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EU-GLOBACT HANDBOOK

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A Q&A COMPENDIUM AND STRUCTURAL FRAMEWORKS ON OFFENCES UNDER ARTICLE 83 TFEU

This JICL Special Issue constitutes one of the scientific products the Jean Monnet Module (2023-2026) *Transnational Crime and EU Law: Towards Global Action against Cross-Border Threats to Common Security, Rule of Law, and Human Rights* (EU-GLOBACT) – (Coordinator: Prof. Dr. Anna Oriolo).

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OVERVIEW

The Journal of International Criminal Law (*JICL)* is a scientific, online, peer-reviewed journal, first edited in 2020 by Prof. Dr. Heybatollah Najandimanesh, mainly focusing on international criminal law issues.

Since 2023 JICL has been co-managed by Prof. Dr. Anna Oriolo as General Editor and published semiannually in collaboration with the International and European Criminal Law Observatory (IECLO) staff.

JICL Boards are powered by academics, scholars and higher education experts from a variety of colleges, universities, and institutions from all over the world, active in the fields of criminal law and criminal justice at the international, regional, and national level.

The aims of the JICL, *inter alia*, are as follow:

- to promote international peace and justice through scientific research and publications;
- to foster study of international criminal law in a spirit of partnership and cooperation with the researchers from different countries;
- to encourage multi-perspectives of international criminal law; and
- to support young researchers to study and disseminate international criminal law.

Due to the serious interdependence among political sciences, philosophy, criminal law, criminology, ethics and human rights, the scopes of JICL are focused on international criminal law but not limited to it. In particular, the Journal welcomes high-quality submissions of manuscripts, essays, editorial comments, current developments, and book reviews by scholars and practitioners from around the world addressing both traditional and emerging themes, topics such as

- the substantive and procedural aspects of international criminal law;
- the jurisprudence of international criminal courts/tribunals;
- mutual effects of public international law, international relations, and international criminal law;
- relevant case-law from national criminal jurisdictions;
- criminal law and international human rights;
- European Union or EU criminal law (which includes financial violations and transnational crimes);
- domestic policy that affects international criminal law and international criminal justice;
- new technologies and international criminal justice;
- different country-specific approaches toward international criminal law and international criminal justice;
- historical accounts that address the international, regional, and national levels; and
- holistic research that makes use of political science, sociology, criminology, philosophy of law, ethics, and other disciplines that can inform the knowledge basis for scholarly dialogue.

The dynamic evolution of international criminal law, as an area that intersects various branches and levels of law and other disciplines, requires careful examination and interpretation. The need to scrutinize the origins, nature, and purpose of international criminal law is also evident in the light of its interdisciplinary characteristics. International criminal law norms and practices are shaped by various factors that further challenge any claims about the law's distinctiveness. The crime vocabulary too may reflect interdisciplinary synergies that draw on domains that often have been separated from law, according to legal doctrine. Talk about "ecocide" is just one example of such a trend that necessitates a rigorous analysis of law *per se* as well as open-minded assessment informed by other sources, *e.g.*, political science, philosophy, and ethics. Yet other emerging developments concern international criminal justice, especially through innovative contributions to enforcement strategies and restorative justice.

The tensions that arise from a description of preferences and priorities made it appropriate to create, improve and disseminate the JICL as a platform for research and dialogue across different cultures, in particular, as a consequence of the United Nations push for universal imperatives, *e.g.*, the fight against impunity for crimes of global concern (core international crimes, transboundary crimes, and transnational organized crimes).

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Counterfeiting of Means of Payment

by Francesco Foccillo[*]

SUMMARY: I. What Is the Definition of Counterfeit Means of Payment? – II. Who Counterfeits Means of Payment? – III. How Is the Multilevel Harmonization Against Counterfeiting Articulated Under International Law? – IV. What Is the Role of INTERPOL in the Fight Against Counterfeit Currency? – V. How Does Europol Act Against the Counterfeiting of the Euro? – VI. How Is the Counterfeiting of Cash Means of Payment Regulated Under European Union Law? – VII. How Does European Regulation Govern the Counterfeiting of Non-Cash Means of Payment? – VIII. What Criminalization Obligations Are Imposed by Directive 2014/62/EU Regarding Currency Counterfeiting? – IX. Does The Graphic Design of Banknotes Affect the Fight Against Counterfeiting? – X. How Does the Italian Legal System Regulate the Counterfeiting of Means of Payment? – XI. How Can Technology and Artificial Intelligence Aid the Fight Against Counterfeiting? – XIII. How Is the Counterfeiting of Means of Payment Connected to Other Eurocrimes?

KEY FINDINGS: Evolution of the dogmatic notion; Dual track of euro-unitarian protection; Technological barriers and graphic safeguards; Hierarchical criminal structure and agency interoperability; Systemic interconnection and the cybercrime nexus.

I. What Is the Definition of Counterfeit Means of Payment?

Given the absence of a unique definition of counterfeit means of payment in the Italian Criminal Code (which punishes such conduct through specific criminal provisions that will be discussed subsequently) and taking into account that this phenomenon presents uniform transnational traits, this paper refers to the definition used by the Australian legislator in the *Crimes (Currency) Act* of 1981, which remains in force as a comparative parameter.

