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The behavioral heterogeneity of money laundering

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To my family, for their endless and unconditional support

To Chiara, for her love and for always being by my side

*To my comrades in arms (Caterina, Cosimo, Giovanni, Matteo, Phil), for all the laughs
and the unforgettable moments we have lived together*

To Alessandro and Davide, for their timeless friendship

My deepest gratitude to all of you.

Table of contents

Abstract.....	3
List of Tables and Figures	4
Introduction.....	6
1. Setting the scene: What do we really know about money laundering?	9
1.1 Money laundering: A still debated concept	9
1.2 The anti-money laundering regime: An historical overview	15
1.3 The criminological knowledge on money laundering: The state of the art.....	18
2. Theoretical perspectives on the behaviors of money launderers	31
2.1 Economics of crime.....	31
2.2 Going beyond the economics of crime: Retrieving contributions from criminological theory	34
2.3 Rationale for the present study, research question and hypotheses	40
3. Data and methodology	47
3.1 Identifying money laundering cases	48
3.2 Data collection, processing, and final sample	54
3.3 Reducing complexity: From words to numbers.....	58
3.4 Data analysis: Multiple correspondence analysis	66
4. Results.....	70
4.1 Money laundering methods	70
4.2 Foreign countries.....	77
5. Discussion, policy implications and future research	83
5.1 Drivers and constraints when choosing a money laundering method.....	83
5.2 Laundering abroad: What do offenders look for?.....	94
5.3 Policy implications	103
5.4 Limitations of the study and directions for future research	109
Conclusions.....	117
References.....	119
Annex.....	158

Abstract

Despite the widespread implementation of a global anti-money laundering regime and the increasing media spotlight, the limited academic focus on the threat side of money laundering has resulted in an insufficient understanding of the actors, processes, and behaviors involved. An examination of existing empirical studies reveals that money launderers do not constitute a homogeneous group characterized by uniform utility functions akin to legitimate rational economic actors. Despite this realization, criminological literature still lacks a systematic analysis that links different types of offenders with specific money laundering practices. Addressing this research gap, the present study conducts an analysis of 348 money laundering investigations carried out by Italian law enforcement agencies from 2016 to 2022, utilizing multiple correspondence analysis. The findings highlight several differences among offenders in terms of money laundering strategies. Italian Mafias predominantly launder illicit proceeds by infiltrating the legal economy, whereas Foreign organized crime groups prefer engaging in schemes outside of the traditional financial system. Additionally, both groups tend to keep their investments close when laundering abroad: Italian Mafias either remain in Italy or choose neighboring countries, while Foreign organized crime groups repatriate illicit proceeds to their home countries. On the other hand, other organized crime groups active in Italy and non-organized crime offenders exhibit more varied and sophisticated behaviors, encompassing both methods and foreign countries. The study concludes with a discussion on implications for both research and policy.

List of Tables and Figures

Tables

Table 1. Empirical studies on the behaviors of money launderers in the criminological domain, 1990 – 2023.....	28
Table 2. Overview of the variables and related operationalization included in the codebook used for coding the criminal cases in the sample.	59
Table 3. Example of the text context of the press release related to the case ID 338.....	63
Table 4. Processing and classification of the unstructured textual information contained in Table 3 (Example of the case ID 338)	64
Table 5. Key characteristics of the money laundering cases in the sample, aggregated 2016 – 2022 (N = 348)	66
Table 6. References of predicate offences and money laundering methods, 2016 -2022. Frequencies by type of actor.	70
Table 7. References of money laundering in foreign countries, 2016-2022. Frequencies by type of actors.	78
Table 8. Distribution of money laundering records from ISTAT and money laundering cases in the sample across Italian regions	111
Table 9. Total number of references for foreign countries involved in money laundering investigations in the sample. Aggregated, 2016 – 2022.....	158

Table 10. Proportion of variance retained by the different dimensions for the specific multiple correspondence analysis of actors, predicate offences and methods. 163

Table 11. Proportion of variance retained by the different dimensions for the specific multiple correspondence analysis of actors, methods and countries..... 164

Figures

Figure 1. PRISMA flow diagram of the identification and screening process used for building the sample 57

Figure 2. Specific MCA map of offenders, predicate offences and money laundering methods (2016-2022). Dimensions 1 and 2. 74

Figure 3. Specific MCA map of offenders, predicate offences and foreign7countries (2016-2022). Dimensions 1 and 2. 81

Introduction

Money laundering is considered to have evolved into a global phenomenon over the last few decades due to the growing interconnectedness of financial systems worldwide. The idea that globalization generates endless opportunities for laundering ill-gotten money is now taken for granted (Alldridge, 2008). In proposing such a threat rhetoric, international bodies and national governments have further argued that only a response coordinated at the international level can effectively oppose such an ever-growing menace to society (Barnett & Finnemore, 2004). Pursuing this “need for a global attack on money laundering” (Arlacchi, 1998, p. 5), a wide array of legislation, regulations and policies emerged during the 1990s in an effort to protect the reputation and integrity of the global financial system (Halliday et al., 2020).

However, the history of money laundering “has been more supported by righteousness than by empirical facts” (van Duyne et al., 2018, p. 10). To date, there is still little empirical knowledge on the threat side of money laundering (see for a review Levi, 2015). The lack of academic interest has led to the rise and establishment of untested claims about how money laundering occurs (Halliday, 2018), particularly concerning the choices made by offenders regarding (Farfán-Méndez, 2019; Reuter, 2017; Riccardi, 2022). Moreover, while academic literature widely acknowledges that “how laundering is carried out depends on local circumstances and changes from crime to crime, from criminal group to criminal group, and from country to country” (Levi & Soudijn, 2020, p. 11), there have been attempts to empirically disaggregate this phenomenon (Farfán-Méndez, 2019; Irwin et al., 2011; Kruisbergen et al., 2015, 2019; Reuter & Truman, 2004). As a result, there is still an unanswered need to account for the diverse behaviors of money launderers (Riccardi, 2022).

Moving from these considerations, the present dissertation aims to address this knowledge gap by disaggregating and comparing money laundering strategies in terms of methods and foreign countries across different offenders to identify potential similarities and differences. To achieve this, this study analyzes a sample of 348 money laundering cases investigated by Italian law enforcement agencies from 2016 to 2022. To date, the allocation of resources for anti-money laundering purposes has mainly been based on risk assessments that are often poorly based on data or rely only on experts' opinions (Ferwerda & Kleemans, 2019), even though methodologies are arguable (Veen & Ferwerda, 2016). Therefore, empirical evidence stemming from actual cases is necessary to understand this dynamic and variegated landscape, better orient policymakers' actions and effectively allocate resources where money laundering risks really are (N. Gilmour, 2016; Riccardi & Milani, 2018).

To achieve its objective, the present dissertation is organized as follows. Chapter 1 briefly illustrates the debate on the definition of money laundering and the main steps in the global development and establishment of the anti-money laundering regime. Additionally, it reviews a large number of previous empirical studies that have provided useful insights into the behaviors of money launderers, identifying the current knowledge gap that the present dissertation aims to address and illustrating the main research question. Chapter 2 locates the present dissertation within an appropriate theoretical framework. Moving from a discussion of the principles of the Economics of Crime, it retrieves the main contributions of criminological theory and discusses them in the context of money laundering. Chapter 3 details the sample used in the analysis and the methodology used to classify and analyze the data. The last two Chapters form the core of this work. Chapter 4 illustrates the main findings of the analysis, providing information on how choices of money laundering strategies – in terms of methods and foreign countries – are distributed across offenders. In conclusion, Chapter 5 discusses in

International Ph.D. in Criminology – Draft Ph.D. dissertation

detail the results, together with their research and policy implications, highlighting the limitations of the present dissertation and potential avenues for future research.

1. Setting the scene: What do we really know about money laundering?

The scope of the present dissertation motivates the investigation of the true extent of our understanding of money laundering. This chapter provides a comprehensive overview of the fundamental conceptual issues associated with money laundering along with a detailed account of the historical milestones that have shaped the global anti-money laundering regime over the last few decades. Having established this essential contextual background, the present chapter then delves into the existing criminological literature on the behaviors of money launderers to identify and discuss the knowledge gaps that the present dissertation aims to address.

1.1 Money laundering: A still debated concept

Practices related to money laundering have a long history, dating back thousands of years. Chinese merchants purchased movable assets and transferred money abroad to hide their wealth from the national government officials already 2000 years ago (Seagrave, 1995). Similarly, moneylenders in the Middle Ages used several methods to conceal the illicit proceeds originating from their activities; although it was not clear whether their activities were illegal or not, their ethical nature was questioned (Naylor, 2004; Uribe, 2003). However, the term “money laundering” is quite recent. It is alleged to come from the activities of Al Capone who funneled the proceeds from the illegal sale of alcohol during Prohibition through laundrettes to disguise their criminal origin (Saltmarsh, 1990; Van Duyne, 2003). Other authors stated that this reference to Al Capone is just a myth and money laundering was born a few years later with Myer Lansky (the Mob’s Accountant), who exploited numbered Swiss bank accounts to launder mafias’ proceeds from illicit gambling (Robinson, 2004; Seymour, 2008). Despite this

interesting debate on its historical origin, the term was used for the first time in American newspapers in 1973 in the context of the Watergate Scandal (Gelemerova, 2011; F. Schneider & Windischbauer, 2008a) and in the legal context only in the 1982' case US v \$4,255,625.39 (1982) 551 F Supp. 314 (Unger, 2013).

Broadly speaking, money laundering is the process aimed at achieving a fictitious appearance of legitimacy for illicit proceeds or, in other words, “whenever a given flow of purchasing power that is potential – since it cannot be used directly for consumption or investment as it is the result of illegal accumulation activity – is transformed into actual purchasing power” (Masciandaro, 2007, p. 48). However, despite such conceptual clarity, defining money laundering has proved to be challenging over the last decades. The US President’s Commission on Organized Crime stated that “money laundering is the process by which one conceals the existence, illegal source, or illegal application of income, and then disguises that income to make it appear legitimate” (1985, p. 7). Since then, numerous scholars and practitioners have attempted to develop a universally recognized definition of the concept. However, these valuable efforts have failed substantially, as a widely accepted definition of money laundering has yet to be established.

In a report for the Dutch Ministry of Finance, the Utrecht School for Economics carried out a semantic analysis of 18 definitions of money laundering, finding that they “use different words and have different meanings” (Unger et al., 2006, p. 21). Van Koningsveld (2013a) reviewed this large array of definitions and distinguished two core elements that characterize them:

1. Concealment of the illegal origin of the criminal proceeds;
2. Fictitious legitimization of the criminal proceeds.

Despite the peculiarities of different jurisdictions' legislations, the aim of disguising is a common element to all money laundering definitions (Unger et al., 2006), because “as long as crime money has not become clean and ‘white’, i.e. legitimized, or if there has been no attempt to do so, there is no laundering” (Van Duyne, 2003, p. 69).

Nevertheless, the concept of money laundering has evolved into a legal construct that, mixing both legal and behavioral elements, includes a wider array of different activities entailing criminal money (Van Duyne, 2013). The *US Money Laundering Control Act* of 1986, the first US federal law to criminalize money laundering, ended up including even the simple movement, deposit and handling of illicit proceeds (U.S. Senate, 1986). Section 1956 (a)(1) of the Act made it unlawful to engage in a financial transaction with knowledge that the funds are the proceeds of a specified unlawful activity and knowing that the transaction was designed in whole or part: “(i) to conceal or disguise the nature, the location, the source, the ownership, or the control of the proceeds of specified unlawful activities”. Section 1956 (a)(2) made it unlawful to “transport, transmit, or transfer a monetary instrument or funds into or out of the US: (a) with the intent to promote the carrying on of specified unlawful activity; or (b) where the defendant knows that the funds are the proceeds of unlawful activity and that the transportation or transfer is designed to conceal or disguise the nature, location, source, ownership, or control of the proceeds of specified unlawful activity or to avoid a transaction reporting requirement”.

Since the introduction of the Act, each of the subsequent legal formulations of money laundering has reflected some of its core elements. Despite only considering drug trafficking as predicate offence, the *UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* of 1988 adopts a similar definition while also adding two new components (United Nations, 1988). In addition to (a) “the conversion or transfers of property

[...] for the purpose of concealing or disguising the illicit origin of the property” and (b) “the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property”, money laundering also entails (c) “the conversion or transfer of property, knowing that such property is derived from any offence or offences [...] and (d) “the acquisition, possession or use of property, knowing, at the time of receipt, that such property was derived from an offence or offences”.

All the elements mentioned above were also incorporated into in the 1990’s *Convention on Laundering, Search, Seizure and Confiscation of the Proceeds from Crime* (Council of Europe, 1990) which had a leading role in shaping the following national laws in the EU. According to Article 6 of the Convention, the following actions are considered as constituting money laundering:

1. The conversion or transfer of property, knowing that such property is proceeds, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of the predicate offence to evade the legal consequences of his actions;
2. The concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of, property, knowing that such property is proceeds;
3. The acquisition, possession or use of property, knowing, at the time of receipt, that such property was proceeds;
4. The participation in, association or conspiracy to commit, attempts to commit and aiding, abetting, facilitating and counselling the commission of any of the offences established in accordance with this article.

Changes in international principles have been implemented at the EU level too to create a harmonized regulatory framework on the prevention and combating of money laundering and the financing of terrorism among Member States. The European anti-money laundering commitment dates to the early 1990s and has been reflected over the years in five Directives and various other measures. The first directive (also known as 1AMLD) was issued in 1991 and defined “money laundering” as the following conducts when committed intentionally (European Council, 1991):

1. the conversion or transfer of property, knowing that such property is derived from criminal activity or from an act of participation in such activity, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of such activity to evade the legal consequences of his action.
2. the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from criminal activity or from an act of participation in such activity.
3. the acquisition, possession or use of property, knowing, at the time of receipt, that such property was derived from criminal activity or from an act of participation in such activity.
4. participation in, association to commit, attempts to commit and aiding, abetting, facilitating and counselling the commission of any of the actions mentioned in the foregoing paragraphs.

In compliance with EU law, the Article 2 of the Italian Legislative Decree 231/2007 adopted the same definition of money laundering (Costa, 2008). Notably, it also includes self-money laundering, namely the laundering of illicit profits by the perpetrators of a predicate offence themselves. However, Italy's criminal law system long considered self-laundering as a mere post-factum to the predicate offence and therefore not punishable. Law 186/2014 (Article 3, paragraph 3) finally introduced a specific crime into Italian criminal law (Article 648-ter 1 of the Criminal Code, see section 3.1).

Overall, it is worth noting that the legal definition of money laundering has evolved over the decades to encompass the movement or flow of money to facilitate crime, even when there is no attempt to legitimize the illicit proceeds (van Duyne et al., 2018). In other words, it means that offenders may be charged with money laundering if they receive, possess, or use illicit proceeds, whether or not their actions actually aim at legitimizing the funds (Levi, 2015). Paradoxically, “after the illegal acquisition of ‘proceeds’ only the immediate destruction, giving away or turning oneself in to the police, may prevent someone from laundering” (Van Duyne, 2002, p. 71). While this broad definition serves a law enforcement purpose by enabling regulators to scrutinize various activities, both domestically and abroad, it poses challenges from an analytical standpoint because it encompasses a wide range of criminal behaviors under the vague umbrella of money laundering (Gelemerova, 2011).

As a result, several scholars have proposed the alternative term of "crime money management", trying to consider the broader process of managing illicit proceeds (Levi & Van Duyne, 2005; van Duyne, 1998; Van Duyne, 2013). This concept, instead of focusing on the ultimate goal of false legitimization, looks at the broader spectrum of offenders' activities which involve illicit proceeds. Despite acknowledging the benefits of such reframing, the present

dissertation uses the term "money laundering" because it is still the most used in academic research on the topic (Gelemerova, 2011; Levi & Reuter, 2006; Van Duyne, 2003).

1.2 The anti-money laundering regime: An historical overview

The increasing focus on money laundering was mainly the response to international drug trafficking, organized crime, and domestic terrorism in the 1980s (Halliday et al., 2019). After uncoordinated actions by single countries that started targeting money laundering with domestic laws, the impulse to the development of a systematic set of anti-money laundering regulations worldwide came from the United States. Following the enactment of the Bank Secrecy Act of 1970 and the Money Laundering Control Act of 1986, the United States pushed for the international endorsement of its national legislative efforts. This objective was achieved through the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (the "Vienna Convention") which, for the first time, criminalized money laundering in international law (United Nations, 1988). In the same year, the Basel Committee on Banking Supervision also cautioned financial institutions to diligently monitor their clients to avoid being unwittingly exploited for money laundering purposes. These two accomplishments were further complemented by the Council of Europe *Convention on laundering, search, seizure and confiscation of the proceeds of crime* (which entered into force in 1993) and the European Commission Directive 91/308/EEC of 10 June 1991 on prevention of the use of the financial system for the purpose of money laundering.

Despite the above-mentioned milestones, the foundations of the international anti-money laundering regime are considered to have been established at the G-7 meeting in Paris in July 1989. Although money laundering was initially a marginal issue on the agenda, it emerged as the most important outcome of the meeting. The Heads of States of the G-7 clearly expressed

grave concern about the laundering of drug trafficking proceeds, consistently linking these two criminal phenomena in the official narrative. The meeting resulted in the creation of the Financial Action Task Force (FATF), an international group of experts composed of representatives from the Ministries of Finance or other competent authorities. The original mandate of the FATF was to assess existing measures for preventing the exploitation of the financial system for the purpose of money laundering and to evaluate additional preventative efforts in the field. The FATF was subsequently provided with office space and a secretariat by the OECD and, despite these facilities, claimed full independence (van Duyne et al., 2018).

In 1990, the FATF issued a report which laid down 40 anti-money laundering recommendations, that can be considered “as the most important products of its policy making role” (van Duyne et al., 2018, p. 125). Acknowledging the dynamic nature of the financial system, the FATF reviewed the list of Recommendations in multiple occasions: 1996, 2001, 2003 and 2012¹. Recommendations are not mandatory but, over time, allowed FATF to exercise a coercive power on national States, in particular by means of Recommendation 19 (van Duyne et al., 2018):

“Financial institutions should be required to apply enhanced due diligence measures to business relationships and transactions with natural and legal persons, and financial institutions, from countries for which this is called for by the FATF. The type of enhanced due diligence measures applied should be effective and proportionate to the risks. Countries should be able to apply appropriate countermeasures when called upon to do so by the FATF.

¹ The 2001 revision also extended the FATF mandate to terrorist financing which ultimately resulted in the issuance of 9 Special Recommendations on the topic.

Countries should also be able to apply countermeasures independently of any call by the FATF to do so. Such countermeasures should be effective and proportionate to the risks”.

Despite the periodic revisions, the basic idea of the Recommendations has remained the same over the years: targeting criminals’ illicit proceeds should remove the means and motive for committing the underlying predicate offences in the first place (Sharman, 2008). The state of compliance of countries with the FATF Recommendations is assessed periodically through the Mutual Evaluation Reports. These reports, produced by experts selected from other member countries and international bodies (e.g., the International Monetary Fund), focus on two main areas:

1. *Technical compliance*: assess whether national laws and regulations meet all the technical requirements of each of the 40 FATF Recommendations;
2. *Effectiveness compliance*: assess whether anti-money laundering countermeasures are effective based on the 11 key areas, or immediate outcomes, delineated in the FATF methodology.

The report is then presented by the assessors to the FATF Plenary at one of its three meetings held every year. After approval and adoption by the Plenary, the country is required to address the shortcomings highlighted and is subject to post-assessment monitoring, ranging from reporting of improvements for countries largely compliant to issuing a public warning against a country that makes insufficient progress to address key deficiencies.

Of note, based on the narrative of “only as strong as the weakest link in the chain” (Sharman, 2008, p. 641), the FATF soon started including all world countries under the anti-money laundering laws in a bold attempt to avoid displacement of illicit proceeds to countries with no such controls in place. For this purpose, a large number of regional bodies (known as

“FATF-style regional bodies”) was created across the globe, collaborating with FATF in key activities, such as the review process of Member States, and extending its influence. This effort was further reinforced by the release of the first blacklist of countries categorized as “non-cooperative” in combatting money laundering in June 2000. While the list itself did not impose any legal formal sanctions on the listed countries, the FATF recommended to all financial institutions in other countries “to impose a higher level of scrutiny on transactions going to, from or through a blacklisted jurisdiction” by the means of Recommendation 21 (Sharman, 2008, p. 21). This measure proved effective in compelling blacklisted countries to reform their anti-money laundering systems and served as a warning to other nations, highlighting the potential reputational and economic consequences associated with inclusion on the blacklist.

1.3 The criminological knowledge on money laundering: The state of the art

Over the last two decades, criminologists have shown a growing interest in the process by which illicit proceeds are converted into forms that grant criminals unrestricted opportunities for spending and investing in the legal economy. The resulting body of literature can be broadly categorized into three main branches (Kruisbergen et al., 2015). First, several scholars attempted to measure the scale of the criminal phenomenon (Ardizzi et al., 2014; Argentiero et al., 2008; Barone & Schneider, 2018; Ferwerda et al., 2013, 2020; Tanzi, 2000; Walker, 1999; Walker & Unger, 2009; Zdanowicz, 2009). Although these estimates have been heavily criticized due to the inherent difficulty in collecting data on a loosely defined phenomenon and the absence of reliable methodologies, they have rapidly become “facts by repetition” (Levi & Reuter, 2006, p. 327). Large numbers - which support the idea of money laundering as an ever-increasing menace threatening the integrity of the global financial system – have been politically adopted to advocate for increased resources, while there is hardly any political

interest in accepting low estimates or developing evidence-based policies (Harvey, 2009; Harvey & Lau, 2008; Reuter & Truman, 2004).

Second, other scholars reviewed the premises, mechanisms and outcomes of the global anti-money laundering regime, attempting to assess to what extent it is effective and cost-effective (Ferwerda, 2009, 2018; Ferwerda & Reuter, 2019; Masciandaro, 1999; Pol, 2018; Reuter & Truman, 2004; Unger et al., 2014). Effectiveness may be defined as the degree to which an intended objective is achieved. However, measuring the effectiveness of anti-money laundering policies is inherently difficult because identifying their goal is not straightforward and specifying the scale of money laundering in their absence is impossible (Ferwerda, 2018; Sharman, 2008). As a result, in the absence of suitable success measures, claims of success tend to be based on compliance with anti-money laundering standard (Halliday et al., 2014, 2019). In particular, the FATF has endorsed a view that considers high numbers of arrests and confiscations of proceeds of crime as appropriate indicators of success of the anti-money laundering regime. However, this approach is inherently flawed as also the opposite works: if anti-money laundering policies are truly effective in deterring offenders from laundering their illicit proceeds, then small numbers of arrests and confiscations should occur over time. Although its positive welfare impact is often taken for granted (Levi et al., 2018), scholars pointed out several shortcomings of the global anti-money laundering regime, ranging from its limited effectiveness in preventing serious profit-oriented crimes, to its potential unintended consequences and the severe costs imposed on obliged entities (Chaikin, 2009; Cochrane, 2014; Ferwerda, 2018; Halliday et al., 2020; Harvey & Lau, 2008; van Duyne et al., 2018).

