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"What are the Factors that Influence the Effectiveness of Anti-Money Laundering Policy Implementation in the UK? Exploring Money Laundering Crime and Policy"

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Abstract

Anti-Money Laundering has become the term for many stakeholders including Financial Institutions and law enforcement agencies that attempt to prevent the movement of money obtained from criminal activity. This research combines two important areas within the money laundering arena: Anti-Money Laundering preventative measures and Anti-Money Laundering Policy.

This study aims to discover significant determinants that influence the current anti-money laundering policy (AML) by understanding the relationship between criminal activity, stakeholder activity and public policy. This research adopts a pragmatic approach which embraces the use of mixed methods. The strategy using mixed method (triangulation) approach for data collection increase the rigor and robustness of the research in terms of exploration, validation and confirmation of findings. From a pragmatic perspective a better understanding of the research problem could be achieved that overcomes complexities in the context of the research, such as access to key stakeholders.

The research question *"What are the factors that influence the effectiveness of AML policy implementation in the UK?"* is answered using a four phase approach to data collection and analysis that incorporates theme identification from literature, focus group interviews, survey questionnaire and verification of factors through individual participation. The findings of the research point to three areas of activity that could be confirmed as areas in which policy changes can be applied. These are *'sentencing'* as a deterrent to crime; *'reporting regime'* for suspicious activity reports, and *'criminal knowledge'* based on law enforcement tactics'. The methods used also provided an abundance of additional material that set the findings in their appropriate environment.

Key words: Anti Money Laundering, Policy, Mixed Methods, Factor Analysis

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Abbreviations

ACPO   Association of Chief Police Officers of England, Wales and N. Ireland

AML   Anti-Money Laundering

ARA   Assets Recovery Agency

AUSTRAC   Australian Transaction Reports and Analysis Centre

CFT   Combating the Financing of Terrorism

CPS   Crown Prosecution Service

DWP   Department of Work and Pensions

Elmer   The NCIS SARs database

FATF   Financial Action Task Force

FCA   Financial Conduct Authority

FI   Financial Investigator

FIB   Force Intelligence Bureau

FinCEN   Financial Crimes Enforcement Network (USA)

FINTRAC   Financial Transactions and Reports Analysis Centre of Canada

FIU   Financial Investigation Unit

FIWG   Financial Investigator Working Group

FSA   Financial Services Authority

HMCE   Her Majesty's Customs and Excise

HMIC   Her Majesty's Inspectorate of Constabulary

HMRC   Her Majesty's Revenue and Customs

IMF   International Monetary Fund

IR   Inland Revenue

JARD   Joint Asset Recovery Database

JMLSG Joint Money Laundering Steering Group

LEA   Law Enforcement Agency

NCA   National Crime Agency

NCIS   National Criminal Intelligence Service

NTFIU National Terrorist Financial Investigation Unit (Special Branch)

NVivo A Qualitative Data Analysis Computer Software Package

PIU   Performance and Innovation Unit, Cabinet Office

POCA Proceeds of Crime Act 2002

PSNI   Police Service of Northern Ireland

RART Regional Asset Recovery Team

SAR   Suspicious Activity Report

STR   Suspicious Transaction Report

SOCA Serious Organised Crime Agency

TF   Terrorist Financing

Acknowledgements

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the School Ethical Approval Panel on 14th April 2011 and 16th January 2012.

I declare that the word count of this thesis is approximately 81,000 words.

Name: Samuel Sittlington

Signature: …………………………………..

Date: 5th March 2015

Chapter 1 Introduction to the thesis

This chapter serves as an introduction to the thesis. Basic background to the Money Laundering concept and the potential contribution of the identification of factors of influence in AML policy is provided. An overview of the research programme undertaken is also presented along with an outline of the thesis.

1.1 Introduction

The aim of this research is to identify the determinants that influence the effectiveness of Anti-Money Laundering (AML) policy implementation in the UK. This pragmatic study will provide empirical evidence based on a robust research framework that is divided into four sequential phases of activity. The research explores opinions, assumptions, experiences and motivations of key stakeholders within the AML framework using mixed methods within the qualitative and quantitative disciplines. Data obtained using methods within those disciplines is then subject to analysis techniques that provide for each phase of the research. The research question is answered by applying the standards of validity and reliability within each phase and the methods chosen. The research produces original work which makes a significant contribution to knowledge in the AML area by eliciting data from three dominant areas of the AML environment: prevention via regulators, detection via enforcement and criminality via ex-offenders. Furthermore the results will impact on practice and policy at a time when change is necessary. A Thesis map is provided at Figure 1.1.

Figure 1.1 Thesis Map

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
Introduction Background to research Research Question	Literature Review Research Gaps	Theoretical Perspective Methodology Methods	Analysis and Discussion	Conclusion Contribution Research Implications

Phase 1

Method	Analysis
Identification of Themes from Literature	Informal Content Analysis

Phase 2

Method	Analysis
Focus Group Interviews Five Participant Groups	Transcripts Theme Validation NVIVO Quotation method

Phase 3

Method	Analysis
Questionnaire Development Pilot of questionnaire Questionnaire Distribution	Exploratory Factor Analysis Principal Component Analysis Varimax Rotation ANOVA Group Analysis Re-Labelling Components

Phase 4

Method	Analysis
Validation/Interpretation of Factor results Five Participants from Original Focus Groups	Analysis of responses from three questions

1.2 Background to the research

Money Laundering refers to the process whereby criminals attempt to clean the money tainted by their criminal activity, in order that it may appear to come from a legitimate source. There are many definitions and interpretations of money laundering and these will be further explored in Chapter 2. Money laundering impacts on society in general through infiltration of banking systems; growth of organised crime and enabling criminal activity to continue. Tackling money laundering therefore can locate stolen funds and restore them to victims, deprive criminals of their ill-gotten gains and disrupt organised criminal activity. As money laundering predominantly takes place within the financial systems, the integrity of those systems depend heavily on the perception that it functions within a high level of legal, professional and ethical standards. One of the most valuable assets of a financial institution is its reputation for integrity (Alldridge, 2003; FATF, 2003; Reuter and Truman, 2005; Harvey, 2007). The cost of money laundering to society is therefore a driver for governments to ensure the legislation and regulation in place is concentrated and vigorous.

Estimations of the cost of money laundering globally are wide and varied. The amounts however are significant: Figures quoted as to the cost of money laundering suggest the lack of empirical underpinning to measure such a phenomenon (Schneider, 2010). The fact that money laundering is a clandestine activity hidden from view and that criminals don't record their activities, makes measuring such a phenomenon difficult. The International Monetary Fund (IMF) in 1998 suggested money laundering to be between 2% - 5 % of the world GDP. Other global amounts suggested by Agarwal & Agarwal (2006) estimate money laundering to be between US $2.0 to US $2.5 Trillion annually (Schneider, 2010).

In the UK money laundering is estimated to cost £15bn per annum (HM Treasury, 2007).

Whilst the cost of money laundering is a significant stimulus to conduct research in this area it is not the objective of this research. The methods chosen to measure the cost of money laundering hold a major significance, as a starting point in this research. The process of money laundering has consequences for many agencies involved in prevention, detection and enforcement. These range from the following activities: collating the number of reports made to law enforcement by banks, the number of prosecutions for money laundering, the amount of assets seized, methods of money laundering and knowledge within those agencies about the type of individuals involved in money laundering. The knowledge of key personnel within those agencies is invaluable to research in this area and that view suggests the areas looked at for measurement are relevant to this research.

As will be discussed in the literature review in Chapter 2 and methodology in Chapter 3 themes can be drawn from the various elements chosen for measurement. An example of such a theme is 'spend' which is provided under the measurement methods of 'confiscation' and 'cash movements' as described by Unger (2006) and Schneider (2006). One of the major contributions to estimating the cost of money laundering is Walker (1992, 1995, 1999, and 2007). Others have built on the work of Walker to carry out their own measurement research and provide empirical discussions and criticisms of measurement methods, such as Tanzi (1996), Reuter (2001), Mayhew (2003), Schneider

(2006), Unger (2006), Masciandaro (2007) and many others that will form part of the discussions in Chapter 2.

Generally the crime of money laundering is preceded by an offence were there has been a monetary gain or benefit to the criminal; for example drug trafficking, robbery or fraud. In most jurisdictions offences are committed by organised crime gangs or individuals. The provisions in place to deal with money laundering are wide and varied internationally but generally relate to offences to prosecute money laundering and confiscate assets obtained from criminal activity.

The UK however is regarded as having the most comprehensive piece of legislation and regulation that deals with organised crime and removes assets from criminals (Levi, 2003; SOCA, 2013). To tackle money laundering the legislation and regulation in place provides that it can be approached from two directions; namely, prevention and detection. Generally Law Enforcement have the responsibility to put in place procedures to detect and prosecute offenders, likewise regulatory authorities have the responsibility to put in place procedures to prevent and detect suspicions of money laundering. This "detection" overlap suggests all stakeholders in the AML environment have a role to play. Exploring how well the system is working has driven this research and established the research question:

> *"What are the factors that influence the effectiveness of anti-money laundering policy implementation in the UK?"*

The literature review in Chapter 2 will suggest the AML system in the UK is not working (Tupman, 1998; Levi, 2003; Reuter and Truman, 2005; Alldridge, 2008;

Harvey, 2007, 2008, 2009). Issues presented will relate to definitional problems around money laundering, terrorist financing, predicate offence and processes around reporting suspicions of money laundering by financial institutions and co-operation with agencies both local to the UK and globally. Each element within the AML process will be explored to develop the concept for the research.

The driving force behind Anti-Money Laundering provisions globally was originally the United Nations through their Convention in 1988[1]; however the Financial Action Task Force (FATF) is recognised globally as the standard setter for anti-money laundering and counter terrorist financing (AML/CTF), (Schott, 2006).

FATF is an independent inter-governmental body that develops and promotes policies to protect the global financial system against money laundering, terrorist financing and the financing of proliferation of weapons of mass destruction (Schott, 2006; FATF, 2013). FATF make recommendations based on an assessment of risks to the global economy. The UK is a member of FATF and implemented the AML standards of FATF through European Directives to legislation; the Proceeds of Crime Act (2002) and Money Laundering Regulations (2003) and (2007).

The past two decades has seen the UK AML landscape dramatically altered as a result of legislative changes that focusses on the financial arrangements of criminal money launderers and terrorists. There is an historical sequence to those

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[1] "The United Nations Convention against Illicit Traffick in Narcotic Drugs and Psychotropic substances (1988). UNODC on money laundering and countering the financing of terrorism (2014)" www.unodc.org

changes and these will be further explored in Chapter 2. However changes within the UK are not always the result of localised activity but are the consequence of events that occur outside of the UK. One of those events was the Terrorist attacks in the USA in 2001. As a result of those attacks on the World Trade Centre in New York, the Pentagon and the hijacking of US Airlines, legislators in the US introduced the "*Patriot Act*".[2] The act was principally aimed at strengthening measures to prevent, detect and prosecute international money laundering and financing of terrorism (FinCEN; 2013). Furthermore the impact of the USA attacks moved the FATF to review their 40 recommendations introduced in 1990 and add a further 8 recommendations in 2001 and a further ninth recommendation in 2004. It is the momentum of this activity that prompted changes in legislation in the UK and globally[3].

Prior to the events of September 11, 2001, there was already a significant onus on UK banks and financial institutions to report suspicions of money laundering under the existing UK legislation (Drug Trafficking offences Act 1986; Criminal Justice Act 1988 and Drug Trafficking Act 1994). After 2001, new legislation and regulation as previously mentioned was introduced. In the UK the Joint Money Laundering Steering Group (JMLSG) is seen as the advisory body that issues guidance and rules to the regulated industry following any changes in legislation or regulation. The Financial Services Authority (FSA) now the Financial Conduct Authority (FCA) and The Prudential Regulation Authority (PRA), have a statutory duty under the Financial Services and Markets Act (2000), (prevention and

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[2] The official title of the USA Patriot Act is Uniting and Strengthening America by Providing Appropriate Tools to Intercept and Obstruct Terrorism (USA PATRIOT) Act of 2001" (FinCEN; 2013)
[3] FATF new recommendations "International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation – the FATF Recommendations" (16th February 2012) came into force in 2013.

detection of money laundering[4]) to effectively police the regulatory regime. This role allows the FCA to institute proceedings for breach of their rules governing regulated activities. The FCA regularly conducts audits of banks and financial institutions to ensure they are compliant with the money laundering regulations.

Law Enforcement relies on information and intelligence in order to conduct all types of investigations. However, reports from financial institutions relating to suspicions of money laundering called suspicious activity reports[5] (SARs) can provide a starting point for money laundering investigations, as they indicate the movement of money (transactions) in suspicious circumstances. The number of SARs reported annually is used as an indicator of effectiveness by government but are part of the compliance regime of the financial industry required to make suspicious reports. The increased number of SARs does not necessarily mean law enforcement will be more effective, neither does it mean that financial institutions are more vigilant (Harvey, 2007; Van Duyne et al, 2005). *"This provides an equally accurate reflection of the UK situation"* (Harvey, 2007: 9). Quantity does not necessarily mean quality and the additional SARs may not represent any meaningful information that law enforcement can deal with in addition an increase could come from financial institutions receiving some recent training in AML.

 It is incumbent on financial institutions to ensure their AML policy is effective as the consequences of an ineffective regime go beyond the banks borders. In a

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[4] Financial Services and Markets Act (2000) Part 1 Regulatory (1-18) Part 2 Regulation and Prohibited Activities (19-39a) Powers of Investigation Part 11 (178-192)

[5] "Suspicious Activity Report (SAR) is a piece of information which alerts law enforcement of potential money laundering or terrorist financing. This could be a large cash purchase or a series of large, out of character deposits" (2014). www.nationalcrimeagency.gov.uk

recent study by Idowu & Obasan (2012) questioning the AML policy and its effect on bank performance in Nigeria, concluded that: *"there was a strong relationship between a bank's performance and the adoption of a sound money laundering policy"* (Idowu and Obasan, 2012:367). Similarly, Ferwerda (2009) who questions the effect of AML policy on crime levels, uses an estimation model to conclude that; *"improved AML policies especially international co-operation are associated with lower crime levels"* (Ferwerda, 2009:923). Whilst the evidence is not over whelming there lies a strong indicator of a relationship between policy and AML effectiveness.

1.3 Theoretical foundation of the study

The above section provides background information of the study relating to AML activities and AML policy. The literature review is provided in Chapter 2 and as suggested by Becker (2004) is an assessment of existing knowledge – both empirical and theoretical that relates to the research topic. This section will discuss the theoretical foundation appropriate to this research by considering theories relating to the choice behaviour of individuals and organisations. The authors own choices of examples are designed to provide simple structure to an area of theory that is wide and substantial. This section provides the introduction to the legal and regulatory framework, the literature review and the methodology chapter that follows.

Theories are a set of principles designed to generate predictions and provide useful insights in the area in which the practice of activity is based (Smith, 1996). In observing anti-money-laundering policy activity it has been recognised that behaviour of criminals is a reaction to a number of changes, such as: a change

in legislation and regulation in the anti-money-laundering environment or a country switching to the Euro, a major disaster or some new financial product introduced on the market. Change in policy and practice tends to occur after attempts to secure the economic stability of countries in a global market (such as the introduction of the FATF 40 Recommendations in 1991) or a catastrophic event such as the events of 9/11 (the terrorist attacks in the US in 2001 which introduced the US PATRIOT Act (2001)). These observations link to several theories of behaviour under the umbrella of classical criminology theory which include deterrence theory, rational choice and economic regulation theory. This thesis applies those concepts to the theoretical framework that will direct the research and the methodology chosen. Stakeholder theory was originally included in the theoretical framework but disregarded as the research progressed[6].

Figure 1.2 provides a Venn diagram of the concept relationships between the three theories. The relationship represented by 'R' in the centre of figure 1.2 provides a visual demonstration of overlap and which the three theories of Deterrence, Rational Choice and Economic Regulation merge. For example cost/benefit is a concept within all three theories presented. Further discussion on the three theories is provided in sections 1.3.1, 1.3.2, 1.3.3 and 1.3.4 and in Chapter 3.

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[6] The relationship between the key agencies that participated in anti-money-laundering policy activity, necessitated the inclusion of stakeholder theory. However, the use of the term stakeholder is not a reason to use the principles of stakeholder theory in this research, particularly when other more suitable theories exist. Stakeholder theory was initially included in the theoretical framework as analysis of focus group data identified a number of factors that necessitated its inclusion. Some of those factors included: influence from outside agencies in the financial sector that changed the perception of the AML purpose[6]. Policy decisions within Law Enforcement agencies that appear ethically incorrect or at the very least morally wrong[6]. As the research unfolded it became clear that stakeholder theory was not a suitable attribute to this research and the response to the above sectors could be better progressed with the theories chosen.

