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Criminal organizations, money laundering and legal economy: evidence from the Piemonte region

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Alla mia famiglia,
che ha reso possibile tutto questo.

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Index

Glossary and list of abbreviations

AML/CFT	Anti-money laundering and combating the financing of terrorism
ANBSC	Agenzia Nazionale dei Beni Sequestrati e Confiscati alla criminalità organizzata
Antimafia Code	Codice delle leggi antimafia e delle misure di prevenzione, nonché nuove disposizioni in materia di documentazione antimafia, a norma degli articoli 1 e 2 della legge 13 agosto 2010, n. 136
BAS	Bank Secrecy Act
CDD	Customer Due Diligence
Chinese AML Law	Anti-Money Laundering Law of the People's Republic of China
DNFBPS	Designated Non-Financial Businesses and Professions
FATF	Financial Action Task Force
FIU	Financial Intelligence Unit
Italian AML Law	Attuazione della direttiva 2005/60/CE concernente la prevenzione dell'utilizzo del sistema finanziario a scopo di riciclaggio dei proventi di attività criminose e di finanziamento del terrorismo nonché della direttiva 2006/70/CE che ne reca misure di esecuzione
NAS	Nuclei Antisofisticazioni e Sanità dei Carabinieri
NPO	Non-profit organisation
Palermo Convention	United Nations convention against transnational organized crime
PRC	People's Republic of China
RBA	Risk-based approach
SAR	Special Administrative Region
SAR	Suspicious Activity Report
STR	Suspicious Transaction Report
Terrorist Financing Convention	International Convention for the Suppression of the Financing of Terrorism

UN	United Nations
UNODC	United Nations Office on Drugs and Crimes
Vienna Convention	United Nations convention against illicit traffic in narcotic drugs

Introduction

Money laundering may be seen as the answer to the following rhetorical question: “What is the point of committing an illicit activity, if I cannot enjoy its reward?”. Given its nature, the origin of the phenomenon can be traced back to the very beginning of commerce. Sterling Seagrave, a British historian, describes in his book “Lords of the Rim” how Chinese merchants used to hide, move and invest their wealth in remote provinces or even outside of China more than three thousand years ago. Although methodologies and techniques have indeed evolved over the last millennia, the basic idea of money laundering was already in place: make money obtained from illicit activities appears as though it was originated from a legitimate source.

Estimations of global money laundering activities may be based either on macroeconomic approaches or microeconomic approaches, but they generally give a loose perception of the size of the phenomenon. Recent studies conducted by the United Nations Office on Drugs and Crimes (UNODC) have estimated money laundering to be around 2.7 per cent of global GDP. However, estimates are often the results of different definitions of money laundering and empirical analyses and, therefore, changes from one year to another cannot be used as a precise measure of the effectiveness or ineffectiveness of legislations.
Money laundering methods and techniques are constantly evolving. Different methods may be used in one or more of the three stages of money laundering (placement, integration and layering). These methods range from cash smuggling and international trade to gambling and the use of front businesses. Despite the variety of methods, however, money laundering is usually a cross-border activity. The aim of the first chapter of this dissertation is to introduce the phenomenon of money laundering and give a practical overview of some of the methods that are commonly used to launder money.

Criminal organisations not only need to launder the proceeds of their illicit activities, but they also need to maintain their power and status. The aim of the second chapter of this dissertation is to describe the most common features of criminal companies and recent trends in the investments made by Italian criminal organisations in the legal economy. Furthermore, it is also worth describing what are the so-called “red flags” that may be used to identify possible criminal companies.

Considering the international framework in which money launderers operate, it is paramount to adopt a set of measures that are aimed at enhancing the cooperation between different States and international bodies. Examples of successful collaborations are the Vienna Convention of 1988, the Palermo Convention of 2000 – which entered into force in 2003 – and the Forty Recommendations of the Financial Action Task Force (FATF) on Money Laundering, initially developed in 1990 and recently revised.

Terrorist financing is another topic worth considering. Money laundering and terrorist financing are linked by the need of secrecy: although funds used to finance terrorist groups may originate from both legitimate sources and criminal activities, the techniques used to launder money are similar to, if not the same as, those used to conceal the sources of terrorist financing. Consequently, Anti-Money Laundering (AML) international standard also include measures aimed at Combating the Financing of Terrorism (CFT). For instance, the FATF Recommendations include a set of nine Special Recommendations on Terrorist Financing, which also deal with the vulnerabilities of non-profit organisations. States are, therefore, both required to comply with international regulations and encouraged to develop their own AML/CFT legislation. Italy is among the seven founding members of the FATF – which was founded in 1989 by the G-7 countries – and its AML/CFT legislation is considerably in compliance with the FATF Recommendations. The aim of the third chapter of this dissertation is to describe the major international AML/CFT regulations and standards and to describe Italy's legislative framework, also in comparison with the Anti-Money Laundering Law of the People's Republic of China. The comparison may be useful also in the light of the fact that China issued its own AML legislation in 2007, almost seventeen years after the constitution of the FATF.

Criminal organisations have the necessity to conceal their identities and blur the audit trail of their operations. Although there are several ways to achieve this purpose, one easy method would be the use of equity investments. The aim of the fourth chapter of this dissertation is to provide empirical evidence on the use of equity investments by criminal companies. The research questions posed in this chapter are the following: do criminal companies hold more equity investments, either in Italy or abroad, with respect to comparable non-criminal companies? Is their average percentage of ownership higher or lower? What are the common elements, if any, of such equity investments? The analysis consists of a comparison between a sample of criminal companies and a control sample of non-criminal companies both located in the Piemonte region.

Chapter One

Money laundering: definition and size of the phenomenon

Money laundering may be defined as "*the conversion or transfer of property, knowing that such property is the proceeds of crime, for the purpose of concealing or disguising the illicit origin of the property or of helping any person who is involved in the commission of the predicate offence to evade the legal consequences of his or her action*"[1].

The origin of the term 'money laundering' is still a debatable matter. According to Jeffrey Robinson, who has been defined as "the world's leading financial crime author" by the British Bankers' Association, the term was first used in 1972 during the Watergate scandal. At that time, Miami investigator Martin Dardis, while describing Nixon's fundraising scheme, which was run by his finance director Maurice Stans, used the term 'laundering' to define the process behind the creation of an untraceable money source. The Committee to Re-elect the President (CREEP) exploited this system to receive illegal contributions from corporations through a bank in Mexico City[2].

Since the 1980's, the attention toward money laundering has increased dramatically. First drug trafficking and then terrorism have both been identified as the main driver behind the surge in money laundering activities, which in turn led to an increase in the number and scope of laws aimed at combating this phenomenon. Money laundering is, therefore, the conversion of money generated by criminal activities into assets whose source cannot be identified. This process is conventionally divided into three subsequent phases: "placement" of the proceeds of an illegal activity into the financial system; "layering" of the funds by separating them from their illegal source through a series of complex operations; "integration" of the funds into the economy, by combining them with money generated by legitimate sources.

Placement is the phase in which money launderers are most vulnerable, because it involves the movement of large amounts of cash. This can be achieved through a number of techniques, such as the creation of several bank accounts into one or more financial

[1] Palermo Convention, article 6.1(a)(i)

[2] Carl Bernstein and Bob Woodward, *All the President's Men* (New York: Simon & Schuster, 1974), 54-56.

institutions[3] in which small amounts of cash below the threshold that triggers controls by the authorities are deposited (a process known as "smurfing"). Other methods may involve bulk cash smuggling, gambling and front businesses. Layering is essential to blur the audit trail of the proceeds and may involve the movement of the funds out of the country through many different institutions and jurisdictions. At this stage, the funds can be used to purchase other securities and negotiable instruments or transferred to shell corporations and tax havens. Integration is the last stage of the money laundering scheme, and involves the combination of the laundered funds with the proceeds of normal financial or commercial activities. At this point, the funds can be freely used in any way, including the reinvestment in the original criminal company and the financing of terrorist groups.

By its very nature, it is not possible to measure money laundering activities. The only available actual data are those related to investigations and confiscations by law enforcement. However, several organisations have tried to estimate the size of the phenomenon. In 1998, the International Monetary Fund (IMF) estimated the scale of global money laundering operations within a "consensus range" between 2-5 per cent of global GDP[4]. In 2009, according to the key findings of the UNODC, global money laundering was estimated to be 2.7 per cent of global GDP, still within IMF's range[5]. These results have been obtained through an estimation that consists of three main sub-components, namely the calculation of the financial gains arising from transnational crime activities, the estimation of the amounts that enter the financial system, and the estimation of the amounts that cross borders for money laundering purposes[6]. Furthermore, the results suggest that the "interception rate" over the proceeds of crime laundered through the financial system is around 0.2 per cent[7], meaning that a lot remains to be done in terms of AML legislation and investigations.

Since these estimates are the results of different definitions and techniques used to measure money laundering, changes in the size of the phenomenon from one year to another cannot be used to judge the effectiveness of the AML regime. Generally, money laundering estimation methods consist of either a macroeconomic or microeconomic approach. The former produces

[3] Paul Alan Schott, *Reference Guide to Anti-Money Laundering and Combating the Financing of Terrorism* (Washington: IBRD, 2006), 7.

[4] IMF. "Money Laundering: The Importance of International Countermeasures," February 10, 1998, accessed July 6, 2016, https://www.imf.org/external/np/speeches/1998/021098.htm.

[5] United Nations Office on Drugs and Crime, "Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes," (Vienna: UNODC, 2011), 7.

[6] *Ibid*, 9.

[7] *Ibid*, 7.

an upper bound of how much money may be laundered through an estimation of the hidden economy, which is obtained by comparing the actual cash holdings and the expected cash holdings – with respect to tax rates, wages, interest rates and real per capita income – over a period of time[8]. The microeconomic approach produces a lower bound on the demand for money laundering services through the estimation of the income generated by different criminal activities[9]. These two approaches, even when used together, produce loose estimations of how much money is laundered, and therefore could not be reasonably expected to provide guidance for policy makers.

1.1 Methods and techniques

For the purpose of this dissertation, the following definitions adopted by the FATF apply: a "method" is a particular procedure for carrying out money laundering activity, while a "technique" is a particular action or way that the activity is carried out.
Money laundering methods and techniques have indeed changed and evolved throughout the years. In order to provide a practical framework, three methods commonly used by money launderers are presented in the following pages: cash smuggling, front businesses and shell companies, and trade-based money laundering.

1.1.1 Cash smuggling

Cash smuggling is one of the oldest money laundering placement methods and consists of the bulk shipments of cash across borders. This process, according to UK Law enforcement, can be summarised as *raising*, *moving*, *storing* and *using* cash. Raising the funds is obviously the first stage, which consists in the generation of the criminal proceeds through illicit activities; moving the cash is necessary to avoid regulatory oversight, separate the proceeds from the predicate offence and break the audit trail; storing the ill-gotten proceeds refers to physically keeping the money in a safe location; finally, the proceeds can be used both for licit and for illicit activities.

Cash smuggling is not illegal *per se,* and therefore there are thresholds that permit the functioning of the system as a whole. FATF Recommendation 32 requires "*all persons making a physical transportation of currency or bearer negotiable instruments, which are of*

[8] Peter Reuter and Edwin M. Truman, *Chasing Dirty Money: The Fight Against Money Laundering* (Washington: Peterson Institute, 2004), 11.

[9] *Ibid,* 19.

a value exceeding a pre-set, maximum threshold of USD/EUR 15,000, to submit a truthful declaration to the designated competent authorities", which is the so-called "declaration system". On the other hand, countries may adopt a "disclosure system" whereby "*travellers are required to provide the authorities with appropriate information upon request*".

In Italy, according to articles 3 and 9 of the *decreto legislativo 19 novembre 2008, n. 195*, the threshold is set at EUR 10,000. Transporting an amount of monetary instruments (including cash, traveller's cheques, negotiable instruments and securities in bearer form) that exceeds this threshold requires a notification to the Italian Customs Agency. Failing to make the notification is punishable with a fine that can be at maximum 40 per cent of the amount that exceeds the threshold, with a minimum of EUR 300.

In the U.S., Bulk Cash Smuggling is a reporting offence under the Bank Secrecy Act (BAS), which provides a threshold of USD 10,000 and penalties that include imprisonment for not more than five years and forfeiture of any property involved in the offence[10].

China's legislation on cash smuggling is different from those implemented in Italy and U.S., as it is part of the State Administration of Foreign Exchange (SAFE), which is a mechanism aimed at controlling the amount of money coming into and out of the country and combating massive capital outflows. Although Chinese authorities limit the amount of money individuals can move out of the country to USD 50,000 per year[11], data suggest that Chinese still manage to move out of the country huge volumes of cash[12]. Two of the most common methods that are used to avoid this restriction are quota pooling (smurfing) and underground banks: the former is the combination of several individual quotas, usually those available to family or friends; the latter is a two-step process in which a Chinese citizen opens a bank account in Hong Kong and then goes to a foreign-exchange shop, which provides a bank account to make a domestic transfer from his Chinese bank account. When this transaction is confirmed, the foreign-exchange shop transfers the amount of money (minus a fee) into the Chinese citizen's Hong Kong account.

Despite the increase in the use of non-cash payment methods, both legit and criminal economies are still heavily cash based[13]. Given the nature of the problem, there are no official

[10] Bank Secrecy Act, 31 U.S. Code § 5332, Bulk cash smuggling into or out of the United States.

[11] Circular of the State Administration of Foreign Exchange on Printing and Distributing the Detailed Rules on the Implementation of the Measures for the Administration of Individual Foreign Exchange, art. 2.

[12] Bloomberg, "China's Money Exodus," November 3, 2015, accessed June 15, 2016, http://www.bloomberg.com/news/features/2015-11-02/china-s-money-exodus.

[13] Europol Financial Intelligence Group, "Why is cash still king? A strategic report on the use of cash by criminal groups as a facilitator for money laundering," (The Hague: Europol, 2015), 8.

estimates about the amount of cash physically smuggled each year. However, the reasons behind the importance of cash as a money laundering facilitator are rather clear. On the one hand, there are criminal activities, such as drug trafficking, that generate huge amounts of cash which, at some point, need to be laundered; on the other hand, cash offers anonymity and is untraceable. A combination of factors, including an increase in the scope and intensity of banking controls and an increase in criminal activity, are believed to be among the causes behind the recent surge in cash smuggling activity[14].

Illegal bulk cash smuggling requires indeed a certain degree of creativity, given that local law enforcement authorities – usually Customs Services – are trained to detect and record suspect cash movements. Cash smuggled by air can be concealed through body packing, in checked and hand luggage, or even swollen – in a similar fashion to what drugs mules do to transport drugs – to reduce its visibility on scanners. Couriers travelling by road, instead, can hide huge amounts of cash by modifying the chassis, seats or other parts of vehicles. For instance, in June 2016 the Italian Guardia di Finanza stopped a Chinese citizen on the Udine-Tarvisio highway for a routine inspection, just to discover he was smuggling EUR 670,000 cash in a homemade compartment under the seats of his car[15]. In order to increase the efficiency of cash smuggling activities, it is fundamental to reduce the volume, but not the value, of the cash transported. This is the reason behind the important role played by high denomination notes, in particular the EUR 500 note. To provide an intuitive, yet exhaustive example, it is sufficient to think that EUR 1 million in EUR 500 notes weighs 2.2kg, while the same amount of cash in EUR 50 notes weighs 22kg and takes up a tenfold larger space. As of April 2016, EUR 500 notes represent 27 per cent of the total value of notes in circulation, even though they represent just 3 per cent of the total volume[16]. On May 4 2016 ECB decided to discontinue the production and issuance of EUR 500 notes, with the aim of fighting money laundering and illicit activities. The decision will be effective around the end of 2018, but EUR 500 notes will remain legal tender and will continue to be used as a mean of payment or exchanged at the national central banks[17].

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[14] FATF, "Money Laundering through the Physical Transportation of Cash," (Paris: FATF, 2015), 29.

[15] Messaggero Veneto, "Cinese trovato dalla Gdf in autostrada con 670 mila euro in contanti," June 24, 2016, accessed June 27, 2016, http://messaggeroveneto.gelocal.it/udine/cronaca/2016/06/25/news/cinese-trovato-dalla-gdf-in-autostrada-con-670-mila-euro-in-contanti-1.13720499.

[16] ECB. "Banknotes and coins circulation," accessed June 16, 2016, https://www.ecb.europa.eu/stats/money/euro/circulation/html/index.en.html.

[17] ECB. "ECB ends production and issuance of EUR 500 banknote," accessed June 27, 2016, https://www.ecb.europa.eu/press/pr/date/2016/html/pr160504.en.html.