Lastly, a third branch of literature focused on analyzing actors, methods, and processes involved in money laundering. To date, scholars have investigated different areas of interest in this domain, such as criminal investments in the legal economy (Dugato et al., 2015;

Kruisbergen et al., 2015; Riccardi, 2014), the involvement of financial facilitators (Benson, 2016, 2021; Cummings & Stepnowsky, 2010; Kramer et al., 2023; Levi, 2021; Malm & Bichler, 2013; Soudijn, 2014; Van Duyne, 2003) and the use of new technologies (Custers et al., 2019, 2020; Kruisbergen et al., 2019; Soudijn, 2018). However, empirical knowledge on the behaviors and decision-making of money launderers, often referred to as the "threat side" of money laundering, is still surprisingly limited (see Table 1). Conversely, the research field is mostly dominated by highly descriptive studies (or "typological" studies) on how illicit proceeds are laundered (Choo, 2009; Filipkowski, 2008; N. Gilmour, 2017; N. Gilmour & Ridley, 2015; Gobena, 2022; He, 2010; Teichmann, 2017; Unger & Den Hertog, 2012; Wronka, 2022).

As a result, there is still an insufficient understanding of the actors, processes and behaviors involved (Farfán-Méndez, 2019; Halliday, 2018). First and foremost, the debate on how illicit proceeds are laundered has been dominated by the well-known three-stage model which "has become synonymous with defining the modus operandi of *all* money laundering methods" (N. Gilmour, 2016, p. 2). Despite its uncertain origin - as it is ascribed either to the Board of Governors of the Federal Reserve System (Levi & Reuter, 2006), the US Drugs Enforcement Agency (Van Koningsveld, 2013) or the US Customs Service (Gelemerova, 2011) - the three-stage model has been strongly endorsed by US agencies since the 1980s (Dean et al., 2010; Levi & Soudijn, 2020) and, nowadays, it is "dutifully adopted by most of the academic, bureaucratic and popular writing community" (Levi & Van Duyne, 2005, p. 152). Money laundering is typically represented as a sequence of three different phases: (a) placement; (b) layering; (c) integration. Placement involves the deposit of illicit cash in the financial system to facilitate its movement (Van Koningsveld, 2013a). The second phase, layering, involves multiple financial operations aimed at severing the connection between money and its criminal origin (Irwin et al., 2011; F. Schneider & Windischbauer, 2008b).

Lastly, integration encompasses the incorporation of illicit proceeds into the legal economy, primarily through investments in real estate, companies, luxury goods, and financial assets. This occurs once the funds cannot be traced back to their illicit origin (Soudijn, 2016).

Despite its strong influence on training materials and the common understanding of the phenomenon, scholars have criticized this theoretical model over the years for being incorrect and outdated (Cassella, 2018; Levi & Soudijn, 2020; Matanky-Becker & Cockbain, 2021; S. Schneider, 2020; Van Koningsveld, 2013a). Indeed, scholars have emphasized the variety of money laundering, stressing how money launderers' behaviors are more variegated than predictable based on the *homo economicus* approach and cannot be reduced to a single theoretical model (Levi & Soudijn, 2020). Contrary to other types of crime, money laundering “is notable for the diversity of its forms, participants, and settings” (Levi & Reuter, 2006, p. 312), resulting in a variety of different conducts ranging from simple to highly complex ones (Arnone & Borlini, 2010; N. Gilmour, 2016; He, 2010).

First, it is important to note that not all criminal proceeds need to be laundered and integrated in the legal economy (Soudijn, 2016). Wealth is often concentrated in the hands of few high-level criminals while low-level ones, such as street drug dealers, often make minimum wages and have part-time legal jobs to integrate their illegal income (Levitt & Venkatesh, 2000; Reuter et al., 1990; van Duyne & de Miranda, 1999). Most criminals directly spend their illicit proceeds in the criminal economy to pay wages to the affiliates, finance the territorial expansion against rival groups or maintain the criminal business running (e.g., payments for new drugs shipments) (Krakowski & Zubiría, 2019; Levi & Soudijn, 2020; Soudijn, 2016), in what it has been incisively defined as the “aquarium economy of the underground crime-community” (van Duyne, 1998, p. 363). On the other hand, illicit proceeds could enter neither the legal economy

nor the criminal one because criminals may simply hoard them for future expenditures (Riccardi & Levi, 2018; Soudijn, 2016).

When it comes to actual money laundering, the behavioral variety is motivated by the fact that offenders involved in various types of predicate offences have specific objectives that influence their use of diverse techniques for achieving them (Gelemerova, 2011; Krieger & Meierrieks, 2011). Not secondary, their activities are constrained by the nature, amount and location of illicit proceeds generated (Bajada, 2017; Rusanov & Pudovochkin, 2018; Tiwari et al., 2023). For example, street drug dealers who have moderate – but regular – quantities of cash may be prone to laundering through legitimate cash-intensive businesses (e.g., bars and restaurants). Conversely, corrupt high-level officials have different laundering needs: payments are likely to be in electronic form (and in large amounts) and they may be interested in moving the illicit proceeds out of their countries to avoid detection. Moreover, they may reasonably have access to methods – and contacts – that are not available to lower-level criminals (Levi, 2015; Skinnari et al., 2007).

In addition, the competence, knowledge and skills of actors are critical in determining the strategies they will employ to launder their illicit proceeds (McCarthy et al., 2015; Tiwari et al., 2023). For example, specific methods (e.g., cryptocurrencies) can be used only by actors who have specific knowledge in the domain (Custers et al., 2020; Dostov & Shust, 2014). On the other hand, some offenders may even be incapable of laundering their illicit proceeds, thus employing experts who provide these services in return for a fee (Kramer et al., 2023).

When examining money laundering strategies, it is crucial to consider not only individual factors but also recognize the significant influence of the broader socio-economic context in which offenders operate. For example, a member of a foreign ethnic organized group may be more inclined to repatriate his/her illicit proceeds to their home country due to family and social

ties (Gelemerova, 2011; Kruisbergen et al., 2015; Soudjin, 2015). On the other hand, entrepreneurs involved in tax evasion may prefer reinvesting their illicit proceeds in their legitimate businesses after conducting complex international money laundering schemes or indulging in a lavish lifestyle, such as luxury cars and travels (Gelemerova, 2011).

There are several unsubstantiated claims surrounding international money laundering too. Globalization of trade and finance has facilitated the movement of people, goods, information and money across national borders. Consequently, it is assumed that also offenders can easily transfer their illicit proceeds to foreign countries, with financial tax havens being their preferred choice (see for a review Riccardi, 2022). However, although fueled by media leaks and journalistic investigations (e.g., Panama Papers, Paradise Papers, Swiss Leaks), this “transnational” view stands in contrast to empirical evidence that highlighted how money laundering is more likely to occur entirely within a single jurisdiction (Hetzl, 2018; Matanky-Becker & Cockbain, 2021). To date, we still know little of how often cross-border transfers happen in practice because the choice of engaging in an international money laundering scheme heavily depends on offenders’ perceived risks and advantages of keeping funds within the jurisdiction where they have been generated (Levi, 2015).

In addition, when looking at potential destinations for illicit proceeds, the assumption that offshore jurisdictions are always a good option for offenders has a weak empirical basis (Riccardi, 2022). Scholars have highlighted how offenders pursue a variety of objectives when laundering abroad. Several works stressed offenders’ preference for investing in countries that are geographically and culturally close to the location where the illicit proceeds have been generated (Ferwerda et al., 2020; Kruisbergen et al., 2015; Levi & Van Duyne, 2005; Riccardi, 2022). Similarly, other studies highlighted the relevant role of countries with strong economies and developed financial systems (Aziani et al., 2020; Gullo & Montalbano, 2022; Walker &

Unger, 2009), as well as those that provide high levels of payment, banking and ownership secrecy (Does de Willebois et al., 2011; van Duyne & van Koningsveld, 2017).

The potential interplay between all the above-mentioned factors determines the money laundering schemes in which actors engage, clearly demonstrating why “writing the generic money laundering crime script therefore is not empirically or theoretically defensible” (Levi & Soudijn, 2020, p. 11). Reducing money laundering to a set of predetermined activities that any offenders choose regardless of their psychological preferences, as well as the constraints imposed by the context in which they operate, represents a key barrier to a more comprehensive understanding of the phenomenon (Benson, 2016).

However, despite acknowledging that how money laundering is carried out “depends on local circumstances and changes from crime to crime, from criminal group to criminal group, and from country to country” (Levi & Soudijn, 2020, p. 10), scholars have not empirically disentangled such variety yet. To the best of my knowledge, only five studies – to a different extent – have adopted a comparative approach to provide empirical insights on specific similarities and differences in the money laundering behaviors of different actors. Reuter and Truman (2004) analyzed FATF typologies up to 2004 to investigate the distribution of methods to move illicit proceeds out of country across different predicate offences. Despite the limitations of the data source, results showed that drug traffickers make substantially more use of simple methods such as cash smuggling, money orders, cashiers’ checks and structured deposits compared to fraudsters (15% vs. 8%), whereas the latter show more reliance on shell companies (10% vs. 4%).

Kruisbergen et al. (2015) analyzed a dataset of 1196 individual investments extracted from 150 cases in the Dutch Organized Crime Monitor. In particular, they analyzed the distribution of real estate assets across two main categories of predicate offences: drug

trafficking and other crimes (e.g., human trafficking, arms trafficking) and fraud/money laundering. The 56,4% of the real estate assets of drug traffickers and other criminal actors were residential buildings or land without real estate compared to the 24.5% of the fraudster/money launderers who, conversely, invested more substantially in commercial properties (69.6% vs. 18.1%). Similarly, 44.2% of companies that were found in cases that focus on, amongst other crimes, drug trafficking, human and firearms trafficking are active in the wholesale and retail business sector (NACE B). In cases of fraud and money laundering, the portfolio was different because offenders invested mainly in real estate companies (NACE K), and financial intermediation companies (NACE J).

Irwin et al. (2011) analyzed 184 typologies of money laundering collected from several regulatory authorities to identify potential patterns and trends in money laundering methods across different types of offenders. When examining placement, drug traffickers, tax evaders and human traffickers preferred using smurfing and structuring methods (50% v. 15% v. 13%), fraudsters and thieves preferred using camouflage methods (25%) whereas commodity traffickers preferred smurfing and structuring and currency smuggling (both 14%). In terms of layering, the use of front companies was the preferred layering method used by thieves (57%), commodity traffickers (36%), tax evaders (31%) and fraudsters (21%). Drug traffickers preferred using bank cheques and drafts (15% each) while human traffickers relied on money transfer businesses (38%). Lastly, for what concerns integration, purchase of real estate was the preferred integration technique for tax evaders (23%), fraudsters (20%) and drug traffickers (18%). On the other hand, human traffickers preferred to use only one method of integration, the purchase or use of cash-intensive businesses (25%).

Kruisbergen et al. (2019) analyzed 30 large-scale criminal investigations from the Dutch Organized Crime Monitor to investigate how organized crime offenders in the Netherlands use

IT instruments to launder their illicit proceeds. The authors did not focus on cybercrime alone but rather explored the financial aspects of criminal operations in a broad range of types of organized crime, including “traditional” ones (e.g., drug trafficking). Regarding the spending of criminal proceeds (consumption and investment), their results showed no major differences between traditional organized crime and cybercrime. Conversely, important differences exist when it comes to money laundering. Financial innovation and new technologies, such as the use of cryptocurrencies, seem to be limited to cases of IT-related crime. Conversely, both groups of offenders show a significant preference for cash: even malware and phishing offenders as well as online drug traffickers, at a certain point of the money laundering proceeds, exchanged their virtual currencies for cash, at least in part.

Lastly, Farfán-Méndez (2019) analyzed how the structure of drug trafficking organizations influences their money laundering strategies. Using five court documents and data collected during fieldwork with US and Mexican officials involved in anti-money laundering investigations, the author focused on Mexican drug trafficking organizations (Arellano Félix, Sinaloa, La Familia Michoacana, and Zetas), showing that hierarchical structures - understood as structures that process information and acquire knowledge - prefer risk-averse methods, whereas wheel networks tend to use risk-tolerant procedures for laundering their illicit proceeds. Hierarchical organizations - which invested time and resources in developing managing processes and incentivizing long-term participation - will prefer risk-averse methods for laundering money to avoid contact with law enforcement and minimize the risk of financial and personnel losses. In contrast, wheel-network organizations that hire members based on expertise and incentivize short-term participation will choose methods that are effective (and quick) but potentially riskier.

The above-mentioned comparative studies provided useful insights on how different offenders launder their illicit proceeds. However, there are specific limitations that need to be addressed. Farfán-Méndez (2019) only focused on drug trafficking while Reuter and Truman (2004), in addition to drug trafficking, only looked at fraud and other types of smuggling activities. Kruisbergen et al. (2015) and Kruisbergen et al. (2019) only focused on organized crime offenders, with the former study only analyzing criminal assets. On the other hand, Irwin et al. (2011) considered specific predicate offences but did not provide information on the type of offenders involved. To date, the literature is still missing a systematic analysis that disaggregates money laundering strategies across both types of actors (organized crime and non) and predicate offences, trying to identify potential similarities and differences when it comes to choosing methods and foreign countries for laundering illicit proceeds (Farfán-Méndez, 2019; Reuter, 2017; Riccardi, 2022). Addressing this knowledge gap is not secondary as “analytic progress will be made through disaggregation” (Reuter, 2017, p. 3).

Table 1. Empirical studies on the behaviors of money launderers in the criminological domain, 1990 – 2023.

n.	Author (year)	Predicate offence	Country of analysis	Sample
1	Beare and Schneider (1990)	Multiple	Canada	150 criminal cases
2	van Duyne and de Miranda (1999)	No information	The Netherlands	9373 suspicious financial transactions
3	Suendorf (2001)	Multiple	Germany	40 criminal cases reconstructed from interviews with 89 individuals (e.g., prosecutors, police officers, bankers)
4	Reuter and Truman (2004)	Multiple	Multiple	8 criminal cases
5	Schneider (2004)	Multiple	Canada	149 criminal cases
6	van Duyne and Levi (2005)	Drug trafficking	The Netherlands	25 criminal cases
7	Beare and Schneider (2007)	Multiple	Canada	149 criminal cases
8	Skinnari et al. (2007)	Drug trafficking	Sweden	Multiple sources: <ul style="list-style-type: none"> • 284 court judgements; • Register checks of 1715 individuals convicted of aggravated drug offences between 2001 and 2005 • 13 interviews with offenders
9	Webb and Burrows (2009)	Human trafficking	The United Kingdom	45 interviews
10	van Duyne et al. (2009)	No information	The Netherlands	717 seized real estate
11	Cummings and Stepnowski (2010)	Multiple	The United States	40 money laundering cases
12	Irwin et al. (2011)	Multiple	Multiple	184 money laundering typologies

International Ph.D. in Criminology – Draft Ph.D. dissertation

13	Petrunov (2011)	Sex trafficking	Bulgaria	152 semi-structured interviews with sex workers, traffickers, law enforcement agents and prosecutors
14	Steinko (2012)	Multiple	Spain	367 money laundering court cases
15	Malm and Bichler (2013)	Drug trafficking	Canada	916 individuals
16	van Duyne (2013)	Multiple	The Netherlands	52 criminal cases
17	Riccardi (2014)	Mafia-type Organized Crime	Italy	1,742 companies infiltrated by Italian Mafias
18	Soudijn (2014)	Drug trafficking	The Netherlands	31 criminal cases
19	Dugato et al. (2015)	Mafia-type Organized Crime	Italy	14,258 real estate
20	Kruisbergen et al. (2015)	Organized Crime	The Netherlands	1196 assets
21	Benson (2016)	No information	The United Kingdom	20 criminal cases
22	Soudijn and Reuter (2016)	Drug trafficking	The Netherlands	6 criminal cases
23	Soudijn (2016)	Drug trafficking	The Netherlands	46 structured interviews and 16 criminal cases
24	Soudijn (2018)	Multiple	The Netherlands	333 cases and 147 interviews
25	McGuire (2018)	Cybercrime	The United Kingdom	100 interviews with convicted or active cybercriminals
26	Custers et al. (2019)	Cybercrime	The Netherlands	22 semi-structured interviews and 4 criminal cases
27	Kruisbergen et al. (2019)	Multiple	The Netherlands	30 criminal cases
28	Farfán-Méndez (2019)	Drug trafficking	Mexico	5 court cases and 22 interviews with government officials, journalists and policy experts

International Ph.D. in Criminology – Draft Ph.D. dissertation

29	Teichmann (2020)	No information	Austria, Germany, Liechtenstein and Switzerland	50 semi-structured interviews with active offenders and 50 semi-structured interviews with compliance experts
30	Custers et al. (2020)	Cybercrime	The Netherlands	Desk research and 20 semi-structured interviews
31	Matanky-Becker and Cockbain (2021)	Tax crime	The United Kingdom	31 criminal cases
32	Kramer et al. (2023)	Drug trafficking	The Netherlands	198 financial facilitators
33	Trozze et al. (2023)	Fraud	Not available	5 criminal cases
34	Berry et al. (2023)	Drug trafficking	The United States and The United Kingdom	84 semi-structured interviews
35	Nazzari (2023)	Cybercrime	Not available	183 Bitcoin addresses

Source: Author's elaboration

2. Theoretical perspectives on the behaviors of money launderers

The aim of the present chapter is to locate the present dissertation in an appropriate theoretical framework that provides a solid base for interpreting money launderers' criminal behaviors and discussing the research findings. Over the last decades, several theoretical approaches have been developed in the social science domain to understand why individuals engage in criminal activities (Burgess & Akers, 1966; Gottfredson & Hirschi, 1990; Matza, 1969; Moffitt, 2003; Reckless, 1967; Sutherland et al., 1992). Theory holds significance for criminologists as it serves as a distilled representation of complex human behaviors (Paternoster & Bachnman, 2001). Given the myriad of factors that may impact an individual's decision to engage in crime, a theory tries to isolate the key factors that account for most of its observable variance. Therefore, the theoretical framework chosen as the backbone of the present dissertation should not be seen as an attempt to universally explain the behaviors of money launderers, as there are undoubtedly other factors not accounted for.

2.1 Economics of crime

The study of crime has traditionally been interdisciplinary, receiving major contributions from criminology, sociology, psychology, and political science, with economics being a more recent addition (Bushway & Reuter, 2008). Conversely, most of the contributions to the study of money laundering come from economists (van Duyne et al., 2018). Their interest on the topic is not surprising considering “the inherent economic logic of profit-driven offences” (Naylor, 2003, p. 82) and the specific role of money laundering in enabling criminals to enjoy the fruits of their crimes.

Several authors trace back economists' interest in criminal behavior to Gary Becker's seminal work "Crime and punishment: an economic approach" in 1968 (Arnone & Borlini, 2010; Ferwerda, 2012; van Duyne et al., 2018). Becker revitalized an idea first mentioned by the Enlightenment philosopher Jeremy Bentham who stated that "the profit of crime is the force which urges man to delinquency: the pain of the punishment is the force employed to restrain him from it. If the first of these forces be the greater, the crime will be committed; if the second, the crime will not be committed" (Bentham, 1789, p. 399). Contrary to Bentham who emphasized individuals' hedonistic nature by underlying the concepts of pain and pleasure, Becker focused on individuals' rationality by adopting the neoclassical economic notions of preferences and choices (Dubber et al., 2014). Drawing on the expected utility function developed by von Neumann and Morgenstern (1944), Becker describes the expected utility of committing a crime as following:

$$EU_J = p_j U_J (Y_J - f_j) + (1 - p_j) U_J (Y_J)$$

where EU_J is the expected utility from committing an offence, p_j the probability of conviction, U_j is an economic utility function, Y_j the income (monetary and psychic) from the offence and f_j the probability of punishment if convicted. Therefore, assuming that the marginal utility of income from the offence remains positive, the offender's expected utility will be lower in case of a higher probability of getting caught and a more severe punishment if convicted (Becker, 1968).

Following Becker's work, several economists applied neoclassical economic principles to model criminals' decision-making process (see, for a review, Winter, 2020) and, within such line of research, some of them focused on developing theoretical economic models to describe the behaviors of money launderers (Ferwerda, 2009; Hinterseer, 1997; Masciandaro, 1999;

McCarthy et al., 2015; Unger, 2007), contributing to the establishment of the so-called “economics of crime and money laundering” (Ferwerda, 2009, p. 42).

The microeconomic models assumes that two key factors shape an individual’s behavior (Jacob, 2011):

1. **Preferences** (internal motives).
2. **Restrictions** (external incentives).

Given the external restrictions, individuals make the optimal choice – which maximizes their utility – among several predetermined alternatives, after thoroughly assessing all the relevant costs and benefits associated with each one of them. This assumption relies on an idealistic individual, also known as “homo economicus”, which is structured upon five main dimensions (Urbina & Ruiz-Villaverde, 2019):

1. **Individualism**: individuals act based on their interests as they are “atomistically self-interested” (Ng and Tseng 2008, 279) and may consider the welfare of others only as far as it affects their own. Therefore, egoism and self-interest drive even altruistic behavior (Axerold 1984).
2. **Optimizing behavior**: given the external limitations, individuals always choose the option which maximizes their expected utility, from an economic point of view.
3. **Full rationality**: individuals choose the option which maximizes their utility by relying on a full rational thinking which is not affected by cognitive biases.
4. **Universality**: the theoretical construct of “homo economicus” may be applied to all individuals and all situations. As also stressed by Becker himself (1981, ix),

“the economic approach provides a framework applicable to all human behavior – to all types of decisions and to persons from all walks of life”.

5. **Exogenous preferences:** individuals make decisions based on a set of predetermined preferences which are exogenously given (Bowles and Gintis 2000). Choices are always consistent with individual preferences and external factors, such as the social context, do not influence them (Wilson and Dixon 2008).

The standard economic approach has rapidly become the mainstream theoretical approach when interpreting money laundering (Riccardi, 2022; van Duyne et al., 2018). However, depicting money launderers as rational actors driven solely by maximizing their utility (e.g., economic gains, amusement) may oversimplify their decision-making process and fail to consider the broader range of factors that influence their actions. Economists themselves acknowledge the need to incorporate insights from other social sciences to develop more realistic and relevant economic models (Bushway & Reuter, 2008; O’Donoghue & Rabin, 2001; Williamson, 1981). This is even more relevant in the money laundering domain where a comprehensive economic theory is still missing (Unger, 2007). Therefore, an alternative theoretical framework that combines the traditional economic approach with key contributions from criminology must be sought to provide a more comprehensive (and reliable) understanding of money laundering dynamics.