Figure 1.2: Venn diagram illustrating the overlap concepts within the Theoretical Framework

Rational Choice Theory

OVERLAP
Cost/Benefit
Choice
Behaviour
Deterrence
Certainty

OVERLAP
Cost/Benefit
Choice
Behaviour
Reward
Public interest
Deterrence

'R'

Deterrence Theory

Economic Regulation Theory

OVERLAP
Cost/benefit
Control
Influence
Capture
Public interest
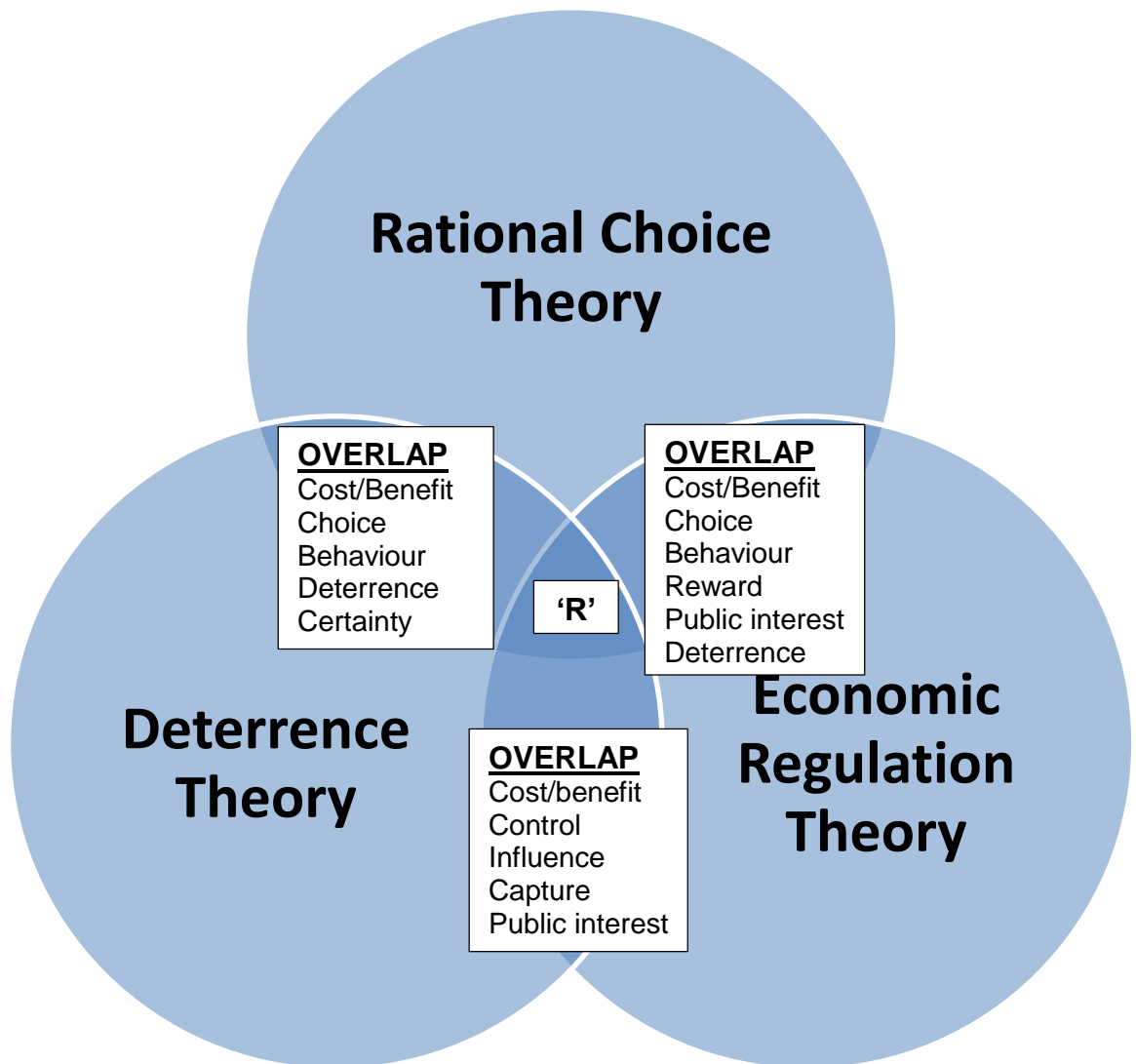
Table 1.1 provides a summary of the theoretical framework and the work of particular author's viewed for this thesis. The authors chosen are extensively read and provide a broad range of views that capture and conceptualise the purpose of this research. The following sections of Chapter 1 review the three areas of theory illustrated.

Table 1.1 Theoretical framework

Crime Theory	Economic Regulation Theory
Rational Choice Siegel (2009) Keel (2005) Paternoster (1996) Lyman and Potter (2007)	**Public Interest Theory** Ferris (2000) Baldwin and Cave (1999) Masciandaro, (1999) Cornish and Clarke (1986)
Deterrence Siegel (1992) Nagin (1998) Keel (2005) D'Arcy (2011)	**Capture** Stigler (1971) Baldwin and Cave (1999)
Economics of Crime Becker (1968) Masciandaro (2004) Ferwarder (2009)	**Self-Regulation Theory** Baldwin and Cave (1999)

1.3.1 Review of crime theory

There is a vast literature on the theory of crime and deterrence and it is important to restrict that view to literature from an AML perspective and not progress into the behavioural studies of why people commit crime. A suitable theoretical starting point in this research can be capsulated in the vision of Cesare Baccaria in 1764 as demonstrated below by Muncie, McLaughlin and Langan (1996):

> *"in order for punishment not to be, in every instance, an act of violence of one or of many against a private citizen, it must be essentially public, prompt, necessary, the least possible in the given certain circumstances, proportionate to the crime, dictated by the laws"*

> (Muncie, McLaughlin and Langan, 1996:13)

Focusing on AML crime and AML policy various aspects of crime and deterrence theory became more relevant. AML being a fairly recent phenomenon there is a lack of literature available on the link between money laundering crime and policy; however Spicker (2006) suggests a link between law and policy:

> *"Many laws are devised not to establish the limits of right and wrong, but to draw a line between those rules that work in practice, and those that won't; it is a line of reasoning that policy makers may also need to follow".*

(Spicker, 2006:5)

Of further relevance to this research is his suggestion that any problems encountered within the policy will be addressed by the practitioners. As will be discussed, this is confirmed in comments by a number of the key actors from focus group interviews.[7]

Despite the scientific study of criminology being a recent event its development has come from a long history of crime and punishment behaviour (Siegel, 2009). From mid-eighteenth century social philosophers began looking for a more rational approach to punishment of crime than the harsh violent treatment of offenders that frightened people into obeying laws. The main theories that came from that era were the Classical theory of criminology and the Positivist theory of criminology. It is important to view both these positions to gain an understanding of the current day thinking of crime deterrence and in particular for this study the

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[7] Focus group Accountants "I mean I've had some recent experience with SOCA and I have to say somewhat concerned that, in my mind in this thing there is, a the opportunity of a lifetime but it must be taken within the lifetime of that opportunity, and the thing is moving so slowly that I'm rather concerned about where it's all ending up, and I don't know I'm puzzled as to why" In response to a question about the success of asset recovery.

relationship between current Anti Money Laundering Legislation and crime activities.

Siegel (2009) provides an explanation of the introduction of classical criminology by Cesare Baccaria and the foundation of deterrence and rational choice theory. Classical theory of crime was inspired by Cesare Beccaria in 1700's and his ulitarian views to form the basis of the classical theory of crime. As suggested by Siegel, Beccaria believed that all people will engage in activity whether it is criminal or non-criminal, (for example regulatory offences) and without the fear of punishment would continue to do so. Individuals possess free will and use it to make rational decisions weighing up the benefits of committing a crime against the punishment of committing a crime.

Keel (2009) in describing Baccaria's vision believed that the only deterrence to crime, is if the punishment fitted the crime (Keel, 2009). The effectiveness of the deterrence was to balance the punishment that it should be no more or less than the benefit gained from the criminal activity. The view of today's modern society suggests that now people's actions are based on whether that particular action makes them happy or not and avoided an unpleasant consequence. This view has its own place within classical criminology and a short explanation is provided at this point. Utility theory follows Jeremy Bentham's (1788) idea of crime prevention by using the force of punishment to deter the individual from committing an offence. This idea was extended by Becker (1968) into the 'economics of crime'. Becker suggests that governments should ensure that sufficient laws are in place that 'crime does not pay'. Ferwerda (2008) provides a clear description of Becker's view:

"Laws should ensure that the costs of committing an offence (the chance of being caught multiplied by the amount of punishment), are higher than the benefits of each offence. If this is the case, the punishment will deter the criminal from committing the specific offense. This follows the economists' usual analysis of choice and assumes that a person commits an offense if the expected utility exceeds the utility he could get otherwise".

(Ferwerda, 2008:905)

Further discussion on utility theory is provided at section 1.3.3. Laws are created by the dominant groups who decide societal norms in order to maintain community harmony and punishment is used as a crime prevention method. This was designed to discourage criminals from committing less serious offences. The impact of this theory at the beginning of the nineteenth century saw reported crimes increased and as a result a new theory of the cause of crime started to emerge. Classical theory as described by Siegel therefore had several basic elements[8].

Further discussions on classical criminology can be viewed through: Keel (2005), Muncie, McLaughlin and Langan (1996) and Paternoster and Simpson (1996).

The challenge to classical theory came from the Positivist camps explanation of the causes of crime. During the nineteenth century advances in scientific methods to explain how the world worked was questioned: why the same methods could

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- [8] In every society, people have free will to choose criminal or lawful solutions to meet their needs or solve their problems.
- Crime may be the more attractive alternative as lawful ones because it usually requires less work for greater reward.
- A person's choice of criminal solutions may be controlled by his or her fear of punishment.
- The more severe, certain, and swift the punishment, the more successful it is in controlling the criminal behaviour.

(Siegel, 2009:3)

not be used to study human behaviour and as a result a new vision emerged. Siegel (2009) in addressing the work of Auguste Comte suggests positivists embrace a rational, scientific view of the world. This view shared by Siegel who posits a number of elements of positivist traits.

- Positivists use the scientific method to conduct research. The scientific method is universal and remains constant in all social and cultural boundaries

- Positivists maintain the goal of predicting and explaining social phenomena in a logical manner. This means identifying necessary and sufficient conditions for any phenomena to occur

- Only real and observed phenomena can be tested scientifically

- Science should be value free and not influenced by a person's biases or political point of view

(Siegel, 2009:4)

1.3.2 Review of Positive criminology

Positivist criminology was concerned less with the content and implementation of the criminal law and more with establishing the causes of law breaking (Muncie, McLaughlin and Langan, 1996). This provided a number of views within the positive perspective that will be mentioned here.

The most influential theorist on positivist criminology is Cesare Lombroso who believed criminals and non-criminals were scientifically different. He believed that there were 'born criminals' linked to crime through biological traits. This view denied that offenders were responsible for their deeds and therefore should be treated and not punished (Peelo and Soothill, 2005).

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Other forms of positivist thought at the time included sociologists Emile Durkheim and Adolphe Quetelet who looked at the influence of social aspects as the reason to commit crime along with the influence of age and sex of an individual. This view suggests, according to Durkheim's vision of social positivism that crime is normal in society and occasionally helpful in that it paves the way for social change.

This view of social chaos or anomie was reinforced by the Chicago School of social study by Burgess and Park who argued that crime was not a function of personal traits or characteristics but rather reaction to an environment that was inadequate for proper human relations and development (Siegel, 2009). This was a challenge to the belief that criminals were biologically different and instead crime was seen as a social problem that could be eradicated through improved social and economic conditions. Edwin Sutherland also from The Chicago School of social study further developed this view to argue that criminality was linked to an individual's view of older law breakers and that quality of life in education, family life, and peer relations were all attributable to their criminal behaviour.

Understanding white collar crime was to become his trademark theory. Sutherland's challenge to conventional wisdom argued that crime was a classless act and therefore a feature of all classes.

> *"We have little or no evidence one way or the other whether business leaders are, indeed, "emotionally balanced". However the point remains that the main burden for explaining white collar crime seem unlikely to fall upon psychological approaches, partly because the problems are widespread and so cannot be explained as aberrations"*

(Peelo and Soothill, 2005:8)

With this view in mind controlling white collar crime or financial crime becomes an emotive and sensitive subject, As Siegel suggests, attempts to prosecute white collar crime as opposed to lower class street criminals sees a prosecutorial imbalance with few prosecutions. When they are prosecuted the sentences are minimal.

In recent time's evidence of efforts to bridge the imbalance has seen the development of governmental strategies of control through legislation, compliance of the institutions involved through reporting and deterrence and through a shift in the sentencing regime with an added deterrence through confiscation, particularly in relation to the legislation that this study refers to (Proceeds of Crime Act 2002). As deterrence has become an important element of this theory exploration it is relevant to return to the classical criminology viewpoint and rational choice theory.

1.3.3 Review of Deterrence and Rational Choice Theory

Deterrence is the use of punishment as a threat to deter people from committing a crime. Discouraging an individual from committing further criminal acts by making them aware of the consequences of doing so, (primarily by incapacitating them so they cannot commit further crime) becomes a specific deterrence. Making an example of those individuals in order to deter other individuals from committing crime becomes a general deterrence:

"The swiftness, severity and certainty of punishment are key elements in understanding the Laws ability to control human behaviour"

(Keel, 2005:1)

It is suggested that not all crime deterrence is caused by the criminal justice system but by other means such as closed circuit TV and private ownership of firearms suggesting that the criminal is more afraid of getting caught than the threat of punishment. Rational choice theory suggests an offender will decide to commit a crime after first considering his own personal situation:

> *"Need for money, personal values, and living expenses against situational factors such as target security, benefit, and police capability. The offender then calculates the risk of getting caught against expected punishment, the value of the enterprise and his need for gain"*

<div align="right">(Siegel, 1992:131)</div>

When we shift the perspective to the ACT of criminal behaviour the issue becomes one of how to make that behaviour less attractive to the individual. This could be carried out using crime prevention methods or reduced through policies that convince criminals to desist from particular criminal activity. It could be suggested that the AML policy is such a tool as it punishes offenders on two levels: socially through incarceration and financially through confiscation (Clarke and Cornish, 1985).

Recent research in this area tested deterrence theory and rational choice theory separately. D'Arcy and Herath (2011) tested deterrence theory in Information systems (IS) to enlighten and advise security management strategies in deterrence principles for computer crime. They found that despite deterrence theory having a strong theoretical foundation and empirical support in predicting illicit behaviour in organisational settings (Paternoster and Simpson, 1996)

"there were inconsistencies and sometimes contradictory findings for deterrence theory in the IS security context"

(D'Arcy and Herath, 2011:644).

Some academics see rational choice and deterrence theory complimenting each other and that they should be viewed together and not as individual theories (D'Arcy and Herath, 2011; Paternoster and Simpson, 1996, Paternoster and Nagin, 1993).

While much of the literature on deterrence and rational choice theory tested offences Jeremy Bentham (1788-1843) transformed this view to determine the economics of crime. The effectiveness of the deterrence was to balance the punishment that it should be no more or less than the benefit gained from the criminal activity. Becker (1968) was to be credited with modernising this theory of crime within the economics of cost and benefits. Becker suggests that Governments introduce legislation on the premise that *"Crime does not pay"* The deterrence is the cost of the offence (the chance of getting caught multiplied by the amount of punishment) and that the cost should be higher than the benefits of the offence (Ferwerda, 2009; Keel, 2005; Becker, 1968).

From a deterrence point of view Keel's analysis suggests this should deter the criminal from committing the offence. From an economist's viewpoint Becker suggests it suits the purpose if the expected utility (cost) exceeds the utility (benefit) he would get otherwise[9].

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[9] $EU = pU(y - f) + (1 - p)U(y)$ (1) when y is income (monetary and psychic) from an offence,
$U(\cdot)$ is the offender's von Neumann-Morgenstern utility function,
f is the monetary equivalent of punishment, which may include the opportunity cost of imprisonment captured by lost wages (f is often informally called the "severity of punishment")

Masciandaro and Portalano (2007) further examine the problem by applying the economics of cost/benefit to money laundering. If more money laundering crime takes place, the greater the negative impact on the financial system. In addition criminals and criminal organisations benefit by enjoying the rewards and are still able to use the proceeds to help them avoid prosecution.

> *"The Policy maker may thus decide to implement a regulation that creates serious obstacles to money laundering, or it can decide to make the opposite choice, devising a regulation that facilitates money laundering"*

(Masciandaro and Portalano, 2007:5).

This implies regulation can provide the opposite effect of its intention. Masciandaro suggests that it leaves the door open to other stakeholders to influence decisions and direction of policy in the regulatory arena. This does not imply a deliberate attempt to make things easy for the criminal but inadvertently the policy makers make mistakes. The agents are left to pick up the pieces, work with what powers they have and try to lobby change through working groups and government contacts. Focus groups conducted in this research have commented on this issue.

Deterrence theory is discussed by D'Arcy (2011), Paternoster (1996), Nagin and Paternoster (1993). Much of the discussion relates to testing deterrence and rational choice theory through studies of University undergraduates and their perceptions of committing crimes such as theft, sexual offences and drink driving.

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and p is the (subjective) probability of conviction (often informally called the "certainty of punishment"); a crime is committed if $EU > 0$ (Becker, 1968).

