income falling under articles 55, 56 and 81 of Presidential Decree of 22.12.1986 – company income – and thus subject to IRE or IRES according to, respectively, the subject carrying on the activity (sole proprietorships, partnerships and limited-liability companies).

Considering that on the basis of the data available it is not possible to know what percentages of companies operate under these legal forms, all companies are assumed to be limited-liability companies and thus subject to IRES.<sup>31</sup>

In addition to lost IRES revenue, lost IRAP revenue must also be considered. IRAP is always calculated on company income base, although on a different tax base and at a different rate. It is pointed out that here, given the method of calculation and the category of income on which it is levied, IRAP is classified and treated as a direct tax although it does not strictly belong in this category.

Income from employment and/or similar income

The second category regards income from employment, which falls under articles 49, 51, 60 and 95 of the Consolidation Act on Direct Taxation .

This aggregate, for the present purposes, must be assessed in two ways – from the wage earner's and the wage provider's perspective – by assuming an impact on government finances in two ways:

1) Lost IRE (tax on income from employment and/or similar income) revenue (articles 49 and 51): non-payment of tax by an earner of income as a worker who is subject to these taxes. In this case, however, the company always acts as a withholding agent on behalf of the worker. Employing illegal or "off-the-books" workers therefore leads to lost IRE revenue.<sup>32</sup> The cost of employees is mostly deductible for IRES purposes and, therefore, is not calculated separately with respect to the calculation of IRES deriving from company income.

<sup>&</sup>lt;sup>31</sup> Considering sole proprietorships or partnerships would change the estimate of tax revenue from IRES to IRE in part, albeit under the same category (i.e. direct taxation).

Non-payment of compulsory social security and other compulsory contributions borne by workers must also be considered.

Lost IRAP (on employment and/or similar income) revenue (Legislative Decree no. 446 of 15 December 1997): non-payment of IRAP by employers on wages paid to employees. The employer probably makes use of illegal and "off-the-books" workers and therefore, in addition to not paying IRE (as a withholding agent) as mentioned above also fails to pay the IRAP contribution – which represents the main source of the tax base – on those same wages. Here this aggregate is already considered in the calculation of IRAP deriving from company income.

The table below summarises the categories of tax and related taxes.

Table 2 – Revenue category and direct taxes

Revenue category	Direct taxes	
Company income	IRES	
Income from employment and/or similar Company income	IRE - IRAP IRAP	

Source: Censis

#### Indirect taxes

The only indirect tax considered is VAT, leaving aside minor and local taxes. In this case, too, by virtue of the principle of equivalence, activity dedicated to the exchange of goods and/or services in the form of a company clearly constitutes a VAT base and is subject to the VAT regime and rates in force.

In relation to the basic assumption of the I-O model, in order to determine the amount of lost revenue, the analysis was conducted separately with respect to two different aggregates:

- VAT on direct demand: total VAT not paid exclusively with regard to the final sale. In this
  case, VAT is calculated with regard to the final consumption stage which is the same as
  demand for the sector.
- VAT on trade and production activated: with reference to the preliminary remarks, this
  aggregate takes into account VAT that could be generated by the demand of counterfeit
  products. In this case, in addition to the final stage, intermediate exchanges relating to the
  production activated by sectors affected by the generation of the main demand are taken
  as a reference.

### Explanation of the price components of a counterfeit and non-counterfeit product on the demand and supply side

Input-output analysis provides an estimate of the final demand for the sector affected by counterfeiting expressed as  $p \times q$  (price times quantity). Isolating the quantity variable – SMS = 1 – thus attention is focused on the component representing price per unit of product, which is undoubtedly the key variable. In fact, when having to assess the fiscal impact, it is on the basis of demand that it is possible to determine company income, the tax base and the consequent potential revenue that can be generated.

Starting from this premise, the price of a counterfeit product (Pc) and a non-counterfeit product (Pm) can be compared both in terms of demand and supply. This makes it possible to isolate the tax components required to make the estimate and evaluate the minimum and maximum limits.