There are indeed certain trends that can be spotted, as regards cash smuggling. Most cross border cash smuggling activities are detected at airports, where controls and passenger checks are more effective. but road and rail are also common transportation means within the EU, especially to and from Switzerland[18]. According to Gabriel Zucman, professor at the London School of Economics, as of October 2013 Italian citizens had moved EUR 120 billion to Switzerland, 80 per cent of which was generated by illicit activities and tax evasion[19]. Italian and Swiss governments have since then begun to cooperate, with the aim of abolishing bank secrecy and enhance the exchange of information between the two countries. On 4 December 2014 the Italian parliament has also approved the Voluntary Tax Disclosure Program, which can be used by taxpayers to declare previously undisclosed assets and funds, independent of whether they are owned abroad or in Italy. Taxpayers who comply with the program are required to pay 100 per cent of the taxes due and will not remain anonymous, but will benefit from a reduction in penalties[20].

Fighting cash smuggling is definitely a hard task. The rationale behind the adoption of thresholds to limit the amount of cash that can be moved freely across borders is straightforward: an individual who carries large amounts of cash must be able to explain both its source and its purpose, given that there are easier – and legitimate – ways to transfer money. As far as controls are concerned, law enforcement has to deal with several inherent limitations. Passenger and luggage checks cannot be put in place effectively on rail and road, and even at airports they are not always sufficient to detect cash. Once cash has been detected, local authorities may still encounter some complications, as it is not in itself an illicit commodity, differently from drugs and counterfeit goods. Therefore, confiscation is often limited to the amount of cash that exceeds the threshold and further investigations can rarely connect the money to the predicate offence that generated it.

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[18] Europol Financial Intelligence Group, "Why is cash still king? A strategic report on the use of cash by criminal groups as a facilitator for money laundering," (The Hague: Europol, 2015), 23.

[19] Angelo Mincuzzi, "Il Tesoro degli italiani in Svizzera? Nel 2013 erano almeno 120 miliardi di euro," *Il Sole 24 Ore*, November 14, 2013, accessed June 27, 2016, http://www.ilsole24ore.com/art/notizie/2013-11-13/il-tesoro-italiani-svizzera-2013-erano-almeno-120-miliardi-euro-195518.shtml?uuid=ABb7U0c.

[20] EY. "Italian Parliament approves Voluntary Disclosure Program," accessed June 28, 2016. http://www.ey.com/GL/en/Services/Tax/Human-Capital/HC-Alert--Italian-Parliament-approves-Voluntary-Disclosure-Program.

Given that cash smuggling is typically a cross-borders phenomenon, cooperation between countries is fundamental, as pointed out in Recommendation 32. However, there are still a number of obstacles to be solved. Cash declaration regimes are not homogeneous, as there are differences in the thresholds, ability of law enforcement to intervene, and in the information exchange system. Since the success of cash smuggling – and money laundering – investigations depends on information regarding cross-border cash movements, Suspicious Transaction/Activity Reports (STRs/SARs) and ongoing investigations, it is clear that a harmonisation of the legislations on a global scale is required.

1.1.2 Front businesses and shell companies

Another common method used by criminal organisations to launder funds and place them into circulation is to run front businesses. A front business is a cash-intensive activity, that is to say it generates the majority of its profits in cash, and tends to employ few people, to reduce the risk of exposure. Activities that satisfy these two requisites include bars, restaurants, nightclubs, car washes, laundries and pawn shops. These activities offer the added advantage of generating a legitimate stream of profits, which enables money launderers to mix illegal funds with legal funds – a practice known as "blending" or "commingling" – so as to blur audit trails. Money generated by illicit sources are added either physically or metaphorically to the cash register. This operation entails two consequences, which are related to each other and must be taken into account. First, taxes must be paid on the income generated by adding the illegal funds to the legitimate revenues. Second, costs have to be adjusted accordingly – also through false and manipulated invoices – in order not to arouse suspicion, reducing therefore the actual tax expense. Moreover, some of the activities, such as nightclubs, offer an ideal marketplace to conduct also illegal activities, namely drug trafficking and prostitution, and may even serve as headquarters.

In order to reduce the risk of getting caught, money launderers may take further measures, such as setting up front businesses in offshore jurisdictions (e.g. Cayman Islands, Panama, Bahamas, etc.), managing the businesses at arm's length through associates and accomplices, and employing complicit accountants and other service providers.
Regardless of the measures taken, audit procedures may uncover front businesses by focusing on certain "red flags". Sales revenue, for instance, are monitored through a number of assertions, such as occurrence and accuracy: if subsequent bank deposits are too high with respect to plausible sales, also in relation to purchase orders, there may be a signal of money

laundering activities. These red flags are described more deeply in the second chapter of this dissertation.

Shell companies are not necessarily an instrument to launder money, but their characteristics made them become a common tool for money laundering and other financial crimes. Shell companies typically have no presence, active business operations or significant assets, which is the reason behind their name – they look good from the outside, but they are hollow inside. Shell companies can serve several legitimate purposes, such as to hold stock or intangible assets of another business entity or to facilitate domestic and cross-border corporate mergers. However, they can also serve other purposes, whose legitimacy may be debatable, to say the least. One example of such purposes is Apple Inc.'s tax strategy, the so-called "Double Irish with a Dutch sandwich" system. This tax avoidance technique involves two Irish companies, a Dutch company and an offshore company located in a tax haven and is aimed at reducing taxes by routing profits through different jurisdictions.

Apple Inc. owns an Irish subsidiary named Apple International Operations (AIO), a shell company based in Cork, Ireland where the company has no physical presence[21]. AIO owns all of Apple's patents, trademarks, copyrights and licenses. Consequently, Apple Inc. must pay a fee to AIO for the right to sell its own products, which represents a business expense for the parent company. The U.S. profits and taxes are drastically lowered by this operation, but this is just one side of the coin. Due to a loophole in the Irish tax law, if the Irish subsidiary is controlled by managers outside Ireland, then the profits can be moved overseas tax-free to the company located in the tax haven. The second Irish company is used for sales in other countries, such as in the European market. Because of the Irish tax treaty with the Netherlands, profits can be transferred tax free to the Dutch subsidiary, which in turn can transfer profits tax free back to the first Irish company, whose earnings are eventually moved to the tax haven. This loophole was closed by the Irish finance minister in 2015 and companies with established schemes will continue to benefit from the old system until 2020[22].

[21] Myriam Robin, "Behind Apple's tax dodge: How the company avoids $US17 million in taxes every day," *SmartCompany*, May 22, 2013, accessed July 8, 2016, http://www.smartcompany.com.au/finance/tax/31829-behind-apple-s-tax-dodge-how-the-company-avoids-us17-million-in-taxes-every-day/.

[22] Investopedia. "Double Irish With A Dutch Sandwich," accessed July 8, 2016, http://www.investopedia.com/terms/d/double-irish-with-a-dutch-sandwich.asp.

Through the systematic use of shell companies, Apple allegedly moved a record USD 50 billion offshore in 2014, where the company paid an effective tax rate of about 2.2 per cent[23].

Shell companies may also be used in the layering phase of money laundering schemes thanks to their very nature. They can be set up in offshore tax havens and used to open bank accounts and move money through wire transfers or other methods without disclosing the real identity of the owners. Another characteristic of shell entities that attracts money launderers is the simplicity of the set up process, that can take as little as a few hours[24]. In 2016, more than 11 million files from the database of the world's fourth biggest offshore law firm, Mossack Fonseca, were leaked. The Panama-based law firm, which was established in 1977 and employs more than 500 staff members, offers research and services – including the incorporation of companies – in many jurisdictions, such as The Netherlands, United Kingdom, Hong Kong, British Virgin Islands and Panama. The leaked documents revealed the names and identities of 214,000 companies and 14,000 clients, including twelve national leaders[25]. The identities of the real owners and the sources of the money flowing offshore, however, are hard to discover because these companies are usually owned by nominees.

1.1.3 Trade-based money laundering

The FATF first tackled trade-based money laundering in 2006, when it published its report on the potential abuse of the international trade system by money launderers[26]. According to the report, the use of false documentation and declaration of traded goods and services is one of the three main methods used by money launderers, with the other two methods being cash smuggling, discussed in the last section, and the movement of value through the financial system. In general, the international trade system may attract money launderers because of its risks and vulnerabilities, which are associated with the large volume of trade flows, foreign exchange transactions and complex financing arrangements, the commingling of illicit funds with the cash flows generated by the legitimate front businesses and customs agencies' scarce

[23] Matt Gardner, "Apple Shifts a Record $50 Billion Overseas, Admits It Has Paid Miniscule to No Tax on Offshore Cash," *Tax Justice Blog*, November 2, 2015, accessed July 8, 2016, http://www.taxjusticeblog.org/archive/2015/11/apple_shifts_a_record_50_billi.php#.VngBmRUrKUk.

[24] Marina Kinner and Leonard W. Vona, *Shell Companies*, 2.

[25] Juliette Garside, Holly Watt and David Pegg, "The Panama Papers: how the world's rich and famous hide their money offshore," *The Guardian*, April 3, 2016, accessed July 8, 2016, https://www.theguardian.com/news/2016/apr/03/the-panama-papers-how-the-worlds-rich-and-famous-hide-their-money-offshore.

[26] FATF, "Trade Based Money Laundering," (Paris: FATF, 2006), 1.

availability of resources. The FATF has identified two main techniques used to launder money through international trade, which are invoice scams and black market peso exchange arrangements.

Invoice scams

Invoices can be manipulated so as to realise major benefits, including tax avoidance and money laundering. One technique identified by the FATF consists in the over- and under-invoicing of goods and services. This technique is based on the misrepresentation of the price of the good or service delivered to transfer a higher value. If the price invoiced is higher than the fair market price, the exporter receives value from the importer, whereas if the price invoiced is lower than the fair market price, the exporter transfers value to the importer. Over- and under-invoicing of goods and services have also significant effects on taxation. In order to provide an exhaustive example[27], consider a money launderer who buys a diamond whose price is EUR 5,000 by paying an invoiced amount of EUR 2,510 – just EUR 10 over its original cost of EUR 2,500 – and by paying EUR 2,490 in black. This is a win-win situation, because the seller will pay taxes on just EUR 10 and the money launderer has effectively placed EUR 2,490. Misrepresentation may involve also the quality or type of goods and services. For instance, an exporter may ship a relatively inexpensive good and invoice it as a more expensive one. Misrepresentation of quality and type is even easier in the trade in services, such as consulting services whose fair market values are always subject to valuation difficulties.

Black market exchange peso arrangements

Black market peso exchange arrangements were commonly used by the Colombian drug cartels so as to launder the proceeds of drug trafficking. This money laundering scheme became the subject of several studies in the 1980's, as it provides an illustration of how different techniques can be combined into a single operation. The idea behind these arrangements is to swap dollars owned by the cartels in the United States for pesos already in Colombia. In order to do so, the cartels sell US dollars to a peso broker for Colombian pesos, usually at a discount. The peso broker smurfs the US currency into the US banking system and acts as an intermediary between Colombian importers, who need US dollars, and US

[27] John Madinger, *Money Laundering: A Guide for Criminal Investigators, Third Edition* (Boca Raton: CRC Press, 2011), 260.

exporters. Despite their name, these arrangements are commonly used in many other countries.

Combating trade-based money laundering is indeed a complex task. First, it is difficult to discern trade-based money laundering from legitimate international trade. Second, these schemes make use both of the trade sector and of the finance sector and can take multiple forms. As with other money laundering schemes and methods, international cooperation is key, but is difficult to achieve. According to a report issued by the Asia/Pacific Group on Money Laundering in 2012, more than 50 per cent of jurisdictions involved in trade-based money laundering investigations sought information from foreign jurisdictions[28]. However, the formal channels arranged for exchange of information that are usually deployed for combating trade-based money laundering, such as the Mutual Legal Assistance Treaty (MLAT) and the Customs Mutual Assistance Agreement (CMAA), often produce poor results due to delayed responses, inadequateness of information and limited feedback[29]. In the light of these considerations and given the complexity of the phenomenon, the development of specific formal channels aimed at enhancing international cooperation against trade-based money laundering may represent a turning point, rather than deploying means of cooperation that are also used for any other criminal investigation (MLAT) or customs fraud (CMAA).

1.2 Recent trends in money laundering

In order to better understand the money laundering phenomenon and its extent and to obtain a more detailed framework, it is worth mentioning other methods that may be used to launder money. In the following pages, three trends of money laundering through particular sectors are shortly discussed, according to the most recent annual reports of the FATF. These trends involve casinos and gambling, the real-estate sector, and legal professionals and accountants.

1.2.1 Casinos and gambling

Casinos and gambling, like financial institutions, may be used to place illicit funds into circulation. Casinos are made vulnerable to money laundering by the variety, frequency and volume of transactions that are within the scope of services provided throughout their activity.

[28] Asia/Pacific Group on Money Laundering, "APG Typology Report on Trade Based Money Laundering," (Bangkok: APG, 2012), 73.

[29] *Ibid*, 76.

Although casinos are non-financial institutions, they offer a variety of financial services that are similar to those offered by banks, such as accepting funds on account, money exchange, and foreign currency exchange. These services are often offered at all times and involve the movement of large amounts of cash. Money typically follows a 3-step cycle that begins with the "buy in" phase, in which the customer buys the gaming instrument by cash or other means of payment. The second stage involves the use of the gaming instrument to play. Eventually, the gaming instrument is exchanged for cash or other means of payment in the "cash out" phase. Given these factors, money launderers may be attracted by casinos as a catalyst to their illicit activities. Casino managers are required to know the different techniques that may be used and recognise plausible signals of suspiciousness related to the behaviour of customers. These techniques and signals are outlined in the following pages, according to the FATF report on the vulnerabilities of casinos and gaming sector[30] that adopts the following classification:

- use of casinos value instruments;
- structuring of transactions;
- refining of banknotes;
- use of individual accounts and safe deposit boxes;
- conspiracy for fixed game.

Use of casinos value instruments

Casinos use value instruments, in particular chips and machine credits, to facilitate gambling and gaming activities. The value instruments may be bought with cash or on account and repayment is then requested by cheque or any other traceable method of payment. During this period of time, gaming activities may or may not occur. The audit trail may be further blurred by transferring the value instrument to another jurisdiction in which the casino chain has a branch, where the credit is then converted into a cheque or bank draft.

Money launderers may also purchase value instruments from other casino customers who are not directly or indirectly associated to them, at a price higher than the face value of the chips so as to make the deal beneficial for both parties. Moreover, chips, casino gift certificates or casino reward may also be used as currency in illegal – even cross-borders – transactions, with the considerable advantage of not being subject to the limitations applicable to the use and movement of cash (i.e. FATF Recommendation 32). Casinos employees and managers shall pay attention to certain signals that may point out to the existence of money laundering

[30] FATF, "Vulnerabilities of Casinos and Gaming Sector," (Paris: FATF, 2009), 28.

schemes through the use of casino value instruments, such as the purchase of casino chips and the immediate claiming of those funds with little or no gaming activity, also in relation to the customer's financial situation and profile, or the clear absence of the intention to win.

Structuring of transactions

Structuring of transactions requires the distribution of a large amount of money into several smaller transactions under the threshold that triggers reporting requirements, which is a practice known as smurfing. This technique may involve regular deposits of cash with value below the threshold, the use of third parties to undertake several smaller transactions, and the switch of gaming tables, gaming rooms or even casinos when the wagering amounts are approaching the threshold. Money launderers may also request the division of winnings into cash and chips payments that are below the threshold.

Refining of *banknotes*

Refining of banknotes is the practice of exchanging large amounts of low denomination banknotes for high denomination ones, for the reasons that have already been explained in chapter 1.1.1. Banknotes may be refined at the cashier's desk, through gaming machines that accept cash or through the use of individual casino accounts. Possible indicators of money laundering schemes are usually connected to the customer's profile and gaming activity, also with respect to the reporting threshold.

Use of individual accounts and safe deposit boxes

Casinos, as already seen, offer a variety of services that are similar to those offered by financial institutions, with less scrutiny and requirements. Customers have the possibility to open deposit accounts and lines of credits, or even use safe deposit boxes, with the latter service being usually offered to VIP, "high roller", customers. Money launderers may exploit these services by depositing on their casino account cash and various types of cheques, with the subsequent possibility to use the balance of the account, or by using the funds on their casino accounts held in a jurisdiction to purchase casino value instruments in another jurisdiction. Safety deposit boxes held with casinos are often not regulated and, therefore, may also be used by third parties with a total lack of transparency.