REFERENCES

Crimes (Currency) Act (Australia), 1981, Definitions Section

The Australian legal system defines counterfeit money (using the term "money" in a broad sense to indicate means of payment) as: "any article, other than a genuine coin or paper money, that resembles, or is apparently intended to resemble or pass for, a genuine coin or paper money; or any article, although originally a genuine coin or paper money, that has been altered in a substantial way and such as to conceal, or be intended to conceal, the alteration itself".

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Starting from this dogmatic premise, we can define the **counterfeiting of means of payment** as the combination of all activities aimed at the **creation of false currency**. This definition is not exhausted in the mere material manufacture of the banknote or security, but encompasses the entire logistical chain and the **preparatory and functional phases**, such as the sourcing of special raw materials (e.g., watermarked paper, magnetic inks), the possession of the necessary technological tools, and the subsequent introduction and distribution of the counterfeit currency into economic channels.

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The Counterfeiting of Money as *Lesa Maestà*

The counterfeiting of money is a criminal phenomenon that arises concurrently with the introduction of the first mercantile means of payment. An emblematic historical case of anti-counterfeiting legislation is the ***Lex Cornelia de maiestate* of 81 B.C.**, enacted under Lucius Cornelius Sulla, which had among its primary objectives the limitation of the then rampant circulation of falsified silver coins (*nummi adulterini*), politically framing such conduct within the very grave **crime of *lesa maestà*** (literally **injured majesty**). This severe classification of falsification activity remained valid in legal dogmatics until the modern era, justified by the profound symbolic value of the imprint stamped on the metal: the coin, bearing the **"sign of the Prince"** and being a sovereign expression of the power of the State, rendered its alteration a direct attack on political authority and the stability of the sovereign. For example, *Section 1* of the *Counterfeiting Coin Act* of 1741, which remained in force in Great Britain from 1742 to 1832, included within the category of ***high treason*** the modification or fabrication *ex novo* of silver shillings or *sixpences* aimed at making them deceptively resemble the gold guinea, punishing offenders with the death penalty.

II. Who Counterfeits Means of Payment?

In studying multilevel enforcement strategies against counterfeiting, it is essential to accurately identify the subjects and groups operating in this sector, analyzing their structural differences in *modus operandi* and underlying economic-political motivations. We must remember that the phenomenology of counterfeiters is articulated into **three distinct macro-categories**:

1. **Independent Counterfeiters:** These are individuals or small isolated groups not affiliated with large organized crime cartels. Their activity is today heavily conditioned and limited by the **increasingly innovative technological and biological security features** introduced by central banks (e.g., holograms, polymers). However, these subjects attempt to evolve in step with advancements in commercial high-resolution laser printing technologies, accessible even to counterfeiters with low financial resources. The conducts of these groups, if structured, are punishable in Italy under **Art. 416 of the Criminal Code (conspiracy/criminal association)**. Independent counterfeiters usually generate a limited negative impact on the market, characterized by a quantitatively low production and a predominantly **local or regional** distribution and dealing network.
2. **Structured Criminal Organizations:** This category includes large cartels and mafia-type associations (including terrorist organizations) that utilize advanced industrial printing techniques, such as **lithographic or intaglio printing**, sometimes accessing professional machinery through the infiltration or complicity of legitimate printing companies unaware of the actual illicit use. These

organizations counterfeit means of payment primarily as an asymmetric tool to **self-finance other illicit activities** with high logistical costs (e.g., drug trafficking or weapon purchasing), as historically demonstrated by Colombian cartels and Middle Eastern eversive cells.

3. **State or Para-State Actors:** This third category consists of sovereign States or para-state organizations that print counterfeit foreign currency as a true **tool of political-economic sabotage** against their geopolitical enemies (for instance, to induce artificial monetary inflation, destroy market confidence, or destabilize the purchasing power of the target currency) or as a means of covert international financing to bypass sanctions regimes. Disposing of unlimited financial and technological resources, these actors are capable of producing counterfeits of the **highest forensic quality**, sometimes entirely indistinguishable from the originals except through in-depth spectrographic laboratory analyses.

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The Phenomenon of North Korean "Superdollars"

An outstanding example of international practice and global financial intelligence relations is the famous case of the so-called **"Superdollars"**. In 1996, the *New York Times* published a detailed article denouncing that the Democratic People's Republic of Korea had produced, in the preceding decades, $100 banknotes of exceptionally high quality, injecting them into the global circuit through its consular and diplomatic missions. These counterfeits were made using highly sophisticated technologies–including the use of paper composed of 75% cotton and 25% linen, magnetic inks, and intaglio printing–rendering them virtually indistinguishable from originals and surpassing ultraviolet tests and bank counting machinery of the era. It is estimated that this activity, officially denied by Pyongyang, generated hundreds of millions of dollars to fund the regime's activities, bypass international sanctions, and sustain military programs. Although the Federal Reserve radically redesigned the $100 bill in 2013 to counter this phenomenon, suspicions regarding a resumption of production re-emerged between **2024 and 2026**.

The structure of criminal organizations dedicated to large-scale counterfeiting is complex and articulated into a **pyramidal and compartmentalized hierarchy** to reduce the risk of infiltration by judicial police organs:

- **The Printers (*Producers*):** They constitute the technical apex; they are responsible for the physical production of the currency through clandestine industrial laboratories. They sell the banknotes wholesale at approximately **20-25% of the face value**.
- **The Distributors (*Wholesalers*):** They manage the macro-regional flows of counterfeit currency, purchasing batches from the printers and organizing the storage and transborder transfer.
- **The Retailers (*Passers*):** Affiliates of the organization who physically inject and launder the banknotes into the consumer market through front commercial activities or currency dealing squares.
- **The Mules (*Couriers*):** Subjects tasked with the **physical cross-border transport** of the counterfeit currency, splitting loads to overcome customs checks at the borders of the Union. The final price for the end user or buyer can reach **65-75% of the face value**.