The "price of the counterfeit product" from the company perspective (supply side) can be explained simply but comprehensively by determining so-called *full costing* with particular regard to the tax components of the price, and thus:

Pc = Cf + Cv + VAT + Mark-up

where:

Pc = price of the counterfeit product

Cf = fixed costs

Cv= variable costs

VAT = value added tax

Mark-up = profit margin

Obviously, the model is the same for a producer of legitimate non-counterfeit products:

Pm = Cf + Cv + VAT + Mark-up

where Pm is the price of the non-counterfeit product or its market price.

#### "Price of the counterfeit product" from the company perspective (supply side)

The "price of the counterfeit product" on the company side can be explained simply but comprehensively by determining so-called *full costing* with particular regard to the tax components of the price, and thus:

Pc = Cf + Cv + VAT + Mark-up

where:

Pc= price of the counterfeit product

Cf = Fixed costs

Cv= Variable costs

VAT = Value Added Tax

Mark-up = profit margin

Obviously, the model is the same for a producer of legitimate non-counterfeit products:

$$Pm = Cf + Cv + VAT + Mark-up$$

where

Pm: price of the non-counterfeit product or market price.

For the present purposes – i.e. determining lost revenue – the aspect related to direct taxes paid by the company primarily as a determinant of the final price is of particular interest.

Its importance lies in the fact that fixed and variable business costs, as already mentioned, incorporate a part of the cost relative to taxation which constitutes a variable which is endogenous to the model, constituting s determinant of the price.

To separate the components of the tax burden on the company, we generally have:

 $\alpha$  Cf = share of taxation relating to the part of fixed business capital used by the company (non-deductible depreciation and amortization, capital gains, non-deductible losses, etc.)

 $\alpha^*$  Cf = share of taxation relating to the part of the fixed labour force used by the company (permanent staff, employees, continuous collaboration contracts, etc.)

βCv= share of taxation relating to the part of variable factors of production used by the company (non-deductible costs relating to atypical, financial and extraordinary operation)

 $\beta$ 'Cv= share of taxation relating to the part of variable labour factors of production used by the company (non-deductible costs relating to the workforce, occasional and project-based contracts)

from which fixed and variable costs are derived respectively as

follows:

CF = Cf (1- 
$$\alpha$$
 -  $\alpha$ \* ) +  $\alpha$ Cf +  $\alpha$ \* Cf

CV= Cv(1-
$$\beta$$
- $\beta$ ') +  $\beta$ Cv +  $\beta$ 'Cv

and thus the total cost – which is the determinant of the price – is:

CT= Cf 
$$(1-\alpha-\alpha^*)$$
 + Cv $(1-\beta-\beta')$  +  $(\alpha$  Cf +  $\alpha^*$  Cf) +  $(\beta$ Cv +  $\beta$ 'Cv) (RELATION 1)

The third and the fourth component are the part of the fixed and variable costs which incorporate the share of taxation respectively for the capital factor of production and the labour factor of production.

Clearly, supposing that the production and marketing stages take place in a wholly or partly illegal manner and are therefore directed towards producing a counterfeit product, and taking the model's basic assumptions, the third and fourth component increasingly tend towards zero and therefore the price, conditions and product being equal, is considerably lower (the nearer  $\alpha$  and  $\beta$  are to zero) compared with the equivalent non-counterfeit product generated under normal business conditions in a legal market.

If a production process, understood in an all-inclusive sense, is carried out in order to generate a counterfeit product, the cost of the product is:

CT= Cf (1- 
$$\alpha$$
 -  $\alpha^*$  ) + Cv(1-  $\beta$  -  $\beta^{\prime}$  ) and therefore the selling price is equal to:

Pc = Cf (1- 
$$\alpha$$
 -  $\alpha^*$ )+ Cv(1-  $\beta$  -  $\beta$ ') + VAT+ Mark-up

it is evident that assessing the impact of direct taxes, we obtain:

The price difference between a non-counterfeit product and a counterfeit product, all things being equal, is at least: Pm - Pc  $\geq$  ( $\alpha$  Cf +  $\alpha$ \* Cf) + ( $\beta$ Cv +  $\beta$ 'Cv)

The advantage of producing a counterfeit product from a fiscal point of view is at least:

1- 
$$(\alpha_C Cf + \beta_C Cv) + (\alpha_C^* Cf + \beta_C' Cv) / (\alpha Cf + \beta Cv) + (\alpha^* Cf + \beta' Cv)$$

Where  $\alpha_{\text{C}}$ ,  $\beta_{\text{C}}$ ,  $\alpha_{\text{C}}^{\star}$  and  $\beta_{\text{C}}$  represent the percentage of potential taxation applicable to the companies producing counterfeit goods.