2.2 Going beyond the economics of crime: Retrieving contributions from criminological theory

Several criminologists criticized the normative models of rationality, claiming that they are too abstract, do not properly describe criminal behaviors and just show how individuals

should *theoretically* behave (Clarke & Felson, 1993; Cornish & Clarke, 1986; Manski, 1978; Posner, 2006; Wortley, 2013). While it is necessary for normative models to simplify human behavior for mathematical modeling, these criticisms are valid. Merely assuming that individuals weigh costs and benefits in decision-making does not guarantee full rationality and utility maximization, nor does it account for individual variation in decision-making over time and in different situations (Paternoster & Pogarsky, 2009).

This idea stands at the basis of the Rational Choice Theory (RCT) that was introduced by Cornish and Clarke (1986) in the criminological domain. Grounded in the early writings of Enlightenment philosophers Cesare Beccaria (1764) and Jeremy Bentham (1789), this version of the rational choice theory assumes that “offenders seek to benefit themselves by their criminal behavior; that this involves the making of decisions and of choices, however rudimentary on occasion these processes might be; and that these processes exhibit a measure of rationality, albeit constrained by limits of time and ability and the availability of relevant information” (Cornish & Clarke, 1986, p. 1). In this sense, building on the concept of “bounded rationality” developed by Simon (1955), the theory assumes that rationality is limited by both limited computational skills and environmental factors that constrain the amount of information that individuals can collect and time they can spend to take an informed decision. It should be noted that “offending is inherently a risky business, and the possible costs and benefits are difficult to estimate in advance. To these uncertainties are added time pressures, and differences in skills and experience on the part of individual offenders what information there is” (Cornish & Clarke, 2008, p. 25). Under these conditions, human decision-making is “satisficing” – satisfactory and sufficient – rather than optimal: individuals will settle down for the alternative of action which they consider “good enough” based on their information and goals, often not using complex computational mental calculations (Simon, 1956).

In addition to recognizing that cost-benefit calculations are not always accurate, thus potentially leading to sub-optimal decisions, the theory also acknowledges that individuals engage in criminal activities for several reasons beyond purely economic gains. Crime is a purposive act that can serve a wide array of motivations, such as “sexual gratification, excitement, autonomy, admiration, revenge, control, reduction of tension, material goods, and so on” (Cornish & Clarke, 2008, p. 25). While money can be used to obtain many of these benefits, it is important to recognize the diverse array of motives, purposes, and benefits associated with offending that go beyond monetary considerations.

Many criminologists have recognized and incorporated core concepts of rational choice theory into models of criminal behavior, as highlighted by Loughran (2019). These models have evolved to include additional factors such as, among others, informal costs (Paternoster & Simpson, 1996), emotions (Pogarsky et al., 2018), perceptual valuation (Waldo & Chiricos, 1972), and social/personal rewards (Loughran et al., 2016; Nguyen & Loughran, 2018). These expanded models provide a framework for synthesizing empirical evidence from research and offer insights into the conditions under which crime may occur. Furthermore, they provide new avenues for preventing crime by identifying factors that can influence criminal decision-making. By incorporating insights from multiple disciplines, these models contribute to a more nuanced and comprehensive understanding of criminal behavior, going beyond simplistic assumptions of rationality and utility maximization.

However, despite relevant contributions, the Rational Choice Theory still maintains a primary focus on individual motivations by framing criminal activities as rational choices which are based on the systematic and continuous calculation of risks and rewards. This is problematic because it decontextualizes the decision-making process of individuals involved and fails to consider how criminal activities are socially patterned and the impact of the wider

social and cultural contexts in which the criminal behavior takes place on offenders' decision-making processes (Benson, 2016). A fundamental sociological understanding is that human interactions take place in socially organized settings. Rather than isolating action from its circumstances, scholars must uncover the relationship between the individual behavior and the social context in which it takes place (Vaughan, 1998). Cook and Levi (1990) argued for a theory of rational choice that considers both decisions and their contexts, urging the importance of understanding the norms, institutions and social conditions that constrain human behavior. A comprehensive understanding of human behavior can only be achieved by considering its situated character and the important link between rational choice and the social context in which such choices occur (Vaughan, 2007).

The need to acknowledge the role of the wider cultural and social context has become central in the criminological domain too. Over the decades, criminologists have shifted their attention towards illicit markets rather than solely focusing on individual offenders. This shift began with classical studies in the early 20th century (Landesco, 1932; Louwage, 1951) and has gained momentum since the late 1960s, thanks to contributions from economists in the field of criminology. A significant development is the emergence of the Illegal Enterprise Theory, which gained prominence in the criminological discourse around the 1970s (Reuter, 1983; Schelling, 1967; D. C. Smith, 1971, 1975). This theory highlights the similarities between legal and illegal activities, conceptualizing organized crime as an "economic activity that happens to be illegal" (Liddick, 1999, p. 404). It draws on established theories of crime (Becker, 1968; Nettler, 1978) and incorporates two fundamental economic concepts (Kleemans, 2014): (a) the "Homo economicus" model and (b) the notion of "efficient markets." Criminals are assumed to be "normal, rational, profit-oriented entrepreneurs" (Kleemans, 2014, p. 35) who engage in illicit activities due to their profitability (Levi, 2008). This perspective acknowledges that illegal activities operate under the same principles of supply and demand as legal markets

(Liddick, 1999). Although governments may criminalize specific products, such measures do not eradicate the demand for them; rather, they alter the market conditions for those involved in their supply. This concept is eloquently conveyed in Reuter's book "Disorganized Crime: The Economics of the Visible Hand" (1983), which highlights the distinct challenges faced by illegal enterprises compared to legal ones, ultimately constraining their operations. Criminals operate in a relatively hostile environment which prevents them from managing activities as their counterparts in legal markets, for at least three reasons:

1. Criminals cannot rely on legal institutions to adjudicate potential disputes in business transactions (Paoli, 2002).
2. Criminals cannot advertise their products and services (Gambetta, 2009).
3. Criminals cannot easily cash out their investments when they want to exit the market (Reuter, 1990).

It is noteworthy, however, that recent advancements have partially addressed these challenges. Technological innovations, such as anonymizing software for communication and virtual currencies for payments, facilitate the distribution of illicit goods in online markets without the need for face-to-face interactions or geographical restrictions. A significant implication of this evolving criminal landscape is the open and active advertising of illegal products, complete with special offers or discounts (Tzanetakis, 2018). Additionally, these platforms have implemented systems to handle conflicts or disputes between sellers and buyers, such as escrow payment systems.

Despite these advancements, most criminals still operate in an environment characterized by high stakes and a lack of regulatory rules and mechanisms. Consequently, it is not surprising that empirical evidence suggests criminal enterprises tend to be primarily small and short-lived

(Bouchard & Morselli, 2014; Bouchard & Ouellet, 2011). Since criminals are not “reliable, trustworthy, or cooperative” (Gottfredson & Hirschi, 1990, p. 213), it is common to observe distrust and violence within illegal markets, necessitating constant efforts from criminals to address these challenges (Aziani et al., 2021; Costa Storti & De Grauwe, 2008; Gambetta, 2000; Kleemans & Van de Bunt, 1999; von Lampe & Johansen, 2004). First introduced in the criminological domain by Kleemans and van de Bunt (1999) and Morselli (2005), the Social Embeddedness Theory suggests that criminals rely on their social relationships to partially mitigate the hostile environment in which they operate (Van de Bunt et al., 2014). In the field of economic sociology, Granovetter (1985) stated that individuals address distrust in economic transactions by embedding them in personal relationships. This concept of “embeddedness”, first mentioned by Polanyi (1944) in the field of economics, has been further elaborated by several sociologists who focused on the role of the social context in the economic sphere (Burt, 1992, 2005; Buskens, 2002; Coleman, 1995; Raub & Weesie, 1990) and then also adopted by scholars in the field of organized crime (Carrington, 2014; Kleemans & Van de Bunt, 1999; Morselli, 2005, 2009). Criminals do not operate in a social vacuum but constantly interact with their social context (Albini, 1971; Ianni & Reuss-Ianni, 1972; Kleemans & Van de Bunt, 1999). Social relationships provide criminals with new business opportunities and allow them to partially address distrust and violence in illegal markets (Kleemans & Van de Bunt, 1999). Cooperation and trust are promoted when individuals already know each other, thus making non-cooperative behaviors less convenient (Kleemans, 2012).

As widely acknowledged in white-collar crime research (Holtfreter, 2008; Vaughan, 2007; Wang & Holtfreter, 2012), the understanding of money laundering also requires a comprehensive overview of the interconnections between individual and environment actions (Benson, 2016). Money launderers are rational when dealing with their illicit proceeds and Rational Choice Theory is a suitable theoretical framework for analyzing money laundering

(Dalla Pellegrina et al., 2020; N. Gilmour, 2016; Riccardi, 2022). However, this assumption does not always entail fully rational decisions because offenders face limitations in terms of information, time, and resources at their disposal. For example, some money launderers may need to quickly move their illicit proceeds out of a country to avoid law enforcement detection and seizure, thus inevitably limiting the time they have at their disposal to choose the best method. Conversely, others may not be interested in engaging in international money laundering at all, as domestic schemes may be enough to satisfy their needs. Additionally, it should not be overlooked that some money launderers may possess limited knowledge of the opportunities offered by the financial system and may default to basic methods. Consequently, it is clear that money launderers do not make choices under perfect circumstances; they are influenced and constrained by a myriad of factors, both internal and external, leading to a plethora of behavioral conducts (P. M. Gilmour, 2023; Tiwari et al., 2023). Decisions and choices of money launderers are “made rational by the situated character of social action, which narrowed the options and influenced the choices decisionmakers saw as rational at the time” (Vaughan, 1998, p. 47).

2.3 Rationale for the present study, research question and hypotheses

Recent decades have seen an increasing focus by national governments and international bodies on money laundering because of the supposed threat that it poses to both the civil society and the global financial system. This threat image has resulted in the implementation of a wide array of legislative, regulatory and policy measures aimed at preventing illicit proceeds from flowing into the international financial system. Consequently, a far-reaching anti-money laundering regime has emerged over the last decades, involving a large array of actors – both in the public and private sectors - in the collective effort against money laundering.

However, despite the grave concern fueling the official narrative and motivating such wide legislative response, there is a dearth of empirical research on the behaviors of money launderers to date (Kruisbergen et al., 2019; Levi & Soudijn, 2020; Matanky-Becker & Cockbain, 2021; van Duyne et al., 2018). Most of the existing literature on money laundering focuses on measuring the scale of the phenomenon and assessing the effectiveness of anti-money laundering policies (see for a review Ferwerda, 2018). Conversely, research on the behaviors and choices of money launderers remains poor, mainly limited to highly descriptive studies of typologies (Choo, 2009; Filipkowski, 2008; N. Gilmour, 2017; N. Gilmour & Ridley, 2015; Gobena, 2022; He, 2010; Sageman, 2004; Teichmann, 2017) which did not discuss in detail “the actors, financial flows and behaviors involved in carrying out these activities” (Irwin et al., 2011, p. 86). Indeed, to date, scholars have mostly focused on listing and describing the different potential methods of money laundering but there is still no “framework in the literature to determine what technique(s) a launderer may use to launder illicitly generated funds” (Tiwari et al., 2023, p. 1).

The scant academic attention on the threat side of money laundering has led to an insufficient understanding of the actors, processes and behaviors involved, leaving room for the spread and unquestioned acceptance of “folk theories” on how money laundering occurs (Halliday, 2018). In particular, there is a tendency to frame money laundering as a monolithic phenomenon within official discourse and policy, trying to describe what “it looks like” by relying on generalizations that try to encompass all possible scenarios and behaviors (P. M. Gilmour, 2023).

Conversely, the examination of the (few) notable exceptions in the criminological domain has shown that money launderers are not a set of unitary and homogenous actors characterized by the same utility functions of legitimate rational economic actors (Farfán-Méndez, 2019; Levi

& Soudijn, 2020; Riccardi, 2022). Money laundering is a diverse phenomenon, comprising a variety of actors, purposes, behaviors and relationships. Consequently, it “cannot be abstracted from the situations in which it occurs and the social relationships in which it is embedded” (Matanky-Becker & Cockbain, 2021, p. 407). By doing so, current knowledge risks decontextualizing the phenomenon. This results in an abstract, static and simplified picture of money laundering that fails to appreciate its multi-faceted nature, significantly limiting the effectiveness of available countermeasures (P. M. Gilmour, 2023).

However, despite acknowledging the heterogeneity of money laundering from a theoretical point of view, the criminological literature still lacks “a systematic analysis that links specific types of criminal groups with particular practices for money laundering” (Farfán-Méndez, 2019, p. 294). This knowledge gap is not limited to money laundering methods but also pertains to our understanding of whether and, eventually, how different offenders utilize foreign countries and the methods they employ to move their illicit proceeds in international money laundering cases (Ferwerda et al., 2020; Reuter, 2017; Riccardi, 2022). As a result, there is still an unanswered need “to account for the diversity of the actors involved in ML, specifically in terms of their preferences, objectives, and utility functions” (Riccardi, 2022, p. 136).

The present dissertation aims precisely at filling this knowledge gap by assuming the existence of heterogeneity in money laundering activities and attempting to empirically disaggregate it by analyzing 348 money laundering cases investigated by Italian law enforcement agencies over the period 2016-2022. Informed by literature review in section 1.3, the present dissertation arises one main research question to extend the existing knowledge on the behaviors of offenders involved in money laundering activities:

Research question: How do money laundering strategies vary across different offenders?

Based on previous empirical research and criminological theory, I formulated the following three hypotheses:

H1. *Italian Mafias primarily employ legitimate businesses and real estate to launder illicit proceeds, whereas Foreign organized crime groups exhibit a lesser reliance on the financial system and legitimate economy.*

Infiltration of Italian Mafias into the legal economy “has to do with the very nature of Italian mafia groups and their claim to exercise a political dominion within their communities” (Paoli, 2004, p. 284). Both legitimate companies and real estate are functional for this purpose (Transcrime, 2018). The management of legitimate companies enable mafiosi to launder their illicit and make profits on a regular basis (Arlacchi, 1983; Fantò, 1999; Ruggiero, 1996). Concurrently, these assets also allow them to expand their influence and power within their communities by, for example, creating new job opportunities as well as exploiting economies of scale with criminal activities they are involved in (Riccardi et al., 2016). A similar reasoning applies to real estate: Italian Mafias often purchase these assets in geographical areas where they have a strong territorial presence to achieve a symbolic advantage by showing their presence and capacity to control the area (Dugato et al., 2015; Savona, 2015).

Foreign OCGs are particularly involved in several illicit markets in Italy, such as tax crime, drug trafficking, human trafficking and cybercrime (Catino, 2020). However, they seem not to have the same level of infiltration in the legal economy as Italian Mafias (DIA, 2023; Riccardi et al., 2016). When it comes to money laundering, previous research highlighted the reliance of these groups on different strategies as they prefer moving their illicit proceeds

outside of the financial system via hawala, cash smuggling and other informal value transfers systems (Gelemerova, 2011; Passas, 1999; Soudijn & Reuter, 2016; Soudjin, 2015). While control of the territory in Italy may be a less relevant driver, these groups are strongly embedded in their own ethnic community which inevitably influence and shape their money laundering activities.

H2. When laundering abroad, Italian Mafias and Foreign organized crime groups primarily tend to move illicit proceeds to foreign countries that are geographically and culturally close to them.

The influence of geographic and cultural distance on legitimate and illicit trade is well-documented (Disdier & Head, 2008; Giommoni et al., 2023; Paoli & Reuter, 2008). Several scholars suggest that, all the other factors being equal, geographic and cultural distance between two countries are strong deterrents for money launderers (Aziani et al., 2020; Ferwerda et al., 2013, 2020; Walker & Unger, 2009). This idea finds empirical support in several studies that showed how the geographical scope of organized crime offenders is quite limited as they usually tend to stay close, both physically and socially, to their investments (Dugato et al., 2015; Kruisbergen et al., 2015; Levi & Van Duyne, 2005; Riccardi, 2014; Webb & Burrows, 2009). To minimize potential risks and uncertainties, organized crime offenders primarily invest in social and economic contexts they are familiar with and where they can rely on trusted contacts (Riccardi, 2022; van Duyne et al., 2018). For example, previous empirical results showed that Italian Mafias prefer geographical areas where they already have a strong presence (Calderoni et al., 2016; Dugato et al., 2015; Riccardi, 2014, 2014; Savona & Riccardi, 2018). Likewise, foreign ethnic organized crime offenders are more likely to export their illicit proceeds to their home countries (Gelemerova, 2011; Kruisbergen et al., 2015; Levi & Van Duyne, 2005).

H3. *Other criminal groups active in Italy and non-organized crime offenders use more variegated and sophisticated strategies, both in terms of methods and foreign countries.*

The activity of other organized crime groups in Italy is well-documented (Catino, 2020). However, these groups are different compared to Italian Mafias and Foreign OCGs because they are not characterized by the same organizational features, rituals, kingship ties and drivers. In this regard, these groups fall within the so-called Entrepreneurial Model of organized crime as they are simpler groups of offenders which are rarely organised in a centrally structured way and, rather, they are mainly profit driven and tend to come together as opportunity arises (Albanese, 2011). Paradoxically, they share more similarities with individual crime entrepreneurs (Gelemerova, 2011). Regarding money laundering, the distinctive characteristics of these offenders – namely the lack of constraints which are typical of traditional organized crime groups – may allow them to be more risk-prone and engage in a wider array of strategies (including sophisticated ones) to achieve their aims (Farfán-Méndez, 2019).

Overall, disentangling the heterogeneity of money laundering is important for both research and policy. First, understanding if certain offenders choose specific methods and countries over others to launder their illicit proceeds becomes a priority. Improving our understanding of how different actors launder their illicit proceeds may help scholars in identifying objectives, preferences, risk appetites and constraints of different offenders, as well as inferring key drivers and constraints behind their behaviors. In addition to building a more comprehensive and realistic picture of money laundering, such empirical evidence would also allow us to better identify where and how money laundering risks are likely to be distributed based on the specific offenders under scrutiny.

Second, the lack of evidence or a comprehensive understanding of money laundering behaviors has not prevented the implementation of pervasive anti-money laundering obligations

worldwide. However, if money laundering is indeed a variegated phenomenon, strategies devised to address it should be tailored to its multi-faceted nature. Different typologies of offenders may pursue distinct objectives, exploit varying vulnerabilities in the legal economy and, more importantly, respond differently to the various control mechanisms put in place by policymakers and enforced by authorities. In this context, adopting a one size-fits-all approach that indiscriminately applies the same set of rules to all money launderers may not be the most effective choice. Conversely, a nuanced analytical framework, grounded in an empirical understanding of the specific peculiarities of money laundering may better anticipate, for example, financial services, business sectors and countries that will be targeted by specific offenders. This approach supports the design of anti-money laundering policies that do not solely rely on increasingly complex and demanding requirements for obliged entities.

3. Data and methodology

The present dissertation took a methodological approach that aims at going beyond what has been done in previous literature. The analysis relied on a mixed method approach comprising secondary data. A research that uses this approach is not a simple combination of qualitative and quantitative analysis, but rather a research design integrating the strengths of each method to answer specific research questions (Bachman & Brent, 2013). Content analysis was used to extract information about actors, predicate offences, money laundering methods and foreign countries involved in the criminal cases in the sample. The resulting coded data was analyzed using both qualitative and quantitative techniques. In particular, bivariate and multiple correspondence analysis were employed to identify potential similarities and differences in money laundering activities across different actors. This approach has been complemented by the exploration and discussion of insights derived from a selection of cases, adding nuance and qualitative depth to the analysis.

Italy has been chosen as a case study for several reasons. First, it is an advanced economy in the European Union, making it exposed to significant money laundering risks due to the relevant role of organized crime, in particular mafia-type, the high level of the underground economy and the widespread use of cash (FATF, 2016; MEF, 2018). However, it is also characterized by a “mature and sophisticated AML/CFT regime, with a correspondingly well-developed legal and institutional framework” (FATF, 2016, p. 5). Italy holds the distinction of being the first country to criminalize money laundering back in 1978 to support law enforcement actions against the Italian Mafias and the *Brigate Rosse*, with the introduction of Law 191/1978, which included section 648 bis, “Substitution of money or funds deriving from armed robbery, racketeering, or kidnapping for reward” (van Duyne & Levi, 2005; Zaccagnini,

1998). Therefore, the country has a long history of fighting crime with national law enforcement agencies that have developed a specific expertise in tracing crime money.

The following paragraphs will illustrate the key steps associated with the identification and collection of money laundering cases to build the sample and detail the methodology used in the present dissertation.

3.1 Identifying money laundering cases

Data availability is a key challenge associated with money laundering research, particularly for scholars investigating the behaviors of these criminal actors. Since the whole purpose of money laundering is to disguise the illicit origin of proceeds, there is no accessible statistics that can be easily used for research purposes. Conversely, data is extremely scarce and often difficult to access, resulting in the exploitation of the same data sources over time (van Duyne et al., 2018). This issue is further exacerbated in the case of Italy where, for example, microdata related to suspicious transactions reports (STRs) filed by obliged entities to the Italian Financial Intelligence Unit - a cornerstone tool within the anti-money laundering framework - cannot be accessed for research purposes, except by analysts working in the research department of the Unit itself (Cassetta et al., 2014; Gara & De Franceschis, 2015). Concurrently, it is worth noting that STRs data present relevant criticalities for research. First, STRs only represent suspicious and not evidence of money laundering (Aziani, 2018; dalla Pellegrina et al., 2022). Second, previous literature empirically demonstrated that anti-money laundering obliged entities often engage in excessive reporting to avoid potential charges of non-compliance with anti-money laundering regulations, the so-called “Crying Wolf” issue (dalla Pellegrina et al., 2022; Gara & Pauselli, 2020; Takáts, 2007). This behaviour inevitably lowers the quality of STRs submitted to the Financial Intelligence Unit. In this regard, the latest

annual report of the Italian Financial Intelligence Unit highlighted that 30% of the STRs received in 2022 lacked relevance from an investigative point of view (UIF, 2023).

On the other hand, collecting primary data by interviewing money launderers turned out to be impossible. Despite relevant examples in the literature (see, for example, Berry et al., 2023), obtaining such data poses several challenges. First, these offenders are generally less likely to collaborate with researchers compared to those involved in other criminal activities because money is a sensitive topic to discuss (Levi & Soudijn, 2020; Van Duyne, 2013). Most offenders may not be willing to disclose information on the movement and location of their illicit proceeds or, in some cases, they may even not be aware of the specific money laundering activities because they relied on professional money launderers from the very beginning. Second, conducting research that involves offenders and their criminal behaviors not only raises several practical challenges and ethical dilemmas, but it is also an expensive method both in terms of finance and time (Windle & Silke, 2019). As a result, undertaking such a methodology proved to be unfeasible within the context of the current dissertation.