III. How Is the Multilevel Harmonization Against Counterfeiting Articulated Under International Law?

Data showing the intrinsically transnational nature of counterfeiting means of payment– a phenomenon that knows no geographical borders or temporal barriers–rendered an articulated regulatory activity at a global level necessary. The first universal regulatory pillar dates back to 1929 when, under the aegis and auspices of the League of Nations, the International Convention for the Suppression of Counterfeiting Currency was drafted, known in the Italian legal system as the **International Convention for the Fight against the Falsification of Currencies** (signed in Geneva on April 20, 1929).
The Convention, which entered into force on February 22, 1931, and was ratified by Italy through Law no. 2283 of November 23, 1935 (in force since December 27, 1935), defines in Art. 2 "currency" as: "both paper money, including banknotes, and metallic money, which are legal tender by virtue of a law". This definition, although innovative and a milestone for the time in introducing a common legal lexicon among signatory States, reflected the economic and commercial reality of the era. We must remember that the first mass-consumption credit card would only be devised in 1949, rendering the 1929 Convention temporally distant and structurally devoid of references to modern electronic or digital payment systems.
The treaty stems from the firm conviction of States that currency counterfeiting constituted a true *crimen iuris gentium* and that purely national enforcement actions were completely insufficient, if not technically impossible, creating dangerous zones of impunibility for counterfeiters. This treaty instrument remains, even today, the primary international point of reference and the historical source of cooperation in this field. The need for multilateral coordination is dictated by the sophisticated operational strategies of cartels, such as the international trafficking of counterfeit currency and the production of banknotes outside the sovereign jurisdictions that issue them. Consistent flows of counterfeit US dollars have been historically located and monitored in Colombia, Peru, Israel, the geopolitical area of the Caucasus, and West Africa.
Recently, in **2024 and 2025**, international cooperation has further evolved through the **strengthening of the operational protocols of INTERPOL and Europol**, aimed at countering not only traditional physical cash, but also the counterfeiting of non-cash payment instruments, such as cloned credit cards, electronic wallets (*e-wallets*), and non-monetary digital transactions, in line with new European directives on *cybersecurity*.

REFERENCES

International Convention for the Suppression of Counterfeiting Currency, 1929, Art. 3

"The following should be punishable as ordinary crimes: 1. Any fraudulent making or altering of currency, whatever means are employed; 2. The fraudulent uttering of counterfeit currency; 3. The introduction into the country, the receiving or obtaining of counterfeit currency, knowing it to be counterfeit, with a view to its uttering; 4. Attempts to commit, and any intentional participation in, these offenses; 5. The fraudulent making, receiving or obtaining of instruments or other articles peculiarly adapted by their nature for the counterfeiting or altering of currency."

In more recent times, within the UNTOC (Palermo, 2000), the counterfeiting of means of payment is not explicitly cited. On the contrary, in the legal system of the European Union, it is expressly provided for by Art. 83, Para. 1, TFEU, which lists the so-called

Eurocrimes. These are defined as “areas of particularly serious crime with a cross-border dimension resulting from the nature or impact of such offenses or from a special need to combat them on a common basis”.
In addition to the counterfeiting of means of payment, the list includes: “terrorism, trafficking in human beings and sexual exploitation of women and children, illicit drug trafficking, illicit arms trafficking, money laundering, corruption, computer crime, and organized crime”. For such crimes, the European Parliament and the Council may establish, by means of directives, minimum rules concerning the definition of criminal offenses and sanctions.
On the front of technological development in anti-counterfeiting, the **Central Bank Counterfeit Deterrence Group (CBCDG)**, established on May 10, 2000, brings together the governors of 35 central banks (including the European Central Bank) with the objective of examining the threats posed by new digital technologies. The work of the CBCDG led, in 2004, to the birth of the **Counterfeit Deterrence System (CDS)**: a set of technologies designed to prevent image processing software and personal computing tools from capturing and reproducing images of protected banknotes.

CASE STUDY

Supreme Court of the Philippines, Judgment No. 261670, 2023
A confirmation of the current application of the principles enshrined in Art. 3 of the International Convention for the Suppression of Counterfeiting Currency (which mandates the punishability of possession and uttering of false currency) is traceable in the case ***Gacasan v. People***. In this setting, the Supreme Court of the Philippines confirmed the prison sentence for Allan Gacasan, found in possession of 100 counterfeit 1,000-Peso banknotes and 25 counterfeit 500-Peso banknotes. The defendant had accepted a purchase offer made by a law enforcement officer engaged in an undercover operation (*buy-bust operation*). The judgment reiterates that the mere possession of false currency with the intent to utter it constitutes a serious crime, in line with international anti-counterfeiting standards established by the 1929 Convention.