Conspiracy for fixed games

All the techniques illustrated so far do not require money launderers to do any gaming activity, even though failing to do so may jeopardise their schemes. Fixed games are used to attain a desirable outcome of the game, and usually require two or more persons. The most common technique in this sense is to play a fixed game with another associate, in which players place opposite equivalent bets on even money wagers in the same game. For example, Person A places EUR 1,000 on red, while Person B places EUR 1,000 on black in a game of roulette. Since the pay-out of this bet is 1:1, the winning party would win EUR 2,000, while the other party would lose EUR 1,000. In this way, every loss for A is a win for B, and vice versa, and the amount of money won is originated from a legitimate source.

Two particular trends that are worth mentioning are online gambling and casino-based tourism, also known as "casino junkets". Online gambling is a fast growing industry that, as of 2014, was expected to get close to EUR 31.2 billion in 2015, with a compound annual growth rate of about 7.3 per cent[31]. The online gambling industry includes different services, such as sports betting, online bingo, online lottery, online poker and casino games. Although the majority of the revenues come from sports betting, online poker and casinos are the fastest growing source of revenue and offer opportunities for money laundering[32].
Online casinos do not offer the same experience as traditional brick and mortar casinos, but they do indeed offer other valuable comforts, such as the possibility to play from home at every hour of the day. Another important advantage offered by online casinos regards privacy, because customers may have a disincentive to frequent local casinos if there is the possibility to get spotted by relatives, friends or acquaintances.

Online casinos are indeed a cross-border activity: operators need a jurisdictional license to conduct activities, but servers may be located in another jurisdiction, while the company's headquarters may be located in yet another jurisdiction. As a result, there may be legal gaps that criminals may exploit to conduct their money laundering activities. Licensed online casinos fall within the scope of national AML legislations and must therefore report customers' information, including bank account information, to law enforcement through

[31] Charles McFarland, François Paget and Raj Samani, "Jackpot! Money Laundering Through Online Gambling," (Santa Clara: McAfee Labs, 2014), 4.

[32] *Ibid*., 6.

Customer Due Diligence (CDD)[33]. Restrictions and limitations on online casinos are connected to the amount of money that can be gambled, the time that can be spent gambling, and the number of accounts that can be opened by a player (usually one per player). Licensed online casinos are also required to accept payments only from licensed financial institutions, while unlicensed online casinos do not require customers to deposit funds through authorised financial institutions. In the light of these factors, online gambling through regulated casinos is not likely to be the preferred method for money launderers, who may therefore exploit unlicensed online casinos and take advantage of the alleged anonymity they grant their customers, also through the use of bitcoins[34] and the TOR[35] network. However, the actual implementation of the Bitcoin technology does not guarantee true anonymity: the flow of Bitcoin transactions is logged in a public register with random codes, which may still be traced back to the actual identity of the user through network analysis. Furthermore, online casinos operating through the TOR network will never be as popular as those on the traditional web, because of the inherent limitations due to the complexity of the network itself and the risk of getting scammed.

Casino-based tourism, or casino junkets, consists of organised programs for people who travel to the casino primarily to gamble. These tours may be part of casinos' marketing plans or may be run by independent operators, such as travel agents whose role is to bring players and funds to the casinos. Since these travels involve the movement of large amounts of money from one jurisdiction to another and may even involve the pooling of funds, they create a layer which may blur the identity of the players and the source of funds, attracting therefore money launderers. In particular, VIP customers or "high roller", which are highly valued casino customers, pose a serious risk given that there is often a lack of specific regulations on VIP rooms, which in turn generate most of casino revenues.

The Chinese Special Administrative Region (SAR) of Macau is China's only legal casino hub. The SAR's casino and hospitality sector generated revenue of USD45 billion in 2013,

[33] MoneyVAL, "The use of online gambling for money laundering and the financing of terrorism purposes," (Strasbourg: MoneyVAL, 2009), 7.

[34] Bitcoin is a digital peer-to-peer currency. From a user perspective, Bitcoin is a digital wallet that can be used to make payments over the Internet and even in a growing number of brick and mortar businesses. Payments are made from a wallet application by entering the recipient's address and the amount. Transactions are recorded in a public register called "block chain". At the time of writing, 1 bitcoin trades at about 601 Euros.

[35] TOR (The Onion Router) is a free software and an open network that defends users against traffic analysis through anonymity, by bouncing communications around a distributed network of relays run by other users all around the world.

almost sevenfold the revenues generated by Las Vegas in the same year[36], accounting for more than half of Macau's GDP[37]. A significant number of junkets promoters – more than two hundred in 2013[38] – operate in the SAR in order to assist customers in the movement of funds from mainland China to Macau casinos. As a consequence, money launderers may use this channel to circumvent PRC's restrictions on movements of capital by depositing funds with junkets in the mainland and then gambling in Macau, eventually cashing out their winnings in foreign currency and investing in properties. Moreover, the fact that a number of foreign casinos and resort companies operate in Macau – such as the American Las Vegas Sands Corporation, which owns the largest casino in the SAR, The Venetian Macao, and Wynn Resorts Limited, which owns the Wynn Macau casino – poses a threat that must be tackled on a global scale. Chinese Special Administrative Regions are authorised by Article 31 of the Constitution of the People's Republic of China (PRC), as part of the "one country, two systems" principle formulated by the former paramount leader Deng Xiaoping. As such, Macau has autonomy over all affairs except those related to diplomatic relations and national defence and will maintain its status until 2049, that is fifty years after its reversion to Chinese possession from colony of Portugal. According to Macau's Law No. 2/2006 on money laundering, casinos and promoters of games of chance are subject to duties related to the identification of customers and operations, record-keeping and communication to the authorities whenever an activity might provide indicia of money laundering schemes or might involve substantial amounts of money. The threshold is set in the Instructions No. 2/2006 at MOP 500,000[39] or EUR 55,000.

Italy's legislation on casinos and gambling is rather controversial. Although gambling is forbidden by Art. 718 Codice Penale, there are four casinos operating on the Italian territory, namely Casinò di San Remo, Casinò di Venezia, Casinò de la Vallee and Casinò Municipale di Campione d'Italia. Moreover, slot machine rooms were introduced with *decreto legge 28 aprile 2009, n. 39* and there are a significant number of authorized online casinos and sports betting centres. According to *decreto legislativo 21 novembre 2007, n. 231*, and in accordance with FATF Recommendation 10, these activities are required to perform CDD when

[36] Charles Riley, "Macau's gambling industry dwarfs Vegas," *CNN*, January 6, 2014, accessed July 4, 2016, http://money.cnn.com/2014/01/06/news/macau-casino-gambling/.

[37] WikiLeaks. "The Macau SAR Economy at 10: Even Jackpots Have Consequences," December 18, 2009, accessed June 28, 2016. https://wikileaks.org/plusd/cables/09HONGKONG2313_a.html.

[38] Jorge Godinho, "The Prevention of Money Laundering in Macau Casinos." *Gaming Law Review and Economics* Vol. 17 (4), 2013, p. 264.

[39] Macau's official currency is the Macau pataca, which is fully backed by foreign exchange reserves, in this case the Hong Kong dollar. At the time of writing, 1 Macau pataca trades at 0.11 Euros.

customers carry out transactions above the applicable designated threshold of EUR 15,000, independently of whether they are carried out through one or more operations. In this sense, the Agenzia delle Dogane e dei Monopoli (AAMS) has established that multiple transactions are considered as smurfing if they occur within a period of seven days[40]. Casino-based tourism is increasing in popularity also in Italy, as people – mostly elders – travel from northern and central regions to the Casinò Perla, the largest casino in Europe, located in Nova Gorica, Slovenia. The Hit Group, owner of the Casinò Perla and other eight casinos, has agreement in place with Italian travel agencies located in Friuli-Venezia Giulia, Lombardia, Veneto and Emilia-Romagna in order to keep prices affordable[41].

The prevention of money laundering through casinos is a complex task, which requires regulations both from international sources and from national sources and casinos' specific internal controls. FATF Recommendation 10 on CDD, which prohibits financial institutions from keeping anonymous accounts or accounts in fictitious names, shall be applied also to casinos, independently of whether they are physical or online, which are among the so-called designated non-financial businesses and professions (DNFBPS). As stated in the interpretive note to Recommendations 22 and 23, the designated threshold on financial transactions that triggers CDD controls is USD/EUR 3,000. Furthermore, casinos and other DNFBPS shall be subject to national AML/CFT regulations. International cooperation remains a challenge for casino regulatory authorities on AML, as physical casinos, online casinos and casino-based tourism pose high risks in connection with money laundering. Gaming promoters play a fundamental role as facilitators of movement of capital and create layers of obscurity around the source and ownership of funds, which aid money launderers in carrying out their activities. Furthermore, although many countries are members of the FATF or other FATF-Style Regional Bodies (FSRBs), the harmonisation of the mechanisms for the prevention of money laundering through casinos is far from being reality.

1.2.2 Real-estate sector

The real-estate sector was the subject of a study carried out by the FATF in 2007[42]. According to the report, this sector merits particular consideration given the large scope of monetary

[40] Agenzia delle Dogane e dei Monopoli, "Servizio telematico per la comunicazione dei dati in materia di antiriciclaggio," December 21, 2012.

[41] Jenner Meletti, "Gli anziani in Pullman al casino una note per giocarsi la pensione," *Repubblica*, February 14, 2011, accessed July 4, 2016, http://www.repubblica.it/cronaca/2011/02/14/news/anziani_casino-12433012/.

[42] FATF, "Money Laundering and Terrorist Financing through the Real Estate Sector," (Paris: FATF, 2007), 5.

transactions and its importance from both an economic perspective and a social perspective. Criminal organisations launder money through the real-estate sector in a number of ways, including:

- loan-back schemes;
- manipulation of the valuation of properties;
- the concealment of money generated by illegal activities.

Loan-back schemes

Loan-back schemes may be used in the integration phase of money laundering to make the illicit funds look as though they originated from a legitimate source. Essentially, money launderers lend themselves money, so as to use the borrowing as a concealment for the ill-gotten money. For instance, illicit funds can be placed in an offshore account set up through a shell company and then borrowed to the money launderer, net of a commission paid to any middle-person[43]. At the end of the operation, the money is clean because it looks as though it comes from a legitimate source. Moreover, the interest portion that the money launderer pays, at least on paper, is tax deductible. The FATF's report also mentions back-to-back loan schemes, which are a variation of loan-back schemes in which a financial institution lends money to a borrower on the basis of the existence of collaterals that originate from criminal activities.

Manipulation of the valuation of properties

The manipulation of prices of real-estate property is particularly damaging to the economic system, given the importance of the sector. In some cases, the real value of a property may be difficult to estimate, especially in the case of atypical properties. In this case, money launderers may buy or sell a property at a price that is higher or lower than its market value. Properties may also be purchased through shell companies that are eventually wound up, a process that enables money launderers to insert a sum of money into the financial system by purchasing the property from the shell company at a price higher than the original purchase price.

[43] John Madinger, *Money Laundering: A Guide for Criminal Investigators, Third Edition* (Boca Raton: CRC Press, 2011), 254.

Concealment of illicit funds

The FATF Report on the real-estate sector mentions also the risks connected to money laundering through front businesses. The report identifies the same advantages that were illustrated in the previous chapter of this dissertation, namely the introduction of illegal funds into the system and the possibility to make additional profits. Properties that are more exposed to this risk are indeed those in which there is an extensive use of cash, such as hotels, restaurants and other similar activities.

1.2.3 Legal professionals and accountants

Professionals, including legal professionals and accountants, are subject to several FATF Recommendations. In particular, legal professionals have been included in the FATF Recommendations since 2003. According to the report published by the FATF in June 2013[44], money launderers seek out the expertise of legal professionals to complete certain transactions and access specialised legal and notarial skills and services. Professionals are required both to apply the CDD measures set forth in Recommendation 10 and to report suspicious transactions in accordance to Recommendation 20, although these requirement applies only when they undertake specific transactions for their clients in the course of business, including buying and selling of real estate, managing of client money or other assets, organisation of contributions for the creation, operation or management of companies and creation, operation or management of legal persons or arrangements. Legal professional activities present at least three unique features that must be considered when analysing the vulnerabilities of the sector. These unique features, according to the FATF, are ethical obligations, client funds, and confidentiality, privilege and professional secrecy.

Ethical obligations

In November 2012, the International Bar Association (IBA) presented the *International Principles on Conduct for the Legal Profession*. The IBA's five principles on conduct for the legal profession are the following:

- Independence, which shall be maintained in giving clients unbiased advice and representation;

[44] FATF, "Money Laundering and Terrorist Financing Vulnerabilities of Legal Professionals," (Paris: FATF, 2013), 4.

- Honesty, integrity and fairness, that shall be maintained at the highest standards at all times;
- Conflicts of interest, which shall be avoided;
- Confidentiality, that shall be maintained and be afforded protection at all times regarding the affairs of present of former clients. A legal professional cannot invoke confidentiality in circumstances where the legal professional acts as an accomplice to a crime;
- Clients' interests, which shall be treated as paramount.

In any case, despite these ethical obligations, the duties to the court and to the public take precedence over the duties to the client, so as to prevent legal professionals from being knowingly involved in money laundering or terrorist financing activities.

Client funds

Legal professionals are usually allowed to hold client funds. This unique feature of legal professionals has been identified as a potential vulnerability with respect to the money laundering risk, as criminals may move illicit funds through legal professionals as part of their placement and layering activities, exploiting the perceived respectability of the latter.

Confidentiality, privilege and professional secrecy

Although these three terms may seem interchangeable to describe the protection provided for the right of a client to obtain legal representation and advice and not to fear later disclosure of the discussions to his prejudice, they legally have different application and meaning. While it appears that confidentiality can be waived by the client or overridden by laws, legal professional privilege and professional secrecy are often tied to fundamental rights laid down in international obligations. Countries shall therefore develop legal frameworks that include the legislation of the remit of these three principles.

Chapter Two

Criminal companies: rationale and characteristics

Organised crime is a pervasive phenomenon that affects every economic system. So far, money laundering has been defined as the process used to clean dirty money and one of the methods illustrated in this chapter is the use of front businesses and shell companies. These businesses may also serve as headquarters for illicit activities carried out by criminal organisations. However, there are several other reasons that push criminal organisations to invest in the legal economy. In order to better understand the evolution and consequences of the involvement of criminal organisations in the economy, it is worth illustrating Italy's peculiar relationship with organised crime and, in particular, with the mafia[45].

Although the mafia is generally perceived as a formal criminal organisation, this is just one side of the coin. Mafia, or being a *mafioso*, refers more to a behaviour that includes gaining respect and being honourable men[46] rather than to the affinity to an association. Throughout the 1950's, criminal organisations became conscious of the importance of the accumulation of wealth as a measure of success and power over other associations and individuals[47], rather than the pure use of coercion aimed at intimidating others. According to a research carried out by the Department of Sociology of the University of Calabria, the number of honour killings that took place in Calabria more than halved between the 1950's and the 1960's. This change in the methodology and goals of criminal organisations, though, came at a price, and criminal organisations started to lose power. Arlacchi identifies two main reasons for the crisis experienced by criminal organisations in this period: the increase in popularity of left-wing parties in the Mezzogiorno and the stance of the State on the fight of criminal organisations, which culminates with the establishment of the *Commissione parlamentare antimafia* in 1963[48]. The marginalisation of the mafia between the end of the 1950's and the end of the 1960's is probably one of the causes of the explosion of violence that took place in the 1970's. According to the Summary of Historical Statistics of ISTAT, the rate of people

[45] For the purpose of this dissertation, unless stated otherwise, the terms "mafia" and "the mafia" refer to all the criminal organizations operating in the Italian territory and not to a specific clan or syndicate.

[46] Pino Arlacchi, *La mafia imprenditrice. Dalla Calabria al centro dell'inferno* (Milan: Il Saggiatore, 2007), 27.

[47] *Ibid*, 74.

[48] *Ibid*, 77.

convicted for homicide was 0.4 per 100,000 inhabitants both in 1968 and in 1969, whereas it grew to 1.2 and 1.1 per 100,000 inhabitants in 1971 and 1972 respectively, to eventually stabilise at 0.9 at the end of the 1970's[49]. Notwithstanding the stance of the State on the fight of criminal organisations, it is worth keeping in mind that associates of the mafia are unscrupulous and proud men who want to accumulate power and wealth. It is in this very historical context that criminal organisations started to invest intensely in the legal economy[50]. Criminal companies indeed respond to a wide range of necessities. On the one hand, criminal organisations may invest in the legal economy with the aim of exploiting their power and financial resources to increase their competitive advantage and, as a consequence, their profitability. On the other hand, criminal companies represent a fundamental instrument for increasing social consensus and controlling territories[51]. In order to achieve their goals, criminal organisations can intervene on their strategic plan with respect to the territory and the industry in which they operate and the structure of their companies.