#### The "price of the counterfeit product" from the consumer perspective (demand side)

From the consumer perspective (demand side), the "product price" is:

Cv<sub>C</sub> represent the fixed and variable costs of production of counterfeit products

All things being equal, the price of the counterfeit product differs from the non-counterfeit product, at the very least due to the percentage of VAT not incurred by sales, in addition of course to differences in the costs borne by businesses due to non-payment of direct taxes (Cf - Cf <sub>C</sub>; Cv- Cv<sub>C</sub>).

## APPENDIX 5 MAIN GOVERNMENT FINANCE AGGREGATES USED AS REFERENCE

Fiscal revenue: assessments (modified accrual basis)

- 1. Total fiscal revenue monthly data
- 2. Total fiscal revenue cumulative monthly data
- Direct taxes
- 3.1. IRE
- 3.1.a IRE withholding taxes on private-sector employees
- 3.1.b IRE balance
- 3.1.c IRE advance payment
- 3.2. IRES
- 3.2.b IRES balance
- 3.2.c IRES advance payment
- 3.3 Total payment (IRE balance and advance payment, IRES balance and advance payment)
- 1.T Tax revenues of local authorities: assessments (modified accrual basis)
- 1.T.1 IRAP total
- 1.T.1.a IRAP private sector
- 1.T.1.b IRAP balance
- 1.T.1.c IRAP advance payment
- 4 Indirect taxes
- 4.1 VAT
- 4.1.b VAT domestic trade
- 4.1.c VAT imports

Source: Tax revenue bulletin; Ministry of Economy and Finance, Finance Department, Department of economic and fiscal studies and research, final accounting, forecasting and revenue analysis. Period: January-December 2010. March 2011 Bulletin

# APPENDIX 6 DATA USED TO CALCULATE TAX BASE AND TAXES

 Statistics on income tax returns for the 2009 tax year Revenue Agency – Ministry of Economy and Finance

#### Analysis of tax bases

Turnover, value of production, income and loss by region and activity

Business or professional income or loss, IRAP and VAT tax bases, by region

Business or professional income or loss, IRAP and VAT tax bases, by activity

Business or professional income or loss, IRAP and VAT tax bases, by total income class

Business or professional income or loss, IRAP and VAT tax bases, by IRAP production value class

Business or professional income or loss, IRAP and VAT tax bases, by companies using ordinary and simplified accounting schemes, by region

Business or professional income or loss, IRAP and VAT tax bases, by companies using ordinary and simplified accounting schemes, by activity

Business or professional income or loss, IRAP and VAT tax bases, by companies using ordinary and simplified accounting schemes, by total income class

Business or professional income or loss, IRAP and VAT tax bases, by companies using ordinary and simplified accounting schemes, by IRAP production value class.

#### Analysis of taxes (IRPEF, IRES and VAT, 2009)

IRPEF, IRAP and VAT payable, by region

IRPEF, IRAP and VAT payable, by activity

IRPEF, IRAP and VAT payable, by total income class

IRPEF, IRAP and VAT payable, by IRAP production value class

IRPEF, IRAP and VAT payable, by companies using ordinary and simplified accounting schemes, by region

IRPEF, IRAP and VAT payable, by companies using ordinary and simplified accounting schemes, by activity

IRPEF, IRAP and VAT payable, by companies using ordinary and simplified accounting schemes, by total income class

IRPEF, IRAP and VAT payable, by companies using ordinary and simplified accounting schemes, by IRAP production value class.