Keeping in mind that analyzing the behaviors of these actors “has to start with looking at the outward conduct: the observable handling of crime-money” (Van Duyne, 2013, p. 233), I relied on law enforcement data. Despite the associated limitations (detailed in section 5.4), it still represents a primary data source for investigating criminal behaviors (Leukfeldt & Kleemans, 2021; Roks et al., 2022). However, contrary to most of previous research that analyzed police files or court documents, I derived the sample from the systematic analysis of official press releases issued by national law enforcement agencies in Italy.

The inherent complexity of accessing and analyzing police files and court documents on a massive scale should not be underestimated as it severely limits the sample size of empirical studies (see Table 1). Conversely, official press releases published by law enforcement agencies

represent an accessible data source to collect information on the results of criminal investigations on a massive scale and build relatively large samples. Not secondary, an open-source database is “potentially limitless in terms of opportunity for discovery” (Greene-Colozzi et al., 2021, p. 178) because it allows researchers to include any variable of interest as long as they also respect certain control conditions (Parkin & Freilich, 2015; Parkin & Gruenewald, 2017).

However, it is important to recognize that press releases have inherent limitations when it comes to providing comprehensive information about criminal investigations. Their primary purpose is to communicate the essential elements and outcomes of a criminal investigation to the general public. Consequently, they may omit specific details that are not deemed pertinent for public dissemination, even though these details could hold significant value for research purposes. While police and court documents could offer a more in-depth level of information, the objectives of the present dissertation compel the utilization of this alternative data source. The pursuit of understanding aggregate patterns necessitates a substantial number of cases, a requirement that cannot be met by relying solely on police files and court documents. Despite the inherent trade-off in terms of amount of information, press releases offer an efficient way of assembling large datasets on criminal cases and have witnessed increasing utilization in the field of criminology (Albanese, 2021; Gottschalk, 2023; Hughes et al., 2020; O’Malley & Holt, 2022; Schoultz & Flyghed, 2020).

The following national law enforcement agencies in Italy have been considered to collect official press releases on money laundering investigations:

1. *Carabinieri*: it is a military corps with police duties which also serves as the Italian military police. Its Specialized Operational Group (R.O.S.) was created to coordinate investigations into organized crime, and it is the main investigative arm of the

Carabinieri which deals with organized crime and terrorism, both at national and international levels;

2. *Guardia di Finanza*: it is a military corps placed under the direct authority of the Ministry of Economy and Finance (MEF). It has anti-money laundering and counterterrorism financing supervisory responsibilities;
3. *Polizia di Stato*: it is a civil corps with police duties tasked with the maintenance of public security. Its law enforcement actions against money laundering and terrorist financing are conducted under the authority of the Ministry of Interior.

It is worth noting that it is necessary to consider all the three law enforcement agencies in Italy when researching money laundering. These three agencies exercise both public security and investigative functions. Judicial investigations focused on specific criminal conduct are distinguished from preventive investigations which aim at discovering possible criminal activity. Preventive investigations are conducted under the authority of the Ministry of Home Affairs (*Polizia di Stato*), the Ministry of Defense (*Carabinieri*), and the Ministry of Economy and Finance (*Guardia di Finanza*). In the performance of their preventive investigative functions, any of the three police agencies may encounter information on money laundering (Caneppele, 2013; FATF, 2016). Once collecting information that appears to reveal the commission of a criminal offence and not merely the suspicion of a crime, the three police agencies are required by law to report that information to the prosecutor who is competent for that geographic area. After entering the notice of this criminal offence in a register, prosecutors can begin a judicial investigative proceeding and direct any of the police agencies to serve as judicial police in the conduct of investigations within their respective legal competences.

For the present dissertation, a case was defined as a criminal investigation that led Italian law enforcement agencies to take formal action by investigating at least one individual for money laundering as sanctioned by the Italian Criminal Code, specifically either for art. 648 bis ("Money laundering"), art. 648 ter ("Use of money, goods or assets of illicit origin"), art. 648 ter. 1 ("Self-laundering") or art. 512 bis ("Fraudulent transfer of assets"). Also in this case, it is important to detail why all the four articles in the Italian Criminal Code have been considered for the analysis. As briefly discussed in section 1.1, although the dominant media and political image still frames it only as a conduct aimed at legitimizing illicit proceeds, money laundering has evolved into a legal concept that basically includes all "minimalist and prosaic set of acts that are sufficient to generate the label of 'laundering' in most common law and civil law countries" (Levi, 2015, p. 10). Therefore, cases investigated by Italian law enforcement agencies entail a plethora of different criminal conducts that cannot be properly considered by only using the art. 648 bis ("Money laundering").

Because criminal charges against individuals based on these four articles have been used in the present dissertation to identify relevant cases for the analysis (see details in section 3.1), their textual contents are reported in full below for readers' reference:

Art. 648 bis "Money laundering"

"Apart from participation in the [predicate] offence, any person who substitutes or transfers money, goods or assets obtained by means of intentional criminal offences, or who seeks by any other means to conceal the fact that the said money, goods or assets are the proceeds of such offences, shall be punished by imprisonment for between 4 and 12 years and by a fine of between €1,032 and 15,493 euros. The punishment shall be increased if the offence is committed in the course of a professional activity. The punishment shall be decreased if the

money, goods or assets are the proceeds of a criminal offence for which the punishment is imprisonment for up to 5 years. The final paragraph of article 648 shall apply”.

Art. 648 ter. “Use of money, goods or assets of illicit origin”

“Anyone who, apart from the cases of participation in the crime and the cases provided for in articles 648 and 648 bis, uses money, goods or other benefits deriving from a crime in economic or financial activities, is punished with imprisonment from four to twelve years and with a fine of between € 5,000 and € 25,000. The penalty is imprisonment from two to six years and a fine from € 2,500 to € 12,500 when the offense concerns money or things deriving from an offense punished with arrest for a maximum of one year or a minimum of six months. The penalty is increased when the offense is committed in the exercise of a professional activity. The penalty is reduced in the case referred to in the fourth paragraph of art. 648. The last paragraph of article 648 applies.”

Art. 648 ter. 1 “Self-laundering”

“The penalty of imprisonment from two to eight years and a fine of between € 5,000 and € 25,000 is applied to anyone who, having committed or contributed to committing a crime, employs, replaces, transfers money in economic, financial, entrepreneurial or speculative activities, the goods or other benefits deriving from the commission of this crime, in such a way as to concretely hinder the identification of their criminal origin (2). The penalty is imprisonment from one to four years and a fine from € 2,500 to € 12,500 when the offense concerns money or things deriving from an offense punished with arrest for a maximum of one year or a minimum of six months (3). The penalty is reduced if the money, goods or other benefits derive from a crime for which a prison sentence of less than a maximum of five years is established (2). However, the penalties provided for in the first paragraph apply if the money,

goods or other benefits come from a crime committed with the conditions or purposes referred to in Article 416 bis 1 (2). Apart from the cases referred to in the preceding paragraphs, conducts for which money, goods or other utilities are destined for mere use or personal enjoyment are not punishable. The penalty is increased when the facts are committed in the exercise of a banking or financial activity or other professional activity. The penalty is reduced by up to half for those who have effectively worked to prevent the conduct from leading to further consequences or to ensure evidence of the crime and the identification of assets, money and other benefits deriving from the crime. The last paragraph of Article 648 applies”.

Art. 512 bis “Fraudulent transfer of assets”

“Whoever falsely attributes to others the ownership or availability of money, assets, or other benefits in order to evade legal provisions regarding asset prevention measures or smuggling, or to facilitate the commission of any of the offenses referred to in articles 648, 648 bis, and 648 ter, shall be punished with imprisonment from two to six years”.

3.2 Data collection, processing, and final sample

National law enforcement agencies in Italy must inform the civil society about their operational activities. For this purpose, they publish press releases on selected criminal investigations in designated sections of their websites. I used web scraping - a technique used to automatically collect text-based data from digital environments, such as websites, forums, and social media (Lynch, 2018) – to collect such data. Because some of the digital environments do not allow the scraping of their contents (Martin & Christin, 2016), I checked the three websites’ terms and conditions of use as well as other technical documentation available. As reported in their ‘robots exclusion protocol’ – available by adding ‘robots.txt’ to their root

directories of their websites (e.g., www.gdf.gov.it/robots.txt) – scrapers can access all the sections that are already available to anonymous users.

I used R - an open-source programming language - to build the web scraping script for the present dissertation and in particular the package “rvest” (version 1.0.3). I instructed the robot not to visit specific pages of the websites as requested in the above-mentioned protocols. In addition, even if not specifically requested, I added a 5 second crawl delay into the web robot script – namely the time that it waits before scraping the next press release - to limit the speed of the requests and not to cause inconvenience to other users of the three websites (e.g., delay access). Based on the work by Luscombe et al. (2022), I developed a two-stage web scraping script. In the first stage, the robot extracted link information for each press release, building an index of the repository. In the second one, the robot retrieved relevant information for each press release, such as the title, the date of the release, the submitting regional agency and the body text.

The web scraping resulted in a total of 543 press releases over the period 2016-2022 that contained anywhere the term “money laundering”. This specific timespan allows to have data for all the three Italian law enforcement agencies. No press releases were available for *Guardia di Finanza* before 2016. For *Carabinieri*, 2015 was also available but, out of the 18 press releases published, none of them mentioned money laundering. On the contrary, *Polizia di Stato* published other 29 press releases involving money laundering over the period 2009-2015. However, the distribution was heavily scattered across the years and including such press releases would have resulted in just a few more records for each of the missing years, not adding real value to the analysis. Therefore, those press releases were dropped and not included in the analysis.

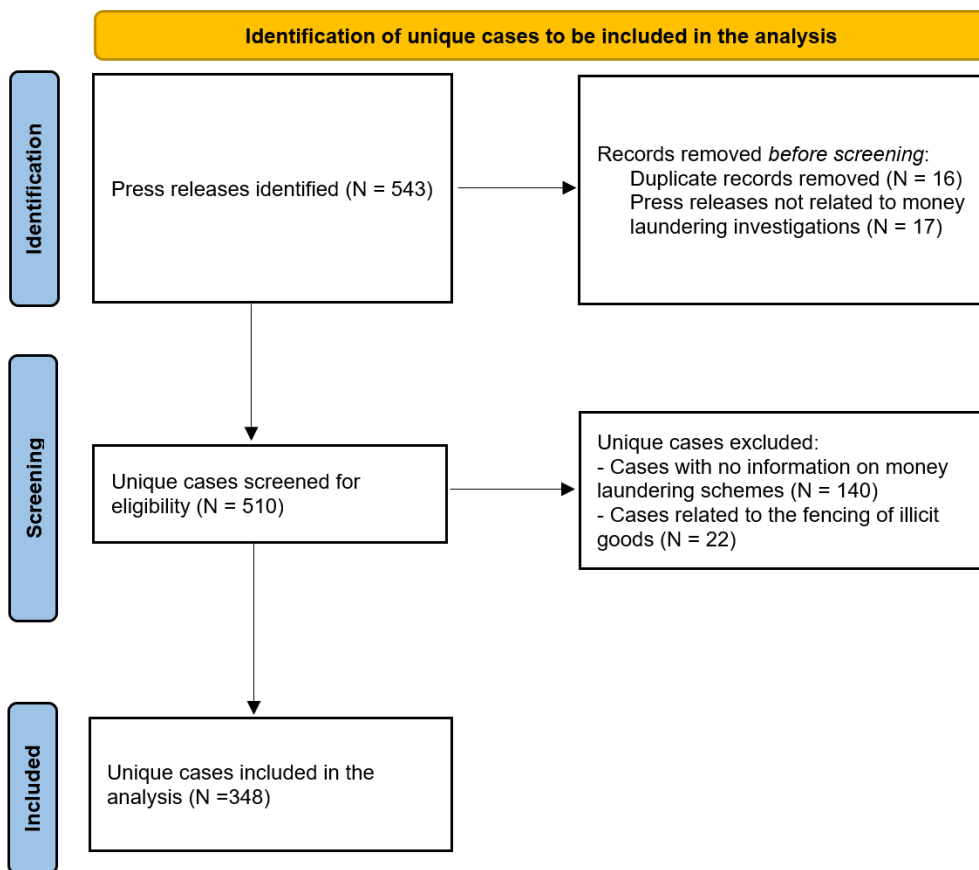
Each of the resulting 543 press releases was then manually reviewed to identify and include in the analysis only unique criminal cases where at least an individual was charged with money laundering based on the Italian criminal code. This review process led to the exclusion of 17 press releases because they did not involve criminal cases at all (e.g., announcements of joint anti-money laundering task forces). In addition, other 32 press releases referred to the same criminal cases but at different stages of the criminal process. For example, defendants involved in the same criminal case may be arrested, charged or convicted at different times thus potentially appearing in multiple press releases. Therefore, I grouped together the press releases referring to the same cases under 16 single data entry points to avoid double-counting because I was interested in distinct cases (criminal investigations) rather than individual defendants.

Therefore, 510 unique money laundering cases were assessed for eligibility. I excluded 140 cases because, although mentioning money laundering schemes set up by the offenders, they did not provide any information on these activities, thus being unsuitable for the present analysis. Such a large number may be explained by the nature of the data source. Like other news media articles, also law enforcement agencies – like news media agencies - may focus on detailing the underlying predicate offences, such as organized crime or drug trafficking, that are considered to have a higher impact on citizens' lives compared to money laundering itself (Unger et al., 2006).

Another 22 cases were excluded because they involved the fencing of illicit goods (e.g., cars, stolen goods). For example, criminals may steal cars, dismantle them and sell the single parts to interested third parties, resulting in further illicit proceeds that need to be laundered. Despite constituting fencing according to the Italian criminal law, the reader can easily understand how such criminal activity is significantly different from the laundering of money proceeds from an analytical point of view. Therefore, I decided to exclude the cases involving

the laundering of goods. Overall, the final sample consisted of 348 unique criminal cases involving money laundering in Italy over the period 2016-2022. The whole identification and screening process employed in the present dissertation is also graphically illustrated in the PRISMA flow in the Figure below.

Figure 1. PRISMA flow diagram of the identification and screening process used for building the sample



Source: Author's elaboration

3.3 Reducing complexity: From words to numbers

Criminologists increasingly work with large-scale textual data to analyze criminals' behaviors. Despite providing rich information, this data source presents several challenges when it comes to its systematic analysis. For this purpose, I employed a quantitative content analysis in the present study. This approach – dating back to the twenty-first century (Neuendorf, 2017) - assumes that the text is the unit of analysis and the resulting data is the recorded occurrences of specific codes as applied to these units. Overall, the coding process employed in the present dissertation consisted of the following three steps:

Step 1: Developing and testing the codebook

In a quantitative content analysis, codes are developed a priori primarily using a deductive process. Based on the research questions and previous criminological literature, I developed a list of codes to comprehensively extract information on relevant patterns of money laundering (top-down approach). This preliminary list has been tested on a randomly selected sample of 35 cases (10% of the sample), to adjust codes which, being too broad, may appear frequently and overstate specific dimensions under study as well as to include additional codes to cover other relevant information emerging from the cases that were missing in the initial design (bottom-up approach). The combination of these two approaches increased the reliability of the codes included in the analysis and allowed for a comprehensive and accurate coding of the cases in the sample (Campana and Varese 2012).

Contrary to previous studies (see for example Varese, 2013), I decided not to use superseding codes. Conversely, the following strategy has been adopted to develop the codebook. For the two themes of interest (money laundering methods and foreign countries), a set of broad codes have been developed to record the absence or presence of the specific

argument in the unstructured text (0/1). Then, for each broad code, multiple not mutually exclusive sub-codes have been created. These binary variables have been coded separately and not as part of a single categorical variable because a case may provide information on more than one. For example, an offender may use multiple money laundering methods to launder his/her illicit proceeds. This structure of the codebook allows to consider this complexity: the broad code records if the cases include information on the money laundering scheme or not and each sub-code records the multiple typologies employed by the offenders. Table 2 illustrates in detail the codebook used in the present dissertation, providing a short description of each variable.

Table 2. Overview of the variables and related operationalization included in the codebook used for coding the criminal cases in the sample.

N.	Variable	Description
1	ID	The unique ID code associated to the criminal case
2	Month	The month of conclusion of the criminal investigation and issuance of the related press release
3	Year	The year of conclusion of the criminal investigation and issuance of the related press release
4	Criminal investigation name	The unique name assigned to the criminal investigation by the law enforcement agency
5	Criminal investigation province	The Italian province where the law enforcement agency office with territorial jurisdiction over the criminal investigation is located
6	Criminal investigation region	The Italian region where the law enforcement agency office with territorial jurisdiction over the criminal investigation is located
7	Law enforcement agency	The law enforcement agency that carried out the criminal investigation
8	Number of criminal actors	The total number of individuals who were arrested and/or charged because of the criminal investigation
9	Amount of illicit proceeds	The total amount of illicit proceeds originated from the predicate offence committed in the criminal case
10	Organized crime	The binary variable that can take on two values:

		<ul style="list-style-type: none"> • 1 if the case material contained evidence of charges for organized crime based on the Italian Criminal Code: <ul style="list-style-type: none"> ○ Criminal association (Art. 416 c.p. “Associazione a Delinquere”); ○ Mafia criminal association (Art. 416 bis “Associazione di tipo mafioso). • 0 otherwise.
11	Actor	<p>A categorical variable that can take on three values:</p> <ul style="list-style-type: none"> • Italian Mafias: if offenders arrested in the criminal investigation were affiliates of either Camorra, Cosa Nostra, ‘Ndrangheta or Sacra Corona Unita. • Foreign OCGs: if offenders arrested in the criminal investigation were members of organized crime groups composed of foreign nationals. • Other OCGs: if offenders arrested in the criminal investigation were members of other types of organized crime groups active in Italy. • No OCGs: if offenders arrested in the criminal investigation were not members of an organized crime group.
12	Predicate offence	<p>The predicate offence that generated the illicit proceeds laundered in the money laundering scheme. This categorical variable can take on eight values:</p> <ul style="list-style-type: none"> • Cybercrime. • Drug trafficking. • Embezzlement & Corruption. • Fraud. • Human trafficking. • Tax crime. • Usury & Extortion. • Other offences: Illicit gambling, smuggling, counterfeiting or when information on the predicate offence is not available.
13	Money laundering method	<p>For each of the following money laundering methods, a binary variable has been computed. It assumes two values:</p> <ul style="list-style-type: none"> • 1 if the case material contained evidence of the employment of the money laundering method. • 0 otherwise. <p>The following money laundering methods have been considered:</p>

		<ul style="list-style-type: none"> • Electronic funds transfers: use of electronic methods to move illicit proceeds (e.g., wire transfers, Money Business Services). • Prepaid cards: use of prepaid cards to move illicit proceeds. • Gambling: engagement in gambling and betting activities at casinos and/or online platforms to disguise illicit proceeds as winning bets. • Investments in legitimate companies: illicit proceeds are used to acquire/finance a company and/or disguised as legitimate turnover of a company. • Opaque corporate vehicles: use of opaque corporate vehicles (e.g., trusts, fiduciaries, offshore companies) to dissimulate the beneficial ownership of assets. • False invoicing: use of false invoices issued by crooked companies to move illicit proceeds. • Strawmen: disguise of ownership of illicit proceeds by employing third individuals. • High-value goods: use of illicit proceeds to purchase of high-value goods (e.g., artworks, jewels, luxury cars). • Financial investments: use of illicit proceeds to purchase government or companies' bonds, company shares, shares of investment funds, insurance policies and other financial instruments. • Real estate investments: use of illicit proceeds to purchase of real estate (e.g., commercial buildings, dwellings, lands). • Underground banking: use of Hawala or similar underground banking systems to move illicit proceeds abroad. • Money mules: Use of third individuals who open bank accounts to receive the transfers from the victims and then redistributed the proceeds among the offenders. • Cash-smuggling: use of couriers to smuggle illicit cash nationally or abroad. • Virtual currencies: use of virtual currencies at any stage of the laundering process.
14	Transnationality	<p>Binary variable that can assume two values:</p> <ul style="list-style-type: none"> • 1 if the case material contained evidence of offenders laundering their illicit proceeds abroad; • 0 otherwise.
15	Foreign countries involved in the money laundering scheme	<p>For each of the world countries, a binary variable has been computed:</p>

		<ul style="list-style-type: none"> • 1 if a foreign country was mentioned to be involved in the money laundering scheme; • 0 otherwise. <p>In particular, a country was considered to be involved in the money laundering scheme if it was either:</p> <ul style="list-style-type: none"> • A jurisdiction where illicit proceeds were deposited, withdrawn or used to purchase assets; • A “throughflow jurisdiction” where the illicit proceeds transited before reaching their final destination; • A jurisdiction where illicit proceeds were intercepted, or assets purchased with illicit proceeds were seized by foreign law enforcement agencies.
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Source: Author’s elaboration

Step 2: Applying the codes to the units of analysis

Recognizing that traditional qualitative methods can be impractical for analyzing thousands of pages, scholars have developed automated methods to ease the process, such as computer-assisted coding and other computational approaches (Deterding & Waters, 2021; Nelson et al., 2021). However, after an initial reading of the cases, I decided to rely on a manual content analysis. Despite their unquestionable convenience, the above-mentioned methods may not be well suited to analyze “complex-specific text that lacks consistent terminology” (Lichtenstein & Rucks-Ahidiana, 2021, p. 3). The cases under analysis were characterized by complex and conceptually dense sentences – especially when describing money laundering schemes used by offenders – that ultimately could not be analyzed by relying on a basic keyword approach. In addition, it is worth noting that even automated methods always need a human researcher to review the results and assess to what extent the algorithm managed to code the sample in the correct way. Considering all these issues, I have decided to directly hand-code the sample from the very beginning of the analysis.

Step 3: Quantify the units of analysis

This section will detail the quantification process of the qualitative data employed in the present dissertation, from the unstructured textual data to functioning variables. Table 3 provides an example of money laundering cases collected and analyzed in the present dissertation. The textual content has been translated in English and displayed in full to show the level of detail that such data source provides.

Table 3. Example of the text context of the press release related to the case ID 338

Unstructured text of the press release

The Economic Crime Police and the State Police of Brescia have seized **real estate assets worth over 4 million euros**. This activity represents the development of the operation "**PECUNIA OLET**" when it was possible to reconstruct the money laundering activities carried out **between Italy and Switzerland** by a businesswoman from Bergamo residing in Switzerland, resulting in the seizure of **assets and financial resources amounting to approximately €10 million**. In particular, these **illicit proceeds were the result of tax and bankruptcy offenses** committed through **construction companies**, registered under **straw names**, which were drained of financial resources through **bank transfers from Italian accounts to Swiss, Sammarinese, and Singaporean accounts** held by offshore companies (**empty shells formally based in Panama, British Virgin Islands, Marshall Islands**) managed in turn by **Swiss fiduciary companies**. However, the December 2016 operation did not mark the end of the investigation. The officers of the Economic Crime Police and the police officers of the mobile squad, through a thorough analysis of the acquired documentation at that time, in collaboration with the Swiss Judicial Authority, and subsequent investigations, managed to **trace other assets of illicit origin**. These **real estate assets**, valued at approximately €4 million, are **registered under the names of two companies** indirectly linked to the Bergamo woman who was already affected by the measures carried out last December. Specifically, there are **87 real estate units** located in the provinces of Brescia,

Varese, Mantua, and Bergamo, constituting corporate assets of the two limited liability companies whose shares are formally registered to a **Swiss national acting as a strawman** for the Bergamo businesswoman.