2.1 Profitability of criminal companies

Criminal organisations, just like traditional entrepreneurs, may want to invest in the legal economy to obtain profits. Minimisation of costs and maximisation of profits and return on investments are all concepts that are common to both non-criminal and criminal companies. However, criminal organisations may exploit unconventional measures to increase their competitive advantage. According to Arlacchi[52], such measures are the discouragement of competitors, the reduction of labour costs and the huge availability of funds.

Discouragement of competitors

Criminal organisations, by definition, are not prone to following rules and laws. As a consequence, the use of coercion in the business environment is not surprising. Criminal companies use threats and aggressiveness over employees, suppliers and customers as sources of competitive advantage, with the aim of reducing purchasing and labour costs and increasing revenues. Furthermore, criminal companies may also make use of other illicit behaviours in order to discourage competitors and increase their competitive advantage, such

[49] ISTAT, "L'Italia in 150 anni. Sommario di statistiche storiche 1861-2010," (Rome: ISTAT, 2011), 327-329.

[50] Pino Arlacchi, *La mafia imprenditrice. Dalla Calabria al centro dell'inferno* (Milan: Il Saggiatore, 2007), 99.

[51] Transcrime, "Progetto PON Sicurezza 2007-2013. Gli investimenti delle mafie," (Milan: Transcrime, 2013), 151.

[52] Pino Arlacchi, *La mafia imprenditrice. Dalla Calabria al centro dell'inferno* (Milan: Il Saggiatore, 2007), 101.

as the use of poor quality raw materials, the sale of counterfeit products, fraudulent financial reporting, tax evasion and corruption of public officials. In particular, the latter may be aimed at artificially winning public tenders that would allow the criminal company to gain market share. This is probably one of the reasons for the high involvement of criminal organisations in industries characterised by a large availability of public funds.

Reduction of labour costs

Criminal companies may further increase their competitive advantage by reducing labour costs. In order to do so, employees may be employed illegally without social security benefits, or exposed to threats that are aimed at reducing their rights, such as the right to strike or to be paid for working overtime. As a result, criminal companies may be expected to report in their financial statements labour costs that are lower – as a percentage of sales revenue – than those reported by traditional companies operating in the same territory and industry.

Availability of funds

Criminal companies' main feature is probably their higher availability of funds with respect to traditional companies. These funds are indeed not exclusively related to the reinvestment of earnings (i.e. retained earnings), but are mainly originated from the illicit activities perpetrated by the criminal organisation. These funds are usually not reported directly as shareholders' equity, because they would be easily traced back to the mafia associates or nominees who injected them. Criminal organisations may therefore constitute complex groups of operating companies and shell companies and record the contribution of the ill-gotten funds as debts owed to associate companies. Alternatively, they may also make use of fraud schemes with the help of complicit suppliers and record the illicit funds as generic trade payables. As a consequence, criminal companies' financial debts and shareholders' equity may be expected to be lower than those reported by comparable companies.

According to a report issued by Transcrime in 2013, criminal companies' profitability is often significantly lower than the profitability of their legitimate competitors[53], despite their unique sources of competitive advantage. This may lead to the conclusion that criminal organisations give the priority to other objectives, such as obtaining the control of a territory and creating social consensus, rather than increasing the profitability of their companies. Criminal

[53] Transcrime, "Progetto PON Sicurezza 2007-2013. Gli investimenti delle mafie," (Milan: Transcrime, 2013), 195.

companies, therefore, may be seen as a tool for the creation of social consensus by, for instance, creating jobs for low-skilled workers.

2.2 Investment trends of Italian criminal organisations

The choice of investing in an industry rather than in another depends on the objectives that the criminal organisation wants to achieve. However, the economic literature suggests that criminal organisations tend to prefer certain industries. In order to better understand the rationale for the investment of criminal organisations in the legal economy, it is necessary to understand what are the main drivers for their investments and what are the features that make an industry more attractive.

If we assume that criminal organisations mainly invest in the legal economy with the aim of realising economic profits by exploiting the unconventional measures illustrated in the last section, then we would conclude that there should be a significant positive relationship between the profitability of an industry and the investment rate of criminal organisations in that industry. However, according to the studies conducted by Transcrime, such relationship is null[54]. These results are probably not enough to rule out the possibility that criminal organisations invest in the legal economy to make profits, but they seem to confirm that this is not their main goal. On the other hand, if we assume that criminal organisations invest in the legal economy to launder money, create social consensus and control territories, it is worth identifying what are the industries that are suitable for the achievement of these objectives. This type of analyses usually make use of data related to the rate of confiscation of firms as a proxy for the investments of criminal organisations in a given country. However, it must be taken into account that results may be biased, given that confiscation may be easier in certain business sectors or territories.

Construction

Construction is historically one of the most representative industry of the investments of criminal organisations in the legal economy. Between 1983 and 2012, 22 per cent of all the companies confiscated were operating in the construction sector[55]. This percentage is increased to 30 per cent if we account also for the other activities of the production chain,

[54] *Ibid*, 156.

[55] Ernesto U. Savona and Michele Riccardi (Eds.), "From Illegal Markets to Legitimate Businesses: The Portfolio of Organised Crime in Europe," (Trento: OCP, 2015), 189.

such as the start-up of the construction site and the manufacturing of concrete material. According to the Bribe Payers Index Report 2011, "Public work contracts and construction" is the sector with the worst score with respect to bribery[56], which implies a higher risk connected to corruption related money laundering. The audit trail of bribes can be easily blurred thanks to the intensive use of cash, subcontractors and fraudulent invoices. The construction industry is also particularly important because of tenders. Criminal organisations can bribe politicians and local authority to obtain an unjust and illegal advantage over their competitors. Indeed, art. 416 *bis* of the Italian Penal Code identifies the use of coercion to obtain approval of tenders and concessions as a fundamental feature of criminal organisations. According to articles 83 and 84 of the Antimafia Code, public administrations shall obtain the necessary antimafia documentation before the approval of a concession or tender. Antimafia documentation consists of both the antimafia communication and the antimafia information: the former includes a declaration regarding the existence of circumstances that would cause loss of, suspension or ban from the public tender. The latter includes the information reported in the antimafia communication plus a declaration regarding the possibility of an infiltration by criminal organisations. According to art. 91, antimafia communication is required for public works whose value is between EUR 150,000 and the threshold set by the European Union, while antimafia information is required for public works whose value is above the community threshold. No communication is required for public works whose value is below EUR 150,000.

As regards the creation of social consensus, the construction industry allows criminal organisations to create jobs, which may consist of illegal contracts that can be used to reduce labour costs and increase profitability. Furthermore, the construction industry is particularly relevant in local economies, where it permits to maintain a high level of control over the development of the territory.

Food products and restaurants

The food industry is a major sector in terms of criminal organisations' investments. Between 1983 and 2012, 12 per cent of all the companies confiscated were operating in this industry, which includes bars, restaurants, retail and wholesale[57]. As already described in the previous chapter, restaurants and bars are commonly used as front businesses because of their high

[56] Transparency International, "Bribe Payers Index 2011," (Berlin: Transcrime International, 2011), 15.

[57] Ernesto U. Savona and Michele Riccardi (Eds.), "From Illegal Markets to Legitimate Businesses: The Portfolio of Organised Crime in Europe," (Trento: OCP, 2015), 189.

cash intensity that allows money launderers to blend ill-gotten funds and legitimate cash flows. Retail and wholesale of food products are two sectors that are particularly susceptible to criminal organisations' infiltration in Italy. Given their relevance both from an economic perspective and from a health perspective, it is clear that law enforcement agencies, such as Nuclei Antisofisticazione e Sanità (NAS) dei Carabinieri, are required to make a great effort to tackle criminal companies operating in these sectors. According to a report issued by FareAmbiente in 2015, 37,529 inspections were carried out by the NAS in 2014, which identified 12,407 firms not compliant and confiscated goods for over EUR 450 million[58]. Although the data suggest that criminal organisations mainly invest in the production chain of meat, pasta and fish and in restaurants and bars, the investment portfolio depends on the specificities of the single criminal organisations. For example, while Cosa Nostra concentrates its investments especially in the construction industry[59], the Camorra is much more oriented toward the wholesale of food[60]. Even within the same clan, the distribution of investments may vary. While the Casalesi and Cesarano are both associated to the Camorra, the former are much more committed to the construction industry, while the latter is investing especially in the wholesale of food and other products[61].

2.3 Management and disposal of confiscated companies and assets

The majority of data regarding criminal companies comes indeed from information regarding the confiscation of criminal companies themselves. Given the relevance of criminal organisations' investments in the legal economy, it is worth describing the main laws in force in Italy as regards the management of confiscated companies and assets. The starting point of this subchapter is *Legge 7 marzo 1996, n. 109* "*Disposizioni in materia di gestione e destinazione di beni sequestrate o confiscati*". The aim of this law is to establish the best practices in terms of destination and reuse of confiscated assets, on the basis of their characteristics: movable properties shall be sold, while immovable properties shall be either held by the State or transferred to municipalities. Each allocation procedure was supposed to last no longer than 120 days, but in practice they often lasted more[62], with possible negative

[58] FareAmbiente, "Rapporto sulle frodi alimentari e agroalimentari in Italia," (Rome: FareAmbiente, 2015), 50.

[59] Transcrime, "Progetto PON Sicurezza 2007-2013. Gli investimenti delle mafie," (Milan: Transcrime, 2013), 171.

[60] *Ibid*, 172.

[61] *Ibid*.

[62] Transcrime, "Progetto PON Sicurezza 2007-2013. Il riutilizzo dei beni confiscati," (Milan, Italy: Transcrime, 2013), 13.

economic consequences caused by the deterioration of the assets. In order to guarantee a faster and more efficient management and allocation of confiscated goods, *Legge 31 marzo 2010, n. 50* established the Agenzia Nazionale dei Beni Sequestrati e Confiscati alla criminalità organizzata (ANBSC).

The necessity of organising all the laws and provisions on the fight against criminal organisations led to the issuance of the Antimafia Code in 2011. The code is aimed at dealing with the management and allocation of both confiscated criminal companies and assets, with a particular focus on the former because of their relevant social and economic implications. According to art. 35 of the code, the designated judicial administrator shall manage the confiscated goods with the aim, if possible, of increasing their profitability.

One of the main risks connected to the management of confiscated companies, which is likely to hinder the profitability of the firm, are the so-called "costs of legality"[63], that are those costs related to the organisational restructuring and employment contracts transition from the illegal status to a legal condition. The profitability of criminal companies often depends on the use of the unconventional practices described at the beginning of this chapter. It follows that the judicial administration in charge of the restructuring of a confiscated company is often forced to reduce the workforce as a consequence of the new contractual positions of the employees, who in turn may be discouraged and unmotivated. Furthermore, the reduction of workforce and the acknowledgment of the new contractual positions may also lead to strikes and requests for a renewal of union agreements.

Employees, though, are not the only stakeholders who may compromise the judicial administration. Suppliers and customers may stop doing business with the confiscated company and bank may interrupt their lines of credit, even though a study conducted by Banca d'Italia in 2013 shows that there is not a significant reduction of banks' lines of credit granted to confiscated companies in the three years following the confiscation[64].

According to art. 48 of the Antimafia Code, the assets shall be held by the State and either:

- rent out, if there are well-founded prospects of continuation or recovery of the economic activity. The assets shall be rent out either to public or private companies upon payment or to cooperatives of workers employed by the confiscated company

[63] *Ibid*, 38.

[64] Banca d'Italia, "Aziende sequestrate alla criminalità organizzata: le relazioni con il sistema bancario," (Rome: Banca d'Italia, 2013), 20.

free of charge. The selection of the tenant shall be taken with the aim of maintaining the current level of workforce;

- sold, at a price not below the ANBSC's valuation, if the sale maximises public interest or guarantees the compensation to victims of crimes carried out by criminal organisations;
- liquidated, for the same reasons as in the previous case.

The decision taken by the judicial administration shall be aimed, if possible, at increasing the profitability of the confiscated assets. Although the possibility to rent out the assets to the workers employed by the confiscated company represents a good solution from a societal point of view, it is often impracticable, given the educational and financial constraints faced by the employees. As a matter of fact, 65-70 per cent of all the companies confiscated from criminal organisations are generally liquidated, while 15-20 per cent fail and only 15-20 per cent remain active[65].

2.4 Financial statement red flags

Investigations into criminal organisations and criminal companies are complex operations that require different skills, including competences in accounting and financial statements analysis. Criminal companies, depending on whether they are aimed at maximising profitability or supporting other companies, may present a number of features in their financial statements that investigators shall consider throughout their investigations.
In this section, these red flags are illustrated, according to the report issued by Transcrime in 2013 and the assumptions formulated throughout this chapter, with the aim of providing a practical framework that can also be applied to the analyses of case studies.

Red flags related to financing sources

One of the main features of criminal companies is the availability of huge financial resources, that is the availability of ill-gotten funds that can be used to finance the legitimate activities of the company. As a consequence, it is possible to assume that a criminal company may present on its balance sheet a level of financial indebtedness on average lower than that of a legitimate competitor. However, criminal organisations may exercise their influence on the

[65] Luigi Dell'Olio, "Perché muoiono le aziende tolte alla mafia," *Repubblica*, September 18, 2014, accessed July 26, 2016, http://inchieste.repubblica.it/it/repubblica/rep-it/2014/09/18/news/il_fallimento_delle_ex_aziende_mafiose-93757984/.

local political and financial systems to obtain economic advantages, such as favourable loans and access to subsidies on a municipality or community level. It follows that the level of indebtedness of a criminal company may also be on average higher than that of a legitimate competitor.

Together with financial indebtedness, investigators shall pay attention also to commercial debts. Criminal companies, as already mentioned, may use coercion and threats over suppliers to increase their competitive advantage. This abuse of power may lead to longer terms of payment, which are reflected on the balance sheet as a higher amount of accounts payable in comparison with legitimate competitors. Moreover, criminal organisations may also conceal the use of ill-gotten funds as commercial debts owed to complicit suppliers or bogus companies, further increasing the amount of accounts payable.

Criminal organisations, in order to use their ill-gotten funds as a financial source for their criminal companies, need to blur the audit trails of their contributions. Besides the use of commercial debts, illicit funds may be contributed as generic "other debts" or debts owed to third parties or affiliated companies. Consequently, these financial statement line items may be higher on average than those reported by similar legal companies. On the contrary, shareholders' equity may be below the average level for similar companies, as it would directly connect the associates of the criminal organisations or nominees to the company.

Red flags related to equity investments

Regardless of the purposes served by criminal companies, criminal organisations need secrecy. The necessity of concealing their illicit activities and blurring the audit trail of their operations may lead to a significantly high use of equity investments, also with respect to comparable non-criminal companies. These equity investments may also be held in foreign companies located in tax havens, where the requirements for the start-up of new companies are usually looser.

In order to understand whether criminal companies indeed use equity investments to conceal their illegal activities, the fourth chapter of this dissertation consists of an empirical analysis of a sample of criminal companies based in the Piemonte region. The analysis is aimed at explaining whether criminal companies hold more equity investments than non-criminal companies, either in Italy or abroad.

Red flags related to current and non-current assets

Criminal companies' asset structures depend on the purpose they serve. While criminal companies that produce goods and services may have similar asset structures in comparison with legitimate competitors, they are not the only type of criminal companies that criminal organisations use. Front businesses, as already described in the first chapter of this dissertation, are one of the most common methods for money laundering. Although they appear as though they are traditional businesses, their main purpose is to clean the illicit funds generated from illegal activities, which can be achieved thanks to the prominent use of cash. In this sense, it is plausible to assume that their asset structure may consist mainly of cash and cash equivalents and other current assets, including accounts receivable and other short-term credits. It follows that non-current assets may be present in a front business' balance sheet, but limited to the essential amount needed to operate.

Criminal organisations also use the so-called "paper-mill companies"[66], which are those companies that are used to produce bogus invoices to launder money. They respond to the necessity of concealing money transfers from criminal companies to the associates of the criminal organisation. They may also serve as legal entities to which assign the property of real-estate, vehicles and other non-current assets. In this case, it is reasonable to expect a high level of both current assets, such as accounts receivable, and non-current assets.