The tests used involved scenario based script and each individual had to decide what their personal response would be given similar circumstances. There was conflicting evidence in the results of these studies. However AML policy was introduced to deter crime and to extend the cost of committing crime therefore the inclusion in this research of both deterrence and rational choice theory are significant. Further contributions are made by Masciandaro (1999, 2007) and Ferwarder (2009) who discuss creating a theoretical model to establish the impact of anti- money laundering policy and the reduction of crime.

1.3.4 Review of economic regulation theory

Economic regulation theory equally generates interest for this study due to the nature of the agencies involved in the AML process. Regulation by the financial services sector incurs a cost to its members in its compliance function and enforces the regulation with the threat of sanctions and fines (Harvey, 2007).

Stigler (1974) provides an account of the introduction of economic regulation; this is followed by a general discussion of the components related by Ricketts (2006) and the expansion of the regulatory state and intervention. Posner (1974) gives an account of the public interest position and the concern about regulation with its vulnerability to capture (Perlman, 1994). As discussed previously those concerns have been made by participants in the focus group interviews and who equate the regulator interests of those being regulated, (Financial institutions regulated by the FSA now FCA), with the public interest (Becker, 1968; Baldwin and Cave, 1999). Ricketts further reviews the work of Stigler (1971) giving an account of the equilibrium effect of private costs and social benefits (Ricketts, 2006). An interesting conclusion to this review is that Masciandaro (2007) in his

economics of regulation paper provides a similar set of regulatory interest groups to the focus groups used in this study[10].

Economic regulation theory deals more specifically with the regulated institutions that form part of this research and the AML process: *"To regulate implies the exercise of some influence on an activity that is different from total control"* (Ricketts, 2006). See also Posner (1974) and Stigler (1974). Economic regulation theory incorporates public interest theory (Posner, 1974) and capture theory (Becker, 1968; Posner, 1974, Baldwin and Cave, 1999). Masciandaro (2007) identifies four categories of entities interested in regulation: The policy maker, criminal organisations, financial institutions and the cost bearers of money laundering. Each of these contributors have their own interests and will influence policy or regulation to suit their own purposes.

> *"To be sure, money-laundering regulation could be opposed, and is indeed opposed, by the political authorities that represent the public interest. The dispersion of the costs, however, makes money laundering a low salience issue for the public and consequently quite low on the political agenda. The man on the street simply does not feel the bite of money laundering, and political actors will act consequently".*

> (Masciandaro, 2007:6)

The regulation and public interest models serve legitimate public purpose with the goal of correcting failing markets (Baldwin and Cave 1999). However analysis of these externalities suggests that when externalities exist the cost and benefit for individuals of social cost and benefits and unconstrained individual action will result in more negative externalities than positive ones. Imposing cost/subsidies

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[10] Focus groups: Law enforcement, accountants, prosecutors, MLROs and ex-offenders

can theoretically correct this divergence - traditionally controlled through regulation. A government can enhance social welfare by intervening to correct market failures and protect the public through regulation. Similarly regulation and self-interest motivates a government to act before and after legislative changes in order to limit the impact or to maximise the benefit for industry. A concern therefore about regulation is its vulnerability to capture which equates the interests of those being regulated with the private interest (Perlman, 1994). This idea further suggests the extent that regulation is driven by public, private or stakeholder interests and must be considered (Baldwin and Cave, 1999).

The stakeholder's involved in this study appear to lead by their own interests and their own agenda as Masciandaro, (2007) suggests, this observation helps to explain why supervisory authorities rather than politicians provide the initiatives in money laundering prevention. The regulated institutions that are governed by the money laundering regulations put in place preventative mechanisms and reporting regimes for persons suspected of money laundering through their institutions. Failing to make the suspicious reports could make the staff liable for prosecution or the institution liable for fines, sanctions and loss of reputational integrity. The cost of the process is borne by the institution and therefore conflicting priorities in terms of roles and responsibilities are visible. The benefit to the institution becomes an issue for debate and policy within the AML arena can be diluted to suit the institution.

Prior to concluding this section; a civil remedy model that has similar characteristics to the economic regulation theory and falls under the rational choice prospective is worth discussing. As Clark (1997) advocates the criminal

law is not the only mechanism that is available to deal with criminal behaviour. Civil remedies are defined as:

> *"an action taken by an authoritative body… A legislator, a court, or an administrative agency… To enforce compliance with prescribed conduct, or, to impose a cost for failure to comply".*

(Mann, 1992:1908)

Mann describes this civil remedy as a 'script analytic model' and is used as a crime prevention technique by which the official seeks to prevent the crime. Civil remedies are used in situational crime prevention, to control offending opportunities as opposed to the offender themselves (Smith, 1998). Examples of this are current today with civil remedies in the regulatory fines and sanctions for breaches of regulatory rules on money laundering and terrorist financing.

The rational choice prospective was developed to provide a theoretical framework for thinking about situational crime prevention (Cornish, 1993; Clarke, 1995). The objective was to look at offender's perceptions of the risks, rewards and efforts in situations to guide the analysis of crime prevention possibilities. An advantage being that a criminal does not have to be identified for the model to be effective (Cornish, 1994b). By using successive points in a crime script, Cornish suggests using the script to develop intervention points and crime prevention policies. This scheme can be classified into four broad purposes: increasing perceived effort; increasing perceived risk; reducing anticipated reward and inducing guilt or shame.

Liability suits and civil recovery are two areas that indirectly can affect crime opportunities (Smith, 1998). The latter area for the purposes of this study applies to compensation generally and confiscation powers provided by the Proceeds of Crime Act 2002 (POCA). Each can be applied as a crime prevention method (at least indirectly, to produce a situational crime prevention effect) or to regulate crime opportunities (Smith, 1998). The confiscation process as applied by the (POCA) provides a second bite at an offender (following conviction) by determining the benefit obtained from criminal activity and stripping the offender of that benefit. This civil process as the study will suggest is a deterrent factor in AML crime. Civil recovery is also available under the same legislation (without conviction) when a determination of a person's wealth is made on the assumption that the wealth is made up of funds from previous criminal activity. The POCA and the dangers of reliance on civil recovery as opposed to prosecution are further discussed in Chapter 3 Literature Review.

1.3.5 Conclusion to theoretical framework section

This section has presented a theoretical framework within the domain of study that represents the problem of prevention, detection and investigation of money laundering crime. The section draws on deterrence and rational choice theories through the vision of Cesare Beccaria and extended by Becker (1968), Cornish and Clarke (1986) and Cornish (1993), and economic regulation theory introduced by Ricketts (2006). The observations and discussions represent a view of social behaviour and the economics of regulation of the AML business, and how that business is affected by the interactions of those within it. The section suggests there is theoretical support for AML policy and the deterrence affect. The costs of committing a crime are weighted against the benefits obtained from

the crime. The section also debates the interests of policy makers and their rationale for AML policy that provides government treasury with additional funds (asset recovery process). Further discussions suggest that change impacts on offenders, law enforcement and the regulated institutions that follow AML policy.

Deterrence theory opens up to economic crime theory under the assumption of rational choice and economic regulation theory which encapsulates "capture" and "public interest". Figure 1.2 and Table 1.1 above provided a summary of the theoretical framework.

Finally as each of the agencies involved in this study are stakeholders in the sense of the definition that they are key partners in AML prevention and enforcement within the AML process. The section suggests that regulatory or other influences can change the way stakeholders conduct their business in order to reach targets set by government or to generate income. In light of this, the study hopes to extend the extant literature around AML activities and AML policy, based on the results of this research and in answer to the research question: *"What are the factors that influence the effectiveness of AML policy implementation in the UK".*

1.4 Motivation for this research

The author lectures on the subject of AML compliance and investigation as well as other related subjects in financial investigation on behalf of the European Commission (EC). A background of law enforcement and financial investigation led the author to seek this teaching role prior to and after his retirement from the police service. Having also written a number of related dissertations for a Master's

Degree[11], the subject of AML is close to the author's heart. It is often said if something is working, don't fix it. However viewing both sides of the AML process of prevention and detection through the above activities provided the author with a vision that was not aligned to one side or the other. The landscape within AML is changing and it is unclear if enforcement or regulators are changing with it (Bell, 2007).

There are difficulties within the AML environment and many of these issues would surface during discussions within the focus group interviews. Issues such as regulatory control; deterrence value of sentencing for money laundering and proper use of the AML legislation are just some of areas of concern. Indications are that the AML system is not effective and a full exploration of the prevention, detection and enforcement methods is required. This study through the methods of data collection chosen and methods of analysis will provide the answers to the research question.

1.5 Context of the study

The study refers to AML in the context of the UK and focuses on agencies within the jurisdictions of England, Scotland, Northern Ireland and Wales. As referred to in Chapter 3 purposeful sampling was used for both focus group interview and questionnaire distribution methods. Sampling was used to select information-rich groups, whose experience and knowledge would provide a rich illumination of the subject under study. The sample is not representative of the population but those chosen to participate have particular characteristics of interest that will best

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[11] "Does Quantity mean Quality? An exploration of the Suspicious Activity Report (SAR) process" (2004). "Do the Police Service of Northern Ireland (PSNI) investigate money laundering effectively" (2005).

answer the research question or can provide an insight into this subject area (Bernard, 2000).

AML is a global concept. In order to put the subject of the research in a global context the literature review takes a wider perspective by looking at events outside of the UK and the impact those events had on AML legislation and regulation in the UK. Phase 1 of the study which identifies the starting point for this research will draw from literature that locates AML in that global context. However, when sources of information have been used they have been clearly indicated, and were relevant, applied to the UK context.

1.6 Research question, aim and objectives

The original focus of the research was to measure the cost of money-laundering in the UK, however this was amended early in the process and the change in focus led to the following research question being developed; *"What are the factors that influence the effectiveness of Anti-Money Laundering policy implementation in the UK?"* The rationale behind the change in direction and a detailed discussion of the development of the research question are further explained in Chapter 2.

In order to fulfil the aim of this research the following related objectives provided a focus of direction to ensure a full exploration of the subject:

1. To identify and draw from literature in the AML arena evidence of themes that are component activities that could be used as a starting point for this research

2. To establish a research strategy that can develop the themes identified and follow a logical sequence of activities that will answer the research question,

3. To use methods in the gathering and analysis of data that will complement the research strategy, that are reliable and valid in respect of the researchers philosophical position and can be replicated in future research, and

4. To ensure the research is compliant with all aspects of ethical considerations and that the research is ethically and morally sound.

1.7 Thesis structure

Chapter 1 introduces the research subject and the background to the research. The author then provides the motivation for the study followed by the context in which the research is set. The final section outlines the research question and objectives that will provide direction to the research.

Chapter 2 sets the scene for the research by introducing the AML framework within the UK context. This is followed by a discussion of the literature surrounding AML and policy on a wider scale. An introduction to the role of FATF and their 49 recommendations is discussed with emphasis on the impact FATF has on AML in the UK. Next a discussion on literature surrounding the cost and measurement of money laundering takes place, with specific interest in areas that identify themes that could be used as a starting point for this research.

Chapter 3 begins by outlining the framework and strategy for this research. This is followed by a discussion of the research philosophy relevant to this research and their various epistemological and ontological assumptions. A discussion of how pragmatism impacts on the research is followed by a discussion of the

methodological strategy. Each of the four sequential phases of enquiry are discussed which includes the methods of enquiry and methods of analysis. This is followed by a discussion surrounding the ethical considerations in this research. A discussion of the strengths and weaknesses of mixed methods takes place thereafter a discussion on the choice of sample and the administration of the data collection process is presented. Finally the method of analysis is presented and the importance of establishing validity and reliability in the research methods.

Chapter 4 presents each phase of analysis separately. Phase 1 discusses the analysis that led to the identification of themes from literature. These include analysis of themes within the FATF recommendation and analysis of themes from methods used to measure the cost and effectiveness of money laundering. Phase 2 discusses the analysis of the focus group data that determine the verification of themes. Phase 3 will discuss the analysis of the questionnaire responses which utilises exploratory factor analysis to determine the factors of influence and One way ANOVA (Analysis of Variance) to determine group comparisons. Phase 4 discusses the analysis of the verification of components from phase 3 using a sample of individuals who participated in the original focus groups. Finally a discussion of the analysis results from question 13 of the questionnaire. This question asks respondents what they would change in the AML framework.

Chapter 5 brings the results of each phase of the analysis together to provide a conclusion to the research. A further discussion will focus on the contributions of the research and the implications of the research on current policy, regulation and practice.

1.8 Chapter conclusion

This chapter has presented an overview of the research programme. The background to the research and the initial motivation has been justified. The objectives to reach the aim of the research have been outlined including a presentation of the Anti-Money Laundering environment. This introduction offered an insight into a complex maze of elements within AML and AML policy which will now be dissected through discussion in Chapter 2.

Chapter 2 Legal and Regulatory Framework

Chapter 2 is divided in two parts. The first part relates to the legal and regulatory framework that applies to money laundering and Anti-Money Laundering (AML) policy. These are explored and discussed. A history of developments over the past two decades is also presented, which include looking at how global events impacted on local activities in respect of AML policy and practice. Further in this section the association between organised crime, terrorist financing and money laundering is explained. The second part of Chapter 2 provides a review of the literature around money laundering measurement and cost of AML policy. Theoretical concepts developed in Chapter 1 are applied and an introduction to the elements that provide a starting point for this study is also made. The research gaps that the study has identified from literature are further presented. Finally the chapter concludes with a summary of the most important issues facing AML practitioners.

2.1 Introduction

The objective of individuals and organised crime gangs is to generate profit from their illegal activities. Money laundering is the process of disguising the illegal origin of those proceeds to make them appear to come from a legitimate enterprise. This is a critical phase in the criminal's activity as it allows them to enjoy the profits of their crime without bringing them under notice of enforcement authorities. The following statement from the Managing Director of the International Monetary Fund (IMF) underlines the importance of having an effective AML policy in place.

"Money Laundering and the financing of terrorism are financial crimes with economic effects. They can threaten the stability of a country's financial sector or its external stability more generally. Effective anti-money laundering and combating the financing of terrorism regimes are essential to protect the integrity of markets and of the global financial framework as they help mitigate the factors that facilitate financial abuse. Action to prevent and combat money laundering and the financing of terrorism thus responds not only to a moral imperative but also to an economic need"

(Min Zhu, 2013:1).

The relationship between terrorist financing and money laundering as suggested above is apparent. In summary the financing of terrorism is the financial support, in whatever form, of terrorist activity and of those who participate, plan or encourage terrorism (Tupman, 1998). There is also another relationship that needs to be included here and that is *'organised crime'*. Organised crime activities involve mainly the provision of illegal goods and services. Drug trafficking, cigarette smuggling, Prostitution, kidnapping for profit, extortion, human trafficking and VAT fraud are some of the criminal activities that *"organised"* crime gangs are involved (Levi, 2007). Money laundering is the common denominator for organised crime and terrorist financing and is a necessary activity/requirement if either of those two activities are to be successful. Anti-Money Laundering and AML policy is the subject of this thesis; however, as both organised crime and terrorism are so closely aligned to that activity and for the reasons described above, they will be discussed here in the context of money laundering activity.

2.2 The concept of money laundering

Money laundering is not a recent phenomenon but has however become a global one. There is no indication that money laundering is decreasing despite the legislative changes internationally to counter the problem (Levi and Reuter, 2006). Further, the introduction of legislation to combat terrorist money laundering suggests an increased global threat to social, economic and political stability. Money laundering can be the Achilles heel of criminal activity in that the state require robust prevention policies. It is incumbent therefore that all jurisdictions have in place stringent money laundering policy; that prevents and detects the flow of dirty money through its financial systems and a resourceful, skilled enforcement regime, to deal with those who attempt to use it. As Howard Davis the chairman of the UK Financial Services Authority (FSA) suggested:

> *"The reputation and legal consequences for financial firms of being identified with the proceeds of illegal activity are potentially very serious. Management have a strong incentive to avoid such consequences and regulations from the UK and other major financial centres are agreed on the need to exert as much regulatory pressure as is necessary to ensure that responsibilities in this area are taken seriously"*

(Davis, 2000[12])

Many academics suggest the term *"money laundering"* entered popular usage as a result of the Watergate scandal in 1973 during the Nixon era (Bauer and Ullmann, 2000). Others go further back to the Chicago, gangster days of Al Capone who in 1931 was famously convicted of tax evasion, after allegedly laundering his crime money through Chinese laundry businesses (Van Duyne, 2003). Capone was not convicted of the crimes that made him his money

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[12] Howard Davis Chairman of FSA addressing a Money Laundering Conference (2000).

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(predicate crime) and as such some debate exists as to the origins of money laundering (Levi and Reuter, 2006). Nevertheless the term money laundering is accepted by governments throughout the world and is in popular usage in film and media today.