Source: Author's elaboration of Guardia di Finanza data. Translation and emphasis by the Author

The unstructured textual data displayed in Table 3 have been processed and classified using the codebook detailed in Table 2. Table 4 shows the resulting classification of case ID 338 to provide the reader with a clear idea of the structure of the database used for the analyses carried out in the present dissertation.

Table 4. Processing and classification of the unstructured textual information included in Table 3 (Example of the case ID 338)

<i>General information</i>	
Unique ID	338
Criminal investigation name	Pecunia Olet
Criminal investigation LEA	Joint Investigation
Criminal investigation month	May
Criminal investigation year	2018
Criminal investigation province	Brescia
Criminal investigation region	Lombardia
Actor	No OCGs
Number of criminal actors	1
Predicate offence	Tax crime
Amount of illicit proceeds	Not available
Amount of illicit proceeds seized	€ 10,000,000.00
Money laundering methods	
[...]	0
Electronic funds transfers	1
[...]	0

Investment in companies	1
[...]	0
Strawmen	1
[...]	0
Real Estate	1
[...]	0
Offshore corporate vehicle	1
Foreign countries involved in the money laundering scheme	
[...]	0
British Virgin Islands	1
[...]	0
Marshall Islands	1
[...]	0
San Marino	1
[...]	0
Panama	1
[...]	0
Singapore	1
[...]	0
Switzerland	1

Source: Author's elaboration of Guardia di Finanza data

The same coding process has been applied to all the cases in the sample. A proper content analysis must also include intercoder reliability assessments to assess its validity (Neuendorf, 2017). Intercoder reliability is the degree to which a certain process can be replicated by different analysts working under varying conditions or, in other words, how similarly two independent analysts code the same unit of analysis. However, intercoder reliabilities assessments, such as Cohen's Kappa (J. Cohen, 1960), have not been calculated in the present dissertation because I have been the only coder of the sample. Limitations of the methodological design will be discussed in detail in section 5.4.

Table 5. Key characteristics of the money laundering cases in the sample, aggregated 2016 – 2022 (N = 348)

Law enforcement agency involved	
Guardia di Finanza	67%
Polizia di Stato	18%
Joint investigations	14%
Carabinieri	1%
Number of individuals involved in the criminal investigations	
Median	7
Mean	13.4
Range	1 - 122
Amount of illicit proceeds (N=190)	
Median	€7,000,000
Mean	€34,779,943.36
Range	€4,500 – €650,000,000
Scope of the money laundering scheme	
Domestic	52%
International	48%

Source: Authors' elaboration

Table 5 presents descriptive statistics outlining the main characteristics of the money laundering cases included in the sample. Of note, most of the cases appear to be major money laundering investigations. The number of offenders involved in the criminal investigations, encompassing both those charged for money laundering and those implicated in other criminal activities, varied between 1 and 122, with a median of 7 and a mean of thirteen individuals (13.4). Similarly, the amount of illicit proceeds is considerable, ranging from as low as €4,500 to €650,000,000, with a median of €7,000,000 and a mean exceeding 34 million (€34,779,943.36).

3.4 Data analysis: Multiple correspondence analysis

Quantitative content analysis transforms text in variables “allowing for a descriptive interpretation of the texts or functioning as variables in statistical analyses” (Kort-Butler, 2016, p. 4). Overall, both these approaches have been used in the present dissertation to delve into the

behaviors associated with money laundering. Indeed, descriptive statistics on criminal actors, predicate offences, laundering methods and foreign countries have been coupled with a multiple correspondence analysis, a family of techniques to identify and display the patterns of association among two or more categorical variables. Despite dating back to the 1930s (Richardson & Kuder, 1933), multiple correspondence analysis has been rediscovered by criminologists only recently (Baúto et al., 2022; Calderoni et al., 2016; Campana, 2011; Chlevickaitė et al., 2023; Harcourt, 2006; Varese, 2012). Basically, this technique is often used when the objective is to investigate the interrelations between many categorical variables because it allows to simultaneously project the different categories of two or more categorical variables under analysis as points in a low-dimensional Euclidean space of two or more dimensions that capture most of the variance of the data (Bijleveld & Smit, 2006). Of note, no pre-existing assumptions are tested but rather patterns across variables emerge inductively. Categories projected close to each other are more associated, allowing for the identification of potential clusters and multiple interactions/relationships (Bijleveld & Smit, 2006; Greenacre & Blasius, 2006).

Although this technique allows to display patterns of relations in a space, it does not calculate correlation coefficients between the variables. However, the existence and strength of a relationship between two variables may be established by drawing two lines originating from the two points and ending at the origin of the two principal axes. The degree of the resulting angle will show the direction of the relationship between the two variables; if the angle is acute then the correlation is positive as the scalar products between the two angles is positive (no correlation in case of a 90-degree angle and negative correlation in case of an obtuse angle). Moreover, the longer the distance between the points and the origin of the axes, the stronger the correlation between the variables and their contribution in explaining the variance in the

data (Greenacre & Hastie, 1987). Conversely, categories that are placed in the center of the plot are less typical and are shared by many individuals.

In the present dissertation, I used a variant of multiple correspondence analysis, namely the specific multiple correspondence analysis. It enables restricting the analysis only to the categories of interest of the variables considered. This technique is suited to the sample because the variables related to the money laundering methods and foreign countries were dichotomous (0/1) but not mutually exclusive, as one case might report information on the use of more than one laundering method or the involvement of more than one foreign country (see section 3.2.1.). Specific multiple correspondence analysis allows to exclude the categories that simply record the absence of any mention of a specific laundering method or foreign country (in this case the 0s) from contributing to the determination of the distances between the categories, thus avoiding potential biases in the results (see, for example, Calderoni et al., 2016). In particular, I used the `soc.ca` package version 0.8.0 in R to implement the specific multiple correspondence analysis (Grau Larsen & Lunding, 2016).

It is worth noting that multiple correspondence analysis is a particularly powerful technique. Its plots are effective for examining the distribution of variables graphically and do not necessitate meeting assumptions required by other techniques commonly used to analyze categorical data, such as Chi-square analysis (Leonardi et al., 2020). However, when plotting together many categories, the multiple correspondence analysis may need to make compromises if it cannot visually accommodate all the demands in terms of associations (Bjerregaard & Lizotte, 1995). Therefore, for the specific multiple correspondence analysis involving international money laundering cases, dichotomous variables of single countries have been rearranged and aggregated in dichotomous variables corresponding to macro geographical

areas. This adjustment serves to reduce the number of variables plotted and enhances the readability of the resulting plot.

4. Results

This chapter presents the findings of the analyses. Specifically, section 4.1 delves into the key similarities and differences in money laundering strategies among different offender categories. Conversely, section 4.2 provides details regarding offenders' preferences for laundering illegal proceeds abroad, highlighting the main countries involved.

4.1 Money laundering methods

The final dataset contained 790 references of money laundering methods, with an average of more than two methods per case (2.4). Table 7 summarizes the frequencies of predicate offences and money laundering methods by type of actor. Additionally, it presents t-test results aimed at identifying predicate offences and money laundering methods with significantly larger average values within specific actor groups in comparison to the other ones. To account for unequal variance, Welch's t-tests were conducted using four dummy variables—one for each actor group.

Table 6. References of predicate offences and money laundering methods, 2016 - 2022. Frequencies by type of actor.

	Italian Mafias	Foreign OCGs	Other OCGs	No OCGs	TOTAL
<u>Predicate offences</u>					
Tax crime	17 (23%)	8 (17%)	62 (48%) ***	48 (49%) **	135 (39%)
Fraud	1 (1%)	2 (4%)	36 (28%) ***	24 (25%) **	63 (18%)

International Ph.D. in Criminology – Draft Ph.D. dissertation

Drug trafficking	17 (23%) ***	10 (21%) **	7 (6%)	1 (1%)	35 (10%)
Cybercrime	/	14 (29%) ***	7 (6%)	2 (2%)	23 (7%)
Usury & extortion	14 (19%) ***	/	5 (4%)	2 (2%)	21 (6%)
Embezzlement & corruption	2 (3%)	1 (2%)	1 (1%)	14 (14%) ***	18 (5%)
Human trafficking	/	9 (19%) ***	1 (1%)	/	10 (3%)
Other offences	23 (31%) ***	4 (8%)	9 (7%)	7 (7%)	43 (12%)
TOTAL	74 (100%)	48 (100%)	128 (100%)	98 (100%)	348 (100%)
<u>Money laundering methods</u>					
Investments in companies	52 (28%) ***	8 (7%)	53 (18%)	39 (20%)	152 (19%)
Strawmen	43 (23%) ***	10 (9%)	59 (20%)	25 (13%)	138 (18%)
Electronic transfers	9 (5%)	23 (21%)	45 (15%)	28 (14%)	106 (13%)
False invoicing	29 (16%) ***	7 (7%)	32 (11%)	17 (9%)	85 (11%)
Real estate investments	22 (12%) **	7 (6%)	25 (8%)	20 (10%)	75 (10%)
High-value goods	14 (8%)	7 (7%)	22 (7%) *	18 (9%)	61 (8%)
Cash smuggling	2 (1%)	13 (12%) ***	14 (5%)	3 (2%)	32 (3%)
Money mule	2 (1%)	10 (9%) **	13 (4%)	3 (2%)	29 (4%)
Financial investments	7 (4%)	2 (2%)	6 (2%)	13 (7%) **	28 (4%)

Opaque corporate vehicles	1 (1%)	1 (1%)	9 (3%)	15 (8%) ***	26 (3%)
Virtual currencies	/	6 (6%) *	7 (2%)	6 (3%)	19 (2%)
Hawala	3 (2%)	12 (11%) ***	/	/	15 (2%)
Prepaid cards	1 (1%)	2 (2%)	9 (3%)	3 (2%)	15 (2%)
Gambling	2 (1%)	1 (1%)	3 (1%)	5 (3%)	11 (1%)
TOTAL	187 (100%)	111 (100%)	297 (100%)	195 (100%)	790 (100%)

Significance level: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1

Source: Author's elaboration

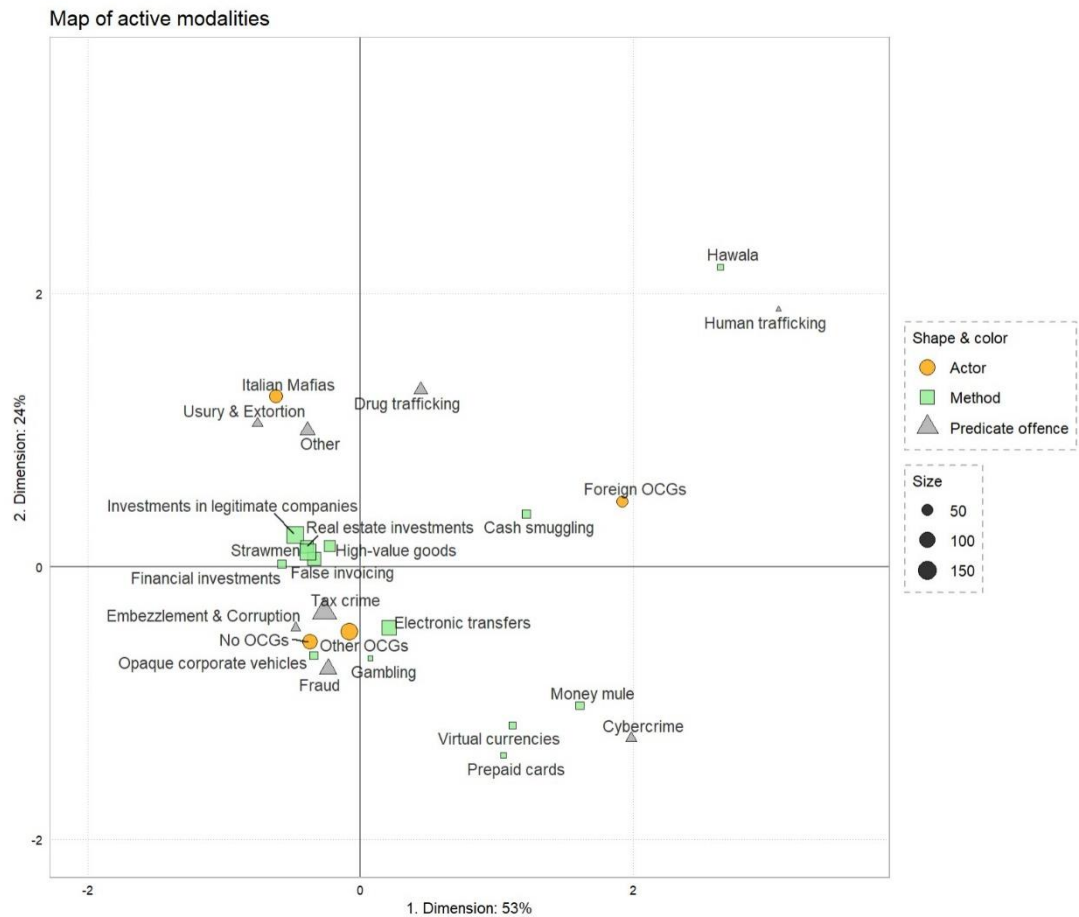
Tax crime accounts for 39% of the recorded predicate offences. It is the second most frequent criminal activity for Italian Mafias (23%) and the primary one for other OCGs (48%) and No OCGs (49%). This result is in line with previous assessments that identified tax evasion as the main source of illicit proceeds in Italy (FATF, 2016; Riccardi et al., 2019). Italy has a large underground economy, fueled by both income misreporting of taxpayers and the high volume of illegal labour (Chiarini et al., 2013; Galbiati & Zanella, 2012). Drug trafficking is another relevant predicate offence across two groups of offenders: 23% for Italian Mafias and 21% for Foreign OCGs, respectively. Notably, often only one group of offenders dominates the number of references for a specific predicate offence: Italian Mafias for usury & extortion (67% of the references) and drug trafficking (47% of the references), Foreign OCGs for human trafficking (90% of the references) and cybercrime (61% of the references), other OCGs for fraud (57% of the references) and No OCGs for embezzlement & corruption (78% of the references). For Italian Mafias, it is also worth noting the relevant role of other offences (31%) compared to all the other offenders. Additional offences such as illicit gambling and

counterfeiting are included in this category, confirming the involvement of Italian Mafias in these illicit markets (Calderoni et al., 2014; Corica et al., 2020).

Regarding money laundering methods, investing in legitimate companies is the most frequent one (20% of the total references) and rank first for Italian Mafias (30%) and No OCGs (19%). This finding is a confirmation of the key role played by firms today in organized and financial crime schemes (Savona & Riccardi, 2018). According to the latest Europol's Serious and Organized Crime Threat Assessment (SOCTA), 80% of organized crime groups in Europe make use of legitimate businesses for carrying out their criminal activity (Europol, 2021). Italian Mafias also record significantly higher number of references for strawmen (17%) and false invoicing (9%), two methods strongly associated with the misuse of legitimate businesses for money laundering purposes, compared to the other offenders.

The specific multiple correspondence analysis provides a clear representation of the actors, predicate offences, and money laundering methods (Figure 2). It complements the above bivariate analyses by plotting all together the categories of the different variables, identifying the most significant associations and discarding less relevant ones. The first two dimensions identified by the specific multiple correspondence analysis describe 53% and 24% of the total variance of the data (77% in total), thus providing an good visual representation of the associations between different categories.

Figure 2. Specific multiple correspondence analysis map of offenders, predicate offences and money laundering methods (2016-2022). Dimensions 1 and 2.



A first cluster, in the upper left part of the figure, confirms the relevant involvement of Italian Mafias in drug trafficking (23%), usury & extortion (19%) and other offences (31%). Usury and extortion racketeering have been traditional activities of Italian Mafias, particularly in the context of the so-called “Mafia protection” imposed to legitimate businesses (A. Smith & Varese, 2001; Varese, 2013). Extortion allows Italian Mafias to obtain an indirect control of legitimate companies by forcing them to pay for protection services, hire specific people, or supply goods or services (Berlusconi, 2014). Of note, usury is also relevant for money laundering purposes (Savona & Riccardi, 2015): for example, in case 114 a Camorra group

partially laundered their illicit proceeds from drug trafficking by lending them to individuals in urgent need of money. Concurrently, results confirm the involvement of Italian Mafias in other criminal markets, such as counterfeiting and illicit gambling (Calderoni, 2012; Calderoni et al., 2014; Corica et al., 2020; Spapens, 2014). In terms of money laundering strategies, Italian Mafias are strongly associated with a variety of methods, such as investments in companies (30%), use of strawmen (24%), false invoicing (16%), real estate investments (13%) and high-value goods (8%). The position of Italian Mafias is consistent with previous literature that highlighted their interest in infiltrating the legal economy (Dugato et al., 2015; Le Moglie & Sorrenti, 2022; Riccardi, 2014; Riccardi et al., 2016; Savona, 2015; Transcrime, 2013).

A second cluster in the upper right quadrant of the figure reflects the activities of Foreign OCGs active in Italy – in particular Nigerian-speaking, Albanian-speaking and Russian-speaking groups - who are strongly involved, respectively, in human trafficking, drug trafficking and cybercrime (Arsovska, 2014; Campana, 2016; C. Cohen, 2022). Notably, Foreign OCGs involved in different predicate offences use different money laundering methods. Cash proceeds originating from human trafficking are laundered via hawala, confirming its popularity among ethnic organized crime groups active in a foreign country (De Bunt, 2008; Soudjin, 2015) while proceeds from drug trafficking are first consolidated and then transferred both domestically and internationally via cash smuggling.

On the other hand, foreign cybercriminals are mainly involved in business email compromise (BEC) scams that entail impersonating business professionals to trick victim companies into paying invoices into accounts controlled by the offenders and other phishing schemes (Lusthaus et al., 2023). Illicit proceeds originating from cybercriminal schemes (in electronic form) are laundered via money mules, virtual currencies, and prepaid cards. Previous research highlighted that cybercriminals employ money mules networks to receive wire

transfers from the victims' accounts and then redistribute the proceeds among the offenders (Custers et al., 2019; Kruisbergen et al., 2019). Of note, despite their illicit proceeds are usually in electronic form and therefore already "placed" in the financial system, these offenders show a strong preference for cashing them out to facilitate their spending and usage (Custers et al., 2019; Kruisbergen et al., 2019).

The last cluster in the left-center of Figure 2 involves other OCGs and No OCGs which are primarily involved in tax crime (48% and 49%) and fraud (28% and 25%). They are strongly associated with electronic transfers, false invoicing, opaque corporate vehicles, and gambling to launder their illicit proceeds. Of note, these actors partially share some money laundering methods with Italian Mafias that, as a result, are collocated in the middle of the two clusters on the X axis. Overall, it is worth noting the strong associations of these offenders with a larger set of money laundering methods compared to Italian Mafias and Foreign OCGs. The relevance of false invoicing in current money laundering schemes has been highlighted by several previous studies (De Simoni, 2022; Savona & Riccardi, 2018). On the other hand, No OCG's reliance on the banking system, financial investments and opaque corporate vehicles to hide beneficial ownership is also in line with the predicate offences they often commit and the type of proceeds they must manage.

4.2 Foreign countries

Overall, 48% of the cases in the sample involved international money laundering schemes spanning across 75 different foreign countries for a total of 431 occurrences.² The full list of references for foreign countries can be found in table 9 in the Annex. Notably, offenders tended not to diversify their illicit proceeds across countries: 56% of the cases involved either just 1 or 2 countries of destination. In particular, the United Kingdom, Switzerland, and Romania have the highest number of references (35, 33, and 23, respectively). Other 9 countries record more than 10 references (Croatia, Bulgaria, Germany, Malta, Hungary, Spain, Slovakia, Slovenia, and Czech Republic). These 12 countries together account for 57% of the total number of references.

Table 8 shows the number of references for countries and geographical areas by type of actor. Additionally, it shows that the likelihood of illicit proceeds leaving the country where the predicate offence has been committed significantly varies across different types of offenders. Also in this case, Welch's t-tests were conducted to identify specific actor groups with significantly larger average values for macro-geographical areas compared to the other groups. The use of macro-geographical areas, as opposed to the single countries, was chosen to mitigate issues stemming from the limited number of occurrences for certain combinations.

Foreign OCGs are the most likely to move their proceeds abroad (73% of the cases), followed by other OCGs (46% of the cases) and No OCGs (39% of the cases). Conversely,

² Out of the 169 international money laundering cases, it was possible to retrieve information on the countries involved in 89% of them (152).

Italian Mafias are the least inclined, moving their illicit proceeds abroad only in 35% of the cases. Furthermore, differences emerge in terms of geographical scope and the countries involved. Other OCGs and No OCGs record the highest number of references (176 and 117 in 47 countries, respectively). Foreign OCGs have a large number of appearances too (83 references in 45 countries), whereas Italian Mafias are less widespread, with only 55 references in 24 countries. Additionally, Italian Mafias almost exclusively launder illicit proceeds in Europe confirming results of previous studies (Calderoni et al., 2016; Savona et al., 2016): out of the 24 countries where money laundering schemes by Italian Mafias were detected, 71% (17) are in Europe. Foreign OCGs have a large presence in Europe (55%), Asia (40%) and Africa (28%). Conversely, both other OCGs and No OCGs have a particularly wide geographical scope, laundering their illicit proceeds in 47 countries (63% of the total number of unique countries identified in the cases), with an average of 3 countries per case (3.08).

Table 7. References of money laundering in foreign countries, 2016-2022.