Red flags related to the income statement

The value of production, cost structure and profitability of criminal companies clearly depend on the purpose such companies serve. It is worth noting, though, that financial statement data of criminal companies may be the result of fraudulent financial reporting. Income statement line items may be conveniently adjusted to conceal any possible red flag. For instance, over-invoicing practices may be used to reduce taxable income and conceal money transfers. On the one hand, operating criminal companies' profitability may be the result of the unconventional measures described at the beginning of this chapter. Threats and coercion may be used either against suppliers to reduce costs of materials and services or against competitors to manipulate tenders. Salaries may also be reduced by paying workers off the books. Low quality, sub-standard and low-price raw materials – which are particularly dangerous in certain sectors – may also be over-invoiced so as to facilitate trade-based money

[66] Translated from the Italian "cartiere". The literal translation seems to fit, as they are companies whose main purpose is to produce "paper", such as bogus invoices for goods and services that were not actually supplied.

laundering. On the other hand, paper-mill companies' value of production may be expected to be low and subject to significant variability from one period to another. Furthermore, since their main purpose is to generate bogus transactions, revenues and costs may even present the same trends. For these reasons, paper-mills may be easier to be identified through statistical analyses.

These red flags represent an attempt to create a practical framework for the identification of criminal companies through both accounting analyses and statistical analyses. In this sense, the research illustrated in the last chapter of this dissertation applies the theoretical concepts related to the use of equity investments by criminal companies with the aim of understanding whether it is possible to draw any interesting conclusion.

Chapter Three

Combating money laundering and terrorist financing

Over the last few decades, but in particular after the recent waves of international terrorism and fight to drug trafficking, there have been an increase in AML/CFT regulations and controls. The success of criminal organisations and terrorist financing largely depends on the quality of a country's AML/CFT regime, that includes enforcement provisions, penalties and confiscations and a thorough recognition of predicate crimes. The lack of an effective AML/CFT legislation not only facilitates crime and corruption, but is also likely to reduce foreign private investments and weaken the financial sector.

Although there are examples of AML legislations that can be traced back to the 1970's, such as the U.S. BSA, it is only in the 1980's that cooperation between states became a priority.
In 1988, with the Vienna Convention, the United Nations (UN) set the ground for the fight against drug trafficking, establishing a list of criminal offences and rules for the confiscation of drugs and proceeds derived from drug trafficking. Even though money laundering is not specifically mentioned in the Convention, the signatory states were required to initiate, develop or improve specific training programs aimed at dealing with the methods used for transfer, concealment or disguise of proceeds derived from drug trafficking.

In 1989, during the G-7 Summit that was held in Paris, the FATF was established. In April 1990, the FATF issued a set of forty recommendations aimed at providing a comprehensive plan of action against money laundering. In October 2001, one month after the September 11 attacks, the FATF issued eight more recommendations aimed at dealing with the issue of terrorist financing, which became nine in 2004. Finally, the FATF reviewed its standards and published a revised version of the Forty Recommendations and Nine Special Recommendations. The FATF also issues annual reports on money laundering trends, which were at the basis of the first chapter of this dissertation.

In 2000, the UN signed the Palermo Convention, which entered into force in 2003. The aim of the Convention was to take a major step forward in the fight against transnational organized crime, including not only drug trafficking, but also trafficking in persons, especially women and children, smuggling of migrants, and illicit manufacturing and trafficking in firearms. The

United Nations recognised the importance of cooperation among members also in the fight against criminal organisations and money laundering, which was specifically dealt with in the art. 7 of the Convention "Measures to combat money-laundering".
Besides international cooperation, states are required to issue domestic laws and regulations against money laundering. In Italy, the primary national regulation currently effective (hereinafter referred to as "Italian AML Law") entered into force in 2007 and represents the implementation of the European Union Directive 2005/60/EC. In order to provide a comparative framework, it is worth describing the major differences – if any – between the Italian AML Law and a foreign legislation. In this sense, the aim of this chapter, after an introduction to the aforementioned international initiatives, is to compare the Italian AML Law with the recent Chinese AML Law, which entered into force in 2007.

3.1 International standards and conventions

The necessity of dealing with cross-border phenomena like money laundering and terrorist financing led states to the development of a set of standards and conventions that are essentially aimed at increasing international cooperation. For the purpose of this dissertation, it is worth illustrating the main international conventions and standards dealing with money laundering and terrorist financing, namely the FATF Recommendations, the Terrorist Financing Convention and the Palermo Convention.

3.1.1 FATF Recommendations

The FATF Recommendations can be seen as a set of measures which countries are encouraged to follow in order to combat money laundering and terrorist financing. Recommendation 1 suggests to adopt a risk-based approach (RBA) to money laundering and terrorist financing. This approach means that *"countries, competent authorities and financial institutions are expected to identify, assess and understand the ML/TF risks to which they are exposed and take AML/CFT measures commensurate to those risks"*[67]. The general principle of a RBA is to require financial institutions and DNFBPs to take enhanced measures to manage risks in those sectors where higher risks are expected. Simplified measures should be allowed only where lower risks are identified. According to Recommendation 2, AML/CFT measures should be the result of activities that allow *"policy-makers, the financial intelligence unit (FIU), law enforcement authorities, supervisors and other relevant*

[67] FATF, "Risk-Based Approach Guidance for the Banking Sector," (Paris: FATF, 2014), 6.

competent authorities, at the policy-making and operational levels, [to] have effective mechanisms which enable them to cooperate, and, where appropriate, coordinate domestically with each other".

The FATF Recommendations, as stated in Recommendation 3, adopt the definitions of money laundering and terrorist financing in accordance respectively with the Palermo Convention and the Terrorist Financing Convention. Furthermore, they also include a number of measures enforced by the two conventions. For instance, as regards confiscation and provisional measures, Recommendation 4 suggests that countries should confiscate *"property laundered; proceeds from, or instrumentalities used in or intended for use in money laundering or predicate offences; property that is the proceeds of, or used in, or intended or allocated for use in, the financing of terrorism, terrorist acts or terrorist organisations; property of corresponding value"*, which is significantly similar to the provisions laid out by art. 12 of the Palermo Convention.

The preventive measures suggested by the FATF to guarantee the transparency of financial institutions include CDD and record-keeping. According to Recommendation 10, financial institutions should undertake CDD measures when:

(i) establishing business relations;
(ii) carrying out occasional transactions above the applicable designated threshold (USD/EUR 15,000) or wire transfers in particular circumstances;
(iii) there is suspicion of money laundering or terrorist financing;
(iv) the financial institution has doubts about the veracity or adequacy of previously obtained customer identification data.

The measures suggested by the FATF are aimed at increasing the transparency of transactions undertaken throughout the course of business relationships. Therefore, they include – but are not limited to – provisions related to customer and beneficial owner identification through independent documents and sources, also with respect to the intended nature of the business relationship. Financial institutions in particular should be required to apply CDD measures using a RBA and, where they are unable to comply with the requirements suggested by the FATF, should be required not to commence business relations or terminate the business relationship. Furthermore, Recommendation 11 suggests that financial institutions should also be required to *"maintain, for at least five years, all necessary records on transactions, both*

domestic and international, to enable them to comply swiftly with information requests from the competent authorities".

The customer due diligence and record-keeping requirements are not only limited to financial institutions, but apply to other DNFBPs, as suggested by Recommendation 22. In particular, they apply to:

- Casinos, for transactions equal or above the designated threshold;
- Real estate agents;
- Dealers in precious metals and/or precious stones, for transactions equal or above the designated threshold;
- Lawyers, notaries and other independent legal professionals and accountants, with respect to a wide set of operations;
- Trust and company service providers, with respect to a wide set of operations.

In order to monitor the correct and effective implementation of the FATF Recommendations, "*countries should establish a financial intelligence unit (FIU) that serves as a national centre for the receipt and analysis of STRs and other information relevant to money laundering, associated predicate offences and terrorist financing, and for the dissemination of the results of that analysis"*. According to the interpretive note to Recommendation 29, FIU should add value to the information received and held through two types of analyses: operational analysis and strategic analysis. The aim of the former is *"to identify specific targets, to follow the trail of particular activities or transactions, and to determine links between those targets and possible proceeds of crime, money laundering, predicate offences or terrorist financing"*. The purpose of the latter is *"to identify money laundering and terrorist financing related trends and patterns [...] and to determine money laundering and terrorist financing related threats and vulnerabilities"*. The results of these analyses should be both spontaneously disseminated, when there are grounds to suspect money laundering of terrorist financing, and disseminated upon request from competent authorities. Financial intelligence units should be *"operationally independent and autonomous"*, which means that the FIU should have the authority to carry out its functions free from political, government or industry influence or interference. Italy's FIU became operative in 2008, taking over from the Italian Foreign Exchange Office and is structured in compliance with international standards. It is an independent and autonomous body set up within the Bank of Italy whose main purpose is to collect information on potential cases of money laundering and terrorist financing starting from the STRs filed by financial institutions, analyse the data and decide whether it is

necessary to pass information to investigative authorities. The FIU also conducts studies with regards to trends and weaknesses of the system, including economic sectors at risk, categories of payment instruments and include the results of its studies in the annual report that is transmitted to the Ministry of Economy and Finance for forwarding to Parliament[68]. Among the powers granted to the FIU, is worth mentioning the possibility to freeze suspicious transactions for up to five working days.

International cooperation is encouraged by the FATF in the last five Recommendations. In particular, Recommendation 36 suggests that countries should implement fully, among the others, the Vienna Convention, the Terrorist Financing Convention and the Palermo Convention (these last two are briefly illustrated in the following pages). According to Recommendation 37, countries should also provide *"the widest possible range of mutual legal assistance in relation to money laundering, associated predicate offences and terrorist financing investigation, prosecutions, and related proceeding"*. As regards terrorist financing, the FATF published nine recommendations to deal with the matter in 2004. These recommendations were aimed at combating, in combination with the Forty Recommendations, the financing of terrorism and terrorist acts. These Nine Special Recommendations were eventually combined with the Forty Recommendations so as to have a unique and complete operational framework on both money laundering and terrorist financing. In regard to terrorist financing, particular attention is paid to Non-profit organisations (NPOs). According to the FATF, NPOs can be defined as *"a legal person or arrangement or organisation that primarily engages in raising or disbursing funds for purposes such as charitable, religious, cultural, educational, social or fraternal purposes, or for the carrying out of other types of good works"*. Non-profit organisations play a fundamental role in several national economies and social systems, by providing essential services to those in need around the world. Potential abuses of NPOs carried out by terrorist groups not only facilitates terrorist activities, but also jeopardise the ability of NPOs to sustain the social system. Recommendation 8 (formerly known as Special Recommendation VIII) states that *"countries should review the adequacy of laws and regulations to entities that can be abused for the financing of terrorism. Non-profit organisations are particularly vulnerable, and countries should ensure that they cannot be misused"*. According to the Interpretive Note to Recommendation 8, NPOs may be vulnerable to abuse by terrorist groups for several reasons, including their access to considerable sources of funds and their high

[68] Banca d'Italia. "The Role of the Financial Information Unit (FIU)," accessed 16 August 2016, https://uif.bancaditalia.it/sistema-antiriciclaggio/uif-italia/index.html?com.dotmarketing.htmlpage.language=1.

cash-intensity. Furthermore, NPOs can often be set up with few formalities and may be subject to little or no governmental oversight.

Recommendation 8 continues by stating that *"countries should ensure that [NPOs] cannot be misused:*

i. by terrorist organisations posing as legitimate entities;

ii. to exploit legitimate entities as conduits for terrorist financing, including for purposes of escaping assets freezing measures;

iii. to conceal or obscure the clandestine diversion of funds intended for legitimate purposes to terrorist organisations."

According to the FATF, Non-profit organisations are exposed to both organisational vulnerabilities and sectoral vulnerabilities[69]. The former are seen where legitimate NPOs are either exploited by external actors or deceived by internal actors, while the latter include cases where illegitimate organisations (known as "sham NPOs") enters the sector. These vulnerabilities may be exploited by terrorist organisations in a number of ways, including:

- the diversion of funds to a terrorist entity;
- the affiliation with a terrorist group; and
- the promotion of terrorism recruitment-related activities.

Diversion of funds to terrorist groups may take place at some point through the NPO's business process, which consists in raising funds for humanitarian programs. This type of vulnerability may be carried out by either internal or external actors. According to the FATF, the vast majority of cases of diversion of funds involved actors internal to the NPO[70]. The diversion of funds may happen before the deposits into the NPO's accounts or during the retention and transfer phases, through several methods including wire transfers and cash couriers. It is worth noting how both these methods are explicitly dealt with in the Forty FATF Recommendations, respectively in Recommendation 16 and Recommendation 32.

Another common method of abuse observed by the FATF is related to the existence of operational affiliations between an NPO and terrorist entities. Affiliations may involve NPOs' internal actors, such as directing officials and staff, who have suspected links with a terrorist entity or more formalised relationships between the NPO as a whole and the terrorist group.

[69] FATF, "Risk of Terrorist Abuse in Non-Profit Organizations," (Paris: FATF, 2014), 19.

[70] *Ibid*, 38.

NPOs' decentralised management and interconnectedness of networks are features that make NPOs both effective instruments and vulnerable to abuses at the same time.
NPOs may also be exploited by terrorist groups for recruitment purposes. According to the FATF, there have been cases where NPOs were involved not only in the transfer of funds to terrorists, but also in the carrying out of fire bomb attacks and in the organisation of events that support terrorism[71]. In order to deal with these potential abuses, countries are encouraged to undertake domestic reviews of their NPO sector. The approach laid out by the FATF in the Interpretive Note to Recommendation 8 involves the following four elements:

- outreach to the sector;
- supervision or monitoring;
- effective investigation and information gathering;
- effective mechanisms for international cooperation.

Outreach to the NPO sector should include policies to promote transparency and integrity, programs to raise awareness about the vulnerabilities of NPOs to terrorist abuse and cooperation on the development of best practices to address terrorist financing risks and vulnerabilities.

Supervision or monitoring are related to the gathering and publication of information on the purpose and objectives of NPOs, on the identities of the persons who control or direct their activities and those of their beneficiaries. Furthermore, NPOs should also issue annual financial statements and put in place effective controls to ensure that all funds are fully accounted for, and are spent appropriately.

Effective investigation and information gathering, also on an international scale, include cooperation and coordination among different countries and levels of authorities so as to set-up appropriate mechanisms to ensure that, when there is reasonable ground to suspect that a particular NPO is being exploited by terrorist groups, this information is promptly shared with those in charge of domestic or international investigative actions.

Notwithstanding the effort put by the FATF into fighting money laundering and terrorist financing, there have been several criticisms on whether this effort is doing any good. In particular, a report published by the Center on Law & Globalization in 2014 has raised several

[71] *Ibid*, 46.

questions on the effectiveness of the fight against global money laundering and terrorist financing. According to the authors of the report, although the scope of AML laws has widened and international cooperation and information-sharing have undoubtedly improved throughout the last decade, there are still a number of issues to be solved. First, the FATF objectives are not yet specified in a way that allows to undertake outcome assessments and there are major deficits in the quality of data that are gathered. Second, and perhaps more important, there are not assessments on whether the FATF system produces public or private "bads" along with public and private goods[72]. The fight against money laundering and terrorist financing is undoubtedly a fundamental task for any government, therefore it is necessary to understand whether a wider scope of AML/CFT laws has any negative impact on the stability of both the economic system and the financial system.

3.1.2 Terrorist Financing Convention

The International Convention for the Suppression of the Financing of Terrorism was signed in New York in 1999 and represents a formal action taken by the UN to counter terrorist organisations by requiring State Parties to adopt measures aimed at identifying and suppressing the sources of financing of terrorism.

Article 2 of the Convention defines terrorism as *"an act which constitutes an offence within the scope of and as defined in one of the treaties listed in the annex [to the Convention]"* or *"any other act intended to cause death or serious bodily injury to a civilian, or to any other person not taking an active part in the hostilities in a situation of armed conflict, when the purpose of such act, by its nature or context, is to intimidate a population, or to compel a government or an international organisation to do or to abstain from doing any act"*. In particular, the Convention is concerned with the direct or indirect collection of funds aimed at carrying out an act within the scope of the previous definitions.