### 2. Statistics on sector-based studies annexed to income tax returns for the 2009 tax year – Revenue Agency – Ministry of Economics and Finance

Average business income based on legal form (sole proprietorships and companies) and by position within the analysis of consistency and economic normality;

Average company revenues and incomes by business sector and by position within the analysis of consistency and economic normality;

Average company revenues and incomes by region, by sector of economic activity and by position within the analysis of consistency and economic normality;



# APPENDIX 7 SUMMARY OF RESULTS OF FISCAL IMPACT ANALYSIS BY SECTOR

Table 1. Tax revenue generated by counterfeiting in Italy by tax type – Food and beverages (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	30.5	75.5	106.1
IRE	26.3	46.8	73.0
IRAP	14.6	33.8	48.3
Total direct taxes	71.4	156.0	227.4
VAT	110.8	279.8	390.6
Total indirect taxes	110.8	279.8	390.6
Total taxes	182.1	435.8	618.0

Table 2. Tax revenue generated by counterfeiting in Italy by tax type – Clothing and accessories (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	95.2	179.9	275.0
IRE	105.9	69.9	175.8
IRAP	51.9	90.7	142.5
Total direct taxes	252.9	340.4	593.4
VAT	414.4	806.7	1,221.1
Total indirect taxes	414.4	806.7	1,221.1
Total taxes	667.3	1,147.1	1,814.4

Table 3. Tax revenue generated by counterfeiting in Italy by tax type – Perfumes and cosmetics (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	2.9	5.3	8.1
IRE	6.8	2.3	9.1
IRAP	1.3	2.3	3.6
Total direct taxes	10.9	9.9	20.9
VAT	15.4	27.4	42.8
Total indirect taxes	15.4	27.4	42.8
Total taxes	26.3	37.4	63.6
Source: Censis			

Table 4. Tax revenue generated by counterfeiting in Italy by tax type – CDs, DVDs, audio and video cassettes (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	45.6	94.2	139.8
IRE	96.7	54.6	151.3
IRAP	25.9	48.7	74.6
Total direct taxes	168.2	197.5	365.7
VAT	293.3	554.2	847.5
Total indirect taxes	293.3	554.2	847.5
Total taxes	461.5	751.7	1,213.2

Table 5 Tax revenue generated by counterfeiting in Italy by tax type – Computer equipment (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	6.1	8.5	14.6
IRE	10.5	2.5	13.0
IRAP	3.5	4.8	8.2
Total direct taxes	20.0	15.8	35.8
VAT	40.5	54.5	95.0
Total Indirect taxes	40.5	54.5	95.0
Total taxes	60.5	70.4	130.8

Table 6. Tax revenue generated by counterfeiting in Italy by tax type – Toys and games (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	1.0	1.8	2.8
IRE	1.4	1.2	2.5
IRAP	0.4	0.8	1.2
Total direct taxes	2.7	3.8	6.5
VAT	4.9	9.2	14.1
Total indirect taxes	4.9	9.2	14.1
Total taxes	7.6	13.0	20.6

Table 7. Tax revenue generated by counterfeiting in Italy by tax type – Electrical equipment and material (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	15.5	32.1	47.6
IRE	33.0	18.6	51.5
IRAP	8.8	16.6	25.4
Total direct taxes	57.3	67.3	124.6
VAT	99.9	188.8	288.8
Total indirect taxes	99.9	188.8	288.8
Total taxes	157.2	256.1	413.4

Table 8. Tax revenue generated by counterfeiting in Italy by tax type – Watches and jewellery (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	10.2	17.4	27.6
IRE	25.9	8.5	34.5
IRAP	5.7	9.0	14.7
Total direct taxes	41.9	34.9	76.8
VAT	73.1	111.7	184.8
Total indirect taxes	73.1	111.7	184.8
Total taxes	114.9	146.6	261.6

Table 9. Tax revenue generated by counterfeiting in Italy by tax type – Medicines (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	0.5	1.0	1.5
IRE	1.3	0.4	1.7
IRAP	0.2	0.4	0.7
Total direct taxes	2.0	1.8	3.9
VAT	2.8	5.1	7.9
Total indirect taxes	2.8	5.1	7.9
Total taxes	4.9	6.9	11.8