Frequencies by type of actor

Country	Type of actor				TOTAL
	Italian Mafias	Foreign OCGs	Other OCGs	No OCGs	
<u>Countries</u>					
The United Kingdom	4 (7%)	4 (5%)	16 (9%)	11 (9%)	35 (8%)
Switzerland	6 (11%)	1 (1%)	14 (8%)	12 (10%)	33 (8%)
Romania	7 (13%)	2 (2%)	7 (4%)	7 (6%)	23 (5%)
Croatia	5 (9%)	1 (1%)	11 (6%)	5 (4%)	22 (5%)
Bulgaria	3 (5%)	4 (5%)	12 (7%)	2 (2%)	21 (5%)

International Ph.D. in Criminology – Draft Ph.D. dissertation

Germany	3 (5%)	5 (6%)	8 (5%)	3 (3%)	19 (4%)
Malta	5 (9%)	2 (2%)	7 (4%)	5 (4%)	19 (4%)
Hungary	3 (5%)	3 (4%)	8 (5%)	4 (3%)	18 (4%)
Spain	3 (5%)	3 (4%)	6 (3%)	3 (3%)	15 (4%)
Slovakia	/	1 (1%)	11 (6%)	3 (3%)	15 (4%)
Slovenia	1 (2%)	3 (4%)	8 (5%)	2 (2%)	14 (3%)
Czech Republic	/	5 (6%)	6 (3%)	/	11 (3%)
Austria	2 (4%)	/	3 (2%)	4 (3%)	9 (2%)
China	1 (2%)	4 (5%)	3 (2%)	1 (1%)	9 (2%)
United Arab Emirates	/	1 (%)	7 (4%)	1 (1%)	9 (2%)
Other countries	12 (22%)	44 (53%)	49 (28%)	54 (46%)	159 (37%)
TOTAL	55 (100%)	83 (100%)	176 (100%)	117 (100%)	431 (100%)
<u>Geographical areas</u>					
Eastern Europe & Central Asia	12 (32%)	16 (35%)	35 (35%)	19 (28%)	82
Western Europe	15 (41%)	9 (20%)	37 (37%)	28 (41%)	89
Middle East & Africa	5 (14%)	11 (24%)	17 (17%)	8 (12%)	41
Americas & Caribbean	3 (8%)	1 (2%)	5 (5%)	11 (16%) ***	20

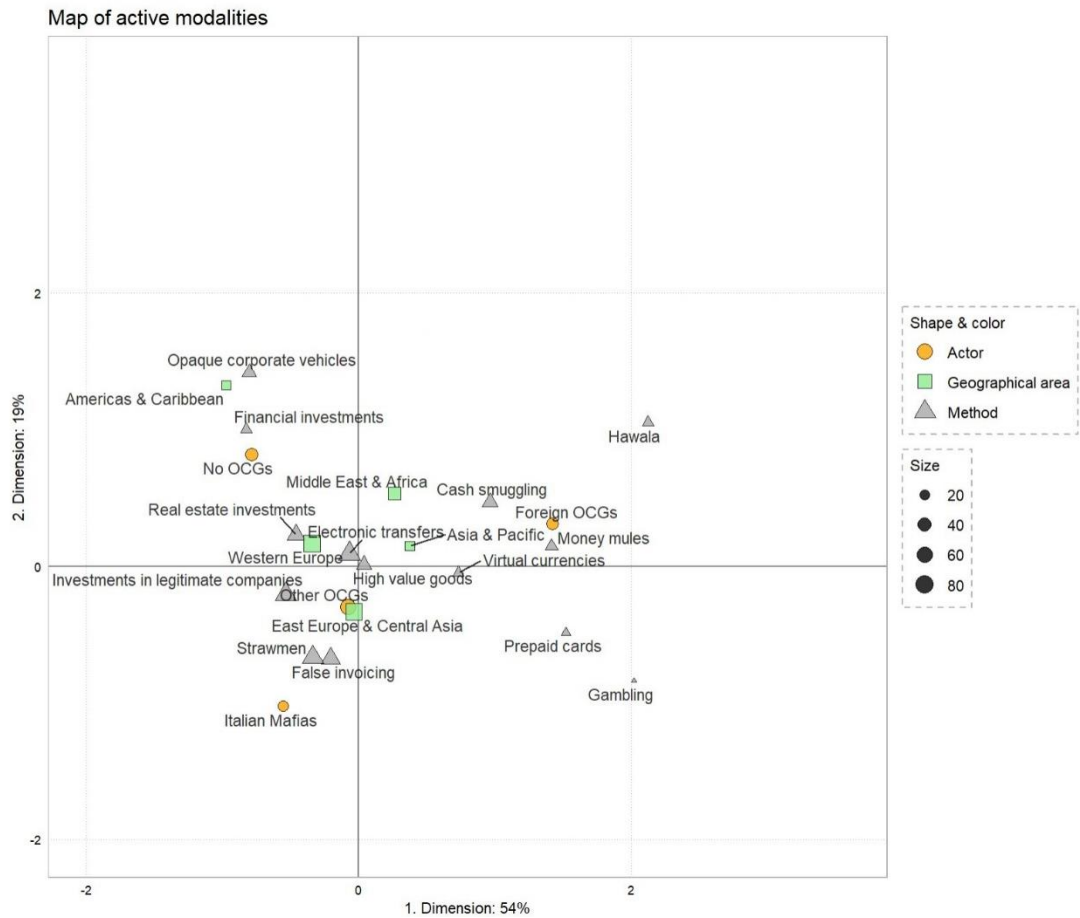
Asia & Pacific	2 (5%)	7 (15%) **	6 (6%)	3 (4%)	20
TOTAL	37 (100%)	46 (100%)	100 (100%)	69 (100%)	252 (100%)
% cases abroad	35%	73% ***	49%	47%	/
N. of unique countries	24	45	47	47	/
Average of countries per case	2.24	2.09	2.98	3.05	/

*Significance level: *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1*

Source: Author's elaboration

As for money laundering methods, the bivariate analysis of actors and countries has been complemented by the means of multiple correspondence analysis (Figure 3). The first two dimensions identified by the specific multiple correspondence analysis account for 54% and 19% of the total variance of the data (73% in total), thus providing a good visual representation of the associations between different categories. As outline in the methodological section (see section 3.3), this specific multiple correspondence analysis groups countries into macro geographical areas to enhance the readability of the figure. The roles of specific countries in money laundering schemes will be discussed in detail in section 5.2, while the specific geographical classification used for the analysis is presented in Table 9 in the Annex.

Figure 3. Specific multiple correspondence analysis map of offenders, methods and foreign countries (2016-2022). Dimensions 1 and 2



The first cluster, in the upper left quadrant of the figure, is related to No OCGs. This group of offenders is mainly associated with the Americas & Caribbean. The multiple correspondence analysis shows that these offenders use opaque corporate vehicles and financial investments to move illicit proceeds to countries in Americas & Caribbean. Several countries in this area (namely Panama, the UK Virgin Islands, the US Virgin Islands and the Bahamas as emerging from the cases) are well-known for their secrecy banking and corporate services that offenders achieve through the shielding of opaque corporate vehicles.

The first cluster, situated in the upper left quadrant of the figure, is linked to No OCGs. This cohort of offenders is predominantly connected with the Americas & Caribbean region.

The multiple correspondence analysis reveals that these offenders leverage opaque corporate entities and financial investments to transfer illicit proceeds to countries in the Americas & Caribbean. Various countries in this region (particularly Panama, the UK Virgin Islands, the US Virgin Islands, and the Bahamas, as evident from the cases) are renowned for their discreet banking and corporate services, which offenders exploit by using opaque corporate structures to hide their beneficial ownership of assets and bank accounts.

A second cluster in the upper right of the figure refers to activities of Foreign OCGs. In particular, these offenders mainly move their illicit proceeds to African countries (namely Nigeria, Morocco, Tunisia and Gambia) via cash smuggling and hawala. This choice is strictly motivated by the fact that these are the offenders' home countries as cases involve Nigerian human traffickers and Moroccan, Tunisian and Gambian drug traffickers. The same driver seem to hold also for the association with cash smuggling and Asia & Pacific. For example, it is directly tied to individual Chinese and Bangladeshi tax evaders in Italy who are involved in sending their illicit proceeds back to their home countries.

A last cluster, in the bottom left of the figure, is associated with other OCGs. These offenders seem to be strongly associated with Western and Eastern-European countries, which serve as a location to set up bogus companies that are used as receiver of false invoices from legitimate companies in Italy. Indeed, these countries offer lower corporate transparency compared to Italy. Illicit proceeds are then cashed out from the business bank accounts of these companies and smuggled back to Italy. A weaker association is also found between Italian Mafias and Eastern-European countries, with the relevant role of false invoicing and strawmen in these schemes.

5. Discussion, policy implications and future research

Empirical evidence presented in the previous chapter echoes previous research that suggested the heterogeneity of money laundering by showing how money launderers differ from each other in many ways. On the one hand, not every offender goes to the same lengths when handling his/her illicit proceeds; on the other, it is important to understand what factors drive and motivate these observable differences (Levi & Soudijn, 2020; Matanky-Becker & Cockbain, 2021). The present chapter attempts to do so by discussing the results of the analysis together with previous empirical research, criminological theory, and policy implications. However, it is important to note that, although I give some possible explanations for offenders' choices of money laundering strategies, these are only speculative and incomplete. The present dissertation has an explorative character, and it does not aim at testing such explanations and drawing causal conclusions. Resolution of this issue will require more research aimed at empirically testing the different assumptions that can be made by looking at the empirical evidence emerging from criminal cases.

5.1 Drivers and constraints when choosing a money laundering method

Italian Mafias mainly launder their illicit proceeds through investments in legitimate companies (28%), use of strawmen (23%), false invoicing (16%) and purchase of real estate (12%). Legitimate companies are important assets for Italian Mafias for several reasons, including but not limited to money laundering. First, companies offer significant opportunities to conceal criminal activities in which Italian Mafias are involved (Riccardi et al., 2016). For example, the investigation *Acero Krupy* (2015) unveiled a 'Ndrangheta criminal network which

used trucks from a nursery company and a floriculture company to smuggle cocaine between Italy and the Netherlands (Transcrime, 2018). Second, companies enable criminals to exploit legitimate opportunities that would otherwise be beyond their reach, such as participating in public procurement tenders which can also be instrumental for influencing local politics and administration (Calderoni, 2011; Caneppele & Martocchia, 2014; Slutzky & Zeume, 2018). For example, in case 340, companies controlled by 'Ndrangheta managed to infiltrate construction projects for various municipalities in Liguria by entering as subcontractors. Once they gained access to the system, they went on to secure more contracts by bribing the municipality employees responsible for the tender assignment procedures. Lastly, Italian mafiosi can use their public figure of legitimate entrepreneurs to clean their reputation and even increase their social consensus by providing jobs and/or financial support to their community (Bruinsma et al., 2018; Campana & Varese, 2018; Kuldova, 2018). In case 326, for example, the Casalesi Clan of the Camorra fictitiously employed 50 affiliates through a network of legitimate companies to provide them with a seemingly legitimate income and access to national unemployment benefits when needed.

The use of strawmen and false invoicing is strictly intertwined with infiltration in legitimate companies. False invoicing is now dominant in the current mafias' business as almost every new criminal investigation discovers the use of false invoices by these criminal groups (e.g., *Aemilia*, *Billions*, *Fuel Discount*, *Petrolmafie*, *Perseverence*, *Golden Wood* and many more). False invoices are a 'multi-purpose' financial crime which does not only allow to launder illicit proceeds, but also to reduce taxable income, produce VAT credits and create black funds that can be used for further criminal activities (Transcrime, 2018). Of note, false invoices are also instrumental in infiltrating legitimate companies. For example, in case 75, Camorra members extorted around 500 legitimate entrepreneurs in Melito di Napoli (a municipality in the province of Napoli, Campania). To ease the collection of funds, they offered false invoices

of equal value to the entrepreneurs, enabling them to decrease their taxable income and generate fictitious VAT credits towards the State. However, once entrepreneurs accepted this criminal service, their companies eventually became targets of mafia control and acquisition in the long term.

Strawmen play a crucial role in concealing the true ownership of assets acquired through illegal means. For this purpose, Italian Mafias often select family members, especially women. For example, previous research showed that the presence of female owners in companies confiscated from organized crime in Italy is nearly twice as high if compared to legitimate companies operating in the same sectors (Savona & Riccardi, 2018). By placing properties under their own names, women can assist their husbands, fathers, or sons in ensuring that control over the assets remains ‘in-house’ while safeguarding them from being confiscated if the man is ever arrested, prosecuted and found guilty (Savona & Natoli, 2007; Soudijn, 2010). For example, in case 201, two members of a Cosa Nostra clan employed their respective wife, sister and daughter as beneficial owners and shareholders in several legitimate companies used to launder illicit proceeds. Similarly, in case 58, a Cosa Nostra boss registered a bar, a consultancy company, two real estates and a vehicle under the name of his daughter to avoid confiscation from law enforcement agencies.

Besides legitimate companies, it is worth discussing the other relevant tangible assets in Italian Mafias’ criminal portfolio, namely real estate. Like legitimate companies, real estate is a multi-purpose asset too. First and foremost, offenders simply need a place to live (Kruisbergen et al., 2015; van Gestel, 2010). Second, purchasing high-valued properties does not require high-level expertise, real estate transactions can absorb large amounts of illicit money and their ownership can be easily concealed through the use of legal entities (Levi & Soudijn, 2020; Maloney et al., 2019). Third, real estate can be used as logistical and organizational bases for

illegal activities (Dugato et al., 2015; Riccardi et al., 2015). For example, in case 10, a Camorra group active in Tuscany used drug proceeds to purchase a beach resort which was later used as a meeting place for group members and as a venue for the distribution of narcotics. Fourth, once purchased, real estate can be either sold or rented, with the latter option being particularly attractive to offenders because it enables them to periodically deposit illicit proceeds in bank accounts under the guise of legitimate rental income (Dugato et al., 2015; Unger & Den Hertog, 2012).

Foreign OCGs operating in Italy frequently use hawala (10%) to transfer their illegal profits out of the country, a widespread practice among legitimate migrant workers to send remittances back to their home countries (Ballard, 2005; Oddo et al., 2016; Passas, 1999). There are several reasons for this choice. First, underground bankers generally operate on a global scale, can handle large cash transactions and can reach remote regions where regular money transaction offices do not operate (De Bunt, 2008; Siegel & Van De Bunt, 2014; Soudjin, 2015). Second, underground banking moves illicit funds outside of the conventional financial system, bypassing all the established anti-money laundering controls in formal channels, is anonymous and does not require physical movement of cash proceeds across borders, thereby reducing the risk of detection and logistical challenges that arise when attempting bulk cash smuggling (Kramer et al., 2023). Third, legitimate alternatives, such as wire transfers, are generally only accessible to individuals with legal residency in the country, making them potentially unavailable to most of these offenders who have often illegally entered Italy. Lastly, these services are often largely structured along ethnic lines with underground bankers sharing the same nationality as criminals themselves (Soudijn, 2016). For instance, in case 343, eight Tunisian and Moroccan nationals charged a fee to transfer their compatriots' illegal profits from drug trafficking back to Tunisia and Morocco through Hawala. Similar schemes have been also found for Nigerian human traffickers (cases 21, 313, 320 and 353). This may allow criminals

to overcome potential language barriers that could arise with other intermediaries and mitigates trust issues that may emerge when involving third-party intermediaries.

These offenders' tendency to rely on intermediaries with the same heritage is detected even when looking at other money laundering methods, such as cash smuggling and electronic transfers. For example, in case 353, Nigerian human traffickers employed Nigerian cash mules to smuggle illicit proceeds back to Nigeria via airplanes (over 100 trips in less than a year). In addition to entrusting illicit proceeds to known contacts within their own ethnic community, this choice also offers operational advantages as it can be conjectured that Nigerian citizens traveling frequently to Nigeria may be generally less suspicious compared to other travelers. Ethnic ties may also allow offenders to easily circumvent anti-money laundering controls and procedures. For example, money transfer service businesses are obliged entities in most jurisdictions. However, in case 149, two Bangladeshi nationals used their money transfer service business based in Rome to move more than €90 million of compatriots' illicit proceeds from tax evasion to Bangladesh over three years (2016-2018) by fractioning the amounts into sums just below the regulatory maximum limit of €1,000 and using identity documents of third conniving individuals (other Bangladeshi nationals) to disguise the ownership of the funds.

However, these money laundering methods are not costless and, on the contrary, may be less efficient compared to other alternatives. For example, in case 225, Moroccan underground bankers charged a 20% fee to their compatriots to move illicit proceeds back to Morocco. High fees for similar money laundering services have been also found in the Netherlands where cash smugglers charged Colombian drug traffickers over 10% - and as high as 17% - of the total smuggled amounts to repatriate illicit proceeds in Colombia (Soudijn & Reuter, 2016). These results naturally raise the question of why offenders would undertake similar "illogical business operations" (Soudjin, 2015, p. 268). The common factor across most of these schemes is foreign

offenders' aim of repatriating illicit proceeds to their home countries. In pursuit of this primary goal and to minimize potential risks by relying on known contacts within their ethnic community, offenders seem willing to pay a premium cost.

A notable exception to the above-mentioned patterns is represented by Chinese-speaking OCGs, who exhibit a preference for more sophisticated methods when it comes to transferring their illegal profits back to China and often collaborate with intermediaries of different nationalities, as already emerged from several criminal investigations at the national (e.g., criminal investigations *Qian Liu* and *Qian Ba I and II*) and international level (e.g., Chinese money launderers working for Mexican Cartels and the recent EU criminal investigation *Eureka* which dismantled the collaboration between Italian Mafias and Chinese OCGs for money laundering purposes). In case 25, members of a Chinese family set up a network of 24 shell companies (using other conniving Chinese individuals as strawmen) to collect over €170 million in tax evasion proceeds from Chinese entrepreneurs through false invoices and move them back to China via wire transfers. In Case 72, an even more complex scheme unfolded, entailing the cooperation with Italian entrepreneurs. Chinese entrepreneurs, who had cash in Italy and wished to send funds to Chinese bank accounts, teamed up with Italian entrepreneurs who needed cash for illicit payments, such as paying black wages to their workers. The scheme worked as follows: Italian entrepreneurs transferred their illegal profits to Eastern-European countries (specifically, the Czech Republic and Slovenia) through false invoicing. Instead of smuggling the cash directly back to Italy, the funds were further wired to bank accounts in China. Chinese entrepreneurs then compensated their Italian counterparts by handing them over cash directly in Italy. This scheme not only allowed both criminal groups to achieve their objectives but also minimized associated risks. The Chinese entrepreneurs avoided direct involvement in international wire transfers to China while Italian ones acquired cash in Italy

without the need for direct smuggling through Italian borders. Similar account settlement schemes involving Chinese offenders have been also found in cases 72, 96, 220 and 244.

There are several potential explanations for these patterns. First, China is geographically far from Italy. While certain methods like cash smuggling are feasible, they may be inherently riskier due to limited transportation options and the necessity of consolidating larger amounts of money in a single trip. For instance, in case 194, three Chinese nationals attempted to smuggle €2.8 million in cash on a single flight bound for China. Second, Chinese-speaking OCGs are extremely active in terms of infiltration into the legal economy in Italy, especially in certain geographical areas (e.g., the province of Prato and to a lesser extent Florence, Rome and Milan) and economic sectors (e.g., clothing retail trade, bars and restaurants and nails salons) (Becucci, 2014; Becucci & Carchedi, 2016; Savona & Riccardi, 2018). In addition to concealing criminal activities, legitimate companies allow these offenders to establish business relationships with legitimate entrepreneurs that can be leveraged when it comes to money laundering. Third, there is a substantial currency market among China residents since the country imposes significant restraints on cross-border currency flows to prevent rapid money outflows from destabilizing the economy. According to Chinese law, domestic entities (both companies and citizens) are authorized to take funds out of China only for specific limited purposes. Account settlement schemes can also be used for this purpose. For example, let's imagine that a legitimate company in China wants to transfer the equivalent of €250,000 in renminbi to Italy. To do so, it may rely on a broker to send their money in Italy. At some point, other offenders may show up at the broker counterpart in Italy willing to send his/her illicit proceeds in China. These transactions balance each other out with no actual money flows between the two countries.

Other OCGs show a statistically significant higher association with high-value goods compared to the other offenders. High-value goods (e.g., luxury cars, jewelry) have a symbolic purpose, enabling offenders to show off their economic power and status symbol both within and outside their communities and territories (Petrunov, 2011). Not secondary, they are a safe and long-term investment because they tend to appreciate over time and therefore limit potential value losses. Lastly, high-value goods are also advantageous from an operational point of view: once purchased, they can be more easily transferred across borders compared to, for example, large quantities of cash, as demonstrated in case 98 where luxury watches were bought in cash in Italy and smuggled throughout Europe to the United Kingdom to be resold.

No OCGs seem to rely more heavily on opaque corporate vehicles (8%) and financial investments (7%) compared to the other offenders. This result is in line with the nature of these offenders: most of them are either legitimate entrepreneurs or small criminal groups involved in tax crime and fraud or charged with embezzlement & corruption. First, the proceeds originated from these predicate offences are often in electronic form and offenders have specific legitimate jobs that may assist them in the money laundering process. For example, in case 267, the director of a legitimate company embezzled more than €400,000 from his company's bank accounts by issuing checks payable towards his personal bank accounts and cashing them out to purchase high-value goods and sustain a hedonistic lifestyle. The director systematically hid these financial operations by cooking the company's books. Second, these offenders are not constrained by all the typical dynamics of traditional OCGs (e.g., kingship ties) that, as already discussed, limit both the scope and riskiness of money laundering activities. As a result, they may be more risk-prone and more able to swiftly take opportunities by leveraging on contacts and instruments they are familiar with due to their everyday lives (e.g., legitimate companies, professionals).

Additionally, it is worth noting that other OCGs and No OCGs exhibit significant similarities. However, these resemblances may well be driven by data itself. The Article 416 of the Italian Criminal Code “Associazione a Delinquere” – which has been used for the actor classification – uniformly punishes all groups of three or more people involved in some type of criminal activity. However, these groups differ inherently from traditional OCGs such as Italian Mafias and Foreign OCGs. They often represent loose associations of individuals, bound by profit motives, which form or disband opportunistically. Conversely, these entities share more similarities with individual offenders or groups of offenders who, for various reasons, have not faced charges under Article 416 from Italian judicial authorities.

Despite all the above-mentioned differences, there are two striking similarities across different actors and criminal markets, which are partially connected and confirm the findings of previous literature (Kruisbergen et al., 2015, 2019; Riccardi & Levi, 2018): (i) the limited use of new technologies; (ii) the preference for cash. New technologies have been assumed to be facilitation tools for money laundering since the late 90s (Haines & Johnstone, 1999). Over the decades, such concern has led to the rise of the “cyber-laundering” concept in both academic and policy debates (Filipkowski, 2008; Handa & Ansari, 2022; Wronka, 2022). With the emergence of virtual assets (e.g., bitcoin), the FATF (2019) increasingly warned against the new money laundering opportunities created by these technologies. However, results show that the use of cryptocurrencies is limited: despite an increase, cryptocurrencies were involved in 9% of the cases in 2022 (vs 5% in 2016). Moreover, cryptocurrencies are primarily associated with cybercrime cases (42% of the total number of references for cryptocurrencies), confirming previous empirical findings (Kruisbergen et al., 2019; Soudijn, 2018).

Reasons for the limited use of cryptocurrencies in “offline” criminal cases can be manifold. First, the number of intermediaries accepting cryptocurrencies for direct asset

purchases is still limited, forcing offenders to exchange cryptocurrencies for fiat currencies through virtual asset service providers. However, these providers operate within the anti-money laundering framework, which requires them to gather information about the identities and activities of potential offenders. Second, cryptocurrencies expose offenders to a series of risks that should not be overlooked. The high volatility can lead to substantial financial losses during the money laundering process. Additionally, the loss or theft of passphrases or hardware wallets can result in the complete forfeiture of illicit gains (Kruisbergen et al., 2019). Not all offenders may be willing to take these risks because “when money is lost or badly managed, the predicate crimes have been committed for nothing” (Levi & Soudijn, 2020, p. 619). Lastly, all executed transactions within the network are included and stored in a shared ledger, also known as blockchain, which is publicly accessible. Although cryptocurrency addresses are pseudonymous, the complete transaction history associated with specific addresses can be de-anonymized if information regarding their ownership is leaked online, generating a significant investigating trail for law enforcement agencies (Custers et al., 2019; Meiklejohn et al., 2013; Ron & Shamir, 2013).