Art. 4 of the Convention includes the measures that State Parties are required to adopt, which include establishing as criminal offences the offences listed in art. 2 and *"to make those offences punishable by appropriate penalties"*. Further measures are required by art. 8 for the *"identification, detection and freezing or seizure of any funds used or allocated for the*

[72] Terence C. Halliday, Michael Levi and Peter Reuter, "Global Surveillence of Dirty Money: Assessing Assessments of Regimes to Control Money-Laundering and Combat the Financing of Terrorism," (Chicago: Center on Law and Globalization, 2014), 7.

purpose of committing the offences set forth in art. 2 as well as the proceeds derived from such offences, for purposes of possible forfeiture". In this sense, art. 18 provides a list of measures that are deemed necessary to prevent and counter preparations for the commission of the offences set forth in art. 2. These measures include the prohibition of *"illegal activities of persons and organisations that knowingly encourage, instigate, organise or engage in the commission of offences set forth in art. 2"* and requirements for financial institutions and other professions involved in financial transactions, which are required *"to pay special attention to unusual or suspicious transactions and report transactions suspected of stemming from a criminal activity"*.

Cooperation among countries is of paramount importance to the suppression of terrorist financing. According to art. 12 of the Convention *"State Parties shall afford one another the greatest measure of assistance in connection with criminal investigations or criminal or extradition proceedings in respect of the offences set forth in article 2, including assistance in obtaining evidence in their possession necessary for the proceedings"*. It is worth noting that a request for mutual legal assistance cannot be refused neither on the ground of bank secrecy nor on the sole ground that it concerns a fiscal offence.

As of January 2011, the treaty has been ratified by 173 countries[73], thus making it one of the most successful anti-terrorism treaties in history in terms of ratifications. In terms of effectiveness, it is difficult to measure the results that the Convention may have generated for at least two reasons. First, as the name may suggest, the Terrorist Financing Convention is only one aspect of a broader international framework to prevent and suppress the support of terrorism. Although terrorist financing is one of the most critical aspects of the fight against terrorist organisations, there are other activities, such as recruitment and supply of weapons, that need to be considered. Indeed, the "Legislative Guide to the Universal Anti-Terrorism Conventions and Protocols" issued by the UNODC includes other eleven universal instruments[74], such as the Convention for the Suppression of Unlawful Seizure of Aircraft (1970), the Convention on the Physical Protection of Nuclear Material (1980) and the International Convention for the Suppression of Terrorist Bombings (1997).

[73] Centre for International Law of the National University of Singapore, "1999 International Convention for the Suppression of the Financing of Terrorism," accessed August 23, 2016, https://cil.nus.edu.sg/1999/1999-international-convention-for-the-suppression-of-the-financing-of-terrorism/.

[74] UNODC, "Legislative Guide to the Universal Anti-Terrorism Conventions and Protocols," (New York: UNODC, 2013), 3.

Second, the Terrorism Financing Convention entered into force in 2002, in the aftermath of the September 11 attacks. This event led the UN to the adoption of the Resolution 1373 on 28 September 2001, which called upon all States, among other things, to *"become parties as soon as possible to the relevant international conventions and protocols relating to terrorism, including the International Convention for the Suppression of the Financing of Terrorism of 9 December 1999"*. Furthermore, Resolution 1373 established a Committee of the Security Council, the Counter-Terrorism Committee (CTC). The aim of the CTC is to monitor the implementation of the measures included in the Resolution itself. These measures are similar to those included in the Terrorism Financing Convention, such as the prevention and suppression of the financing of terrorist acts, the freeze of funds of persons who commit or attempt to commit terrorist acts and the denial of all forms of financial support for terrorist groups.

3.1.3 Palermo Convention

The purpose of the Palermo Convention, as stated in art. 1, is *"to promote cooperation to prevent and combat transnational organised crime"*. Organised crime is, therefore, a crime committed by an organised group. According to the definitions provided by art. 2, it is possible to describe organised crime as the perpetration of a serious crime – which is an offence *"punishable by a maximum deprivation of liberty of at least four years or a more serious penalty"* – by an organised criminal group, that is defined as *"a structured group of three or more persons [...] acting in concert with the aim of committing one or more serious crimes or offences established in accordance with [the] Convention".*

Contrary to the Vienna Convention, the Palermo Convention explicitly deal with money laundering. In particular, art. 6 requires State Parties to adopt measures to establish as criminal offences both *"the conversion or transfer of property, knowing that such property is the proceeds of crime, for the purpose of concealing or disguising the illicit origin of the property or of helping any person who is involved in the commission of the predicate offence to evade the legal consequences of his or her action"* and *"the concealment or disguise of the true nature, source, location, disposition, movement or ownership of or rights with respect to property, knowing that such property is the proceeds of crime"*. Given that money laundering is by definition the consequence of other criminal activities, states are required to apply art. 6 *"to the widest range of predicate offences"*.

According to art. 7, States *"shall institute a comprehensive domestic regulatory and supervisory regime for banks and non-bank financial institutions and, where appropriate, other bodies particularly susceptible to money-laundering, within its competence, in order to deter and detect all forms of money-laundering, which regime shall emphasise requirements for customer identification, record-keeping and the reporting of suspicious transactions"*. Furthermore, the Convention requires State Parties to *"cooperate and exchange information at the international level"* and to *"implement feasible measures to detect and monitor the movement of cash and appropriate negotiable instruments across their borders"*. With respect to these measures, it is worth noting the similarities to the requirements set by the FATF Recommendations, such as CDD and SARs.

The Palermo Convention sets also a number of measures with respect to the confiscation and seizure of proceeds of crime. According to art. 12 of the Convention, State Parties shall adopt measures aimed at enabling the confiscation of both *"proceeds of crime derived from offences covered by [the] Convention or property the value of which corresponds to that of such proceeds"* and *"property, equipment or other instrumentalities used in or destined for use in offences covered by [the] Convention"*. Furthermore, art. 12 of the Convention recognises the possibility that *"proceeds of crime [may be] transformed or converted, in part or in full, into other property or intermingled with property acquired from legitimate sources"*. Although the Convention requires State Parties to confiscate such properties up to the assessed value of the proceeds, this is often impracticable[75].

Art. 18 of the Palermo Convention deals specifically with international cooperation and, in particular, with mutual legal assistance. Art. 18 of the Convention states that *"State Parties shall afford one another the widest measure of mutual legal assistance in investigations, prosecutions and judicial proceedings in relation to the offences covered by [the] Convention"*. Given that mutual legal assistance is linked to the sharing of information, art. 18 of the Convention states also that *"without prejudice to domestic law, the competent authorities of a State Party may, without prior request, transmit information relating to criminal matters to a competent authority in another State Party where they believe that such information could assist the authority in undertaking or successfully concluding inquiries and criminal proceedings or could result in a request formulated by the latter State Party pursuant to [the] Convention"*.

[75] Europol Financial Intelligence Group, "Why is cash still king? A strategic report on the use of cash by criminal groups as a facilitator for money laundering," (The Hague: Europol, 2015), 28.

A number of scholars have argued that the Palermo Convention, which was supposed to be the main instrument against transnational organised crime, has had an ambiguous impact over the past decade[76]. In particular, two main factors have contributed to the partial ineffectiveness of the Convention. First, transnational organised crime has evolved and adapted to the legislative framework provided by the Convention. Second, other international threats have emerged, such as terrorism, which have slowed the momentum that led to the signing of the Convention in 2000. The main issue, however, remains the limited possibility to measure what has been achieved. Monitoring the number of countries that adheres to the Convention is not enough, considering that it is not possible to obtain reliable data on whether these adhesions entail a reduction in transnational organised crime.

3.2 National AML/CFT legislations: a comparison between the Italian and Chinese legislative frameworks

The Italian anti-money laundering law (*decreto legislativo 21 novembre 2007, n. 231*) was promulgated in 2007 in order to transpose the EU Directive 2005/60/EC. In the same year, the Chinese anti-money laundering law (Law 3600/06.10.31) came into force. The purpose of this section is to briefly analyse the major differences, if any, between the two legislative frameworks. Given the cultural, economic and historical differences between the two countries, and given the transnational nature of money laundering and terrorist financing, it is worth comparing the two laws to have a better idea on how different countries are dealing with these two phenomena.

Definitions

The Italian AML law defines money laundering as a criminal action that may consist of:

a) "*the conversion or transfer of goods, knowing that such goods originated from a criminal activity or participation thereto, with the aim of concealing the illicit source of such goods or helping whoever takes part in such activity to avoid the judicial consequences of his own actions*";
b) "*the concealment of the real nature, origin, position, arrangement, movement, ownership of goods or rights on such goods, carried out knowing that such goods originated from a criminal activity or participation thereto*";

[76] André Standing, "Transnational Organized Crime and the Palermo Convention. A Reality Check," (New York: International Peace Institute, 2010), 10.

c) "*the purchase, possession or the use of goods knowing, at the moment of the reception, that such goods originated from a criminal activity or participation thereto*".

The Chinese AML law, instead, defines money laundering activities as those activities *"involving the use of various means to cover up or conceal the origin and nature of criminal proceeds and benefits derived from narcotics-related crime, gang-type organised crime, crime of terrorism, crime of smuggling, crimes of misappropriation of public property and bribery, crime of undermining financial management order, crime of financial fraud and other crimes"*.

The two definitions of money laundering given by the Italian and Chinese law are clearly similar, yet they present a number of differences. While they both refer to goods and proceeds originated from criminal activities, the operations encompassed are different. On the one hand, the Italian law refers to three main operations that may be carried out, namely the conversion or transfer of the goods, the concealment of their real nature or other information, and the purchase of the goods. These operations are deemed punishable if they are carried out being aware of the illicit source of the goods. On the other hand, the Chinese law refers only to the cover up or concealment of the ill-gotten goods and proceeds.

With respect to terrorism and terrorist financing, the differences are even more noteworthy. While the Italian AML law refers to another Legislative Decree (*decreto legislativo 22 giugno 2007, n. 109*), which defines terrorist financing as "*any activity, with any mean, aimed at the collection, funding, intermediation, safekeeping, custody or distribution of funds or economic resources, whatever their sources, intended to be totally or partially used to carry out one or more than one terrorist-related crimes or used to facilitate the carrying out of one or more than one terrorist-related crimes, irrespective of the effective use of the funds or economic resources aforementioned*". The Chinese law mentions terrorist financing only in art. 36, which states that "*[the] Law shall govern the monitoring of funds suspected of being destined for use in terrorist activities, unless otherwise specified in other laws, in which case such laws shall prevail*". In this sense, it is worth noting that until the end of 2015, when the PRC promulgated the Counter-Terrorism Law, the Chinese AML law – with all its limitations – was the country's main instrument for combating terrorist financing.

Structure and scope

The Italian AML law includes five articles devoted to the identification of the categories subject to the law, namely financial intermediaries and other institutions engaged in finance business, professionals, auditors, and other categories, including debt collection agencies, casinos and online casinos. Each of these categories are subject to different provisions, in accordance with art. 15, 16, 17 and 18. The Chinese law, instead, only refers to financial institutions, which are defined in art. 34 as to include *"policy banks, commercial banks, credit cooperatives, postal savings institutions, trust and investment corporations, securities companies, futures brokerages and insurance companies established in accordance with the law and engaged in finance business, as well as other institutions engaged in finance business"*. The scope of non-financial institutions and their obligations are not included in the AML law, but are formulated by the State Council.

Anti-money laundering authorities

In Italy, the Ministry of Economics and Finance is responsible for the anti-money laundering policies and activities. Italy's FIU is set up within the Bank of Italy and, in accordance with art. 6 of the Italian AML law, it carries out several activities, including the analysis of financial flows with the aim of identifying and preventing money laundering and terrorist financing, the financial analysis of the STRs received from financial and non-financial institutions, and the acquisition of further data and information in order to perform analyses and prepare statistical models. Further controls may be performed from both external agents, such as the Bank of Italy, the Consob (Commissione nazionale per le Società e la Borsa) and the IVASS (Istituto per la vigilanza sulle assicurazioni) and internal agents, such as the board of statutory auditors, the surveillance council and the management control committee.

In China, one of the departments within the State Council[77] organises and coordinates anti-money laundering activities. The department in charge of anti-money laundering activities, in accordance with art. 8 of the Chinese AML law, is also responsible for "*monitoring funds in connection with anti-money laundering work, [formulating] anti-money laundering rules and regulations for financial institutions itself or in concert with the relevant finance regulatory organisation of the State Council, [monitoring and inspecting] financial institutions' performance of anti-money laundering obligations, [investigating] suspicious transaction*

[77] The State Council of the PRC is the highest executive organ of State power and administration.

activities within its purview and [performing] other anti-money laundering related duties specified in laws or by the State Council". The department, in accordance with art. 10, is also responsible for the establishment of the national FIU, whose aim is to analyse STRs and to report on its findings to the State Council's department. Other regulators and enforcement bodies are the People's Bank of China, the China Banking Regulatory Commission (CBRC) for the banking industry, the China Insurance Regulatory Commission (CIRC) for the insurance industry, and the State Administration for Industry and Commerce (SAIC) for the non-financial sector.

Obligations regarding customer identification

Customer identification is one of the key measures adopted both on an international level and on a national level. In this sense, the Italian AML law provides different measures depending on the nature of the activities carried out by the subject. For instance, art. 15 deals with financial institutions' obligations in terms of customer identification. Financial institutions are required to undertake CDD measures when establishing business relations, carrying out occasional transactions above EUR 15,000, when there is suspicion of money laundering or terrorist financing, and when the financial institution has doubts about the veracity or adequacy of previously obtained customer identification data. Similar procedures and thresholds are also applicable to auditors and other professionals. These obligations, in accordance with art. 18, consist of several activities, including the identification and verification of the customer's identity and obtaining information on the purpose and nature of the business relation, which shall be preserved for a minimum of ten years after the conclusion of the business relation.

The Chinese AML law, in a similar fashion to the Italian AML law, requires financial institutions to establish a system for authenticating the identities of customers. Customer due diligence, in accordance with art. 16, is required when establishing business relations and when carrying out occasional transactions above a specified threshold. Furthermore, art. 16 specifies that "*if a financial institution has suspicions as to the truthfulness, validity or completeness of the identity information previously obtained from a customer, it shall authenticate such customer's identity anew*". Customer identities and transaction records shall be preserved for a minimum of five years after the conclusion of the business relation. As of January 2016[78], CDD measures are not required neither for one-off services (i.e. cash

[78] PwC, "Know Your Customer: quick reference guide," (New York: PwC, 2016), 98.

remittance, cash exchange and negotiable instruments cashing) below USD 1,000 or equivalent nor for property insurance contracts paid in cash below USD 1,000. Large Value Transactions (LVTs), however, must be reported. In this case, the threshold is set at approximately USD 10,000 for daily cash transactions and at approximately USD 100,000 for wire transfers; for entities other than individuals, the threshold is set at approximately USD 200,000.

Legal liability

Both the Italian and the Chinese AML laws provide for administrative sanctions in case a financial institution or other entity fail to perform properly the required CDD measures. Art. 55 of the Italian law states that any person who fails to perform the customer identification process required by the law shall be punished with a fine that ranges from EUR 2,600 to EUR 13,000. This sanction shall be doubled in case the customer identification process was carried out fraudulently. Furthermore, any person who carries out an operation and fails to specify the purpose or the nature of the business relation or the professional service, or fake such information, shall be imprisoned for a period that ranges from six months to three years and shall be punished with a fine that ranges from EUR 5,000 to EUR 50,000.

The sanctions provided for by art. 32 of the Chinese AML law are applicable to financial institutions that fail to perform their obligations of authenticating the identity of their customers, fail to preserve customer identity information and transaction records, fail to submit STRs, conduct transactions with customers whose identity is unknown, violate confidentiality provisions, or refuse to collaborate or interfere with an AML investigation. Any financial institution that commits any of such acts shall be punished with a fine that ranges from RMB 200,000 to RMB 500,000 (approximately from EUR 26,800 to EUR 67,000). In case a financial institution commits any of the foregoing acts and causes money laundering consequences, the fine ranges from RMB 500,000 to RMB 5 million (approximately from EUR 67,000 to EUR 670,000) and the directors and other directly responsible persons shall be punished with a fine that ranges from RMB 200,000 to RMB 500,000.

Given the nature and size of the money laundering and terrorist financing phenomena, AML legislations need to be constantly up to date. Even though Italy and China are both members of the FATF – the former founded and joined the intergovernmental organisation in 1990,

while the latter joined the FATF in 2007 – it is clear that the two countries are moving in the same direction at two different paces. One of the most frequent criticism about the Chinese AML law is that it needs to be revised. According to Yu Guangyuan, vice-president of the China Association for Fiscal and Tax Law, the current legislative framework is not adequate to deal with many of the new techniques used by money launderers, including mobile payments and online banking that, according to Yu, account for nearly 40 per cent of money laundering[79]. On the other hand, Italy, according to the IMF, "*has a mature and sophisticated AML/CFT regime, with a corresponding well-developed legal and institutional framework*"[80]. However, the IMF recognises the high ML/TF risks connected to tax evasion, organised crime and corruption, which still represent a significant concern[81].