IV. What Is the Role of INTERPOL in the Fight Against Counterfeit Currency?

The **International Criminal Police Organization (INTERPOL)** is an intergovernmental entity dedicated to strategic cooperation between the police forces of its Member States and the operational countering of transnational crime. Nearly all countries in the world belong to it (among UN members, only North Korea and the Federated States of Micronesia have not yet joined), facilitating the real-time sharing of data and criminal intelligence information essential for collective security.
In the area of counterfeiting means of payment, INTERPOL’s activities focus mainly on three operational guidelines that the must be remembered: **technical and forensic support**, **specialized training** for territorial law enforcement, and the **coordination of joint international operations** aimed at dismantling clandestine printing facilities and seizing false currency before its injection into the market.
In addition to these field services, INTERPOL makes several informational resources available online:

- ***Counterfeit alerts*:** Information and forensic analysis on new types of counterfeit banknotes identified on the global market (excluding the euro and US dollars, which are managed by specific channels and dedicated agencies).

- **Annual statistics and reports:** Analytical data regarding the total quantities and types of counterfeit banknotes discovered and seized by Member States.
- ***Early warning messages*:** Urgent notices regarding euro counterfeiting, published and distributed in close cooperation with **Europol** and the **European Central Bank (ECB)**.
- ***Document-checker banknotes*:** A centralized online database containing **4,800 types of banknotes** and over **70,000 high-resolution images** to support the visual and instrumental checks of border agents.

Advanced technical analyses are carried out at the *Counterfeit Currency and Security Documents laboratory*. This facility is responsible for analyzing, cataloging, and archiving both newly issued legal banknotes (to study their security features) and counterfeit ones seized across different continents, producing technical reports in forensic chemistry. These activities reflect INTERPOL's strategic vision, which in its annual report has placed the fight against counterfeiting among the **priority objectives** to weaken the financial capabilities of mafia organizations.

Within the framework of advanced prevention, an initiative of international importance is **Project S-Print**, aimed at monitoring the commercial supply chain of industrial materials and sensitive equipment (e.g., intaglio presses, magnetic inks, watermarked paper). The objective is to support legitimate supply companies that, while acting in good faith, might sell industrial machinery to buyers operating under false pretenses or through front companies to evade the controls of law enforcement.

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The Guidelines of Project S-Print

Through the *Project S-Print Best Practices*, INTERPOL provides a set of **operational recommendations and conduct standards** to actors in the chemical-typographic production chain to prevent machinery, special inks, or paper substrates from being exploited by forgery cartels. These guidelines are articulated into five due diligence duties:

1. Maintain complete records: Keep detailed accounting and technical documentation of all transactions and machinery specifications sold.

2. Customer profiling (*Know Your Customer*): Verify the true identity of each new buyer, cross-checking the information provided with independent, objective sources and commercial registries.

3. Commercial precautionary principle: Refrain from supplying materials or technologies in case of minimal doubts regarding the legitimacy of the customer or the proposed real destination of use for the instrumentation.

4. Direct cooperation with authorities: Promptly report to police forces and INTERPOL contact points any anomalous order or suspicious commercial contact.

5. Secure disposal of materials: Provide for the traceable destruction or responsible disposal of obsolete equipment, printing plates, or waste materials, to prevent their illicit recovery and reuse by criminal organizations.

In conclusion, the **forensic and digital resources of INTERPOL** are:

- **Counterfeit Currency Laboratory:** Hub for chemical and forensic analysis on falsified inks, paper, and holograms.
- **Document-Checker Database:** Centralized digital archive for customs support with 4,800 types of banknotes and 70,000 comparative images.
- **Early Warning Messages (ECB-Europol):** Rapid alert system for intercepting massive flows of false euros within the common space.

- **Project S-Print Network:** Multilevel preventive system for monitoring the supply chain and technological precursors of printing.

V. How Does Europol Act Against the Counterfeiting of the Euro?

The action of the **European Union Agency for Law Enforcement Cooperation (Europol)** is closely interconnected with that of INTERPOL. This operational coordination is enshrined in the ***Joint Initiative*** **between the Secretary General of INTERPOL and the Director of Europol** on the fight against currency counterfeiting, with specific reference to the euro, signed on November 5, 2001, just before the physical entry into circulation of the single currency. The *Joint Initiative* stems from the broader Cooperation Agreement between the two agencies and arises from the need to deepen investigative synergy in the specific sector of false currency. The document is articulated in four fundamental articles regulating the direct exchange of information (Art. 2), requests for technical assistance (Art. 3), and operational coordination on the field (Art. 4).

In 2005, **Council Decision 2005/511/JHA** took a decisive step by officially designating Europol as the "**central office for the fight against the counterfeiting of the euro**", within the meaning of the 1929 Geneva Convention. This fundamental act confers upon the agency the task of centralizing investigations, analyzing strategic intelligence information, and facilitating judicial and police cooperation between the security forces of Member States.

In the conclusions of the Council of the EU defining the priorities of the Union against organized crime, the fight against criminal organizations involved in the production and distribution (both physical and online) of counterfeit money was confirmed as a priority objective of the permanent **EMPACT (European Multidisciplinary Platform Against Criminal Threats)** program. EMPACT represents the platform for multidisciplinary cooperation led by Member States and supported by EU institutions and agencies, including Europol itself, to dismantle the chains of command of transnational forgery associations.

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Two Counterfeiting Operations by Europol

The effectiveness of the EMPACT operational model in targeting not only physical typographic production but also the new digital distribution channels used by organized crime is demonstrated empirically by two major recent investigations:

1. Dismantling of the Naples printing facility (August 14, 2024): Facilitated by the exchange of information and coordinated by Europol, the French *Police Nationale* and the Carabinieri Corps in Italy dismantled a sophisticated clandestine printing facility in Naples. The operation led to the seizure of high-quality counterfeit banknotes with a face value of approximately **3 million euros**. The laboratory, hidden behind a mobile wall electronically operated in a private garage, was equipped with 31 digital printing machines and large quantities of raw materials. It is believed that the arrested forger was responsible for the production of **over 27% of all false banknotes** of 20, 50, and 100 euros removed from circulation in the entire eurozone during 2023.