The 1970's in the USA was the decade that money laundering controls became a significant contributor to the war on drug trafficking. Similarly in the UK the Drug Trafficking Offences Act (1986) (DTA) became the first notion of a money laundering offence. However, criminals could only be prosecuted for laundering the proceeds of drug trafficking and not the proceeds of other crimes. This was corrected by the introduction of the Criminal Justice Act 1988 (CJA) when suspicions of all crime could be made. Many further changes and introductions of new legislation was to emerge[13]. The introduction of the Proceeds of Crime Act (2002) was as a result of the existing legislation not working. Reports were being made by banks on suspicions of criminal activity but law enforcement were reluctant to prosecute due to the complexities of cases. The UK government Cabinet Office Performance and Innovation Unit (PIU) in 2002 reviewed existing legislation and systems and reported through its report, *"Recovering the Proceeds of Crime"*. The result of the PIU report is summarised below and suggests that law enforcement was reluctant to prosecute for money laundering offences because:

1. Money laundering was felt to be either ancillary to the main crime or was too complex to investigate;

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[13] Money laundering and terrorist financing in the UK is governed by four Acts of primary legislation: Terrorism Act (2000); Anti-terrorism Crime and security Act (2001); Proceeds of Crime Act (2002); Serious Organised Crime and Police Act (2005).

2. It was necessary to prove that laundered money was directly linked to drugs trafficking or other specific crime;

3. The legislation could only be used to prosecute someone for helping another person retain the benefit of their crime; and

4. The prosecution had to show that the defendant knew or suspected that the other person had benefited from crime (which was almost impossible without an admission of guilt).

(PIU, 2002)

The DTA however introduced the first reporting regime for financial institutions. Suspicions of criminal activity through the use of bank accounts were reported to the National Criminal Intelligence Service (NCIS). These reports known as *"disclosures"* are as relevant today as they were when the legislation was introduced. Reporting in 2014 is made to the United Kingdom Financial Intelligence Unit (UKFIU) which is now part of the National Crime Agency (NCA) previously the Serious and Organised Crime Agency (SOCA). Money laundering schemes can be very simple or highly sophisticated schemes. As illustrated in Figure 2.1 money laundering takes place in three distinct phases of placement, layering and integration. Each are explained below:

Placement

Cash is converted to monetary instruments or is deposited into accounts. This is the most dangerous phase for the launderer as it is the stage most easily detected by banks or entities governed by regulation. Proceeds of crime are introduced to the financial system; this may be in small sums to avoid suspicion and transferred to other instruments such as bank drafts.

Layering

Funds are moved to other financial institutions to obscure origins. Once funds have entered the system they can be transferred to other accounts. Wire transfers to international destinations or investments can easily be made through the use of internet banking.

Integration

Funds are used to acquire legitimate asset or fund activities. The funds have reached legitimacy and can now be used to purchase property, vehicles, and luxury items or begin new business ventures. (FATF, 2002)

Figure 2.1: The Money-Laundering Cycle
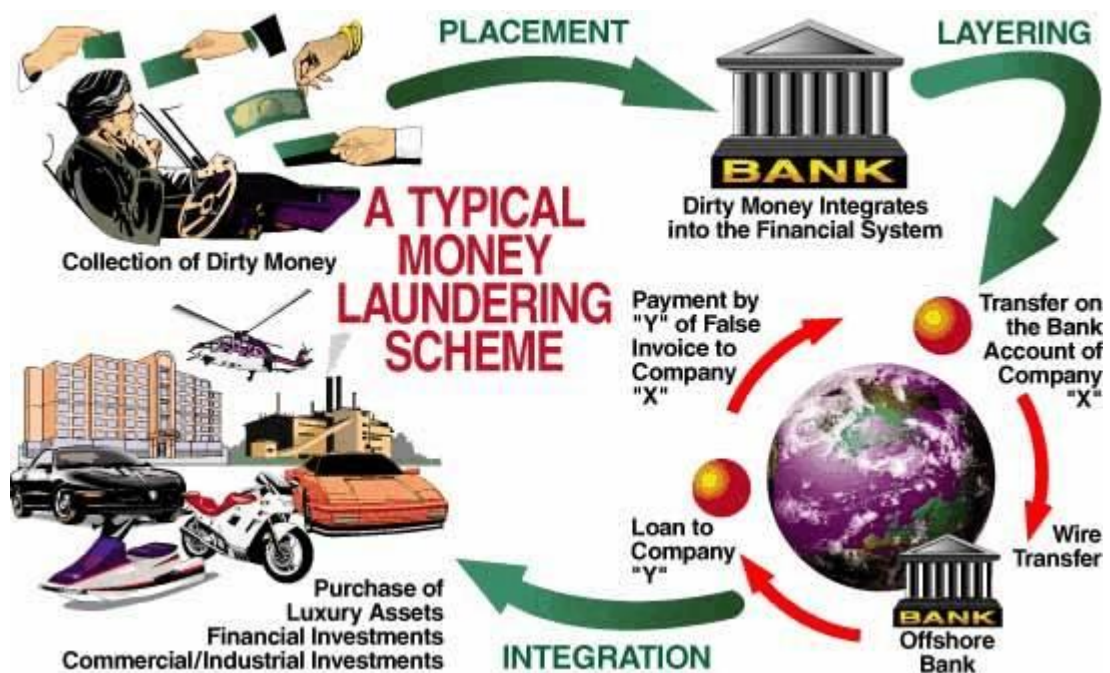
Source: UNODC[14] (2006)

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[14] Available at http//www.unodc.org.unodc/money_laundering_cycle.html

To understand the importance of the reporting regime the following hypothetical scenario is provided by this author:

'A drug dealer has been dealing for the weekend and has substantial cash in a bag at his home. He is unemployed and has no visible means of income so is aware that he could not, if required, explain where the money came from. He may, or not be aware that to place large amounts of cash into a bank account could trigger a suspicious activity report from the bank to UKFIU. He needs to make the money appear to come from a legitimate source. There are numerous ways he could do this; a) he could buy a car from an advertisement in the local paper for cash; b) he could re-sell the car and obtain a cheque from the buyer and lodge the cheque into an account; c) he could place the cash in small amounts into a number of friend's bank accounts; d) he could find a friendly business that will take his cash and launder it through their own business; e) he could set up his own business and launder the cash through that business; f) he could use a solicitor or accountant in any of the above scenarios as a cover for legitimacy. Whatever route he decides to take he is trying to avoid any of the regulated agencies[15] making a report on his activity'. In essence the money laundering regulations as described by HMRC are in place to protect the UK financial system[16].

Once a report is made by the bank or financial entity it is sent electronically to the UKFIU were it is examined. The information is stored in a data-base which is

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[15] The regulated sector obliged to make reports are: All banking and financial business (some exceptions), Bureaux de Change, Estate Agents, Lawyers (providing advice in relation to financial or real estate transactions), Accountants, Casino operators, Dealers in high value goods (including auctioneers) were a transaction involves accepting a cash payment of 15,000euro or more, Company formation businesses, Insolvency practitioners, Tax advisors (The money laundering Regulations; 2003/3075).

[16] Introduction to the Money Laundering Regulations (www.hmrc.gov.uk), (2014).

accessed by all UK police forces that can then use that information to begin investigations or further advance on-going investigations. Not all international agencies follow the UK process but have similar processes in place as advised by the Financial Action Task Force (FATF).

The formation of the Financial Action Task Force (FATF) in 1989 was a turning point for all nations in the establishment of corroborative doctrine to tackle money laundering head on. The FATF is an inter-governmental body established by the G-7 Summit in Paris in 1989. FATF is a policy making body with an objective to develop a co-ordinated international response. One of the first tasks of FATF was to develop recommendations that set out measures that national governments should put in place to implement effective anti-money laundering programmes. The FATF remit in response to world events (such as 9/11 attacks in USA) evolved. Setting standards, promoting effective implementation of legal, regulatory and operational measures against money laundering, terrorist financing and other related threats to the international financial system (FATF, 2014).

The FATF is one of many international bodies that consult and exchange information to ensure action when the international financial system is at stake[17]. These bodies in addition to the FATF either set rules or have responsibilities to monitor distinct business such as Financial Intelligence Units (FIUs)[18] or the Insurance Industry (Alldridge, 2003). One of the most important of these was the United Nations office on drugs and crime, based in Vienna which sought to

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[17] International Monetary Fund (IMF); World Bank; Egmont Group; International Organisation of Security Commissioners; United Nations Office of Drugs and Crime; Basel Committee on Banking Supervision; International Association of Insurance Supervisors (Levi and Reuter, 2006: 295) United Nations.
[18] FIUs receive reports from regulated entities on suspicions of money laundering and terrorist financing

internationalise the problem of transnational organised crime. This prompted all

nations to sign up to the United Nations Convention against Organised Crime in

Palermo, Italy in December 2000. This convention created three protocols that

targeted action and co-operation relating to crime, arms trafficking and

manufacturing and people trafficking. All member states were to implement by

29th December 2003.

The first recommendations set by FATF in 1990 were made up of 40

recommendations that set out the basic framework for anti-money laundering to

be applied universally, and became the global standard in this area (FATF, 2002).

The recommendations were revised in 1996, 2001, 2003 and 2012. At each stage

the revised outcomes were due to a change or renewed threat to the financial

systems around the world. The most significant change came about after the 9/11

attacks in USA. In response to a call for a co-ordinated and rapid response to

detect and prevent the misuse of the world financial systems by terrorists, the

FATF extended its role beyond money laundering.

The focus saw the 40 recommendations being extended by a further 8 special

recommendations specifically designed to set new international standards to

combat terrorist financing (FATF, 2002). Each member country was advised to

adopt these new standards into their legislation. The FATF announced:

> *"The FATF works to identify emerging methods and trends used for laundering money. Terrorists finance their operations through criminal activity, or they may also use funding from legal sources. In either case, terrorist groups utilise financial networks in the same way other criminal groups do. That is, they move funds; and hide connections between the source of their funding and the perpetrators, organisers, and sponsors of their activity"*
>
> (FATF, 2002:1).

FATF will monitor each of its member countries to ensure progress in implementation of its recommendations. FATF further, evaluates money laundering and terrorist financing techniques and counter measures globally. Publishing measures in collaboration with other international stakeholders to ensure the international financial system is protected from abuse.

Each time the FATF revisited or made recommendations to combat money laundering and terrorist financing, the European Union (E.U.) provided direction to each of its member states[19]. The EU implemented the FATF 40 recommendations as revised in 2003, and recommendations on terrorist financing into the Third ML Directive. In the UK the Third Directive was implemented by means of the Money Laundering Regulations (2007). The main objectives of the Third Directive was to; a) apply the AML compliance regime to the financing of terrorism (also with funds obtained legitimately); b) to introduce strict new requirements for the identification of the ultimate beneficial owner of firms (to clamp down on the use of offshore companies) and; c) to highlight the importance of taking a risk sensitive approach to AML compliance (high standards of due diligence in high risk situations) (EU Directive; 2005). In setting the research in context it is the Proceeds of Crime Act (2002) and The Money Laundering Regulations (2007) that apply to this research.

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[19] The E.U. anti-money laundering legislation is found in the following Directives: First ML Directive 91/308/EEC, 10 January 1991; Second ML Directive 2001/97/EC, 4 December 2001; Third ML Directive 2005/60 EC, 26 October 2005.

2.3 Defining money laundering

Despite the simplicity of the money laundering process which is to *"clean dirty money",* it appears to be one of the most difficult concepts to define. That is borne out by the many competing definitions that abound from various organisations and jurisdictions around the world. Unger (2006) found 18 definitions of money laundering.

Most Countries apply the definition (in some form or another) adopted by the United Nations Convention against Illicit Traffic in Narcotic Drug and Psychotropic Substances (1988) (Vienna Convention)[20]:

- The conversion or transfer of property, knowing that such property is derived from [drug trafficking] offense or offenses or from an act of participation in such offense or offenses, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of such an offense or offenses to evade the legal consequences of his actions;

- The concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership or offenses or from an act of participation in such an offense or offenses.

The Vienna Convention adds that money laundering also involves:

- The acquisition, possession or use of property, knowing at the time of receipt that such property was derived from an offense or offenses… or from an act of participation in such offense or offenses.

The above definition however restricted the investigation of money laundering unless the predicate offence was a drug trafficking offense. Over the years the international community has extended the predicate offences to include a wide

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[20] Money laundering and Terrorist Financing: Definitions and Explanations (2003:1-2). (www1.worldbank.org)

array of offences as possible. The definition of predicate crime is significant as a crime in one country may not be a crime in another country. For example how the USA and Japan list their predicate crimes. Most countries don't list the crimes but define them as *'serious crimes'*. The critical question being, *"What is considered to be the predicate crime"?* That which is on the USA and Japanese list or that which is viewed as a *'serious crime'* elsewhere (Masciandaro, Takats and Unger, 2007).

There are a whole array of arguments and further discussions that can be drawn from the definition of money laundering and the predicate offence. For the purposes of this study it is important to be aware that some jurisdictions require the predicate offence proven before the money laundering offence. Neither do those jurisdictions provide in their legislation or definitions a stand-alone money laundering offence.

The above issue is provided for in the UK definition of money laundering as it is drawn from the Proceeds of Crime Act 2002 (POCA) and refers to a number of offences of money laundering which are summarised below[21]:

- The conversion or transfer of property for the purpose of concealing or disguising its illicit origin or of assisting any person to evade the legal consequences of his actions

- The concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of criminally derived property

- The acquisition, possession or use of criminally derived property

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[21] Part 7 of Proceeds of Crime Act (2002) sets out: money laundering offences and offences of failing to disclose suspected money laundering. www.gov.uk (2014)

What is useful when viewing the POCA is that *'criminal conduct'* is also explained within the legislation as: all conduct which constitutes an offence in any part of the United Kingdom, which means that an all crimes approach is adopted in respect of predicate crimes committed in the UK. Offences committed outside the UK are relevant if the laundering took place within the UK. For many jurisdictions the inclusion of predicate offence causes difficulties in money laundering prosecutions. Predicate crime or predicate offence as it is sometimes called is the substantive crime that pre-dated the money laundering activity. For example a drug trafficker places the proceeds of his crime into the financial system after he has sold/supplied his drugs. The predicate offence is *"supplying controlled drugs"*. Many jurisdictions prefer to prosecute the substantive offence first and there-after the money laundering offence.

What is unique within the UK legislation is the opportunity to prosecute both offences jointly or separately. Proving that the proceeds of the crime are the benefit of criminal conduct (the predicate offence) can be carried out using circumstantial evidence. Case law in the UK has provided law enforcement with the means to use many strands of evidence to prove *"stand alone"* money laundering offences. This negates the need to wait for a conviction in relation to the criminal conduct (i.e. the underlying predicate offence).

The UK Crown Prosecution Service (CPS) offers guidance to Prosecutors in deciding how to prosecute substantive offences and money laundering offences. The guidance offers four types of money laundering prosecutions:

Mixed cases in which money laundering can be charged or included on an indictment in which the underlying/substantive offence is included. The subsets of which are *'own proceeds'* or *'self-laundering'* when the defendant in a money laundering case may also be the author of the predicate crime; Laundering by a person other than the author of the predicate offence. Secondly, there are cases when money laundering is the sole charge for indictment or the easiest charge to prove. The subsets of which are *'Own proceeds'* laundering and laundering by a person other than the author of the predicate offence[22]. Defining the predicate offence becomes an important pre-requisite to defining money laundering. Interpol and FATF offer the following similar definitions:

> *"Any act or attempted act to conceal or disguise the identity of illegally obtained proceeds so that they appear to have originated from legitimate sources".*
> <div align="right">www.Interpol.int (Interpol, 2014)</div>

Rather than define money laundering FATF describes money laundering as:

> *"The processing of criminal proceeds to disguise their illegal origin. This process is of critical importance, as it enables the criminal to enjoy these profits without jeopardising their source".*
>
> <div align="right">www.fatf-gafi.org (FATF, 2014)</div>

Harmonisation of predicate crime definitions is necessary if there is to be co-operation and corroboration across jurisdictions in the fight against money laundering and terrorist financing. Some countries particularly underdeveloped

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[22]Crown Prosecution Service (CPS) guidance notes found at
www.cps.gov.uk/legal/p_to_r/proceeds_of_crime_money_laundering/#a02

countries where corrupt dictatorships exist[23], have no incentive to prosecute their own money laundering offences never mind responding to mutual legal assistance requests from other countries for foreign offences. As a result countries with different predicate crime definitions can ignore foreign crimes. The consequences leave a plethora of environments suitable for money laundering in countries worldwide (Masciandaro, Takats and Unger, 2007).

2.4 Organised Crime and Terrorist Financing

Organised crime like money laundering appears to have a number of competing definitions. One of the difficulties of defining organised crime is described by Lunde (2004):

"Attempts by law enforcement and other agencies to provide a single definition of organised crime have been confounded by the fact that activities of the criminal underworld are, by their nature kaleidoscopic, constantly responding to shifts in the market conditions and exploring the myriad of money-making opportunities provided by the legitimate over-world"

(Lunde; 2004:8).

This was an area recognised by Tupman (1998) who prior to the 11 September 2001 terrorist attacks in USA had already linked terrorism, organised crime and money laundering and makes the following observations:

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[23] Cases such as Marcos of Philippines; Suharto of Indonesia; Mabut of Zaire; Abacha of Nigeria, who have laundered billions of dollars abroad (Masciandaro, Takats & Unger; 2007, page 230) Added to that list can include Gaddafi of Libya and Mubarak of Egypt.