[79] Cao Yin, "Efforts urged to improve money laundering law," *China Daily*, 29 February, 2016, accessed 29 August, 2016, http://www.chinadaily.com.cn/china/2016-02/29/content_23676602.htm.

[80] IMF, "Italy: Detailed Assessment Report on Anti-Money Laundering and Combating the Financing of Terrorism," (Washington: IMF, 2016), 7.

[81] *Ibid*, 21.

Chapter Four

Empirical analysis of the relationship between criminal companies and equity investments in the Piemonte region

The purpose of this chapter is to summarise the theoretical concepts illustrated in the previous chapters and to provide an analytical framework for the money laundering phenomenon. As seen in the second chapter of this dissertation, there are several red flags that characterise criminal companies and can be used as quantitative tools for investigations. The empirical analysis carried out in this chapter is specifically focused on the use of equity investments by criminal companies. These instruments, according to a number of studies (including the report issued by Transcrime in 2013) are used by criminal organisations to blur the audit trail of their operations and, therefore, facilitate money laundering.

Criminal organisations are a pervasive phenomenon that affects Italy as a whole. The diffusion of criminal organisations in the northern regions is not a recent event, contrary to common beliefs. According to a former associate of the *'ndrangheta*[82], criminal organisations have been operating in Piemonte at least since 1972. Nowadays, Piemonte represents one of the most important criminal organisation hubs in the North, with an index of presence of criminal organisations (*indice di presenza mafiosa)*[83] between 2000 and 2011 equal to 6,11. The Liguria region presents the highest level of the index in the North (10,44), while Campania presents the highest level in absolute terms (61,21). The Piemonte region has been the centre of many investigations that have been carried out throughout the last two decades. It is worth noting that the city council of Bardonecchia (TO) was the first city council in the northern Italy to be disbanded for association with criminal organisations in 1995. In 2011, the so-called "Minotauro" operation led to 142 arrests and the confiscation of assets for a total value of about EUR 70 million at the expense of the *'ndrangheta*. In 2012, two city councils in the province of Torino (Leinì and Rivarolo Canavese) were disbanded for association with criminal organisations. In the light of these considerations, the analysis of data from the

[82] Repubblica, "'Ndrangheta al nord, il pg del processo Minotauro: condanne per 609 anni," 9 March, 2015, accessed 1 September, 2016, http://torino.repubblica.it/cronaca/2015/03/09/news/_ndrangheta_torino_minotauro_pg_c_hiede_condanne_per_609_anni-109126539/.

[83] Transcrime, "Progetto PON Sicurezza 2007-2013. Gli investimenti delle mafie," (Milan: Transcrime, 2013), 27.

Piemonte region may offer interesting insights into the characteristics of criminal organisations and their investments in the legal economy.

4.1 Outline of the research and research hypotheses

The first step of the analysis was the collection of data on criminal companies via Telemaco, a database that includes data from the various Chambers of Commerce. For the purpose of this research, criminal companies are defined as those companies which, in the reference period (2005-2014), were managed by persons who in the following years would have been arrested for association with criminal organisations. Equity investments are included in the asset section of the balance sheet. In particular, art. 2424 of the Italian Civil Code requires companies to adopt the following classification:

> *III - Immobilizzazioni finanziarie, con separata indicazione, per ciascuna voce dei crediti, degli importi esigibili entro l'esercizio successivo:*
>
> *1) partecipazioni in:*
>
> *a) imprese controllate;*
>
> *b) imprese collegate;*
>
> *c) imprese controllanti;*
>
> *d) altre imprese.*

In order to carry out the analysis, it was necessary to collect the same data for comparable non-criminal companies, which serve as control group. The comparability of criminal and non-criminal companies depends on a number of characteristics, such as their size, Ateco codes and province where their headquarters are located. The analysis was run on a sample of 68 criminal companies. However, since the reference period is ten years, and the database takes into consideration all the years in which the criminal companies were managed by criminals, for several companies there are more than one observation. Specifically, the analysis is based on a total of 851 observations: 341 are related to criminal companies, while 510 are related to the control group.

The final database that was used to carry out the analysis with Stata contains several financial information for both the criminal and non-criminal companies, including those related to equity investments, such as:

- Total number of equity investments;

- Country in which the subsidiary is located (either in Italy or abroad);
- Share of ownership;
- Company name of the subsidiary.

Traditionally, companies have several reasons for holding equity investments. Investments in other companies may be used to increase profitability, gain access to a new strategic market or resource, gain competitive advantage and achieve many other strategic objectives. As far as criminal companies are concerned, equity investments may offer a further advantage, that is the possibility to launder the proceeds generated from illicit activities and to issue invoices for bogus transactions that are used to transfer the ill-gotten funds. Criminal companies may also hold equity investments in foreign companies. In this case, criminal organisations may exploit the differences between two or more legislations so as to carry out trade-based money laundering activities. Some legislations may also be particularly favourable due to their loose CDD measures and low tax rates.

The research questions at the basis of this analysis are therefore the following: do criminal companies hold more equity investments, either in Italy or abroad, than comparable non-criminal companies? Is their average percentage of ownership higher or lower? What are the common elements, if any, of such equity investments?
The classification of criminal and non-criminal companies is made through the use of a dichotomous variable that is equal to zero when the company is classified as non-criminal and equal to one when the company is classified as criminal.

4.2 Criminal companies and Ateco codes

The sample of criminal companies that was used to carry out the research consists of 68 unique companies observed for ten years, for a total of 341 observations. In the following pages, the sampled companies are presented on the basis of a number of accounting information, namely total assets, leverage and availability of cash.

	Percentiles	Smallest		
1%	10,199	3,549		
5%	41,638	9,373		
10%	105,187	10,000	Obs	341
25%	274,606	10,199	Sum of Wgt.	341
50%	942,721		Mean	7,175,403
		Largest	Std. Dev.	58,295,160
75%	3,165,057	21,866,580		
90%	7,955,773	32,534,450	Variance	3.40e+09
95%	11,998,310	74,084,570	Skewness	12.84954
99%	21,866,580	78,430,870	Kurtosis	167.1709

Table 1 (Criminal companies: Total Assets in thousands of euros)

The values of the Total Assets variable shown in Table 1 present a high level of variability within the sample. The high values of both skewness and kurtosis imply that the distribution is far from symmetrical. This is also evident from the difference between the median (EUR 942,721) and the mean (EUR 7,175,403). In order to perform a proper analysis, the presence of one or more outliers must be taken into account.

	Percentiles	Smallest		
1%	0.031	0.000		
5%	0.154	0.005		
10%	0.374	0.015	Obs	341
25%	0.682	0.031	Sum of Wgt.	341
50%	0.888		Mean	0.843
		Largest	Std. Dev.	0.470
75%	0.945	3.266		
90%	1.017	3.352	Variance	0.211
95%	1.197	4.112	Skewness	3.407
99%	3.266	4.347	Kurtosis	24.623

Table 2 (Criminal companies: Leverage)

The distribution of values for the Leverage variable shown in Table 2 are much more symmetrical than the distribution of values for the Total assets variable: the median and the mean are closer, while the skewness is still positive but closer to zero.

	Percentiles	Smallest		
1%	-164,424	-261,732		
5%	34	-186,091		
10%	280	-179,130	Obs	341
25%	2,657	-164,424	Sum of Wgt.	341
50%	21,767		Mean	3,786,732
		Largest	Std. Dev.	45,706,960
75%	191,203	5,847,839		
90%	954,779	6,958,240	Variance	2.09e+09
95%	1,460,285	568,577,500	Skewness	12.983
99%	5,847,839	625,859,100	Kurtosis	169.985

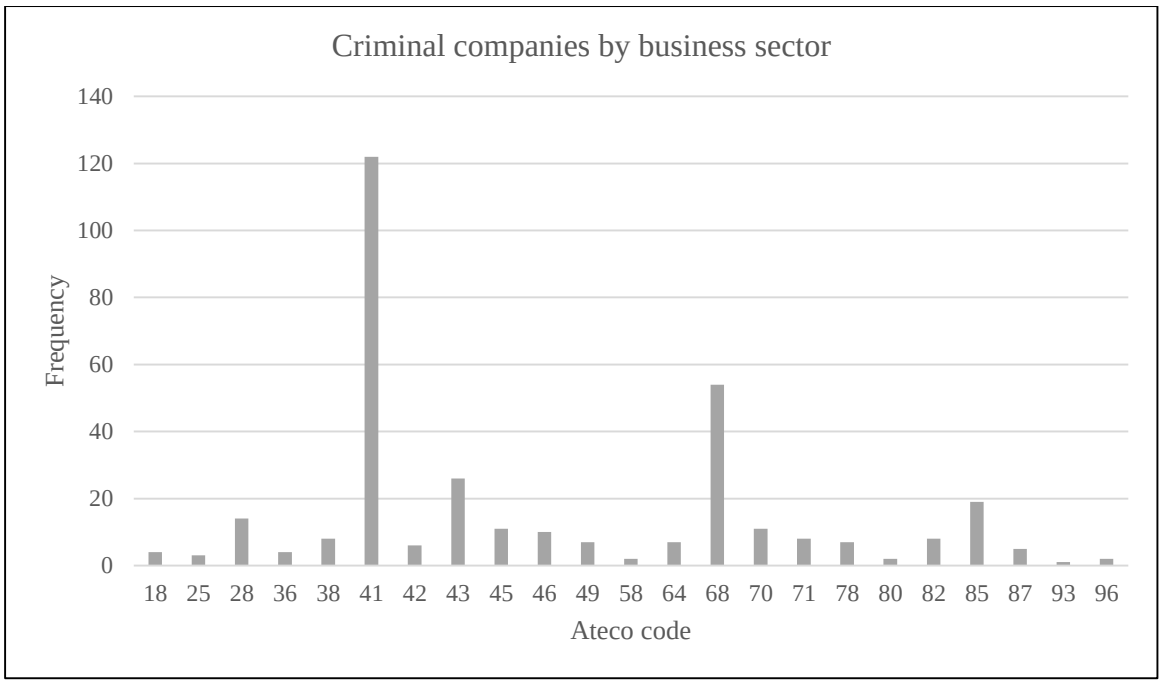
Table 3 (Criminal companies: Availability of cash in thousands of euros)

The values of the Availability of cash variable shown in Table 3 follow the distribution of the Total assets variable, which is in line with the original expectations. The mean value (EUR 3,786,732) is remarkably higher than the median value (EUR 21,767), while the skewness and kurtosis have similar values to those seen for the Total assets variable. Furthermore, even the four largest values of the variable are significantly different, since the highest of the four values is more than 100 times higher the lowest of the four values. The highest values belong to the observations related to one specific company over a period of two years and must be taken into account in the analysis.

As already seen in the second chapter of this dissertation, criminal organisations prefer to invest in certain industries rather than in others. Criminal organisations invest in the legal economy with the aim of creating social consensus, obtaining control over a specific territories and laundering money. Specifically, the 68 sampled criminal companies operate in 23 different business sectors. Table 4 sums up the distribution of such business sectors.

Ateco code	Business sector	Frequency	Percentage
18	Printing and reproduction of recorded media	4	1.17
25	Manufacture of fabricated metal products, except machinery and equipment	3	0.88
28	Manufacture of machinery and equipment	14	4.11
36	Water collection, treatment and supply	4	1.17
38	Waste collection, treatment and disposal activities; materials recovery	8	2.35
41	Construction of building	122	35.78
42	Civil engineering	6	1.76
43	Specialised construction activities	26	7.62
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	11	3.23
46	Wholesale trade, except of motor vehicles and motorcycles	10	2.93
49	Land transport and transport via pipelines	7	2.05
58	Publishing activities	2	0.59
64	Financial service activities, except insurance and pension funding	7	2.05
68	Real estate activities	54	15.84
70	Activities of head offices; management consultancy activities	11	3.23
71	Architectural and engineering activities; technical testing and analysis	8	2.35
78	Employment activities	7	2.05
80	Security and investigation activities	2	0.59
82	Office administrative, office support and other business support activities	8	2.35
85	Education	19	5.57
87	Residential care activities	5	1.47
93	Sports activities and amusement and recreation activities	1	0.29
96	Other personal service activities	2	0.59
	Total	341	100.00

Table 4 (Criminal companies: business sectors)



Graph 1 (Criminal companies: business sectors)

As shown both in Table 4 and in Graph 1, the construction industry is the business sector with the highest frequency and accounts for more than one-third of the observations. This industry presents several characteristics that may be attractive to criminal organisations, such as the high availability of public funds, limited degree of competition and low productivity of labour. This result is in line with the study performed by Transcrime in 2013. Another business sector that presents a high frequency is the real estate industry, which accounts for more than 15% of the observations. This sector was the subject of a report of the FATF that was published in 2007 and that was illustrated in the first chapter of this dissertation.

4.3 Preliminary considerations on the equity investment variables

In order to understand if it is worth deepening the research activities, it may be useful to perform a preliminary analysis of a few basic statistics on the number of equity investments held by both criminal companies and non-criminal companies. These statistics include the mean values, the standard deviation and both the minimum and maximum amounts observed in the samples. It is worth noting that the number of observations in the following table may be lower, due to the limited availability of data.

Variable	Obs	Mean	Std. Dev.
Non-criminal	453	0.523	1.180
Criminal	323	1.254	5.008

Table 5 (Total number of equity investments)

Table 5 shows that criminal companies hold on average a higher number of equity investments. However, the variability within the sample of criminal companies is much higher, due to the presence of two observations related to a particularly big company. In order to confirm that these results are not solely due to the presence of outliers, it is useful to winsorise the variable for 1%.

Variable	Obs	Mean	Std. Dev.
Non-criminal	453	0.523	1.180
Criminal	323	0.978	2.701

Table 6 (Total number of equity investments after winsorisation)

Table 6 shows that the results of the preliminary analysis hold true even when the extreme values are not considered. In this case, the mean value of total equity investments held by criminal companies (0.98) is almost twice the mean value obtained for non-criminal companies (0.52).

The same preliminary research may be performed also on the equity investments held abroad by criminal and non-criminal companies, so as to see whether it is worth deepening the analysis of this hypothesis.

Variable	Obs	Mean	Std. Dev.
Non-criminal	459	0.041	0.331
Criminal	323	0.090	0.440

Table 7 (Total number of equity investments abroad)

The results shown in Table 7 confirm the research hypothesis on equity investments abroad. Criminal companies, on average, hold twice as much equity investments than comparable non-criminal companies. Even though the results do not appear to be affected by the presence of outliers, for the sake of consistency the variable was winsorised for 1% (results are shown in Table 8).

Variable	Obs	Mean	Std. Dev.
Non-criminal	459	0.041	0.331
Criminal	323	0.090	0.440

Table 8 (Total number of equity investments abroad after winsorisation)

Finally, the same preliminary research may be performed on the average percentage of ownership held by the two groups of companies. Assuming that criminal companies use equity investments in other firms to launder money, it is worth measuring whether their average share is higher than the average share held by comparable non-criminal companies. In this case, the results for the winsorised variable are shown in the following table.

Variable	Obs	Mean	Std. Dev.
Non-criminal	388	0.062	0.198
Criminal	288	0.096	0.233

Table 9 (Average percentage of ownership after winsorisation)

Table 9 shows that criminal companies, on average, hold a higher share of ownership with respect to comparable non-criminal companies. As regards the sample size for this variable, the number of observations has decreased because of the lack or insufficiency of data within the companies' financial statements.

Although these tables confirm that the sampled criminal companies, on average, have a higher number of equity investments – either in Italy or abroad – and that their average share of ownership is higher with respect to comparable non-criminal companies, the results are far from statistically significant. The purpose of the preliminary research performed so far is to confirm that it is worth deepening the analysis of data with more precise tests. A common tool to perform this kind of analysis is the *t*-test. The *t*-test has several applications, but for the purpose of this analysis it can provide further information on the significance of the mean values obtained in the preliminary stage of the research. In particular, it can be used to test the null hypothesis such that the means of two populations are equal. In this case, the null hypothesis is that the mean values of a specific winsorised variable – Total equity investments, Total equity investments abroad or Average percentage of ownership – are equal for both criminal companies and non-criminal companies.

The first *t*-test is performed on the winsorized Total equity investments variable, whose results are shown in Table 10.