Table 10. Tax revenue generated by counterfeiting in Italy by tax type – Auto parts (2010 - in millions of euros)

Revenue	Direct demand	Induced demand	Total demand
IRES	1.0	1.8	2.8
IRE	1.4	1.2	2.5
IRAP	0.4	0.8	1.2
Total direct taxes	2.7	3.8	6.5
VAT	4.9	9.2	14.1
Total indirect taxes	4.9	9.2	14.1
Total taxes	7.6	13.0	20.6



## APPENDIX 8 GLOSSARY OF TERMS USED FOR FISCAL IMPACT ANALYSIS

#### Total tax revenue

Total amount of tax revenue over a specific period of time.

Tax revenues are characterised by compulsoriness, that is, the State exercises its public powers in order to obtain payment.

They are conventionally divided into two categories:

- Charges are monies payable by individuals which originate from a consideration which the State performs at the request of the subject;
- Taxes have no correlation with the activities of a public authority: thus, taxpayers must comply whenever they find themselves in a given relation to a requirement established by law.

#### **Direct taxes**

Direct taxes are taxes which are levied according to evident ability to pay, such as income or capital. They may be real or personal taxes.

The former are levied according to individual income categories, which are determined in accordance with statutory and taxation legislation. The latter, in contrast, are levied on taxpayers' whole income, taking into account – for the purpose of calculating the tax – items such as income (medical expenses, employees, etc.) that influence their actual ability to pay. This type of tax, moreover, cannot be transferred, so that the taxpayer identified by law and the actual taxpayer are one and the same subject.

#### **IRE**

Income tax, as provided for by the 2005 Finance Law, replaces the old personal income tax (IRPEF) and is applied to income generated by residents and non-resident producers of income in Italy, regardless of age, sex, marital status and citizenship.

IRE, which is the main tax in Italy, is personal, direct, progressive and is levied on income:

· Personal, as it taxes individuals, taking their specific conditions and situations into account;

- *Direct*, since it is levied on wealth (income) as it is earned and not when it is transferred from one individual to another, unlike indirect taxes (VAT, registration tax, etc.);
- Progressive, as taxation rates increase with income, and the amount of tax increases more
  than proportionally in relation to the increase in the tax base. More technically it can be
  described as "progressive by income bracket", since the tax rate increases with income;
- On income, as IRE is levied on the income earned by taxpayers and their assets.
  - Income tax (IRE) is levied on monetary wealth measured by "total income" (net of deductions) produced by the taxpayer/person during the year in question. Total income is the sum of the following components:

Income from property; deriving from buildings and land; income from gainful employment, deriving from salaries and wages; company income, deriving from profits earned during the year from commercial enterprises; income from self-employment; capital gains from dividends and interest from securities or shares in limited-liability companies; other income. These incomes are all of those earned during the year from sources other than the ones set out in the previous points.

The following tax rates and income brackets have applied since 1 January 2007:

- 23% for incomes between 0 and 15.000 euros
- 27% for incomes exceeding 15,001 euros but not 28,000 euros
- 38% for incomes exceeding 28,001 euros but not 55,000 euros
- 41% for incomes exceeding 55,001 but not 75,000 euros
- 43% for incomes exceeding 75,001 euros.

#### IRE – Withholding taxes on private-sector employees

IRE differs from the equivalent tax on public-sector employees' salaries only in terms of the status of the withholding agent. The employer is constituted by a limited-liability company, cooperative and private organisations (as distinct from companies), whose exclusive or main scope is to conduct commercial activities or form partnerships or associations for the purpose of carrying on a business or practising arts and other professions. They also include withholding taxes levied on income from coordinated, continuous collaboration contracts.

#### IRE - balance

The remaining tax, which the taxpayer is required to pay on a self-assessment basis, payable for the year to which the income tax return refers. The amount is equal to the tax payable net of withholding taxes, receivable tax credits and advance payments.

#### IRE – advance payment

The amount of tax payable on a self-assessment basis, usually in two instalments (the first by the final date for paying the previous year's tax and the second by the end of November), as an advance payment of the tax on incomes payable for the current year. It is calculated as a percentage of the tax payable (net of withholding taxes and receivable tax credits) on the basis of the tax return for the preceding period.