2. Cross-Border Operation (April 7, 2025): Europol supported a cross-border operation led by the Italian Carabinieri with the support of the authorities of Austria, Belgium, France, Germany, and Spain. The investigation led to the arrest of three Italian suspects and the dismantling of a laboratory in southern Italy that distributed false currency throughout the eurozone via **online messaging platforms and encrypted applications**, accepting anonymous payments in **cryptocurrency**. During the intervention, 600 banknotes were seized for a total value of approximately 50,000 euros, alongside the dismantling of an illegal mint dedicated to coining 2-euro coins located in northern Italy.

VI. How Is the Counterfeiting of Cash Means of Payment Regulated Under European Union Law?

The legislative activities of the European Union in the area of falsification underwent a substantial development with the introduction of the euro, the single currency that required common and homogeneous efforts to guarantee its effective protection. In Union law, the cornerstone regulation governing the fight against cash counterfeiting is **Council Regulation (EC) No 1338/2001** of June 28, 2001.

This regulation defines the measures necessary for the protection of the euro against counterfeiting and aims, as stated in Art. 1, Para. 1, to establish certain measures necessary for the circulation of euro banknotes and coins under conditions that guarantee their protection against counterfeiting activities. Art. 2 of the same regulation provides the technical definitions of “counterfeit banknotes and coins,” distinguishing them from authentic ones based on their fraudulent manufacture or alteration. The regulatory framework was subsequently integrated by **Directive 2014/62/EU**, which harmonized minimum criminal penalties and introduced more incisive investigative tools across all Member States.

The new EU regulatory package against money laundering (**AMLR - Anti-Money Laundering Regulation**) has further strengthened the protection of cash, integrating the reporting mechanisms for suspicious banknotes provided for by Regulation 1338/2001 with the controls of banking supervisory authorities to limit the use of counterfeit currency in healthy legal commercial channels, initiating the integration of security standards for the future coexistence between physical cash and the **digital euro**.

REFERENCES

Regulation (EC) 1338, 2001, Art. 1 para. 2
The cited Regulation (EC) No 1338/2001 defines "counterfeiting" by covering both the fraudulent manufacture or alteration of banknotes and coins, and their uttering, importation, transport, and possession. The definition also extends to the possession of materials, computer programs, or tools suitable for the production or alteration of euro banknotes and coins or their protection features, regardless of the means utilized.

The regulatory extension to non-Euro States and AMLR integration has been organised in the following way:

- **Council Regulation (EC) No 1339/2001:** Extends the application of Articles 1 to 11 of Regulation (EC) No 1338/2001 (as amended by Regulation no. 44/2009) to all EU Member States that have not adopted the euro as their single currency, ensuring a uniform level of protection across the entire community territory and preventing legislative blind spots.
- **AMLR Package Alignment (2024-2026):** Integrates the technical reporting of suspect banknotes with the mandatory due diligence controls of commercial banks and financial entities in all Member States, including non-euro area countries, connecting cash anti-counterfeiting tracking with Central Bank supervisory systems.

VII. How Does European Regulation Govern the Counterfeiting of Non-Cash Means of Payment?

European regulation for combating the counterfeiting of non-cash means of payment originates with Framework Decision 2001/413/JHA. However, due to accelerated technological evolution and the need to include new phenomena of cybercrime such as computer fraud and financial credential theft, this act was replaced by **Directive (EU) 2019/713**. The latter, pursuant to Art. 1, establishes **minimum rules concerning the definition of criminal offenses and sanctions** in the area of fraud and counterfeiting of non-cash means of payment, facilitating prevention and support for victims of digital fraud within the common space.

Legislative Decree no. 184 of November 8, 2021, constitutes the fundamental act transposing the Directive into the Italian legal system. Art. 1, letter a) of the cited decree defines a "**non-cash payment instrument**" as a non-cash protected device, object or record, material or immaterial, or a combination thereof, which enables the holder to transfer money or monetary value, including through digital means of exchange. This comprehensive definition includes not only physical cards, but also virtual currencies and digital assets.

Under the internal sanctioning profile, Legislative Decree 184/2021 profoundly innovated **Art. 493-*ter* of the Criminal Code**, which punishes the **unlawful use and falsification of credit cards, payment cards, or any other similar instrument**. The rule provides for imprisonment from one to five years and a fine from 310 to 1,550 euros for anyone who, in order to gain a profit, makes unlawful use of such instruments without being the holder. In the two-year period **2024-2025**, the application of this discipline was further strengthened at the European level to counter the phenomenon of large-scale *phishing* and *carding*. Furthermore, with the advancement of projects on the **digital euro** underway between **2025 and 2026**, the regulatory framework is evolving to guarantee that new electronic payment instruments enjoy the same criminal and technological protection currently reserved for physical transactions and traditional cards.

CASE STUDY

Court of Cassation, Fifth Penal Section, Judgment No. 34768, 2022
The Court of Cassation clarified that Art. 493-*ter* c.c. finds application also in the event that a subject unlawfully uses a credit card received legitimately from the holder for a specific purpose, but employs it to carry out further and unauthorized operations (such as cash withdrawals for their own benefit). According to the judges of legitimacy, such conduct does not integrate the crime of embezzlement (Art. 646 c.c.), since the agent never acquires the legal "possession" of the card, but rather a mere precarious detention, strictly limited in time and in the purposes delegated by the holder. Therefore, the use of the device outside the limits of the mandate configures the crime of unlawful use of payment instruments, punished more severely precisely to safeguard the security of financial circuits and public trust.