Criminal	Obs	Mean	Std. Err.
0	453	0.523	0.554
1	323	0.973	0.150
	776		
t	=	-3.186	
Pr(|T| >|t|)	=	0.002	

Table 10 (t-test for the winsorized Total equity investments variable)

Table 10 shows that the results obtained in the preliminary analysis of the Total equity investments variable are significant, even after the winsorisation of the variable, as the *p*-value is equal to 0.0015. Therefore, it is possible to reject the null hypothesis with a 5% significance level and conclude that criminal companies, on average, hold more equity investments than comparable non-criminal companies. However, these results need to be further analysed, as the number of equity investments held by a company presumably does not depend only on the variable considered.

Criminal	Obs	Mean	Std. Err.
0	459	0.041	0.016
1	323	0.090	0.025
	782		
t	=	-1.754	
Pr(|T| >|t|)	=	0.080	

Table 11 (t-test for the winsorized Total equity investments abroad variable)

The results shown in Table 11 for the Total equity investments abroad variable are not as in line with the research hypothesis as the results for the Total equity investments variable. The *p*-value of the test performed on the Total equity investments abroad variable is higher than 0.05, albeit still lower than 0.1. Therefore, it is not possible to reject the null hypothesis at the 5% level, but it is possible to reject it at the 10% level. Although the results are not convincing, the variable may still be analysed at a deeper level.

Criminal	Obs	Mean	Std. Err.
0	388	0.062	0.010
1	288	0.096	0.014
	676		
t	=	-2.035	
Pr(|T| >|t|)	=	0.042	

Table 12 (t-test for the winsorized Average percentage of ownership variable)

Table 12 shows that the results for the Average percentage of ownership variable are significantly in line with the initial research hypothesis. The *p*-value of the test is lower than 0.05 and therefore it is possible to reject the null hypothesis at the 5% level. However, further analyses are required in order to understand whether these results are really due to the independent variable, that is the dichotomous Criminal variable.

4.4 Description of the model

The results obtained in the last section take into consideration only the relation between the independent dichotomous Criminal variable and the dependent equity investment variables. These considerations are useful to obtain a general idea on whether the relation between the two variables is in line with the research hypothesis, but they are not enough to draw a conclusion on the effect of the independent variable on the dependent one. The *t*-test may give useful information on the correlation between the variables, but does not give any information on the causal effect. It follows that it is necessary to develop a model that takes into account other factors that may have an impact on the values taken either by the dependent variable or the independent variables. The control variables that are used in the multivariate regression model that follows this section are described in Table 13.

	Obs	Mean	SD	p25	p50	p75
Size_w	851	6.640	1.579	5.364	6.690	7.730
ROE_w	851	0.070	1.074	-6.638	0.043	0.221
Leverage_w	851	0.799	0.501	0.607	0.849	0.947

Table 13 (Control variables)

These control variables are expected to have an impact on the dependent equity investment variables and, for the sake of consistency, they are all winsorised for 1%. In particular:

- The variable that takes into account companies' size corresponds to the logarithm of their total assets. Size is expected to influence the value of the equity investment

variables because bigger companies are more willing to invest in other companies. The purpose of taking the logarithm is to deal with a symmetrical distribution that would otherwise be impossible to obtain, given the high skewness of the Total Assets variable shown in Table 1.

- The ROE (Return on Equity), calculated as net income over equity, is a ratio commonly used to measure the profitability of a company. This ratio is used as a control variable because the profitability of a firm is expected to be positively correlated with its willingness to invest in other companies.
- The leverage, calculated as total liabilities over total assets, is a measure of the level of indebtedness of a company, that is how much the company finance its operations through the use of debts. Given the relation between profitability and leverage – the DuPont Analysis shows that the financial leverage is one of the driver of the ROE – it is necessary to use this variable as a control variable.

In order to understand the strength and direction of the relationship between the variables, it is possible to use a correlation matrix. The results[84] that are significant at the 5% level are shown in Table 14 and are marked with a star if they are significant also at the 1% level.

	Criminal	Total Eq. Inv._w	Total Eq. Inv. abroad_w	Avg. ownership_w	Size_w	Leverage_w	ROE_w
Criminal	1						
Total Eq. Inv._w	0.114*	1					
Total Eq. Inv abroad_w		0.553*	1				
Avg. ownership_w	0.078	0.573*	0.575*	1			
Size_w	0.093*	0.313*	0.193*	0.350*	1		
Leverage_w	0.071	-0.086	-0.131*	0.118	-0.073	1	
ROE_w						0.095*	1

Table 14 (Correlation matrix)

- The Criminal variable is significantly and positively correlated with both the Total equity investments variable and the Average percentage of ownership variable, but it is not significantly correlated with the Total equity investments abroad variable, at least at the 5% level. These results are in line with the results obtained with the *t*-tests.

[84] The results shown in the correlation matrix refer to winsorised variables.

Furthermore, the Criminal variable is positively and significantly correlated with the Size variable.

- As regards the Total equity investments variable, the correlation matrix shows that this variable is positively and significantly correlated with the Total equity investments abroad variable, the Average ownership variable and the Size variable. It follows that larger companies are more likely to hold large equity investments, either in Italy or abroad.
- The Total equity investments abroad variable is negatively and significantly correlated with the Leverage variable. Therefore, companies with lower level of indebtedness are expected to hold more equity investments abroad than companies with a higher leverage. As seen in the second chapter of this dissertation, criminal companies may have lower level of indebtedness because of their large availability of cash, and at the same time may hold a higher level of equity investments in foreign companies for carrying out international trade-based money laundering.

4.5 Multivariate regression

The general purpose of a multivariate regression model is to obtain a clearer insight about the relationship between a number of independent variables and a dependent variable. Even though the results of the *t*-tests represent a good starting point for the analysis of the relationship between the Criminal variable and the equity investment variables, it is necessary to develop a statistical model that takes into account also the other variables that have an impact on the dependent variable. The multivariate regression is performed on the three winsorized dependent equity investment variables that are at the basis of this research: Total equity investments, Total equity investments abroad and Average percentage of ownership.

Multivariate regression on the Total equity investments variable

The first multivariate regression is performed on the winsorized Total equity investments variable. Since the distribution of the dependent variable is left-censored, with many observations taking zero as value, it may be necessary to perform a tobit regression, also known as a censored regression model. In particular, the analysis is performed setting the lower limit equal to zero and therefore the values that fall at this threshold are censored. The results of the analysis are shown in Table 15.

Variable	(1) Tot. Eq. Inv.	(2) Tot. Eq. Inv.
Criminal	0.031 (0.428)	0.031 (0.911)
Size_w	1.536*** (0.213)	1.536*** (0.460)
Lev_w	-0.603 (0.625)	-0.603 (0.931)
ROE_w	-0.105 (0.178)	-0.105 (0.191)
Constant	-12.311*** (2.353)	-12.311*** (3.947)
Year fixed effect	Yes	Yes
Robust option	Yes	Yes
Cluster option	No	Yes
Observations	776	776
Pseudo R2	0.077	0.077
***p<0.01, **p<0.05, *p<0.1		

Table 15 (Tobit regression on the Total equity investments variable)

In the first column, the tobit regression is performed using the robust option. The results show that the dichotomous Criminal variable is not useful in explaining changes in the dependent variable. In the second column, the tobit regression is performed using the cluster option. Given that the model uses observations that are clustered into companies (identified by their *Codice Fiscale* - CF), it is necessary to perform the multivariate regression using the cluster option, that takes into account that observations may be correlated within companies. It is worth noting that the robust option is implied with the cluster option. The results obtained using the cluster option, which adjusted the standard errors for 163 clusters in CF, are still not significant. It follows that it is not possible to determine, on the basis of this model, whether criminal companies hold more equity investments than non-criminal companies.

Multivariate regression on the Total equity investments abroad variable

The second multivariate regression is performed on the winsorized Total equity investments abroad variable. Since also in this case the distribution of the dependent variable is left-censored, it is necessary to perform a tobit regression. The results of the analysis are shown in Table 16.

Variable	(1) Tot. Eq. Inv. abroad	(2) Tot. Eq. Inv. abroad
Criminal	2.975*** (0.797)	2.975* (1.786)
Size_w	1.350*** (0.202)	1.350*** (0.308)
Lev_w	-8.895*** (1.269)	-8.895*** (1.877)
ROE_w	1.139*** (0.378)	1.139** (0.499)
Constant	-9.281*** (2.375)	-9.281*** (2.569)
Year fixed effect	Yes	Yes
Robust option	Yes	Yes
Cluster option	No	Yes
Observations	782	782
Pseudo R2	0.286	0.286
***p<0.01, **p<0.05, *p<0.1		

Table 16 (Tobit regression on the Total equity investments abroad variable)

In the first column, the tobit regression is performed using the robust option. The results show that the dichotomous Criminal variable is significant at the 1% level and, therefore, is useful in explaining changes in the dependent variable. In the second column, the tobit regression is performed using the cluster option, adjusting for 163 clusters. Also in this case, the dichotomous Criminal variable is significant, albeit at the 10% level. These results are in line with the research hypothesis that criminal companies hold, on average, more equity investments in foreign companies than non-criminal companies.

Multivariate regression on the Average percentage of ownership variable

Finally, the last multivariate regression is performed on the winsorized Average percentage of ownership variable. Since in this case the distribution of the variable does not require a tobit regression, it is possible to use the standard OLS model, first with the robust option and then with the cluster option, adjusting for 153 clusters. The results of the analysis are shown in Table 17.

Variable	(1) Avg. Ownership	(2) Avg. Ownership
Criminal	0.030* (0.016)	0.030 (0.031)
Size_w	0.046*** (0.006)	0.046*** (0.011)
Lev_w	-0.043*** (0.014)	-0.043 (0.026)
ROE_w	-0.002 (0.005)	-0.002 (0.006)
Constant	-0.203*** (0.043)	-0.203*** (0.056)
Year fixed effect	Yes	Yes
Robust option	Yes	Yes
Cluster option	No	Yes
Observations	676	676
R-squared	0.143	0.143
***p<0.01, **p<0.05, *p<0.1		

Table 17 (Linear regression on the Average percentage of ownership variable)

In the first column, the linear regression is performed using the robust option. The results show that the dichotomous Criminal variable is significant at the 10% level and, therefore, is useful in explaining changes in the dependent variable. However, these results are no longer significant after the introduction of the cluster option, whose results are shown in the second column. It follows that it is not possible, on the basis of this model, to draw any accurate conclusion on whether Criminal companies have larger equity investments than non-criminal companies.

4.6 Overview of the analysis and final considerations

The purpose of the research illustrated in this chapter is to explain whether criminal companies use more equity investments, either in Italy or abroad, than comparable non-criminal companies, and whether such equity investments are on average larger than those held by non-criminal companies, in terms of percentage of ownership. As regards the equity investments held by criminal companies in Italian companies, the results obtained from the tobit regression are in line with the research hypothesis, but there is not enough statistical support to draw any significant conclusion. Similar results were also obtained from the linear regression on the Average percentage of ownership variable. On the other hand, the tobit

regression on the Total equity investments abroad variable provides interesting information. The results of the tobit model with the robust option are statistically significant at the 1% level, which implies that the dichotomous Criminal variable does have an influence on the dependent variable. The significance of these results is reduced by the use of the cluster option, which is a much stricter rule than the robust option. Nonetheless, the results are still significant at the 10% level.

The results obtained from the tobit regression on the Total equity investments abroad variable represent also an interesting starting point for some qualitative considerations. The analysis of the equity investments in foreign firms held by criminal companies may provide useful insights on which are the countries where criminal organisations conceal their ill-gotten funds. In particular, with respect to the sample of criminal companies analysed throughout this research, there are a number of information that are worth considering. First, the majority of the criminal companies that held equity investments in foreign countries were based in Torino and operated in one of the three following business sectors: financial service activities, except insurance and pension funding, real estate activities, and activities of head offices and management consultancy activities. Second, the aforementioned companies were all confiscated in 2011 during the so-called operation "Minotauro". This operation led to 142 arrests and the confiscation of companies, villas and apartments, vehicles and bank accounts for a total value of about EUR 70 million at the expense of the *'ndrangheta*¸ which is the major criminal organisation operating in the Piemonte region. Finally, the equity investments in foreign firms held by the aforementioned criminal companies were limited to only five different countries: Argentina, Germany, France, United Kingdom and Albania.
In the light of these considerations, the importance of further researches in this field is clear: the combination of quantitative data and qualitative information may represent a turning point in the fight against criminal organisations and money laundering. In particular, the statistical analysis of equity investments in foreign firms held by criminal companies may play a major role in the identification of the money trails that need to be followed so as to stop the international trade-based money laundering phenomenon.

Conclusion

Money laundering is a pervasive phenomenon that affects every economic system, from the richest countries to the poorest. The necessity of cleaning the proceeds originated from illicit activities is common to every criminal organisation in the world. While it is not possible to measure the actual size of the phenomenon, it is still possible to estimate it. In 2009, according to the key findings of the UNODC, the size of global money laundering was around 2.7 per cent of global GDP, with an "interception rate" as low as 0.2 per cent. It follows that a lot remains to be done in terms of AML legislation and investigations. In fact, money laundering methods and techniques are constantly evolving and adapting to the AML legislative framework. Criminal organisations employ cash couriers and smugglers, front businesses and professionals for their money laundering activities, with operations that range from complex international transactions to gambling.

Criminal organisations employ front businesses also for other purposes. On the one hand, criminal organisations may invest in the legal economy with the aim of exploiting their power and financial resources to increase their competitive advantage and, as a consequence, their profitability. On the other hand, criminal companies represent a fundamental instrument for increasing social consensus and controlling territories. Among the tools that criminal organisations may exploit to increase the profitability of their companies there are the discouragement of competitors, the reduction of labour costs and the huge availability of funds. In this sense, it is worth mentioning that the research carried out by Transcrime in 2013 showed that the profitability of criminal companies is often significantly lower than the profitability of their legitimate competitors, despite their unique sources of competitive advantage. Furthermore, criminal companies, depending on whether they are aimed at maximising profitability or supporting the operations of other companies, may present a number of features in their financial statements that investigators shall consider throughout their investigations. These red flags include the availability of funds, the level of indebtedness and their equity investments. This last financial item is the subject of the research carried out in the fourth chapter of this dissertation.

Money laundering and the financing of terrorism are linked by the need of secrecy. The techniques that are used to launder money are similar to, if not the same as, those used to conceal the sources of terrorist financing. It follows that an exhaustive international

legislative framework aimed at fighting one of the two phenomena cannot fail to deal with the other. International initiatives include the Palermo Convention, the Terrorist Financing Convention and the Recommendations of the FATF, which countries are encouraged to implement. However, national AML/CFT legislative frameworks are far from homogeneous. For instance, although Italy and China are both members of the FATF – the former founded and joined the intergovernmental organisation in 1990, while the latter joined the FATF in 2007 – it is clear that the two countries are moving in the same direction at two different paces.

The last chapter of this dissertation consists in a research on the use of equity investments by criminal companies. For the purpose of the research, criminal companies are defined as those companies which, from 2005 to 2014, were managed by persons who in the following years would have been arrested for association with criminal organisations. The analysis is carried out on a sample of 68 criminal companies that were located in the Piemonte region. Criminal organisations have been operating in Piemonte at least since 1972 and, nowadays, this region represents one of the most important criminal organisation hubs in the North. The research questions at the basis of this analysis are therefore the following: do criminal companies hold more equity investments, either in Italy or abroad, than comparable non-criminal companies? Is their average percentage of ownership higher or lower? What are the common elements, if any, of such equity investments?

As regards the equity investments in Italian companies and the average percentage of ownership, the results obtained from the analysis are in line with the research hypotheses, but there is not enough statistical support to draw any significant conclusion. On the other hand, the results obtained from the tobit regression on the equity investments in foreign companies provide interesting information. The results of the tobit model with the robust option are statistically significant at the 1% level, which implies that the dichotomous Criminal variable does have an influence on the dependent variable. These results are confirmed at the 10% level also with the cluster option. Further studies may use these results as a starting point and extend the research to other regions, in order to perform an analysis on a larger number of criminal companies that hold equity investments in foreign companies. These results are also a valid starting point for some qualitative considerations. The majority of the criminal companies that held equity investments in foreign companies were located in Torino and were confiscated during the same investigative operation. Furthermore, their investments were limited to only five different countries: Argentina, Germany, France, United Kingdom and Albania. It follows that the combination of quantitative data and qualitative information may

represent a turning point in the fight against criminal organisations and money laundering. The study of this information may lead to the identification of the money trails that need to be followed so as to stop the international trade-based money laundering phenomenon.

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