> *"The IRA has had to follow the changing fashions of organised crime to continue raising money. At one time armed robbers were the aristocracy of organised crime and for a period the IRA obtained its funding by robberies…like organised crime the IRA flirted with drugs and now has followed organised crime into a much lower risk area of cross border fraud and counterfeit products"*

(Tupman, 1998:310).

From the makeup of an organised crime gang, it should be appreciated that the type of activity they would be engaged in would reap substantial funds that would need to be laundered (Levi and Reuter, 2006).

The reference for European Union (EU) countries as a definition of organised crime comes from Article 2 of the United Nations Convention against Transnational Organised Crime, referred to as follows:

> *"An Organised Criminal group shall mean a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain directly or indirectly, a financial or other material benefit;*
>
> *(a) 'Serious crime' shall mean conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or more serious penalty;*
>
> *(b) 'Structured group' shall mean a group that is not randomly formed for the immediate commission of an offence or does not need to have formally defined roles for its 15 members, continuity of its membership or a developed structure".*

(United Nations, 2004:2)

Furthermore organised crime is defined by Interpol as: "any group having a corporate structure whose primary objective is to obtain money through illegal

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activities, often surviving on fear and corruption" (Interpol, 1988 cited in Lea, 2007).

The main similarities in these definitions are the use of group structure and the type of criminal activity that refers to either "*serious crime*" or criminal activity that infuses violence or the fear of violence. Hauck and Peterke (2010) put forward the suggestion that the term *'organised crime'* is highly uncertain and unclear:

> *"On the one hand the term can be used to refer to certain types of more sophisticated criminal activities embedded, in one form or another, in complex illicit markets. Arms, drugs and human trafficking are often correlated with a set of 'enabling activities' such as (the threat of) violence, corruption and money laundering"*

> (Hauck and Peterke, 2010:408-409)

They go on to suggest that because the types of offences are '*serious crimes'* the term should relate more typically to '*organised criminality'* than '*organised crime'*. This vagueness in definition is agreed by Lea (2007) who would go one step further to suggest definitions of organised crime are outdated and barely resemble a few words that cover a wide range of criminal activity.

The National Crime Agency (NCA) who took over from the Serious and Organised Crime Agency (SOCA) in the UK on 6th October 2013 define organised crime by including *'organised crime groups'*: *"Organised crime can be defined as serious crime planned, coordinated and conducted by people working together on a continuing basis"* (NCA, 2014). The NCA describe the main motivation of the establishment of organised crime as 'monetary gain' and are called organised crime groups due to the multiple criminal activities with other criminals.

Like money laundering, organised crime can be located in the early 1900's in the USA through the activities of Italian immigrants and mafia like figures that dominated the major cities such as New York and Chicago. The Volstead Act in 1919 that was more commonly known as *'Prohibition'* was the forerunner to the emergence of organised criminal activity in America. A black market was created by the effects of *'prohibition'* for alcohol. The Italian immigrants as well as dominating the alcohol trade and making vast fortunes, became the dominating force and the central authority in organised criminal activity in the country. This description falls into Lea's (2007) understanding of organised crime which is based on family and close community. One has only to look at the portrayal of mafia families in films such as *'The Godfather'* (1972) and *'The Sopranos'* (1999) to understand trust and family loyalty was a key component. The consequences to those that crossed that loyalty was also well known. Memberships of these groups was tight. Cohesive groups that if not already related through blood became the family and acted like a close knit community of criminality, with similar thinking (Newburn, 2007; Lea, 2007).

Traditional organised crime structures such as tight-knit mafia family structures may be something confined to the movies, there are still examples of family units operating as such. In the UK one of the most recent crime families under investigation was the Adams family or Clerkenwell Crime Syndicate as they were also known: Allegedly one of the most powerful organised crime families in the UK[24]. Other notorious UK organised crime gangs include in the 1950s -1960s

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[24] For a more detail on the Clerkenwell Crime Syndicate see http://en.wikipedia.org/wiki/Clerkenwell_crime_syndicate

Ronald and Reggie Kray (known as the Kray twins[25]) and The Richardson Gang[26] run by Charlie and Eddie Richardson in South London in the 1960s.

More recently a description of crime threats were released by various government agencies around the world to inform law enforcement and are also available on internet pages to the general public. Crime threats recently released by NCA suggest the following crimes are a threat to the UK from organised crime[27].

- Child sexual exploitation and abuse
- Counterfeit currency
- Cyber crime
- Drugs
- Firearms
- Fraud
- Human trafficking
- Identity crime
- Intellectual property crime
- Kidnap and extortion
- Money laundering
- Organised theft
- Organised crime groups
- People smuggling

(NCA, 2014)

For the majority of these crimes, money laundering is the common denominator. Just as money laundering has become a global phenomenon with technology, internet banking, transport, communication and open borders so organised crime has evolved to become its partner. Whereas organised crime is associated with profiting with substantial sums of money through the above activities, terrorist financing is better known for the small amounts used to commit terrorist attacks.

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[25] For more detail on the Kray twins see http://en.wikipedia.org/wiki/Kray_twins
[26] For a more detail on the Richardson Gang see http://en.wikipedia.org/wiki/The_Richardson_Gang
[27] National Crime Agency, National Strategic Assessment of Serious and Organised Crime (May, 2014)

For example the Madrid bombings in 2004 and the London bombings in 2005 costing approximately $10,000 in total (Levi and Reuter, 2007).

Terrorist financing and money laundering share similar characteristics such as money laundering involving the movement of funds through legal channels to hide their original origin; terrorist financing involving the use of both legal and illegal funds to finance their operations and conceal their source (World Bank, 2003). In both cases concealment is necessary. As regards terrorism small amounts of money can be used for terrorist activities and it is those small amounts that are harder to detect.

FATF who sets the standards for combatting terrorist financing (CTF) does not define terrorist financing in light of its 8 special recommendations on terrorist financing (FATF, 2012). However, FATF advises countries to follow and implement the (1999) United Nations International Convention for the Suppression of the Financing of Terrorism[28]. Schott (2006) suggests the financing of terrorism is a simple concept and provides the following definition: *"It is the financial support, in any form, of terrorism or of those who encourage, plan, or engage in terrorism"* (Schott, 2006: 1.1). Terrorism itself is more difficult to define as the term is described as having significant political, religious and national implications from country to country. This is a vast area of debate which would take up more space than provided in this thesis. For the purposes of this study the definition provided in the UK by the Terrorism Act (2000) and discussion around that definition will apply here:

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[28] The UN International Convention for the Suppression of the Financing of terrorism (1999), which provides the definition of Terrorist Financing. For a full view of the definition follow www1.worldbank.org section B "What is Terrorist Financing"?

> *"The use or threat of action designed to influence the government or an international governmental organisation or to intimidate the public, or a section of the public; made for the purposes of advancing a political, religious, racial or ideological cause; and it involves or causes:*

- *serious violence against a person;*
- *serious damage to a property;*
- *a threat to a person's life;*
- *a serious risk to the health and safety of the public; or*
- *serious interference with or disruption to an electronic system".*

(www.mi5.gov.uk/home/the-threats/terrorism.html)

After the July bombings in London in July 2005 terrorism was again on the agenda for government legislators. The Counter-Terrorism Act (2008) came into force in the UK in November 2008 and mainly applies to the banking sector. In terms of terrorist financing it provides for more enhanced due diligence prior to entering into a business relationship with a client. The legislation also provides for monitoring individuals and entities, to provide specific documents or information. The legislation specifically relates to individuals with relationships in countries outside of the UK. The emphasis in this legislation is the threat to or risk to the national interests of the UK, from nuclear, radiological, biological or chemical weapons (JMLSG, 2013).

Terrorist groups come in various shapes and sizes with differing structures, ideologies, motives and activities, seeking to cause widespread disruption, fear and intimidation to achieve their aims. Violence or the threat of violence is apparent as is the intimidation of those who do not agree with their ideals and motivation of those who may be sympathetic to them (Schott, 2006). Often their aim is to change government policies or governments themselves. What is an important question for this part of the thesis relates to the link between organised

crime and terrorist financing and *"How terrorists are funded"?* It is in this direction that the discussions will follow.

A debate recognised by Tupman (2009) suggests there is no difference between terrorist money laundering and all other forms of money laundering. A debate he suggests has been ignored by FATF. The argument hinges around the use of a predicate offence for what he describes as *'normal'* money laundering and the offence of terrorist financing, which occurs subsequently. Takats (2007) includes terrorist financing as one of the predicate offences in his model for predicate crimes linked to money laundering *"Terrorists need to transfer funds from their base to different jurisdictions in order to finance terrorist attacks"* (Takats, 2007: 197). Both forms of money laundering are characterised by the movement of illicit fund transfers. The following figure 2.2 illustrates the two forms of money laundering.

Figure 2.2 Forms of Money Laundering

Traditional money laundering

Illegal money	_____to_____	Legal purposes

Terrorist Financing

Legal money	_____to_____	Illegal purposes

Source: (Masciandaro, Takats and Unger, 2007:198)

Takats (2007) further suggests if you combine both illegal crime money and legal money then the need for laundering decreases. He uses the example that if a

terrorist is drug dealing he doesn't need to launder the funds rather he can transport it to the place he needs to use it. Both the above statements appear to conflict with each other. Even in traditional or normal money laundering there can be a mix of clean money with dirty money in a laundering process. The perpetrator is using the clean funds of a business to act as a cover for the dirty money that is being filtered through it. To all intents and purposes one cannot distinguish which is clean and which is dirty. The clean is facilitating the dirty and this is within the knowledge of the perpetrator. Concealment is part of the offence and law enforcement only have to show that the process of the mixing takes place with the knowledge and actions of the launderer.

Terrorist financing can also be a mix of legal funds and illegal funds. There are two issues here; firstly legal funds are suggested to come from charitable donations (Schott, 2006; Levi and Reuter, 2007; Takats, 2007). A donation to a terrorist organisation is an offence in the UK by virtue of the Terrorism Act (2000). Persons can collect for charities and it is a matter for law enforcement to establish the legitimacy of that charity and the purpose of the donations. Secondly in order to finance their activities terrorist organisations are also involved in organised criminal activity (Lea, 2005; Tupman, 2009). Of course small sums or even large sums of money can be transported to the destination of activity.

The purpose of the legislation and the regulation in money laundering and terrorist financing is to prevent the financial system from being used to launder funds and increase the risk of being caught with crime money. The disruption tactics of Her Majesty's Revenue & Customs (HMRC) to search for cash, of vehicles, and individuals at ports and border crossings adds to the preventative

measures being taken. For the above reasons *'traditional'* or *'normal'* money laundering and terrorist financing of money laundering as Tupman (2009) suggests are one and the same process.

Experts have agreed that the trade in drugs is a significant financial contributor to terrorist organisations (Masciandaro, 2001, 2004b; Schneider, 2004). In Afghanistan the Taliban in support of Al Qaeda are heavily involved in opium production and heroin trafficking. Huge sums of money are required to be laundered and that money is used for firearms purchase and support of terrorist training around the world (Masciandaro, 2007).

Terrorists are involved in many other activities of criminality (Rider, 2004; Schott, 2006). Within the UK in Northern Ireland the criminal activity of terrorist paramilitaries is well recorded. On a statement of income and expenditure going back nearly two decades a terrorist organisation, the Irish Republican Army (IRA) was involved in cigarette smuggling, robberies, protection rackets and with overseas contributions amassed a turnover over £20m (Tupman, 1998). There is no doubt laundering of those sums of money needs to take place.

The IRA like other terrorist organisations is a well-structured and organised unit with varying responsibilities levelled out to lieutenants from various departments; for example: procurement of weapons, training, welfare, funding, punishments and active service units. It should be noted that in order not to be one-sided in this discussion the Loyalist organisations have similar structures and operations to the IRA but do not appear to be as well recorded literally.

Lilley (2006) suggests terrorists have learned the art of laundering the funds of their criminal activities, from their organised crime counterparts. Tupman (2009) strengthens this argument; *"The IRA were not primarily in business for the purposes of making money but needed ways of making money in order to stay in business"* (Tupman, 2009: 196). The link between organised crime and terrorism can be explained using the Northern Ireland situation as an example. Terrorism in Northern Ireland has evolved significantly over this past decade. A discussion with the main Republican and loyalist terrorist groups throughout the 1990's was successful in that each ceased their terrorist campaign and engaged in a political process. This resulted in a devolved Government in May 2007 with power sharing between the Nationalist and Unionist Political Parties. Transfer of Policing and Justice Powers from Westminster to the Northern Ireland Executive was completed in April 2010.

The completion of this process left a void within the organisation and the foot soldiers were left behind. Many hierarchical members of the organisations were placed in prominent posts within government while others on the fringes were left to their own devices. In short the leaders of the organisations became the spokespersons for their Political wings of the organisations. Some went into Government and brought their hierarchy with them. Other leaders controlled local community groups and also had access to the vast amounts of money from European Union grant funded schemes.

Terrorists or (community representatives as they were now called) were able to negotiate social, economic and political environments to suit their members. The structures within the ranks of the organisations remained but were now no longer

called terrorist or paramilitary organisations. For the foot soldiers who did not know any better they had formed themselves into criminal gangs. Robbery, extortion, drugs, kidnapping, loan sharking, counterfeit goods, fuel smuggling, cigarette smuggling and VAT fraud did not diminish but increased (OCTF, 2002).

As a result of organised criminal activity some very high profile cases have emerged:

- A robbery at the Northern Bank in Belfast, Northern Ireland when £26m in cash was stolen and families of bank staff held hostage in order that the crime could be carried out[29].

- Gun smuggling operation between Florida in United States and UK and Ireland for the use by criminal gangs in their criminal activities outside of their organisations[30].

- Cash in transit robberies while ATM cash machines are being replenished netting hundreds of thousands of pounds sterling[31].

These crimes were typical of organised crime carried out with military precision and had all the hallmarks of the previous structures contained within paramilitary organisations. As a result of the peace process, re-grouping of terrorist organisations as suggested by the Organised Crime Task Force (OCTF) and Chief Constable of the Police Service of Northern Ireland (PSNI) are heavily involved in organised crime (OCTF, 2013). This therefore changes the thinking of law enforcement in how they tackle organised crime. As Tupman (1998) suggests:

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[29] Northern Bank Robbery (2004): The crime that nearly ended the peace process (theguardian.com)
[30] Lax Florida Laws attracted IRA (2000): The Register Guard National newspaper (news.google.com)
[31] Armed Robbery and Cash in Transit (2002): 134 attacks in the past year (0ctf.gov.uk)

"The greater the devotion of manpower resources to fundraising activities, the greater the likelihood a political group will become an organised crime group, in fact, though not in name. Both the Mafia and the Triads started out with political aims, but became something quite different"

(Tupman, 1998:310)

The experience in Northern Ireland demonstrates the need to appreciate the development of crime in a transitional context. Political policy and economic factors have contributed to the changing nature of organised crime in Northern Ireland since 1998. Paramilitaries have taken advantage of new physical and social spaces, which have opened up following the peace process. However the transition has also seen the development of crimes perpetrated by those foot soldiers once committed to terrorist ideologies, now organised into their own organised crime groups.

Outside the UK world leaders encourage contact and discussions with terrorist organisations globally (Hamas, Hezbollah, ETA, FARC and Taleban are just a few of the terrorist groups involved). In conflict resolution the Northern Ireland peace model gives an indication of the consequences for those terrorist structures. If terrorist organisations are preparing to withdraw from conflict to a peaceful solution there has to be an outlet for the foot soldiers in the negotiations or they will, as in the Northern Ireland case suggests, turn to the new terrorists, that of organised crime gangs. As Tupman (2009) suggests the next move is to measure the response by law enforcement and the reaction to policy of the way the new business i.e. terrorist/organised crime business is structured.

2.5 The UK Experience for Anti-Money Laundering

POCA is Law Enforcements body of instructions to prohibit the concealing, arranging or acquiring of criminal property by offenders and to prosecute them. *"In the Proceeds of Crime Act 2002 the UK possesses one of the world's most comprehensive pieces of criminal asset legislation"* (Bell; 2007:33). Further AML provisions are provided to the regulated sector of financial institutions (accountants, lawyers, banks; key actors who must disclose all suspicions of money laundering transactions. Failing to do so may make them liable to prosecution themselves. The Money Laundering Regulations (2007)[32] (MLR's) are the instructions to these key actors to put in place preventative mechanisms and reporting regimes for persons suspected of money laundering through their institutions. The appropriate officer is generally called the money laundering reporting officer (MLRO). Any suspicious reports of money laundering/terrorist financing (ML/TF) are reported to the Serious and Organised Crime Agency (SOCA), the UK Financial Intelligence Unit (UKFIU). Regulated entities are generally supervised by a competent authority such as Financial Conduct Authority (FCA) or other professional bodies such as Chartered Association of Accountancy Practice (CAAP or in the case of Solicitors the Law Society. Her Majesties Revenue and Customs (HMRC) provide a full list of responsibilities of supervising authorities[33].