Council Regulation (EC) No 974/98, on the introduction of the euro, parallelly addresses cash protection in Art. 12, establishing that participating Member States must ensure adequate sanctions against the alteration and falsification of banknotes and coins. Subsequently, on May 29, 2000, the European Union defined specific minimum rules through **Framework Decision 2000/383/JHA**, adopted in consistency with the aims today expressed by Art. 83 TFEU. This act emphasized the urgency of protecting the euro with effective criminal law measures even before its actual entry into circulation (which occurred on January 1, 2002) to defend the credibility of the new currency and avoid serious economic repercussions.

REFERENCES

Framework Decision 383/JHA, 2000, Art. 3
"Each Member State shall take the necessary measures to ensure that the following conducts are punishable offenses: a) any fraudulent making or altering of currency, whatever means are employed; b) the fraudulent uttering of counterfeit currency; c) the importation, exportation, transport, receiving, or obtaining of counterfeit currency with a view to its uttering; d) the fraudulent making, receiving, obtaining, or possession of instruments, objects, or computer programs peculiarly adapted by their nature for the counterfeiting or altering of currency, or of holograms and protective elements. Each Member State shall also ensure that participation, instigation, and attempts are passable by sanctions."

The protection of the euro from counterfeiting was further deepened in 2001 with **Council Decision 2001/887/JHA**. Given the need to integrate and strengthen the protection system, Art. 2 requires Member States to provide for the necessary expert analyses of suspect currency through a **National Analysis Centre (NAC)** for banknotes and a **Coin National Analysis Centre (CNAC)** for metallic currency, with the obligation to communicate the results of such assessments to Europol (Art. 3).
In the field of technical analysis of metallic coins, **Decision 2003/861/EC** provided for the establishment of the **European Technical and Scientific Centre (ETSC)**, whose activities were extended to non-euro area States by Decision 2003/862/EC. The ETSC was formally established by Commission Decision of October 29, 2004, with the objective of coordinating the technical actions necessary to protect euro coins against falsification. In 2014, European regulation became even more stringent: **Directive 2014/62/EU** established minimum rules concerning the definition of criminal offenses

and sanctions in the area of counterfeiting of the euro and other currencies, updating the list of offenses originally drafted in Framework Decision 2000/383/JHA, introducing more effective investigative tools, and harmonizing the statutory levels of penalties across the Union.

In conclusion, the institutional framework of EU expert analyses and enforcement is made up of:

- **Directive (EU) 2019/713:** Introduces minimum rules and legally defines non-cash payment instruments, covering also digital assets (transposed in Italy by Legislative Decree 184/2021).
- **National Analysis Centres (NAC & CNAC):** State bodies appointed for urgent technical expertise on suspect banknotes and coins, with an obligation to report to Europol under Decision 2001/887/JHA.
- **European Technical and Scientific Centre (ETSC):** Established in 2004 to coordinate at a central level the analytical response and protection against the counterfeiting of metallic euro coins.
- **Directive 2014/62/EU:** Updates the catalog of Eurocrimes linked to false cash currency, raising the minimum statutory sanctions to hinder penal *forum shopping*.

VIII. What Criminalization Obligations Are Imposed by Directive 2014/62/EU Regarding Currency Counterfeiting?

The framework of Euro-unitarian sources safeguarding cash consolidated through **Directive 2014/62/EU**, which established minimum rules concerning the definition of criminal offenses and sanctions in the area of counterfeiting of the euro and other currencies, replacing and tightening the old framework of Framework Decision 2000/383/JHA. This source of European law imposes mandatory criminalization obligations to strike not only at production, but at the entire logistical and technological chain of false currency.

REFERENCES

Directive (EU) 62, 2014, Art. 3

"1. Member States shall take the necessary measures to ensure that the following conduct constitutes a criminal offense, when committed intentionally: a) any fraudulent making or altering of currency, whatever means are employed; b) the fraudulent uttering of counterfeit currency; c) the importation, exportation, transport, receiving or obtaining of counterfeit currency with a view to its uttering; d) the fraudulent making, receiving, obtaining or possession of: i) instruments, articles, computer programs and data, and any other means peculiarly adapted by their nature for the counterfeiting or altering of currency; or ii) security features, such as holograms, watermarks or other components of currency that serve to protect against counterfeiting. 2. Member States shall take the necessary measures to ensure that the conduct referred to in paragraph 1, points (a), (b) and (c), is punishable also in respect of banknotes or coins manufactured by using legal facilities or materials in violation of the rights or the conditions under which competent authorities may issue currency. 3. Member States shall take the necessary measures to ensure that the conduct referred to in paragraphs 1 and 2 is punishable also in respect of banknotes and coins which are not yet issued but are designated for circulation as legal tender."