Conversely, cash is a predominant feature of 67% of the cases in the sample. Despite technological advancements, cash is still king for criminals (Europol, 2015; Kruisbergen et al., 2019; Matanky-Becker & Cockbain, 2021; Riccardi & Levi, 2018). It is worth noting that also offenders involved in criminal activities that usually do not generate cash proceeds often have a cash-out at some stage of the laundering process (Custers et al., 2019; Europol, 2015; Kruisbergen et al., 2019; Riccardi & Levi, 2018). For example, in case 345, Eastern-European cybercriminals used stolen credit card details to buy high-value goods (e.g., luxury watches, high-end tech devices) that were later smuggled to Ukraine and Russia (home countries of the offenders) to be sold again in exchange for cash. A similar scheme was found in case 294 involving Russian hackers. On the one hand, cash is a bearer negotiable instrument that provides

no information on both its origin/destination and thus makes hard for law enforcement agencies to reconstruct the paper trail; on the other, it offers a wide range of spending opportunities, both in the licit and illicit economy, without leaving a digital trace as in the case of electronic transfers (Riccardi & Levi, 2018). Cash payments of significant high amounts are often accepted by providers of goods and services in the regular economy (e.g., car companies, electronic stores), seemingly without asking too many questions (Kruisbergen et al., 2019). For example, in case 335, members of a North-African Foreign OCGs involved in drug trafficking travelled to Germany specifically for purchasing cars in cash. Subsequently, these cars were driven to Morocco and Tunisia (offenders' home countries), where they were resold once again in exchange of cash.

However, when addressing the purportedly limited use of new technologies by offenders and their preference for cash, it is crucial to bear in mind the limitations associated with the data used in the present analysis. Over the years, law enforcement agencies have honed their expertise in dealing with certain frequently occurring money laundering schemes. Consequently, traditional investigative methods may be less effective in detecting money laundering schemes that extensively leverage new technologies. For example, it is widely acknowledged that law enforcement agencies often lack the requisite knowledge and adequate tools to properly identify and investigate criminal activities involving cryptocurrencies (Senthilkumar & Graham, 2018). As a result, research exclusively dependent on law enforcement data may inevitably yield higher detection rates for basic money laundering strategies, reflecting the challenges investigators encounter during their daily activities rather than underlying patterns in money laundering methods (Levi & Reuter, 2006).

5.2 Laundering abroad: What do offenders look for?

When talking about cross-border money laundering in the policy debate, the common assumption is that illicit proceeds flow through multiple foreign jurisdictions via a network of bank accounts, opaque corporate vehicles and the intermediation of professionals or law firms. Conversely, the results of the present dissertation suggested a more variegated landscape. First, most cases (52%) were found to be entirely domestic, with illicit proceeds never leaving Italy. Second, even in cases involving laundering abroad, offenders did not employ complex schemes and transferred their illicit proceeds to either one or two foreign countries at most in 56% of the cases. Third, references were concentrated in a small number of foreign countries: the 12 jurisdictions with more than 10 references account for 63% of the total number. Moreover, the first 13 countries per number of references are all European ones (85% of them are also part of the European Union) and three of them border with Italy, suggesting that the geographical scope of offenders' money laundering strategies is rather limited and certainly not as global as often assumed (Kruisbergen et al., 2015; van Duyne et al., 2018).

However, it is crucial to note that the levels of financial policing and the readiness to initiate cross-border financial investigations in Europe are notably low, and Italy is no exception to this trend. Conducting cross-border investigations presents considerable challenges, given the intricacies of international cooperation among investigators, foreign law enforcement agencies, judicial bodies, and anti-money laundering obliged entities. Consider, for example, a hypothetical scenario where illicit funds are traced to a foreign bank account situated in a jurisdiction lacking cooperative information-sharing agreements. In such instances, investigators confront a significant risk of encountering an investigative impasse, as they may be unable to access the necessary information, potentially leading to a dead end in their pursuit. Consequently, it is plausible to argue that Italian law enforcement agencies might prioritize the

identification and investigation of money laundering cases within their national territory. Furthermore, when dealing with transnational cases, priority may be given to those involving European countries with similar legislative systems and a history of mutual cooperation, thereby streamlining the investigative process and increasing the likelihood that offenders are arrested and prosecuted.

Having said that, the relatively high number of references of the first 5 countries (the United Kingdom, Switzerland, Romania, Croatia and Bulgaria) justifies a detailed discussion of their involvement in money laundering schemes. There is substantial evidence about the abuse of the UK financial system for money laundering purposes by offenders active in other countries, Italy in particular (Allum, 2014; Calderoni et al., 2016; Lord & Levi, 2017; Transcrime, 2018). First, several criminal investigations and journalistic exposés have shown the United Kingdom's attractiveness as a location for setting up shell companies or purchasing high-end real estate (e.g., *Paradise Papers*, *London Laundromat*). Despite having one of the most publicly accessible and complete company registers in Europe, the UK Companies House does not check the validity and reliability of the information included in the registry (Riccardi, 2022). Second, even when convictions for money laundering are secured, recovering assets through confiscation orders in the UK is often challenging, especially when dealing with cases involving large-scale criminal organizations (Bullock et al., 2009; Hopkins & Shelton, 2019; Sittlington & Harvey, 2018).

Switzerland is considered one of the main destinations for illicit outflows from Italy (FATF, 2016). It has an historical association with smuggling of cash and high-value goods (e.g., gold, jewels) across the border mainly by Italian Mafias and Italian legitimate entrepreneurs who wanted to hide their illicit proceeds in Swiss bank accounts and safe-deposit boxes to take advantage of the high levels of banking secrecy (e.g., criminal investigations *Fort*

Knox, Panni Sporchi). For example, 70% of the repatriated or regularized assets through the Italian Asset Repatriation Program in 2009 were stashed and invested in Switzerland (FATF, 2016). Despite significant steps having been taken in limiting bank secrecy and improving data sharing with law enforcement agencies from other jurisdictions over the last years, the Swiss financial sector is still perceived attractive for illicit proceeds and assets of non-resident individuals, as also demonstrated by recent leaks (e.g., *Credit Suisse's* facilitation of money laundering).

Notably, Romania, Croatia and Bulgaria are typically not considered high-risk jurisdictions in terms of money laundering. The involvement of these countries should be interpreted within the relevant role of Eastern-Europe countries in general: out of the 12 countries with more than 10 references, 58% (7) are in East-Europe. Several criminal investigations (e.g., *Volcano, Transilvania, Denaro Pulito, Buildgate*) have already highlighted that several offenders operating in Italy – mainly Italian entrepreneurs involved in tax evasion - make use of countries in this geographical area to establish shell companies and engage in false invoicing schemes (UIF, 2022). This is primarily due to the relatively lenient processes for company incorporation and the limited requirements for disclosing beneficial ownership information in these countries. Of note, both Bulgaria and Croatia have been recently added to the jurisdictions under increased monitoring (FATF, 2023a, 2023b). In particular, in the case of Bulgaria, one of the key points in its FATF action plan is ensuring that the beneficial ownership information held in the national register is accurate and up to date. On the other hand, Croatia must improve detection, investigation and prosecution of money laundering, with a focus on illicit proceeds originating from predicate offences committed abroad and laundered through legal persons (FATF, 2021). Furthermore, results also confirm empirical evidence which revealed the notable presence and expansion of Italian Mafias in this area, particularly

in Romania, to take advantage of the emerging business opportunities presented by the growing Eastern markets (Dagnes et al., 2019; Sciarrone & Storti, 2014; Transcrime, 2018).

Additionally, it is interesting to note the relatively limited role of the Netherlands in the sample. The country is referenced only five times, with an additional three references for its overseas territories (two references for the Netherlands Antilles and one reference for Curaçao). However, the abuse of the Dutch financial system for money laundering purposes is well-documented (Aziani et al., 2020; Ferwerda & Kleemans, 2019; Soudijn, 2018). Moreover, the Dutch route could offer significant advantages for certain offenders in the sample, such as Italian Mafias and No OCGs. In this regard, several factors may account for the limited representation of the Netherlands in the sample.

First, the Netherlands is often associated with drug trafficking cases from the Italian perspective (Calderoni, 2012; Ferwerda & Unger, 2016; Transcrime, 2018). For example, Italian Mafias often engage in importing drugs from South America via Dutch ports, like Rotterdam, and transporting them to Italy for sale. However, it is crucial to highlight that only three cases in the database involve drug trafficking from the Netherlands. Moreover, these cases may not necessarily include the Netherlands as a money laundering destination since illicit proceeds are generated in Italy and may well be entirely laundered there. Second, the Netherlands is renowned for allowing the use of opaque corporate vehicles, such as Dutch foundations (the so-called *Stichtings*), which can be exploited to conceal the beneficial ownership of illicit funds (Bosisio & Jofre, 2023). Nevertheless, even in this scenario, the offenders in the sample seem to favor alternative routes. Most offenders engaged in tax-related crimes employ false invoicing schemes with companies based in Eastern European countries. This choice may offer them certain advantages, including increased control over their illegal proceeds while benefiting from the comparatively lax enforcement of financial crime

regulations in these countries. When offenders do turn to other countries, those with larger financial centers compared to the Netherlands, such as the United Kingdom and Switzerland, seem to be sought out.

As shown in Table 8, the likelihood that illicit proceeds leave the country where the predicate offence has been committed significantly varies across different types of offenders. Foreign OCGs are the most likely to move their proceeds abroad (73%), followed by other OCGs (46%) and No OCGs (39%). Conversely, Italian Mafias are the least prone (35%). Results suggest that laundering illicit proceeds abroad is not necessarily the best option for all offenders *a priori*: the choice may be heavily based on offenders' perceived risks and advantages of keeping funds within the origin jurisdiction (Levi, 2015). Significant differences are also detected when looking at the specific countries involved, highlighting differences in offenders' drivers.

Italian Mafias laundered their illicit proceeds in Italy in the 66% of the cases and, when laundering abroad, they mainly chose country geographically close to Italy (e.g., Croatia, Malta, Romania and Switzerland). Similarly, Foreign OCGs sent their illicit proceeds to their home countries in 64% of the cases and this finding is consistent across foreign offenders of different nationalities active in different criminal markets, like Nigerian and Pakistani human traffickers (cases 21, 47 and 354), Colombia, Gambian and Moroccan drug traffickers (respectively cases 336, 343 and 350), Romanian, Albanian, Ukrainian and Russian cybercriminals (respectively cases 7, 294, 344) and Chinese tax evaders and drug traffickers (case 25, 72, 220, 244 and 341). The common driver of these two groups of organized crime offenders seems to be proximity, confirming that the closer a country is to where the illicit proceeds are generated, both geographically and culturally, the higher its risks in terms of money laundering (Ferwerda et al., 2020; Kruisbergen et al., 2015; Petrunov, 2011; Riccardi, 2022; Steinko, 2012).

Proximity enables offenders to stay close to their illicit proceeds, maximizing oversight and control of the movement of funds. While laundering illicit proceeds in distant locations may offer greater protection, it typically requires offenders to have technical expertise or to rely on professionals, such as lawyers and tax advisors, who can assist them in the process to minimize potential risks of detection. However, involving external third parties in cross-border movements of illicit proceeds not only increases the overall cost of the money laundering scheme but it also requires offenders to place trust in external third parties to manage and move the illicit proceeds, which can be risky and generates more uncertainty (Riccardi, 2022). Not secondary, these relationships entail significant principal-agent issues because often offenders lack the ability to determine if professionals are doing an adequate job and may even lose sight of the whereabouts of their illicit funds (Levi & Soudijn, 2020).

Conversely, to minimize potential risks of fraud, detection and enforcement, offenders may prefer investing in social and economic contexts they are familiar with and balancing security and efficiency by integrating their illicit proceeds into networks of personal contacts (Riccardi, 2022; van Duyne et al., 2018). These contexts provide a sense of familiarity and security, allowing offenders to rely on trusted individuals who can facilitate the movement and management of their illicit funds while mitigating inherent distrust within criminal economic transactions (Kruisbergen et al., 2015; Van De Bunt et al., 2013). Overall, results confirm that there is little evidence that “most average criminals would venture further than their own social and economic circle: their own yard” (van Duyne et al., 2018, p. 264).

In particular, more than other criminal groups, Italian Mafias are embedded in multiple social relations of kinship, rituals, and secrecy to increase trust among members (Catino, 2019; Nicaso & Danesi, 2013; Paoli, 2003) and tend to invest in territories under their control to enhance social consensus within their communities (Dugato et al., 2015; Transcrime, 2013).

For example, in case 326, a Camorra group active in Veneto routinely smuggled a large share of their illicit cash back to Campania to sustain the economic needs of families of the group's inmates. On the other hand, investing in a context where offenders think they know, and they can manage is also instrumental in circumventing more easily the anti-money laundering controls. For example, in case 79, a Mafia group bribed a manager of a local bank branch to authorize their wire transfers – which were flagged by the internal detection systems of the bank – and not to file a suspicious transaction report to the Italian Financial Intelligence Unit.

Other OCGs and No OCGs have a wider geographical scope compared to Italian Mafias and Foreign OCGs (47 countries vs. 24 countries vs. 45 countries, respectively). Notably, No OCGs are strongly associated with countries in the Americas & Caribbean compared to the other offenders. Similar to their flexibility in selecting methods for money laundering, these offenders appear to exhibit a greater degree of adaptability when it comes to choosing countries that align with their interests. Again, these offenders are not subject to the same drivers and constraints of traditional OCGs. Rather than prioritizing geographical proximity, their primary motivation for selecting specific countries may revolve around the level of secrecy they can offer for their money laundering operations.

The use of countries with low levels of financial and corporate transparency for money laundering purposes is well known (Does de Willebois et al., 2011; Jofre et al., 2022; Riccardi, 2022; Riccardi & Milani, 2018). However, it is worth noting that empirical evidence from the cases show offenders' preference for “on-shore” European countries that are characterized by less corporate and financial transparency compared to Italy rather than notorious offshore countries in the Caribbean or the Pacific Ocean (54% vs 29% vs. 9%, respectively). These results partially contradict previous literature which suggested the prevalence of money laundering amongst smaller nations (or developing ones in general) which, from a theoretical

point of view, may be incentivized to lower their regulatory standards for attracting illicit capitals (Argentiero et al., 2008; Morris-Cotterill, 2001; Unger, 2007; Walker, 1999). Additionally, third-party financial facilitators were involved in 65% of the cases where illicit proceeds flew to notorious high-risk countries in the Latin America & Caribbean area, suggesting again how investing in these countries may be an option only for offenders who are willing to take more risks by involving third parties because specific skills, knowledge and expertise are required. Not secondary, the choice may be justified only for those offenders generating sufficient illicit proceeds to cover the substantial fees charged by financial facilitators.

The prevalence of European countries in these offenders' money laundering schemes is remarkable and can be attributed to two main factors. First, these countries, while still offering laxer corporate transparency requirements than the EU average, are geographically and culturally closer to Italy and have similar languages, regulations and often the same currency. Second, transferring illicit proceeds to these countries is generally less risky for three main reasons:

1. Obligated entities do not have to carry out enhanced monitoring on financial flows towards these countries.
2. They are less likely to be included in anti-money laundering blacklists. For example, by design, European countries cannot be included in the official EU blacklist that targets high-risk third countries having strategic deficiencies in their regime on anti-money laundering and countering the financing of terrorism.

3. They rarely draw attention from media which, on the contrary, focus on those jurisdictions identified by the dominant narrative (e.g., *Panama Papers*, *Paradise Papers*).

Increased scrutiny of specific jurisdictions may lead to displacement effects, diverting illicit proceeds to countries that do not gather the same attention by law enforcement agencies and public authorities. Paradoxically, the current implementation of anti-money laundering measures may act as a cover for dirty money. It may be conjectured, for example, that the best place to hide illicit proceeds is a country with a reputation for regulation and a good FATF evaluation (Riccardi, 2022).

Additionally, it is worth noting that these countries may offer stable political and economic environments. First, the sheer size of their financial markets provides greater opportunities for offenders to obscure the trail of their funds because “hiding money is easier in a bigger pool of money” (Ferwerda et al., 2020, p. 4). Second, these countries often possess high-level financial services that enable offenders to launder money more effectively and efficiently. Furthermore, they are more likely to be insulated from external factors that may cause capital loss, such as conflicts or political instability. Overall, countries with stable political and economic environments may be perceived as safer havens for storing and enjoying illicit wealth because they provide stability and protection against several capital loss risks and ensure offenders that they can ultimately access and enjoy the fruits of their crimes (Ferwerda et al., 2020; Riccardi, 2022).

The present results can be of particular interest to scholars researching international money laundering flows. The dominant framework for modelling money laundering flows at the international level is the so-called Walker-Unger model (see, for example, Walker, 1999; Walker & Unger, 2009). While this theoretical model ultimately aims at estimating money

laundering flows at the international level, it makes assumptions on which country characteristics money launderers are looking for when deciding the destination of their illicit proceeds. In particular, the general hypothesis in gravity models is that flows are larger between larger and closer countries.

Conversely, despite some data limitations, the present dissertation provides empirical insights on money launderers' choices when deciding the foreign destination of their illicit proceeds. It suggests that relevant differences (or preferences) exist based on different types of criminal actors. As a result, one could argue that generating a unique model for all money launderers may not be theoretically defensible. Although some simplifications are necessary for modelling purposes, developing multiple theoretical models based on different types of criminal actors may prove to be a better alternative. For example, Italian Mafias seem to mainly launder their illicit proceeds in Italy, suggesting that geographical distance is a cost for money laundering. Conversely, Foreign OCGs bear this cost to move their illicit proceeds back to their home countries which are often far away from Italy, suggesting that also cultural proximity may play a pivotal role in influencing these flows. Including certain variables based on the specific type of actors under analysis is essential to develop more realistic economic models that consider empirical evidence stemming from criminal investigations.

5.3 Policy implications

Overall, the results of the present dissertation warrant further discussion in terms of policy implications. Over the decades, scholars have long criticized the anti-money laundering framework, pointing out its limitations, flaws, and unintended consequences (Ferwerda, 2018; Halliday et al., 2019; Levi et al., 2018). While many criticisms are directed towards its focus on measuring compliance effectiveness rather than outcomes effectiveness (see for a review

Halliday et al., 2020), one could argue that such political distortion is the inevitable result of the lack of robust data and evidence on actual patterns of money laundering. Despite the primary role of the risk-based approach, existing policies and regulations in this domain have weak empirical bases and they have been built on predetermined assumptions about how offenders behave and, consequently, how they respond to anti-money laundering efforts (van Duyne et al., 2018). However, this lack of empirical data is a key issue because practitioners who conceptualize money laundering inaccurately are less likely to address it effectively (Van Koningsveld, 2013b).

The present dissertation attempted to establish a robust empirical foundation for examining patterns of money laundering. However, readers should be mindful of existing data constraints, which require a cautious interpretation of the results. The findings suggest, at most, that certain money laundering patterns exhibit a certain degree of predictability, providing opportunities for deeper scrutiny to enhance anti-money laundering initiatives. On the other side, these results do not argue for a complete overhaul of the existing anti-money laundering framework; rather, they emphasize the need for targeted improvements within the current system as a complexity beyond the scope currently described in both official discourse and policy debate emerges from empirical evidence.

Overall, offenders seem to use a variety of money laundering strategies which cannot be effectively represented by sweeping generalizations that try to portray money launderers as an homogenous group of offenders. As a result, policies must “consider the actors involved in money laundering or the spaces in which they operate” (P. M. Gilmour, 2023, p. 38). Notably, these factors are often intricately interconnected, giving rise to money laundering strategies that emerge from the intersections of actors, predicate offences and the broader social and cultural environment in which they operate (Tiwari et al., 2023). Instead of focusing on describing how

offenders can launder their illicit proceeds, policymakers need to reframe anti-money laundering efforts by contextualizing this criminal phenomenon within its temporal, environmental and social setting to consider the full spectrum of offenders' behaviors (Cassella, 2018; P. M. Gilmour, 2023; Levi & Soudijn, 2020; Soudijn, 2016). Retrieving a well-established concept in the organized crime literature, it is worth noting that “criminal activities cannot be separated from the social relations between the participants and the institutional environments in which their interactions take place” (Van De Bunt et al., 2013, p. 323). The same principle applies to money laundering: it does not occur in a vacuum and, as a result, it should not be abstracted from its wider context.

Overall, the heterogeneity of money laundering activities may imply that offenders are likely to respond differently to the various control mechanisms, such as beneficial ownership registration or increased exchange of information (Reuter, 2017). For example, most foreign OCGs active in Italy are likely to never place their illicit cash within the financial system as they move their illicit proceeds out of the country using cash smuggling or underground banking systems. Other OCGs and No OCGs, such as cybercriminals, already have their illicit proceeds within the financial system but tend to cash them out at a certain point of the laundering process to sever the digital trail and facilitate their spending. This basic example illustrates the potential inadequacy of uniformly applying the same rules to all instances of money laundering. The first group of offenders would be unaffected by the extensive controls implemented by obligated entities to prevent financial system abuse while stricter regulations on cash movements would significantly impact on both groups.

As a result, in developing effective anti-money laundering countermeasures, it is important to understand that “perhaps it is too ambitious to aim to impact on all organized crime rather than on particular communities, crime organizations or on particular forms of criminal

activity” (Levi & Soudijn, 2020, p. 41). There is no reason why money laundering patterns should be constant over place and time *a priori*: offenders may choose the money laundering strategies that best suit their specific needs, goals, competences and wider environmental (and social) contexts. Acknowledging the complex nature of money laundering by considering the specific interplay and combination of agency and context factors is essential to develop effective countermeasures. Instead of pursuing a one-size-fits-all strategy, law enforcement should adopt a differentiated approach based on the specific criminal activities and actors under scrutiny.

International money laundering is subject to the same line of reasoning. To date, most of the current blacklists are based on rather arbitrary evaluations which reflect countries’ geopolitical influence at the international level rather than an empirical assessments of money laundering risks (Nance, 2018; Riccardi, 2022; Sharman, 2008). Conversely, because of their wide range of potential unintended consequences (Nance, 2018; Unger & Ferwerda, 2008), blacklists should have a strong empirical basis. Despite its limitations (see section 5.4), actual evidence stemming from criminal investigations represents the best available approximation of money laundering activities, and it should be considered.