For the purposes of this research the term 'policy' will incorporate those pieces of legislation and regulation that are provided as the AML provisions in the UK.

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[32] Secondary regulation is provided by the Money Laundering Regulations (2003) which was replaced by the Money Laundering Regulations (2007).
[33] HMRC supervision responsibilities and AML controls are provided at www.hmrc.gov.uk

Policy is generally decided from the results of statistical data (Fleming, 2009) so it is not improper to suggest that the changes in money laundering policy in the last ten years has been significant because the crime figures in that area suggested weaknesses that warranted change. Government's justification for this move suggests *"protecting the financial sector from operational and reputational risks"* helps to make the UK less attractive to potential launderers (Harvey 2007:5).

The driving force behind POCA was a report commissioned by Tony Blair by the Cabinet Office. The aim was to deter people from crime by reducing the returns that could be anticipated, to disrupt criminal networks and markets and to improve crime detection rates and create significant revenue flows (PIU 2000).

As a crime deterrent, the legislation is designed to embed in criminals the fear that should they be prosecuted and convicted for an offence under this legislation, they could be sentenced to a period of imprisonment. In addition any assets they have obtained as a result of that criminal activity can also be confiscated. This enhances a previous period of legislation when confiscation although possible was cumbersome and unsuccessful. The consequences were such that criminals should not only lose their liberty but also the profit of their criminal activity through confiscation.

The POCA legislation further suggests that any proceeds confiscated are returned to Government Treasury with a percentage returning to law enforcement and the prosecution service to enable them to fight further crime. A term aptly named *'incentivisation'*. This suggests that the incentive to fight acquisitive crime

can come from an economic or enforcement perspective. Research by Sproat (2007) in trying to determine if this new *'policing of assets'* has become the new *'assets of policing'*, suggests that this is not the case. *"Policing of assets recovers very little, if any, new assets for policing above and beyond that spent on the policing itself"* (Sproat, 2007:291). Although Sproat also took into account the cost of compliance to financial institutions in 2007, this cost/benefit analysis of money laundering, remains even now a thorny issue for compliance entities and the benefits attached.

The consequences of the money laundering regulations ensure that not only do financial institutions submit reports of suspicions of money laundering and terrorist financing but also: solicitors, accountants, estate agents, financial advisors, casinos and high value dealers. Not all of these entities can bear the brunt of the cost for analysis systems that apply *'know your customer'* procedures and *'risk based approaches'* to compliance, as some of the major financial institutions. So a fractured system is inevitable were reporting appears sophisticated at one end and antiquated at the other.

Harvey and Lau (2009) provided little comfort for regulated entities in their study of reputational management of those entities, listing statutory requirements and having to bear the cost of reporting because of *'covering their backs'* being a common theme, also discovered in this research. Reputation also does not appear to be high on the agenda for some recent large financial institutions who can bear the brunt of compliance costs. Most notably was the fine of $1.9B meted out to HSBC in 2013 for regulatory and compliance failings[34]. HSBC had for

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[34] Source www.bbc.co.uk/news/business-20673466

several years by passed the compliance regime and laundered money for terrorists in Sudan and Somalia as well as drug kingpins in Columbia. Smaller fines were also meted out to other large banks for similar offences[35].

Sanctions are divided into two areas such as – country based sanctions and list based sanctions. The country based sanctions refer to embargoes on countries such as Iran, Cuba and Syria. The list based sanctions refer to individuals and entities, such as drug traffickers, terrorists, weapons proliferators and corrupt leaders. Financial institutions operating a risk based approach need to check customers using the Specially Designated Nationals (SDN) list. Sanctions apply to commercial and financial transactions, direct or indirect on a list of prohibited transactions. This risk based approach applies to individuals and companies and is based on an entities compliance program. What is confusing about the above scenarios is that AML legislation is designed to prosecute those, who did exactly what HSBC, RBS and others have done. The result is 'fines' for sanctions breaches but 'no prosecution' for laundering terrorist and criminal funds. The reputation of those banks appear yet, to be intact. What needs to happen before bank customers react? As a result of a recent IT mishap concerning RBS in the UK over a weekend in August 2012 (when customers could not access ATM machines or current accounts)[36] revenues for the first six months thereafter to 30th June fell 8% to £13.2bn. There appears to be no disclosures from HSBC that being fined $1.9bn for laundering millions of dollars for terrorists and drug dealers had an effect on the numbers of customer accounts. What consequences arrive

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[35] Fines by Office of Foreign Asset Control (OFAC). Lloyds Bank fined $350m in 2009 Standard Charter Bank fined $645m in 2012; RBS fined $100m in 2013.
RBS Group were also fine £5.6m in 2009 by FSA/FCA sanction systems for not having adequate systems and controls in place to prevent breach of UK financial sanctions.
[36]RBS sets aside £125m to compensate customers over computer glitch: www.bbc.co.uk/news

as a result of the above activity is yet to be seen. This author suggests, if large financial institutions who do have the funds to spend on compliance costs are not prosecuted, what sort of compliance regime will smaller entities put in place and will they have the incentive to be compliant?

The above discussions have shown that organised crime, terrorist financing and money laundering are inextricably linked. It is clear from the discussions that money laundering plays a decisive role in the movement of money from both organised crime and terrorism. Whether it is to clean money that has derived from crime or move money for the purposes of terrorism or terrorist acts. The reporting role that applies to financial institutions for reporting suspicions of money laundering is vital to the success of prevention, detection and advancing investigations in this regard. The effectiveness of the AML policy that directs those rules has implications on organised crime and terrorism and becomes an important driver in directing this research. The second part of Chapter 2 extends the legal and regulatory framework to the literature debate on the measurement of money laundering and the cost of the effectiveness of AML policy.

2.6 Literature Review

The choice of literature that has been viewed to develop this thesis has been limited to two specific areas: literature surrounding research on estimations of the scale of money laundering and literature surrounding the evaluation of the efficiency and effectiveness of AML policy. This choice has been determined in one respect by the research question; *"What are the factors that influence the effectiveness of AML policy implementation in the UK"* and another by the literature available in this area. Much of the literature surrounding the

effectiveness of AML policy implementation, is in fact part of a larger body of legal and political work on the money laundering landscape. This includes but is not limited to terrorist financing, organised crime and asset recovery. Some sources simply describe the relationships between AML bodies, the bigger AML and criminal justice framework, other sources focus on the implementation of AML and compare it from one country to another. Finally, for the purposes of this study a small group of authors explore the two areas mentioned above. It is this group which is of greatest interest to this research and the discussions below largely focuses on, with others mentioned as necessary. There were two key elements to bear in mind when reviewing this AML literature: The prevention of money laundering emphasises counter measures put in place to deter money laundering and the second the detection of money laundering which relates to the effectiveness of those measure in place (detection also includes the investigation of money laundering).

The activities of money laundering and its role in concealing criminal or terrorist funds is by nature, a secretive activity. This makes the estimation of money laundering and the cost to society difficult to establish. Launderers do not appear to record their criminal activities or keep books on the amounts of money they obtain for laundering (Schott, 2006). In addition money laundering is a global enterprise that to reliably estimate on a global scale would be problematic. *"To estimate risk, a figure for the total number of persons who launder money is also needed. No such estimate is available, so an indicative calculation is all that can be offered"* (Levi and Reuter, 2006:363). Those difficulties have not however prevented attempts to measure the scale of money laundering. See also, IMF

(1998), Thomas (1999), Walker (1999a, 1995), Reuter and Truman (2004), Schneider (2007), Unger (2007).

Evaluating the effectiveness of the AML regime also provides similar problems. By using traditional or modern methods to assess the effectiveness of countermeasures requires access to statistical output data. Researchers are reliant on data from law enforcement, regulators and government departments that is available and current. In addition the evaluation comes from assessing if a reduction in money laundering activity has occurred. The inability to quantify this sum creates difficulty in understanding the impact policies have had on money laundering activity (Harvey, 2005; Vettori, 2013). See also Harvey (2004, 2005), Van Duyne (2006), Bosworth-Davies (2007), Ross and Hannan (2007), Sproat (2007), Ferwarder (2009), Harvey and Lau (2009).

One common limitation within the literature is the lack of conceptual clarity in part due to the inconsistent use or lack of guiding theories, models or frameworks. The following sections will discuss the literature suggested within the current research topic and apply the theoretical framework discussed in Chapter 1.

2.7 Estimating the scale of money laundering

Estimating the scale (or measurement of) money laundering is necessary as Biagioli (2008) suggests because:

- It gives a measure of the phenomenon and its potential impact on the legal economy, not only in terms of its power of influence on the economic and financial system, but also in terms of stability of the system itself. Separating legal money from crime money is one of the challenges here.

- It may influence risk assessment within the financial sector: such as risk on financial products, financial transactions and customer due diligence.

Exposure to particular country risks must also be taken into consideration[37].

- By estimating the scale of the problem an evaluation of what countermeasures to put in place can be made. This is an important aspect of the evaluation as a balance must be made as to the measures adopted and the cost of doing so.

(Biagioli, 2008:90).

In theoretical terms deterrence, rational choice and economic regulation all have important roles to play in relation to the above reasons to estimate money laundering. Theorists believe that crime is reduced through the use of deterrents (Siegel, 2009; Nagin and Pogarsky, 2001). In AML the goal of deterrent is channelled through the prevention of money laundering, regulation and the SAR reporting regime. Criminals will think carefully before using the financial system in both general and specific terms. As Lyman and Potter, 2009 suggest:

> *"Deterrence theory is based on the belief that potential criminals will think before they act, if the likelihood of getting caught and or punished then deterrence theory holds that crime can be prevented by threat of punishment...in addition the penalties should be severe enough that there will be no repeat offenders"*

(Lyman and Potter' 2009:269)

Similarly for all crimes including money laundering, the decisions in which potential criminals make exemplifies the theory of criminality known as rational choice (weighing up the benefits and consequences of action). People are free agents who possess free will to make decisions regarding all aspects of their

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[37] Brent (2002 provided similar concerns in developing his 'five directions money laundering model' for the flow of laundering funds through economically developing countries.

lives. Harsh and quick punishment is a deterrent policy in this area. *"It is likely that the offender understands that his actions could result in his arrest and possible imprisonment"* (Lyman and Potter 2009:62). The benefits of the AML regime to make it effective must exceed the costs of implementation and the organisation should feel safer and protected from risk (Cornish and Clarke 2014). Therefore a robust AML regime implemented with good supervision and enforcement in the financial sector should make an effective deterrent to criminals and prevent money laundering. In addition proper AML enforcement by financial institutions can be a key stage for detection of money laundering. However such evaluations as suggested by Biagioli (2009) can only be made if the estimations of the scale of money laundering are correct.

There are no systematic estimates of the scale of money laundering either globally or in the UK. The International Monetary Fund (IMF) in 1998 estimated that the aggregate amount of laundered funds, globally to be two and five per cent of the world's gross domestic product (GDP). Those figures would suggest between US $590 billion and US $1.5 trillion (Schott, 2006). Walker (1998) suggested US$2.85 trillion per annum. More recent figures suggest: Baker (2005); US$1 trillion per annum and Reuter and Truman (2004); US$45-280 billion. For OECD countries Schneider (2007) estimated at US$1.1 trillion (Biagioli, 2008).

The estimations above indicate the wide diversity in variables used or methods chosen and in some cases suggest that these figures are based purely on assumptions. These estimates do not provide any method of research that identifies how the figures were obtained. *"There is a lack of defined methodology*

that has hampered previous empirical research in this area" (Van Duyne et al, 2005). It is acknowledged that some academics have criticised previous measurement attempts. *"They attempt to measure a fata morgana, a reflection of air that gives the illusion of being water"* (Van Duyne, 2006:32) *"Purists want to measure and model precisely and innovators want to measure the immeasurable even if there is a risk of criticism"* (Unger, 2007:32) This makes the identification of the correct variables for measurement more important. Thomas (1999) criticised empirical approaches in measuring the grey economy (of which money laundering plays a part) as measured without theory and urges for proper theory that can be tested (Unger,2007:32).

However despite the criticisms above as Harvey (2005b) points out *"The alarmist notion of the volume of money laundering being of major significance cannot be objectively challenged"* (Harvey, 2007:2). As a consequence this research examines money laundering measurement to identify appropriate variables, based upon the characteristic indicators relevant to the UK landscape.

Whilst it is necessary to recognise the previous methods those criticisms do not deter from the fact that the characteristics of money laundering and the various features used are important. It is also important to recognise that previous research was carried out outside the UK and some differences may occur. Whilst section 2.3 discussed the various definitions of money laundering this research will adopt the following definition of money laundering: *"Money laundering is the processing of criminal proceeds to disguise their illegal origin".* (FATF, 2003:1)

Laundering the proceeds of crime will not amount to money laundering unless that crime is listed in the schedule of predicate crimes for that purpose. Limitation of the definition in this way is important because of the number of competing definitions from various agencies and countries and the crimes listed in one country may not amount to a laundering offence but would do so in another country. In addition the terms 'scale of money laundering' and 'cost of money laundering' will mean money obtained through criminal activity that is laundered through the UK.

A discussion of a number of the methods that attempt to estimate the 'scale of money laundering' are provided below. Whilst this research is not intending to reproduce these models, the research will benefit by drawing appropriate themes that can be identified as key determinants of money laundering. This includes but is not necessarily limited to the following; a) Walker (1995, 1999a) who attempted to measure the global cost of money laundering using a seven step model; b) Thomas (1999) who looked to measure money laundering by looking at the difference in the national economy between expenditure and income. c) Tanzi (1996) who a used a model called 'demand for currency approach', which suggested the more money that was hidden from view the more money should be printed. d) Unger (2007) who conducted a study on behalf of the Dutch Ministry of Defence based on a modified Walker model; e) Van Duyne (2006) who conducted a study of money laundering and predicate crime in Serbia to attempt to identify the "hidden economy"; f) Schneider (2007) who attempted to estimate the shadow economy/money laundering for 145 countries by linking the study to capital flight (the hot money method); and g) Masciandaro (2007) who conducted a study of money laundering from an economic perspective looking at

the causes and effects of money laundering through a demand and supply framework. A discussion of each of these methods are provided:

The following areas of research concentrate on estimations of the shadow economy and referred to by Tanzi (1996), Thomas (1999), and Schneider (2007). Shadow economy activity is known by various names: shadow, informal, hidden, black, underground, grey, clandestine, and illegal and parallel (Fleming et al, 2000). Generally this refers to legal or illegal goods and services in the market that escape detection in the official estimates of GDP. The majority of these are based upon statistical discrepancies that are seen to occur in a number of macroeconomic variables. The first is the data discrepancy approach described by Thomas (1999). This measurement of money laundering is carried out by using discrepancies in statistics or unusual value movements as one of the indicators of money laundering. As described in Unger (2007) Thomas suggests the shadow economy creates a difference between income and expenditure in the national accounting figures. If expenditure exceeds income then the excess must have been earned in the black market economy. The aggregate of people cannot spend more than they earn. Thomas looked at the working population and measured the difference between them and the official employment statistics. He suggests the shadow economy is based on that difference.

Another method similar to Thomas (1999) above, by Tanzi (1996) used the demand for currency approach. This approach like the Thomas discrepancy model was used to demonstrate both the shadow economy and money laundering. For the shadow economy he assumed that hidden transactions are undertaken using cash in order to avoid observable traces for the authorities. An

increase in the shadow economy would necessitate the demand for more cash and hence increased the demand for currency. Tanzi calculated that even accounting for natural demand such as income, price level, payment habits and interest rates that any access could account for shadow economy growth.

The work of Schneider 2007 focuses on the estimation of the size of the shadow economy. Similar work has been discussed above relating to Thomas (1999) and further accounts can be found in the work of Masciandaro (2007). Although Masciandaro uses what he terms a macroeconomic approach to analyse the relationship between crime, money laundering and value. This approach extends the theoretical model of Becker (1968) to one that includes disciplines associated with economic, legal and social science approaches. In essence it shows that the costs of money laundering activities depend on the effectiveness of the anti-money laundering regulation. Transaction cost increase as the regulations improve and enforcement is successful. The public benefits increase as each improvement in the effectiveness of the AML regulation increases given its cost (Masciandaro in Unger, 2013).

For Thomas a number of measures are taken, for example: the difference between income and expenditures measures of GDP, the balance of payments differences can be measured between capital inflows and outflows, money supply differences can be observed between demand for, and supply of currency and finally anomalies can be observed in price changes in properties.

Schneider (2007) measured the shadow economy using a DYMIMIC (dynamic multiple-indicators multiple causes) model to estimate the shadow economy for

145 countries. The benefits of the model approach considers multiple cause variables such as: regulation, taxation and prosecutions for the shadow economy and multiple effects such as: demand for money, less official growth and or increase in crime rates. The choice of cause indicators are not reinforced theoretically and this has already been identified as a weakness in many of the methods used in measurement of the cost of money laundering. Statistical analysis is then used to decide the groupings of cause and effect variables (Unger, 2007). One of the interesting developments in this research will be the impact offences such as counterfeit goods, cigarette and fuel smuggling and tax evasion which are determined as criminal activity will dominate the discussions.