The **European Central Bank (ECB)**, in its capacity as the issuing institution, has focused its regulatory efforts on the protection of the euro since 1998. These initiatives found a first foundation in Art. 4 of ECB Recommendation BCE/1998/7 of July 7, 1998. The document suggested a revision of enforcement policies in order to harmonize criminal law, enhance institutional and judicial cooperation, draft new conventions, and analyze the impact of new technological means available for counterfeiting.
In the same year, the ECB established the **Counterfeit Analysis Centre (CAC)**, the nerve center for the technical analysis of false banknotes. In addition to direct monitoring, the ECB offers strategic support to the private sector: companies producing control devices can test their machinery using a representative selection of seized counterfeit banknotes. Subsequently, the ECB publishes the list of instruments that have passed the tests, with the dual objective of guiding buyers toward reliable devices and stimulating manufacturers to develop increasingly sophisticated technologies. In the period **2024-2026**, this technical surveillance role became even more central in view of the project for the digital euro, requiring the ECB to integrate the protection of physical cash with new security standards for electronic transactions.

IX. Does The Graphic Design of Banknotes Affect the Fight Against Counterfeiting?

Yes, design represents a fundamental technical security asset, not merely an aesthetic one, aimed at inhibiting counterfeiting through complex features and innovative materials. The actions of the ECB are not limited to institutional recommendations or the activities of the Counterfeit Analysis Centre; to these is added the initiative most visible to citizens: the design and restyling of banknotes.
Each year, the ECB publishes a report on counterfeit euro banknotes withdrawn from circulation. The report for 2024 indicates a ratio of **18 counterfeits for every million authentic banknotes**. Although this figure is slightly higher than in the preceding four-year period, it remains significantly lower than pre-Covid levels (23 per million in 2019) and far from the negative record of 64 per million registered in 2009. The ECB defines this share as "very small", confirming the effectiveness of current security measures.

X. How Does the Italian Legal System Regulate the Counterfeiting of Means of Payment?

The counterfeiting of means of payment is not configured by the Italian legal system as a single omnibus criminal offense; the legislator explicitly distinguishes the counterfeiting of traditional cash (banknotes and coins) from that of instruments of payment other than cash (already analyzed under the regulatory scope of Directive 2019/713 and Legislative Decree 184/2021).
The counterfeiting of "national or foreign coins and banknotes, having legal tender in the State or abroad" and their fraudulent alteration are punished by **Art. 453 of the Italian Criminal Code** with imprisonment from three to twelve years and a fine from 516 to 3,098 euros. This statutory provision relates specifically to cash physical currency.

REFERENCES

Italian Criminal Code, Art. 453

"Whoever counterfeits or alters national or foreign banknotes or coins having legal tender, or introduces them into the territory of the State, or holds them with the intent to put them into circulation, shall be punished with imprisonment from three to twelve years and a fine from 516 to 3,098 euros."

XI. How Can Technology and Artificial Intelligence Aid the Fight Against Counterfeiting?

Given the persistent and highly sophisticated circulation of fake currency, it is essential to understand how to detect counterfeit banknotes and coins, both as an advanced enforcement measure and for individual self-protection. Knowing how to recognize authentic money is also crucial on a strictly legal level: **Art. 457 of the Italian Criminal Code** punishes anyone who spends or puts into circulation counterfeit coins or banknotes received in good faith, providing for a penalty of imprisonment up to six months or a fine up to 1,032 euros.

To support citizens and retailers, the European Central Bank (ECB) provides an interactive section dedicated to security features. The primary "analog" barrier remains the **"feel, look, tilt"** method:

- **Feel:** Verifying the unique crisp texture of the paper made of pure cotton fibers and the raised intaglio printing on the edges.
- **Look:** Examining the watermark and the vertical security thread by holding the banknote against the light.
- **Tilt:** Observing the color-shifting effects of the emerald number and the appearance of Europa's portrait in the holographic window when tilting the bill.

However, for a deeper forensic analysis, technology enters the field. The most widespread physical and chemical detection tools include ***fake note detectors*** (fixed professional scanners verifying ultraviolet, magnetic, and metallic properties of banknotes) and ***counterfeit detector pens*** (iodine-based markers that react to the starches of common wood-based paper, turning dark, while remaining completely clear on authentic cotton-fiber banknotes, though proving ineffective for polymer plastic currencies like Australian bills).

The true technological revolution in the **2024-2026** period is represented by the integration of **Artificial Intelligence** and *Machine Learning*. Recent scientific studies have demonstrated that AI can make currency validation faster, more accurate, and globally accessible. In particular, systems based on **Convolutional Neural Networks (CNN)**, specialized in image recognition, have shown accuracy rates exceeding 82% even on limited datasets, with exponential growth potential as data volume increases.

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Future Developments and Banknote Verification via Smartphones

A fundamental milestone in the use of AI for detecting counterfeit currency was achieved in **2025** by a research team at *Amity University*. The team developed a mobile application capable of verifying the authenticity of banknotes in real time **using nothing more than a standard smartphone camera**. This system bypasses the structural limits of traditional methods: unlike *Fake Note Detectors* (which are non-portable and expensive) and *Counterfeit Detector Pens* (which are inaccurate and unusable on polymers), the app guarantees immediate results and high scientific reliability. The native integration of an **automated voice assistant** transforms this technology into a powerful tool for social inclusion, allowing visually impaired or blind users to verify the authenticity of money in total autonomy. According to the developers, the system achieved a **95% accuracy rate** on a dataset of ten thousand images. This innovation paves the way for the capillary distribution of preventive anti-counterfeiting tools directly into the hands of citizens, transforming a common mobile device into a technological safeguard protecting public trust.