In this regard, results of the present dissertation suggest that different types of offenders may not have the same propensity in laundering illicit proceeds abroad and may rely on different countries based on their specific aims, needs and opportunities. As a result, the vulnerability of a destination country to money laundering is inherently a function of the actions and behaviors of the offenders involved, rather than being solely determined by the country's intrinsic characteristics. For example, while a country may offer good levels of banking secrecy, how (and especially if) this vulnerability will be exploited depends on the specific threat actors

involved. In this regard, it is clear that “more interesting than the country itself, is the relation between an offender and the country he invests in” (Kruisbergen et al., 2015, p. 250).

Let’s make the example of China as emerging from empirical evidence. From Italy’s point of view, China may be classified as a high-risk country for money laundering, but mostly in connection with Chinese offenders. It would be unlikely, though not impossible, for an Italian tax evader to prefer laundering and investing illicit proceeds in China rather than other third countries. Moreover, “destination countries (countries *j*) have different levels of ML risk depending on the country the illicit money originated from (country *i*)” (Riccardi, 2022, p. 129). So, while China may be considered high-risk from Italy's standpoint, this may not necessarily be true for other countries, even those geographically close to Italy.

Some additional examples can be given regarding the last point. Italy and Switzerland, despite bordering, differ significantly in terms of the money laundering threats faced: Italy mainly deals with illicit proceeds of domestic organized crime while Switzerland is primarily concerned with foreign illicit capitals, often from corrupt elites (Ferwerda & Reuter, 2019). Similarly, Steinko (2012) showed that, out of the main foreign countries involved in 363 money laundering sentences passed in Spain between 1995 and 2011 (more than 90% had drug trafficking as predicate offence), most of them were strongly associated with illicit drug flows, either being consumers (the United Kingdom, the United States, Germany and France), producers of illegal drugs (Colombia, Morocco) or transit countries towards the Western hubs of illegal-drugs consumption (the Netherlands, Venezuela, Turkey, Portugal and Mexico). Once again, high-risk countries in terms of money laundering are specific to the threats faced by Spain and different from those of Italy and Switzerland.

As a result, it is important to highlight that international money laundering is a contextual and relational process influenced by the specific actors involved (Riccardi, 2022). To gain a

deeper understanding of whether offenders are likely to launder their illegal profits abroad and in which countries, it is crucial to consider their specific characteristics and the wider context in which they operate. Consequently, it is challenging to identify a univocal list of countries that pose a high risk of money laundering worldwide, as universal blacklists lack the necessary nuance to consider the diverse range of actors and underlying predicate offences involved. For example, blacklisting notorious tax havens may strike at corrupt high-officials or multinational corporate profit shifting but it has likely no impact on human or drug traffickers' decisions to send their illicit earnings to their home countries. Instead, a more effective approach may be to adopt a national strategy for blacklisting, which can better address the specific money laundering threats faced by each country. Notably, Tax Justice Network, a UK non-governmental organization (NGO), has already made progress in this direction by introducing a bilateral version of its Financial Secrecy Index (FSI) which attempts to produce a list of secrecy countries j based on the specific country of interest i (Janský et al., 2022).

This approach would have the advantage of aligning with existing national risk assessments (NRAs) which require countries to accurately comprehend and evaluate the actual money laundering risks they are exposed to (see for a review Ferwerda & Reuter, 2019). In this regard, a promising avenue could be developing specific blacklists that a country may use based on the money laundering threats it faces. For example, it may be conjectured that Spain and the Netherlands, both having a relevant role in the international drug trade, may share similar high-risk jurisdictions in terms of money laundering. Overall, by moving away from using generalized risk factors that may not be applicable to all contexts, this tailored approach can enable a more comprehensive understanding and a more effective tracing of illicit financial flows at the international level.

On the other hand, it is worth noting that the results from the present dissertation seem less applicable to, for example, the FATF 40 Recommendations, which provide a comprehensive framework of measures to help countries tackle illicit financial flows. The FATF Recommendations set an international standard, which countries should implement through measures adapted to their particular circumstances, because they have diverse legal, administrative and operational frameworks and different financial systems. While countries should strive for overall compliance with all FATF Recommendations, the findings of this dissertation underscore the importance of a risk-based approach which starts from a thorough analysis of threats. Countries must maintain a clear and updated understanding of the threats they face to allocate resources in the fight against money laundering efficiently and effectively.

5.4 Limitations of the study and directions for future research

The present dissertation has some limitations that need to be considered when interpreting the results. First and foremost, it only includes money laundering cases investigated by Italian law enforcement agencies. This choice inevitably raises the question of the generalizability of Italy as a case, especially considering its unique characteristics such as the significant presence of organized crime groups in the country. On the one hand, the choice of such a sui generis case unavoidably constrains the scope of this dissertation; on the other, comparing money laundering activities across multiple countries is inherently limited by the complex nature of the criminal phenomenon itself. Focusing on just one country allows to avoid potential confounding factors that are difficult to control for, such as national differences in the legal definitions of money laundering (Matanky-Becker & Cockbain, 2021).

Second, the analysis relies on information emerged from criminal investigations. Although the open-source data enabled the collection of rich and detailed information on a

massive scale, this data source suffers from some limitations. Data only cover offenders and money laundering activities that came to the attention of Italian law enforcement agencies and, not secondary, were targeted in successful investigations. This issue could lead to an ‘institutional’ bias where certain actors falling outside the scope, priorities and resources of law enforcement agencies are not targeted by criminal investigations (Bjelland & Dahl, 2017; Cockbain et al., 2020). For example, given the well-known challenges in cross-border criminal investigations, this bias may result in a more frequent enforcement of local – and potentially simpler – money laundering schemes rather than complex and transnational ones. As a result, analyses based on these data may reflect the shifting focus of law enforcement agencies and obliged entities on specific behaviors rather than indicating underlying trends in money laundering methods (Levi & Reuter, 2006).

Additionally, examining "failed" offenders may introduce an inherent bias toward confirming research hypotheses. It could be argued, for example, that less sophisticated money launderers are more likely to being detected and arrested. As a result, the prevalence of basic money laundering techniques, such as the reliance on cash-based schemes, may indeed be a reflection of the nature of the sample. Similarly, the well-documented territorial control exhibited by Italian Mafias, if deemed an outlier, could inevitably skew the results toward confirming the proximity hypothesis, as widely discussed in previous sections.

Third, cases were identified through a purposive sampling as they were selected based on their availability. Criminal investigations involving money laundering that, for any reasons, were not covered by Italian law enforcement agencies with an official press release on their websites are not in the sample. The non-probability selection of the sample means that these cases are not representative of all money laundering cases in Italy. According to the statistics provided by the Italian Ministry of the Interior, 9012 money laundering offences have been

reported by Italian law enforcement agencies to the judicial authority in the period 2016-2020 (with 2020 being the latest year available). On the contrary, the sample used for the analysis only included 348 cases for the period 2016-2022. However, as shown in Table 10, it is worth noting that there is a positive and significant correlation between the two distributions of cases across Italian regions (Pearson's $R = 0.72^{***}$).

Table 8. Distribution of money laundering records from ISTAT and money laundering cases in the sample across Italian regions

Italian region	% of money laundering cases ISTAT in	% of money laundering cases in
	2017-2021 (N=8720)	the sample 2016 -2022 (N=348)
Abruzzo	90 (1%)	9 (3%)
Basilicata	78 (1%)	1 (0.3%)
Calabria	254 (3%)	11 (3%)
Campania	1110 (13%)	18 (5%)
Emilia-Romagna	695 (8%)	33 (10%)
Friuli-Venezia Giulia	106 (1%)	7 (2%)
Lazio	780 (9%)	69 (20%)
Liguria	267 (3%)	5 (1%)
Lombardia	1253 (14%)	58 (17%)
Marche	217 (2%)	7 (2%)
Molise	32 (0.4%)	/
Piemonte	433 (5%)	18 (5%)
Puglia	755 (9%)	13 (4%)
Sardegna	153 (2%)	5 (1%)
Sicilia	558 (6%)	35 (10%)
Toscana	1112 (13%)	25 (8%)
Trentino-Alto Adige	248 (3%)	5 (1%)
Umbria	49 (1%)	7 (2%)
Valle D'Aosta	15 (0.2%)	1 (0.3%)
Veneto	495 (6%)	20 (6%)
TOTAL	8720 (100%)	348 (100%)

Source: Author's elaboration of Italian Ministry of Internal Affairs data

On the other hand, information regarding the specific criteria used by Italian law enforcement agencies for publishing a press release was not available. Despite efforts to gather information on the selection criteria by contacting the press offices of the three law enforcement agencies, no relevant information was provided. One plausible hypothesis is that law enforcement agencies may be more inclined to publish press releases only for the most serious cases, such as those involving organized crime groups and substantial amounts of illicit proceeds. This potential bias could result in an underrepresentation of minor cases, similar to what already occurs in news media articles (Unger et al., 2006). However, while this issue represent a relevant constraint, it can also be viewed as an advantage that partially reinforces the robustness of the research. As also shown in Table 5, the analysis primarily deals with money laundering scenarios characterized by substantial illicit proceeds and large number of offenders, often tied to organized crime groups. Therefore, the research offers an exploration of the most substantial and impactful facets of money laundering. Overall, efforts were directed towards collecting as many public criminal cases as possible to mitigate the adverse effects of sample selection. However, limited external validity of the research must be considered when interpreting the results.

Fourth, cases in the sample only include information on the criminal charges as reported by law enforcement agencies because they have not received a final judgement by a criminal court. Additional charges may be laid or, on the contrary, dropped due to lack of evidence, plea bargaining or acquittals. However, judicial decisions may take a long time – especially considering the three sets of proceedings in the Italian criminal system – and often exclusions of evidence are only due to formal errors (Leukfeldt & Kleemans, 2021). Building on seminal discussions on how solid empirical evidence should be for criminological research (Sutherland,

1945; Tappan, 1947), I decided to include in the sample only closed police investigations that provide enough information to be prosecuted in court. Such choice is the optimal trade-off between the solidity of the data for research purposes and the topicality of the cases (Roks et al., 2022). However, it should be noted that charges in these cases are merely allegations, and the defendants are presumed innocent unless and until proven guilty.

Lastly, it is important to address the accuracy of the coding process. While the present dissertation was coded by a single researcher using a clear codebook to limit subjectivity (Krippendorff, 2018), it is worth noting that “individual human coders may fatigue over time, thus making more mistakes, or their interpretation of categories may shift slightly over time, resulting in misclassification” (Kort-Butler, 2016, p. 5). The decision to use a hand-coded content analysis was motivated by the complexity of the unstructured textual data being analyzed (see section 3.4.1.). However, this methodology inevitably exposes the coder to potential errors that must be considered.

Despite the above-mentioned limitations, the present dissertation contributed to expanding empirical knowledge in an under-researched area. However, there is significant scope for further research in this field, as well as several directions to explore, both in terms of research questions to answer and methodology to use. First, the multiple correspondence analysis suggest the heterogeneity of money laundering methods across different types of offenders. However, money laundering methods are often inherently different. For example, both smuggling cash across borders and setting up international structures of shell companies with bank accounts in various countries constitute money laundering, but they differ significantly in terms of actions, decision-making processes, logistical challenges, and intermediaries involved. While the present dissertation has attempted to provide a preliminary explanation for why offenders use different money laundering strategies, future research should

aim to quantitatively test if and to what extent various factors identified in the literature play a role in driving these behaviors (e.g., the amount of illicit proceeds, the involvement of professional money launderers).

Second, the country variable used in the multiple correspondence analysis only recorded the involvement of a jurisdiction in a money laundering scheme, without considering its specific role. It overlooked the fact that certain jurisdictions often serve as transitional points before directing illicit proceeds to other third countries (the final destination) or back to the country where the predicate offence occurred (Does de Willebois et al., 2011; Ferwerda et al., 2020; Riccardi, 2022; Steinko, 2012). While this dissertation emphasized the importance of considering the specific actors under scrutiny to comprehend the choice of jurisdictions in money laundering schemes, the selection of a particular throughflow jurisdiction may be predominantly influenced by intrinsic characteristics facilitating money laundering. Future research should consider these additional elements when modelling international money laundering flows (Reuter, 2017; Riccardi, 2022).

Third, on a general note, the number of money laundering studies based on systematic empirical analyses has remained surprisingly limited over the last two decades. Much of the research relies on anecdotal evidence stemming from the analysis of a few case studies. One of the main reasons underpinning the scarce empirical evidence is the lack of robust data and data on money laundering that can be used. The present dissertation tried to account for this issue by using open-source data. However, efforts from single researchers will always be frustrated by resources constraints, resulting in studies that are based on (relatively) small samples of cases that inevitably limit the scope and generalizability of the findings.

Conversely, just like scholars studying terrorism and extremism have created large empirical databases to benefit the whole academic community (Freilich et al., 2014; LaFree et

al., 2006), researchers interested in money laundering should adopt a similar approach. In this regard, open-source information, such as news media articles and law enforcement press releases, can play a crucial role in collecting money laundering cases across different jurisdictions on a massive scale. A similar database could significantly scale criminological research in this domain by providing access to a vast and diverse sample of cases, enabling researchers to use quantitative methodologies to explore new research questions that have been difficult or impossible to answer to date. Moreover, granting researchers from different countries and backgrounds access to a singular database may facilitate the comparison of findings across the resulting studies which, to date, has been limited because they “have taken place across numerous geographical and temporal contexts using highly varied methods” (Matanky-Becker & Cockbain, 2021, p. 408).

In addition to building a large empirical dataset, one of the primary goals of future empirical research in this domain should be to leverage new data sources. By pushing past the limitations of using only one or two data types, money laundering scholars will be able to develop a more comprehensive understanding of money laundering. To date, almost all the previous studies have used police files or court documents (see Table 1). However, gaining access to this type of material can be quite hard, if not even impossible in certain countries (Levi & Soudijn, 2020). Not secondary, while these data provide exclusive insights on criminal activities because of the special investigation methods used by law enforcement agencies (Leukfeldt & Kleemans, 2021), they are biased by law enforcement agencies’ priorities, resources and constraints and only account for the behaviors of “failed” offenders (Cockbain et al., 2020).

Moreover, it is worth noting that many police investigations lack financial details because law enforcement agencies often do not prioritize money laundering (Levi, 2018; Levi &

Soudijn, 2020). Conversely, they typically focus on suspects involved in predicate crimes (e.g., drug trafficking) (Kramer et al., 2023; Soudijn, 2014). As a result, police files may not include information that is not strictly useful for prosecution, and money launderers are often either absent or only at the periphery of criminal networks when relying on this data source (Bright et al., 2012; Malm & Bichler, 2013; Morselli & Giguere, 2006).

As a result, speaking directly with presumed or convicted money launderers may help reduce these biases by providing more detailed – and unfiltered – insights into their goals, choices and decision-making processes. Despite challenges in approaching these offenders (see for a review Levi & Soudijn, 2020), collecting this type of information may open interesting research avenues (see for example Berry et al., 2023; Teichmann, 2020; Teichmann & Marie-Christin Falker, 2021). For example, querying offenders about the main constraints and difficulties they encounter when laundering illicit proceeds may help scholars and policymakers in gauging the effectiveness of anti-money laundering controls. If deficiencies are identified, this information could pinpoint areas in need of intervention.

Similarly, demand-supply interactions associated with money laundering services in online environments (e.g., dark web marketplaces) represent another promising type of data that can be used in the future to collect transactional data on a massive scale (Kruisbergen et al. 2019). In this regard, the use of virtual currencies and the transparency of the blockchain offer a unique opportunity to criminologists interested in money laundering. For the first time, scholars can now access data on financial transactions linked to criminal activities without relying on the involvement of law enforcement agencies. Analyzing the money laundering strategies of purportedly “successful” offenders is essential for testing the so-called “ingenuity fallacy” hypothesis in realm of money laundering, namely when “the situation is imagined to be more complex than it really is” (Levi & Soudijn, 2020, p. 6). While the prevalence of basic

money laundering schemes is a recurring finding in the literature (Levi & Soudijn, 2020; Matanky-Becker & Cockbain, 2021; Steinko, 2012), understanding the extent to which unnoticed money laundering activities are more intricate than those detected by law enforcement agencies poses a challenging inquiry. Leveraging this new data source may contribute significantly to addressing this research question.

Conclusions

Overall, to the best of my knowledge, the present dissertation has conducted the first exploratory analysis of an under-researched area by demonstrating the heterogeneity of money laundering. The complex and multifaceted nature of money laundering requires any national or international effort aimed at curbing it to acknowledge the specific offenders involved. Analyzing the actors, predicate offences and spaces connected with money laundering is as important as understanding how illicit proceeds are actually laundered (P. M. Gilmour, 2023; Matanky-Becker & Cockbain, 2021).

The findings of the present dissertation support the argument that offenders are likely to make rational decisions as to how and where to launder their illicit proceeds (N. Gilmour, 2016; Matanky-Becker & Cockbain, 2021). However, this may involve making decisions based on considerations of what options may be best (or just feasible) considering the specific agency and context factors such as, among others, their purposes, competences, amount and type of illicit proceeds. As a result, it is clear how current claims on money laundering in the policy debate may lay false claims to universality, whereas they are partial at best and likely to represent only a small number of cases (Matanky-Becker & Cockbain, 2021).

Aligned with the efforts of other scholars (Benson, 2016; Tiwari et al., 2023), it is necessary to underpin the rationale behind offenders' decision-making in laundering illicit

proceeds by considering a comprehensive range of factors that shape their choices. Similar to the decision-making processes involved in engaging in criminal activities, the choice to launder criminal proceeds may also be impacted by factors such as the nature of the predicate offence, the social connections of the offenders, and the broader circumstances and dynamics leading up to and surrounding the specific moment when the decision to launder is taken (Benson, 2016; N. Gilmour, 2016; Levi & Soudijn, 2020; Tiwari et al., 2020).

Collaboration between scholars and policymakers is crucial to strengthen the global anti-money laundering approach, acknowledging the complexity of this criminal phenomenon which emerges from empirical evidence. Addressing all money laundering activities with a uniform approach is impractical; however, developing a nuanced understanding of the diverse landscape of money laundering, including the motivations, behaviors, and decision-making processes of money launderers, can empower law enforcement authorities and policymakers to anticipate and investigate money laundering activities more effectively.

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Annex**Table 9. Total number of references for foreign countries involved in the 348 money laundering investigations in the sample. Aggregated, 2016 – 2022**

N.	Country	Geographical area	References
1	United Kingdom	Western Europe	35
2	Switzerland	Western Europe	33
3	Romania	East Europe & Central Asia	23
4	Croatia	East Europe & Central Asia	22
5	Bulgaria	East Europe & Central Asia	21
6	Germany	Western Europe	19
7	Malta	Western Europe	19
8	Hungary	East Europe & Central Asia	18
9	Slovakia	East Europe & Central Asia	15
10	Spain	Western Europe	15
11	Slovenia	East Europe & Central Asia	14
12	Czech Republic	East Europe & Central Asia	11

13	Austria	Western Europe	9
14	China	East Asia & Pacific	9
15	United Arab Emirates	Middle East & Africa	9
16	Luxembourg	Western Europe	8
17	San Marino	Western Europe	8
18	Belgium	Western Europe	7
19	Albania	East Europe & Central Asia	6
20	Monaco	Western Europe	6
21	Panama	Americas & Caribbean	6
22	Poland	East Europe & Central Asia	6
23	France	Western Europe	5
24	Lithuania	East Europe & Central Asia	5
25	Netherlands	Western Europe	5
26	Nigeria	Middle East & Africa	5
27	UK Virgin Islands	Americas & Caribbean	5
28	Cyprus	Western Europe	4
29	Hong Kong	East Asia & Pacific	4

30	Portugal	Western Europe	4
31	Russia	East Europe & Central Asia	4
32	Ukraine	East Europe & Central Asia	4
33	Estonia	East Europe & Central Asia	3
34	Liechtenstein	Western Europe	3
35	Pakistan	East Asia & Pacific	3
36	Andorra	Western Europe	2
37	Australia	East Asia & Pacific	2
38	The Bahamas	East Asia & Pacific	2
39	Belize	East Asia & Pacific	2
40	Canada	Americas & Caribbean	2
41	Egypt	Middle East & Africa	2
42	Vatican City	Western Europe	2
43	Malaysia	East Asia & Pacific	2
44	Marshall Islands	Middle East & Africa	2
45	Mauritius	Middle East & Africa	2
46	Morocco	Middle East & Africa	2

47	Netherlands Antilles	East Asia & Pacific	2
48	Seychelles	East Asia & Pacific	2
49	Sweden	Western Europe	2
50	Tunisia	Middle East & Africa	2
51	Turkey	Middle East & Africa	2
52	United States	Americas & Caribbean	2
53	US Virgin Islands	Americas & Caribbean	2
54	Afghanistan	Middle East & Africa	1
55	Bangladesh	East Asia & Pacific	1
56	Bermuda	Americas & Caribbean	1
57	Brazil	Americas & Caribbean	1
58	Colombia	Americas & Caribbean	1
59	Cuba	Americas & Caribbean	1
60	Curaçao	Americas & Caribbean	1
61	Denmark	Western Europe	1
62	Dominican Republic	Americas & Caribbean	1
63	Gambia	Middle East & Africa	1

64	Greece	Western Europe	1
65	Japan	East Asia & Pacific	1
66	Latvia	East Europe & Central Asia	1
67	Lebanon	Middle East & Africa	1
68	Libya	Middle East & Africa	1
69	Macao	East Asia & Pacific	1
70	Mexico	Americas & Caribbean	1
71	New Zealand	East Asia & Pacific	1
72	Serbia	East Europe & Central Asia	1
73	Singapore	East Asia & Pacific	1
74	Syria	Middle East & Africa	1
75	Thailand	East Asia & Pacific	1

Source: Author's elaboration

Table 10. The proportion of variance retained by the different dimensions in the specific multiple correspondence analysis of actors, predicate offences and methods

Dimension	Eigenvalue	Variance	Adj. Variance	Cumulative %
1	0.145	10.6	53%	53%
2	0.116	8.5	24%	77%
3	0.096	7.1	10.6%	87.6%
4	0.089	6.6	7.3%	94.9%
5	0.075	5.5	2.3%	97.2%
6	0.071	5.2	1.3%	98.5%
7	0.067	4.9	0.7%	99.2%
8	0.064	4.7	0.4%	99.6%
9	0.063	4.6	0.3%	99.9%
10	0.059	4.3	0%	99.9%

Source: Author's elaboration

Table 11. The proportion of variance retained by the different dimensions in the specific multiple correspondence analysis of actors, methods and countries

Dimension	Eigenvalue	Variance	Adj. Variance	Cumulative %
1	0.106	11.9	54.8%	54.8%
2	0.078	8.7	17.8%	72.6%
3	0.073	8.1	13.1%	85.7%
4	0.059	6.6	4.5%	90.2%
5	0.059	6.6	4.3%	94.5%
6	0.055	6.2	2.7%	97.2%
7	0.053	6	2.1%	99.3%
8	0.047	5.3	0.5%	99.8%
9	0.043	4.9	0.1%	99.9%
10	0.041	4.6	0%	99.9%

Source: Author's elaboration