Walker (1995) provided the first recognised model to estimate money laundering in and throughout Australia. He further extended his model to estimates of global measurement of money laundering Walker 1999a, 1999b, 2002). His work is described by Unger (2007) as most promising for global measurement of money laundering. However his attempted to measure the extent of money laundering occurring on a global basis has been criticised as using an ad hoc equation which was lacking solid theoretical or methodological background (Reuter and Truman, 2004; Van Duyne 2006). However, *"It still provides a relevant point of departure for further improving the measurement of money laundering"* (Unger 2007:42). Despite these shortcomings, this model (questionnaire material was supplied to this author by Walker) provided a good starting point for this study. Walker's (2007) research was the first of its kind for global measurement of money laundering and has since been used by other researchers in the same field. His approach to quantifying money laundering applied a standard economic theory in which he develops an international input-output model (Schneider, 2010). For the

purposes of this research Walker's model has identifiable variables that could be included in this study for research in the UK. Walker believed all crime was relevant for measurement of money laundering as all crime could have some monetary benefit that could be laundered.

Although Walker's was a pioneer study that measured money laundering for all countries for the first time he relied on his own knowledge and experience to calibrate his model which led Unger (2007), to suggest that his cryptic sounding formulas were from trial and error estimation. Estimates were provided of the proceeds from these crimes and the probability of them being laundered. An attractiveness index was then developed that expressed the opportunities and risks of financial institutions presented by each country. The model defined the type of data and analysis required for global money laundering and suggests an effective crime prevention strategy. The model however lacked valid data and appeared to rely on the same information per country. Walker also relied on his own low, medium or high scores to measure all crimes per country (Schneider, 2010; Reuter 2007).

> *"The vagueness of such estimates is a result of both disagreements as to how money laundering is conceptualised, as well as weaknesses in the techniques used to quantify it. As a consequence, estimated changes in the volume of money laundering cannot be used a s a measure for judging the effectiveness of global anti-money laundering law enforcement regime such that aggregate figures provide little added value for policy makers"*

(Schneider, 2010:474-475)

Despite the criticisms Unger (2007) argues that Walker's model is a positive example of multiple frameworks of economics and criminology. She extends Walker's model by applying a theoretical underpinning using Tinbergen's 'Old' 'Gravity model' (Schneider, 2010). The gravity model looks at the export flow from one country to another. It calculates the GDP for both countries and the distance between them. Using a modern version of the 'gravity model': the attractiveness of money laundering is factored on secrecy laws, attitudes to AML, corruption and crime. The results suggested by Schneider (2010) provide plausible estimations of money laundering and organised crime. The main benefit however is the first theoretical foundation of the Walker model.

Van Duyne (2006) looked at the relationship between money laundering and predicate crime in Serbia from (2000-2005) by hypothesising a link between crime for profit activity and counter activities by law enforcement. He conceptualised three categories of crime actually occurring, reported crime and sanctioned crime or crime investigated and prosecuted. The study met with difficulty due to lack of proper accounting records and crime recording in Serbia. The research was widened to search for data by using case studies and surveys of various law enforcement and government agencies to better determine the analytical work that was carried out.

Keeping to the crime for profit theme the study also looked at the household sector income and expenditure for evidence of the black economy. If the household spend was systematically beyond its means then there were reasons to speculate were the deficit came from in the event that it was not from savings.

The third area that the study looked at was international trade flows, through balance of payments data. It was in this area that he found major differences in inflows and outflows, pointing to a number of countries identified as major recipients of funds which could not be matched to any viable product or service in term of imports and exports. Van Duyne supplied material to this author from the above study, to assist this research.

Reviewing the above literature provided a broad scope of activity around measurement of money laundering that identified activities for inclusion in this research. Measurement of money laundering took into account macro activities such as shadow economy and national accounting figures and micro activities such as SAR process and crime types. Some of the difficulties identified in both areas relate to reliability of data, access to data, theoretical underpinning and guesstimates.

Finally, 'measuring money laundering at a European level' a new project assigned by the European Commission to Eurostat in 2010 has produced, for the first time, up to date data on AML activities.

> *"This deeper and more evidence-based knowledge has the potential to enrich analysis of the phenomenon and thus to enable a first cost/benefit analysis of national and European anti-laundering systems. While this is the Commission's long-term ambition, it will however take some years to implement, as the cost/benefit issue is complex and has barely begun to be explored at international level".*

(Eurostat, 2010:4)

2.8 The cost and effectiveness of AML policy

The measurement of money laundering and the cost and effectiveness of AML policy are inextricably linked. This section provides an extension of the work on estimations on the scale of money laundering. The priority for the UK government is that effective AML legislation will make the UK less attractive to money laundering activity. As far as preventing that activity is concerned much of the emphasis in AML policy has been placed on the role of financial institutions and their money laundering compliance regime. However the effectiveness of AML policy also impacts on the success of the enforcement authorities at detecting and prosecuting money laundering. As such some discussion will be directed toward the relationship between financial institutions and law enforcement through the SAR regime. As money laundering activity continually evolves it is important to get a current perspective of this phenomenon.

Direction from FATF in assessing the effectiveness of AML/CTF, emphasised the extent to which financial systems and economies mitigate the risks and threats of money laundering, financing of terrorism and proliferation. FATF suggest this assessment could be related to (a) policy or legislation; (b) a law enforcement initiative; or (c) implementation of a specific set of measures to mitigate those risks FATF, 2013). FATF describe the purpose of assessing the effectiveness of country by country AML/CTF, that *"Financial systems and the broader economy are protected from the threats of money laundering and the financing of terrorism and proliferation, thereby strengthening financial sector integrity and contributing to safety and security"* (FATF, 2013:14). As Ferwarder (2008) suggests FATF recommendations should provide a country with a complete framework for successfully combating money laundering. For example a response to a 'name

and shame' threat by FATF to non-compliant countries in 2001 had a positive effect. The response being that 50% of those countries reviewed their international compliance standards rather than face the cost to reputation by being non-compliant (Reuter and Truman 2001).

As outlined in the introduction there are a number of prominent academics who have conducted research in this area of AML risk. The following literature discusses the roles of the financial institutions and their responsibilities in terms of compliance policy, and how the integrity of the financial system and reputation of financial institutions impact on those roles and responsibilities. A further examination will draw inference from those discussions and examination of the effectiveness question of AML policy.

Reuter and Truman (2005) have questioned the extent to which AML controls has reached prominence since September 11, (2001) in USA and globally. As a result of those controls ask '*how well is the system doing?*' In response they suggest: *"The success of the system should be judged not by how much it reduces money laundering but by how much it reduces the activities of money laundering"* (Reuter and Truman, 2005:58)   The AML system itself may deter activity that would otherwise be reported but what can also occur is a change in method to launder that money (such as a much more hands on approach by drug traffickers to use cash couriers). The consequence is that the choice to complete the activity is made more difficult as the risk of detection is increased by this change in method. Weighing up the benefits and consequences of the action are traits of rational choice, whether the criminal takes into consideration those risks is determined by many reasons. Lyman and Potter (2007) suggest crime is committed for political,

economic, psychological, social and physical means. Organised crime and financial incentives play an important role in determining whether a criminal will engage in crime (Akers, 1999; Lyman and Potter, 2007). However, Wright, (2010) would argue that the choice to commit crime has to make two further considerations: 1. Many criminals when committing crime are under the influence of alcohol or drugs and with this temporarily impaired incapacity cannot make rational choices. 2. Most crimes including serious ones do not occur penalties as they do not result in an arrest or conviction, therefore the effect of deterrent through severity of punishment is reduced (Wright, 2010).

Research by Ferwarder (2009) questioned if AML policy reduced crime. He developed a theoretical model which suggested the criminalisation of money laundering had a negative effect on the crime rate. He extended Becker's (1968) 'economics of crime' model which explains criminal behaviour under the assumption of rational choice to include the effect of money laundering. This extension suggests that anti-money laundering policy deters potential criminals from committing money laundering and crimes in general. Using indicators drawn from AML policies and mutual evaluation reports of the World Bank, FATF and IMF for 17 countries he concluded that *"AML policy deters potential criminals from illegal behaviour and therefore lowers crime rates"* (Ferwarder, 2009: 923).

Reliance on the results of this research however lie with the quality of the evaluation reports used for development. The FATF in April, 2009 reviewed and

re-issued the assessment criteria for evaluating money laundering[38] which suggested the previous criteria was somewhat flawed.

Ferwarder further concludes by suggesting the quality of the evaluation reports from FATF and IMF could be improved in the future to further improve the results of the research methodology. This however does not detract from the importance of the evaluation reports as Dawe, presented in Unger (2013) also used the World Bank, IMF and FATF evaluation reports for all countries as benchmarks for conducting a National ML/CTF risk assessment. The results also fall in line with the work of Chong and Lopez (2007) who found that tougher money laundering regulation that criminalise feeding activities and improve disclosure are linked to lower levels of money laundering. Although there is little work focusing on the theory of optimal money laundering regulation, the theory of regulation in other areas such as crime and the regulation of legal markets can help formulate testable theories about money laundering regulation (Chong and Lopez, 2007).

The effectiveness of AML policy can also be related to cost and benefits of the regulatory system itself. Concerns have been expressed by financial institutions about the cost of AML compliance and the benefits from such a compliant process (Bosworth-Davies, 2007). And as Harvey (2005) points out little has been done to properly assess the extent to which those measures are effective or appropriate. Costs can relate to tangible operating costs such as physical resourcing for the compliance regime. Benefits can relate to the success of the cost-flow such as intangible reputational benefits from customers and

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[38] www.fatf-gafi.org FATF reference document. AML/CTF Evaluation and Assessments. Handbook for Countries and Assessors April (2009).

competitors and to the tangible benefits from avoiding sanctions and fines for not complying with the regulations. Frustrations would suggest a conflict in the roles between their commercial interests (such as servicing the needs of clients and customers) and being governments 'unpaid policemen' (Harvey, 2004; Levi, 2007).

Theoretically, as crime theory would suggest it is impossible to eliminate criminal behaviour completely, so in relation to financial crime an equilibrium situation is required were the costs equal the benefits. Similarly from an economic crime theory perspective investing in the system should reap greater benefits than an alternative method. For AML the benefits of devoting resources to a system of prevention should be greater than devoting resources to another activity (Biagioli, 2008).

The balance it would seem has to be drawn between the requirements of having a robust compliance system that thwarts the efforts of criminals and terrorists to launder money, and the cost of complying with those regulations. A third need arises that relates to the same financial institutions that police the AML system as Reuter and Truman (2005) have noted:

> *"The AML system has worthy goals but it also imposes real costs. The obvious ones…government expenditure the SAR programmes (are a small part) Firms subject to the reporting requirements have to invest in systems to identify customers and transactions and to deliver reports. They in turn subject customers to costs and inconvenience by requiring additional information and time for verification".*

(Reuter and Truman, 2005:59)

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The interest from the financial institution perspective surely has to relate to a business decision to manage risk within their institutions. That risk relates to damage to their reputation and integrity by failing to comply with the AML regulations. Further, they risk fines and sanctions from the Financial Conduct Authority (FCA) if found to be failing in their task or in breach of their obligations. Risk in AML activity as suggested by Harvey (2005) impacts on the reputation and integrity of the financial system. To evaluate the effectiveness of those rules and regulations Harvey sought to evaluate using 'second best' measures of reputation, such as, SARs, prosecutions and asset recovery. Ross and Hannan (2007) identified risk as appearing as an explicit AML regulatory consideration from the revised FATF recommendations in 2003; specifically recommendation 5 which stated that financial institutions should apply customer due diligence measures on a risk sensitive basis depending on the level of customer and transaction (FATF, 2003). Recommendation 24 follows this up by implying that countries should extend AML/CTF monitoring and compliance to designated non-financial institutions on a risk sensitive basis (Ross and Hannon, 2007).

The AML/CTF strategy recommended by FATF in 2003 would allow financial institutions and reporting entities to self-regulate based on a managing risk model. Each area of their business could be assessed for risk and action taken to mitigate that risk. Considering that the priority for money launderers is to look for weaknesses in the financial system a risk strategy would put in place mechanisms to continually review all the systems.

FATF acknowledges the difficulties of applying risk-based concepts to AML/CTF domain as described by Dawes (as cited in Unger, 2013): that money laundering

and terrorist financing are difficult to record as they maintain many processes hidden from normal activity. (Dawes, as cited in Unger 2013). Dawes further suggests that different stakeholders in AML/CTF communities see money laundering (ML) and terrorist financing (TF) risks from different perspectives. By building on the business model of risk using key indicators of threat (demand for money laundering), vulnerability (structures, processes and weaknesses in the AML system) and consequences (cost, damage to reputation) a build-up of information on typologies, case studies, money laundering methods and patterns could be developed and continually reviewed for use in assessing customer business and transactions (Reuter and Truman, 2004; Fleming, 2005; Bosworth-Davies, 2007; Ross and Hannan, 2007; Dawes in Unger 2013). For this model to be successful would need the co-operation of the regulators and three conditions of risk in place:

a) Agreement about the risk being decided upon

b) Must be an explicit agreed model of the attributes that will contribute to the assessment of risk

c) Those responsible for delivering and refining a risk based decision model must have access to knowledge about the outcomes of assessment

(Ross and Hannan, 2007:110)

The outcome from this model does not accurately equate with the results of Harvey's observations, however there are some similarities. There is a potential reduction in costs if specific areas of high risk are targeted than lower risk areas, Less 'defensive reporting' as staff become more knowledgeable about money laundering trends and most importantly reputational risk becomes a factor of all

the reduced risk. Many previous reviews of the AML/CTF regime have criticised the degree of exchange of information and co-operation between law enforcement agencies, regulators and financial institutions (KPMG, 2003; Fleming, 2005; Lander, 2006). The benefits from improved relationships, improved feedback and communication include greater quality SAR reporting, more effective matching of data and overall general performance of reporting entities (Ross and Hannon, 2007; Unger and Van Wararden, 2009; Van Den Broek, 2011). Any criticism from the use of this model could potentially come from small or medium size businesses who have been caught by the expanded regulation to report. Cost to these entities may be more visible and less attention paid to risk which makes them more vulnerable to being targeted for money laundering.

The ideal measure of success of the above model would be a reduction in money laundering activity. However as previously suggested it is difficult to quantify the amount of money laundering activity. As a result given that by its very nature, it is clandestine it is also difficult to quantify the deterrent effect of those procedures on that activity. Money laundering activity could be effected by the expansion of the reporting entities. It could be anticipated that more SAR reports would generate an increase in convictions and asset recovery and therefore provide a prevention and deterrent effect to criminal launderers (Harvey 2007). Theoretically the model by following the 'economics of crime' should apply cost and risk to the launderer. In reality the cost of the regulation follows Stigler (1971) and Becker's (1968) position by the institution absorbing the cost of compliance and ultimately any benefit going to law enforcement and government. Much of the discussions above suggest the consequences are correct in that the private

interest frustrations of regulated entities surrounding cost and potential reactions are counterproductive (Unger 2013).

While deterrence is most often associated with crime control it is also a major part of regulatory enforcement (Clarke, 2000; Simpson, 2002).

> *"A crime control model can involve consideration of future conduct and remedies through rehabilitation, restorative justice and mediation. Deterrence, incapacitation and rehabilitation are all concerned with future conduct…deterrence which equates with a crime control strategy, and regulation are part of an overall enforcement strategy emphasising crime prevention and deterrence".*

(Croall, 2003:47)

Money laundering is harmful, it makes crime pay, alters the cost/benefit calculation of those engaged in crime and encourages crime activity (Becker, 1968). In order to protect citizens governments act on behalf of society, the economy and politics and require information from the private sector. The legal framework for money laundering (POCA) that applies to the UK has already been discussed in Chapter 2a. This sets out the criminal and regulatory requirements for both law enforcement and regulated institutions for reporting suspicions of money laundering. This responsibility places on regulated entities an external policing role in which they would have to monitor and report upon the activities of their customers. Levi (2007) suggests *"have been involuntarily co-opted into becoming unpaid agents of the state".* (Levi, 2007:162)

Much of the debate surrounding regulatory control in AML exists with the influence from regulators, namely the FCA (previously FSA). Regulatory

enforcement is generally related to co-operative compliance strategies which includes persuasion, education and advice. This is in contrast to the policing style that emphasises conflict, arrest and prosecution (Croall, 2003). Some suggest that regulators in AML arena have too much power and that supervision of financial institutions becomes intrusive, cumbersome and controlling (Bosworth-Davies, 2007). The main question that arises from this regulatory control is *"How much of compliance co-operation from financial institutions is down to integrity, reputation, cost, customer care concerns or 'keeping ourselves right' for the regulator"?*

The last decade has seen many fines and sanctions against financial institutions for banking and compliance failures (provided at section 2.4)[39]. The fear is that due to the build-up of fines against financial institutions that the above statement is true. The implications of which mean an increase in poor quality reports and a disgruntled less motivated partner in the fight against money laundering and terrorist financing. From within an economic paradigm of welfare economics the role of the regulator is to act in the public interest (Ricketts, 2006). One has to question if the public interest is foremost in their minds if their behaviour has a negative impact on the prevention and deterrent effect of money laundering activity. In addition Takat's (2007) who agrees that excessive fines force banks to report transactions which are less suspicious, argues that there should be a reduction in fines for non-compliance and a levy for all reports made (in other words charging banks to make reports).