In conclusion, there are three levels of currency verification:

- **Level 1 - Sensory Verification (ECB Method):** Immediate check based on the three tactile and visual actions of "feel, look, tilt" accessible to every citizen.
- **Level 2 - Chemical/Physical Verification (Pens and Scanners):** Iodine reaction on wood starches and fixed ultraviolet/magnetic scanners for retail businesses and banks.
- **Level 3 - Digital/Cybernetic Verification (CNN Neural Networks):** Visual analysis via machine learning algorithms and mobile applications (Amity University 2025 Model) featuring inclusive voice guides and 95% accuracy.

XII. How Is the Counterfeiting of Means of Payment Connected to Other Eurocrimes?

The counterfeiting of means of payment is not an isolated criminal phenomenon, but is deeply interconnected with other **Eurocrimes under Art. 83, Para. 1 of the TFEU**, serving primarily as an economic engine and a subsidiary logistical tool for funding and sustaining further large-scale illicit activities, such as drug trafficking, trafficking in human beings, and arms smuggling.

We must keep in mind the **four core areas of transnational criminal intersection**:

- **Terrorism and Narco-terrorism:** Terrorist organizations utilize currency counterfeiting both as a primary channel for logistical self-financing and as an asymmetric weapon of geopolitical destabilization. The massive injection of counterfeit currency into a targeted State's economy is programmatically aimed at generating artificial inflation, devaluing the legal tender, and undermining public trust in financial institutions.
- **Money Laundering:** From an economic criminal law standpoint, the **Financial Action Task Force (FATF/GAFI)**, in its Recommendation 3, classifies currency and means of payment counterfeiting as a **predicate offense** for money laundering. The financial proceeds generated from the wholesale distribution of fake currency constitute illicit capital that mafia consorteries must "clean" through legitimate commercial circuits to reinvest them in the legal economy.
- **Computer Crime (*Cybercrime*):** The technological evolution of digital payments has partially shifted the criminal axis from traditional print-shop falsification

toward sophisticated cyber-frauds, such as *skimming* (tampering with and cloning ATM and POS devices) and cross-border fraud on *e-commerce* platforms. An emerging phenomenon of high social alarm monitored by security agencies is ***crypto-counterfeiting***: by exploiting structural vulnerabilities and bugs in *blockchain* protocols, cyber-criminals succeed in generating duplicated tokens or executing fraudulent *double-spending* operations. Although the **MiCA (Markets in Crypto-Assets) Regulation 2023/1114** comprehensively disciplines crypto-asset markets, the **2024–2026** period has highlighted the urgent geopolitical need to integrate this framework with specific criminal enforcement measures against digital counterfeiting, given the structural absence of a central banking governance in the virtual currency sector.

- **Transnational Organized Crime:** Large criminal syndicates (such as the specialized counterfeit districts or Eastern European networks) manage the international trafficking of fake banknotes using the same logistical channels as legitimate cash and narcotics, relying heavily on physical *cash couriers*. The final insertion and "washing" of the currency into the retail market typically occur through cash-intensive businesses (restaurants, arcades, laundromats, retail chains), which inherently facilitate the mixing and confusion of legitimate and illicit capital.

XIII. Key Findings

- **Evolution of the Dogmatic Notion:** The counterfeiting of means of payment has undergone a profound historical transition. Codefied since Roman times (*Lex Cornelia de maiestate*) and early modern English law (*Counterfeiting Coin Act* of 1741) as a severe crime of high treason due to the direct attack on the sovereign's effigy, it is today established as a **Eurocrime under Art. 83, Para. 1 of the TFEU**, protecting market stability, public trust, and the integrity of European financial circuits.
- **Dual Track of Euro-unitarian Protection:** The European Union protects payment instruments through a double regulatory architecture: physical cash (euro) is safeguarded by **Regulation (EC) No. 1338/2001** and the minimum rules of **Directive 2014/62/EU**; conversely, non-cash instruments (credit cards, electronic wallets, and digital assets) are covered by **Directive (EU) 2019/713**, transposed internally by Legislative Decree 184/2021, which significantly hardened **Art. 493-*ter* of the Italian Criminal Code**.
- **Technological Barriers and Graphic Safeguards:** The graphic and material design of banknotes serves as an advanced security presidium. The European Central Bank (ECB) integrates periodic iconographic restyling (such as the third series of Euro banknotes announced on January 31, 2025) with automated technical blocks managed by the CBCDG group, notably the **EURion constellation** pattern which, in synergy with the *Counterfeit Deterrence System* (CDS), technologically inhibits commercial software and hardware from scanning or printing currency images.
- **Hierarchical Criminal Structure and Agency Interoperability:** Large-scale currency falsification is run by structured, compartmentalized syndicates of producers, wholesalers, retailers, and couriers, with profit margins expanding

along the chain. Multilevel enforcement relies on the interoperability between **INTERPOL** (via forensic laboratories and the *Project S-Print* monitoring chemical-typographic precursors) and **Europol** (designated as the EU central office under Decision 2005/511/JHA), coordinating cross-border operations and multi-million seizures within the permanent **EMPACT** platform.

- **Systemic Interconnection and the Cybercrime Nexus:** The counterfeiting of means of payment acts as a predicate offense for money laundering and a funding mechanism for terrorism. Financial digitalization has extended the threat toward *cybercrime*, introducing emerging practices of **crypto-counterfeiting and e-commerce fraud**. These developments require constant updates to banking supervision frameworks (the EU **AMLR** package of 2024) and cryptographic market transparency rules (MiCA Regulation) to secure public trust in the co-existence of cash and the digital euro.