#### **IRES**

As of 1 January 2004, income earned by companies and organisations are subject to IRES (company income tax). The new tax replaces IRPEG, the company income tax which was in force until 2003. IRES taxpayers include the following types of companies and organisations with residence in Italy:

Limited-Liability Companies; Cooperatives; Mutual insurance companies, Public and Private Commercial Entities and Public and Private Non-Commercial Entities.

Companies and entities of all kinds, not residing within the State are also taxable subjects.

The rate is calculated at 27.5% of taxable income (tax base). It is applied to the difference between taxable income earned and costs deducted during a certain time period, known as the tax period. In general, costs can be deducted if and to the extent to which they are acknowledged in the income statement and contributes to the tax base for the tax period in which the deductions apply.

#### IRES - Balance

The remaining tax, which the taxpayer is required to pay on a self-assessment basis, payable for the year to which the income tax return refers. The amount is equal to the tax payable net of withholding taxes, receivable tax credits and advance payments.

#### IRES – Advance payment

The amount of tax payable on a self-assessment basis, usually in two instalments, as an advance payment of the tax on incomes payable for the current year. It is calculated as a percentage of the tax payable (net of withholding taxes and receivable tax credits) on the basis of the tax return for the preceding period.

#### **Indirect Taxes**

Taxes levied on the basis of evidence of ability to pay, such as consumption, trade and transfers. From such actions, in fact, the Revenue Agency deduces the existence of an income or assets and implements the tax.

#### VAT

Value added tax is regulated by Presidential Decree no. 633 of 1972. VAT applies to economic actions such as trade in goods and services, whether resulting from domestic transactions or imports. Transactions that take place overseas the State do not fall within the scope of VAT (Article 7, Presidential Decree no. 633/1972). From an economic perspective, the tax affects consumption, understood as purchases made by individuals who purchase goods and services for their personal or family use and consumption. In legal terms, however, it can be defined as a tax on trade, as it affects all goods and services supplied by businesses and professionals, even if these are not addressed to the benefit of consumers. In this regard we distinguish between *de facto* taxpayers (consumers) and *de jure* taxpayers (businesses and professionals); the latter are legally responsible for applying and collecting the tax and are thus burdened with a number of obligations and formalities.

#### VAT - Internal trade

The tax levied on commercial transactions within the European Union.

#### VAT – Imports

The tax levied on commercial transactions with countries outside the European Union.

#### Other taxes

Stamp duty

Insurance

Mortgages

Licence fees

Government concessions

Vehicle taxes

Tax on capital gains from property

Inheritance and gift taxes

Land and registry rights

Taxes on the manufacturing of spirits

Mineral oils

Uncondensable gases

Electricity

Methane gas

Lubricating oils

Lotteries

#### Other indirect taxes

#### Additional (regional and municipal) IRE

Taxes payable by individuals and determined by the application of a flat-rate tax on income subject to IRE. Additional taxes are allocated to Regions (additional regional IRE) and to the municipality of residence for tax purposes (additional municipal IRE). For employees and similar taxpayers, the additional tax is levied by the withholding agent and is calculated and paid on submission of the income tax return.

For 2001, additional regional IRE tax was set at 0.9% across Italy; in subsequent years Regions could apply discretionary increases (up to 1.4%).

Additional municipal IRE is broken down into two distinct rates:

- a common, shared rate (established by decrees issued by the Minister of Economy and Finance, in consultation with the Minister of the Interior, to be issued by 15 December of the year preceding the one to which the additional tax applies) which is the same for all municipalities;
- a variable rate, which varies between municipalities, since it is set at the discretion of the implementing authority, according to its own means. The maximum rate is 0.5%.

#### **IRAP**

A regional tax on productive activities. It is levied on companies and individuals, and was introduced in 1998 on the abolition of a number of taxes (ILOR, ICIAP, tax on VAT registrations, tax on net company assets, national health service contributions). IRAP revenue is allocated to the Regions to cover the costs of health care.



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