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[39] The most recent fines:
16th June 2014 – Credit Suisse International £2.4m Misleading financial promotions
16th June 2014 – Yorkshire Building Society £1.5m Misleading financial promotions
23rd May 2014 – Barclays Bank £26m Gold fixing
23rd January 2014 – Standard Bank PLC £7.7m Anti Money laundering failing
For further detais see: www.fca.org.uk

The public interest argument can be compared with the policy to prevent money laundering from a good governance perspective. Tensions identified by Van Der Broek and Addink (2011), relate to legal rights of clients over reporting information and client confidentiality and the replacement of the rule based approach to a risk based approach that requires active participation from institutions. This change from more government led design and functioning of rules in the rule based system has developed to a dilution of the public and private sectors that can impact on preventative accountability.

Harvey and Lau (2009) from interviewing compliance officers expected a positive correlation between compliance and reputation however, found the opposite in that respondents suggested that compliance was driven by fear rather than as a benefit to the bank. Harvey and Lau also found that disclosure of the costs of compliance in annual reports was frowned upon due to the potential backlash from shareholders. The above points to a move away from the role of regulators as acting in the public interest to improve overall allocative efficiency, to acting in their own best interests (Ricketts, 2006). This can be further examined by considering the concerns of Bosworth-Davies who imparts:

> *"In my considered judgement, there is absolutely no possibility or likelihood whatsoever that any banker of stature in the financial sector will ever be prosecuted for money laundering in the UK. We may have to face the possibility of difficult regulatory findings, but no-one in my circle believes that the government will bring criminal charges against the board member of a leading British bank…"*

> (Bosworth-Davies, 2007:196)

Protection of bankers is one of a number of points Bosworth-Davies makes in relation to government influence in AML activities. He points to government wanting reporting entities to go beyond their statutory duties by reporting suspicious activity reports (SARs) as opposed to suspicious transaction reports (STR). This he suggests was in order that governments get more information on tax offences and offshore movements of funds. Which they were unable to obtain from voluntary disclosure. The above would indicate a manipulation of the AML regime, not to prevent or deter money laundering, but to provide a *"means of providing government with greater access to information about tax evaders and others who seek to keep their assets out of the reach of the government, the so called, undeclared economic activity"* (Bosworth-Davies, 2007:207).

In light of the above comments it is evident that to effectively fight money laundering governments need to be able to distinguish between normal, healthy, financial transactions, from those that hide profitable, criminal activity. In terms of money laundering transactions the exchange of information between the private sector and public sector is crucial. Good quality reports from financial institutions are essential for law enforcement to analyse, develop and follow up. Economic theory suggests if one group has more or less information than the other then the system skews. As markets should be efficient distortion as in this case occurs with the imbalance of information. Imperfect information then causes power imbalances and distorts the market (Wilson, 2008). In AML the co-operation and coordination of investigations relies on the FIU capacity to transform SAR information into intelligence. According to Deleanu (as cited in Unger, 2013) the danger is the balance of power has changed to law enforcement from the private

sector and the product (intelligence) could be used by governments for purposes other than the prevention and detection of AML offences.

Pressure is placed on financial institutions to conform to government legislation through the regulatory authorities. In some respects as suggested above this is seen as being done for economic reasons as opposed to social welfare reasons of crime prevention and deterrent. Whether those institutions would consider their reporting role and the cost of that role if regulation was not in place, remains to be seen. However, *"it is the responsibility of reporting institutions to identify and assess the money laundering risks and take measures to manage and monitor those risks"* (British Bankers Association, 2006:129).

2.9 Research Gap

The research gaps referred to in this section are drawn from observations from existing empirical literature that have been reviewed to answer the research question: *"What are the factors that influence the effectiveness of AML policy implementation in the UK"?* This author has not found previous research that sets out to discover the influencing factors in AML policy implementation. To clarify this statement, AML is a very wide subject area and there has been much valuable research conducted from which this research has drawn. The previous sections have described the money laundering landscape in terms of both the UK and from a global perspective.

The concept of money laundering and the legislation and regulation that encompass it have evolved substantially over the past decades. Academics have

questioned over that time the adequacy and relevancy of the policy regarding money laundering (Levi and Osofsky, 1995; Van Duyne 2006; Harvey, 2008; Ferwarder, 2009) to the extent that it is enforced by both the regulated industry and law enforcement. Levi and Osofsky (as others) emphasised the need for greater communication between policy makers, legislators and practitioners, to ensure there were no practical holes causing unnecessary obstacles, to attain the goals of underlying confiscation legislation (Levi and Osofsky, 1995; Bosworth-Davies, 2007; Ross and Hannon, 2007).

Bell (2007), evaluation of the UK, Proceeds of Crime Act (2002) sets the scene, that puts into context the subject of this research, the findings from this research, and the contribution that this research will achieve by filling those gaps. Bell suggests *"There is no group which performs the role of detailed analysis of the legislation and making recommendations for change"* (Bell, 2007:42).

This research makes a substantial contribution to knowledge and enhancement of theory, by following a robust, methodology that incorporates significant stakeholders in the AML environment. This research becomes the voice that Bell refers to; of the stakeholders in AML and the identification of underlying issues and the drivers of future policy (Bell, 2007).

The research gaps referred to in this section can be divided into two areas. The first relates to lack of theory that underpins the relationship between crime and policy in AML. This view has been acknowledged extensively: Levi (2005), Van Duyne (2006), Reuter (2007), Unger (2007), Harvey (2009), Verghage (2009), Schneider (2010), The second gap identified relates to knowledge through lack

of access to data. Previous research has acknowledged the difficulties of obtaining access to expert's knowledge and experience and having to rely on statistical data (which in many instances is unreliable, out of date or missing) Van Duyne (2006), Ferwarder (2009), Verhage (2009).

There is a lack of literature available on the link between money laundering crime and policy of which to draw relevant theory. A reason may be that AML is a fairly recent research subject that has not yet established an appropriate theoretical footing in which to bed the research. Many recent studies around AML appears to concentrate on the success or failure of the money laundering concept. Academics have looked to try and evaluate that success or failure through studies linked to the measurement and cost of money laundering. Other studies reflect on designing economic models to interpret guessed and suspected effects of money laundering and the costs and benefits of regulatory compliance. Further studies incorporated the risks and benefits in AML/CTF compliance with the justification for compliance costs based on asset recovery strategy. Some of the above research did not assume any theoretical position while others applied their own thoughts to what was relevant. The scale of money laundering dominates the literature and it is from this aspect that research gaps relating to theory are drawn.

It is assumed that measuring the scale of money laundering at regular intervals would give an indication of the effectiveness of the AML regime. Much of the literature around the area of money laundering measurement focuses on varying methodologies and the identification of significant variables. Harvey (2004). Walker (1999, 2004, 2007), Van Duyne (2006), Unger (2007).

Walker's work in measuring the cost of money laundering appears to dominate academic thinking and criticism. Criticism relates to two areas: the first relates to the approach used (Reuter 2007, Schneider 2010), due to the perceived lack of theoretical underpinning for the research and the second to the methodologies used to measure money laundering (Unger 2007, Ferwarder 2009). Describing Walker's research (Unger 2007) who is a strong defender of Walker's work suggests most literature on money laundering is pure speculation and without solid empirical background.

More recent empirical work on the effectiveness of AML policy embraces models of econometrics, based on a cost/benefit approach such as rational choice utility model. This provides a new perspective on the economic analysis of money laundering Masciandaro, (2004, 2007), Takats and Unger (2007), Ferwarder (2009), Schneider (2010). The methodologies used to measure money laundering appear to have taken on a mainly quantitative route although some authors such as Fleming who looked at asset recovery effectiveness used mixed methods of quantitative survey and statistical data analysis and qualitative interviews. Biagioli (2008) suggests that quantitative issues raised by anti-money laundering have not found answers*…"we have to invest in looking for new and more efficient ones…through building integrated and shared attitudes and methodologies can we tackle issues of measurement and evaluation of impact"* (Biagioli, 2008:94).

One of the main difficulties acknowledged by those conducting research in AML relates to getting access to data from experts (Verghage, 2010, Van Duyne

2006). It is with this criticism in mind that questions the validity of previous research if the data wasn't available, and brings into question the vagueness of estimates of the scale of money laundering and generalisation of results for interpretation (Schneider, 2010). In light of this, such estimates cannot be used as a measure for judging the effectiveness of AML policy. With this in mind, the strategy employed in this research has been formulated to close the gap that hindered previous research in this area. This includes gaining access to key expert groups from the AML industry. The research strategy is fully discussed in Chapter 3 and can be viewed visually on Figure 3.1.

The literature is also sparse in describing and communicating the relationship between the above key agencies and subsequently a void is produced in relation to understanding the experiences and activities within the bigger AML picture. (Levi and Reuter, 2006, Verhage, 2009). Table 2.1 provides a summary of the research gaps:

Table 2.1 Summary of research gaps

Research gaps	Relevant authors
Theory • Based on lack of underpinning theory • Based on extension of deterrence and rational choice theory and economic regulation theory	Schneider (2010) Harvey (2009) Verhage (2009) Reuter (2007) Unger (2007) Van Duyne (2006) Levi (2005)
Knowledge • Based on lack of data available previously • Based on use of key stakeholder groups • Based on robust methodology strategy • Based on inclusion of ex-offenders data	Harvey (2009) Verhage (2009) Ferwarder (2009) Van Duyne (2006) Fleming (2005)

Data in this research comes from a unique mix of key stakeholder groups: law enforcement, prosecutors, accountants, money laundering reporting officers (MLRO's)[40] and ex-offenders which has not been recorded previously in this area. The research extends to mixed methods of data collection as previously outlined. Capture of the data from these groups will enhance knowledge and provide a unique insight into the relationships between the anti-money laundering and crime fighting agencies in the UK.

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[40] MLRO refers to Money Laundering Reporting Officer

2.10 Chapter conclusion

This Chapter in order to answer the research question *"What are the factors that influence the effectiveness of AML policy implementation in the UK"* sets out to map the AML landscape and present a picture of how it has evolved over the past two decades. Legislation and regulation has been extended and enhanced to deal with economic, social and environmental changes that impact on society on a global scale. The UK has its own comprehensive legislation comprised of the Proceeds of Crime Act (2002) and Money laundering Regulations (2007). Further terrorist legislation compliments the primary legislation and in some cases is incorporated into it.

The sections in this chapter have described the various components that underlies AML and AML policy and discussed the practical implications of those components. The introduction at section 2.1 set the scene by introducing an overview of the chapter, this was followed at section 2.2 by a closer look at how money laundering had evolved since the 1930's and the use of predicate offences prior to the money laundering offence itself. Discussion in this section also provided a description of the money laundering process and a hypothetical scenario was introduced to help explain the reporting process. The impact of the FATF was discussed and how recommendations from that organisation are incorporated into legislation around the globe. The importance of the FATF role in setting AML policy should not be underestimated. The EU follows FATF recommendations and issues directives to its member states to compliment legislation and enhance regulation.

Defining money laundering has its own difficulties as shown in section 2.3. Many definitions exist and issues of what crimes are predicate crimes for money laundering differ from country to country. Harmonisation of predicate crimes is identified as a necessity to improve co-operation and corroboration across jurisdictions.

The link between organised crime and terrorism has been thoroughly discussed. Section 2.4 has shown that both types of organisations are involved in crime activity and require to launder criminal funds. Reference has been made that describes the move from terrorism to organised crime due to the military type structures already in place. The link between the groups in terms of loyalty to each other makes these groups difficult to penetrate. Further discussion explains why terrorist financing was included in the money laundering legislation and what constitutes an offence. Some examples of the type of offences committed by these groups are presented.

Section 2.5 discusses the UK experience for anti-money laundering and concentrates on the POCA legislation and money laundering regulations. Aspects of the deterrent effect of the legislation is presented including the dual penalties of sentencing and confiscation. Some debate exists about the incentivisation scheme and that the benefits of asset recovery will not reach the intended heights expected by government. Some suggestion is made that the cost of policing the money laundering regulations outweigh the benefits returned through asset recovery. Recent fines for regulatory and compliance failings on a number of large banks was also discussed. With no prosecutions pending this action undermines

the very purpose of the legislation which was designed to prevent money laundering activity, and questions the message this sends out to other smaller reporting entities.

The second part of Chapter 2 offers the literature review. The introduction at section 2.6 is followed by a discussion of the scale of money laundering in section 2.7. This section explains the clandestine nature of money laundering that makes it a difficult activity to measure. The section goes on to discuss how several academics have attempted to measure the scale of money laundering and the various techniques used. Criticisms of the methods used are presented, however estimations are accepted as a best guess from a difficult subject area.

Section 2.8 discusses the efforts made to understand and evaluate the effectiveness of AML policy. Much is made of the risks associated with money laundering and how those risks impact on AML activity and the reputation and integrity of the institutions themselves. Further discussions are directed to state involvement in manipulating regulatory activities to suit indifferent needs and regulatory influence through sanctions and fines.

Section 2.9 discusses the identification of research gaps in the literature that lead to the contribution of this study. Gaps were identified that contribute to both theory and knowledge in AML research. Gaps such as, the lack of theory in previous research in AML which is acknowledged as missing and knowledge gained through the use of methods that can draw unique data from key experts that include ex-offenders. The chapter conclusion at section 2.10 is presented.

Chapter 3: Research Methodology

3.1 Introduction

The aim of this chapter is to explain and substantiate the research framework used in this study. The next section outlines the framework and strategy for this research followed by the research questions. Following a review of the literature and the identification of the research gap in chapter two, this chapter will discuss the research philosophy and the various epistemological and ontological assumptions that led to a Pragmatic approach, as the choice appropriate for this research. The methodological strategy is then described.

Section 3.4 commences with an explanation of the 4 phases of enquiry that use qualitative and quantitative approaches to address the research question. This is followed by a discussion surrounding the ethical considerations in this research. Section 3.5 discusses the use of mixed methods using qualitative methods of enquiry with expert focus group interviews and quantitative methods of enquiry using questionnaire surveys. A discussion on the choice of sample and the administration of the data collection process is presented which is followed by the method of analysis and the importance of establishing validity and reliability in the research methods. Figure 3.1 presents a visual image of the research framework Chapter.

Figure 3.1 Visual presentation of the Research Framework

Phase 3 Questionnaires

Questionnaire Development
On-line questionnaire
Research questionnaires
Question development
Statement development

Phase 1 Theme Development

Literature Themes
SARs
Money laundering methods
Crime types
Policy
Spend

Question prompts

Phase 2 Focus Groups
Focus group interviews
Law enforcement
Accountants
Prosecutors
MLRO's
Ex-offenders

Pilot of Questionnaire
University Staff
University Group
Sample of focus groups
Feedback/restructuring

Theme formation
Merging themes
Theme validation

Method of data collection
Tape recording
Facilitator notes
Transcripts

Questionnaire Distribution

Survey Monkey
Law Enforcement
AML Working Groups
AML Member Associations
HM Prison
Prosecutors
Accountants
Financial Institutions

Data Analysis
NVIVO 9
Reading
Word search
Text highlighting
Statement reduction

Questionnaire Analysis

Survey Monkey
SPSS
Factor Analysis
Principle Component Analysis
Descriptive Analysis
Labelling Factors

Phase 4 Component Verification

Sample of original focus groups used to view results and comment.

Figure 3.1 describes the sequential nature of the research design and how each phase leads and informs the next phase. The research follows a carefully constructed strategy that has been designed to overcome the difficulties highlighted and discussed in the literature review in Chapter 2 referred to in Table 2.1. How we conduct research is influenced by our own assumptions of how knowledge is obtained (we assume information exists to be collected and we assume there is a link between that data and knowledge). Those assumptions then influence the choices we make as to how our research will be conducted. Although it is not always obvious what data is needed or what data can be obtained, the relationship between the research question and the knowledge required to address that question should follow approaches and techniques to better understand the research problem.

Justifications of the techniques used however, need to be made in light of those assumptions of how we see the world and our theoretical perspective (Saunders, 2007; Cresswell, 2007; Pole and Lampard, 2003). In doing so this research follows the adoption of Crotty's (1998) four question framework presented at figure 3.2, were competing approaches are informed through their ontological, epistemological and methodological positions. Each element informs the next with the choices of methods being applied. The framework has been expanded to include the ethical considerations that became so prominent in this research and will be discussed later in the chapter (Cresswell, 2003).

3.2 Ontology; Epistemology; Methodology

Considering each position briefly, ontology is "*our own view of the nature of reality or being*" (Saunders, 2007:1) and the researchers assumptions about the way the

world operates, *"claims about what is knowledge"* (Cresswell, 2003:6) and how we make sense of it. Ontology therefore informs the methodology of *"what processes the research should focus on"*.

Figure 3.2: Elements of the research framework
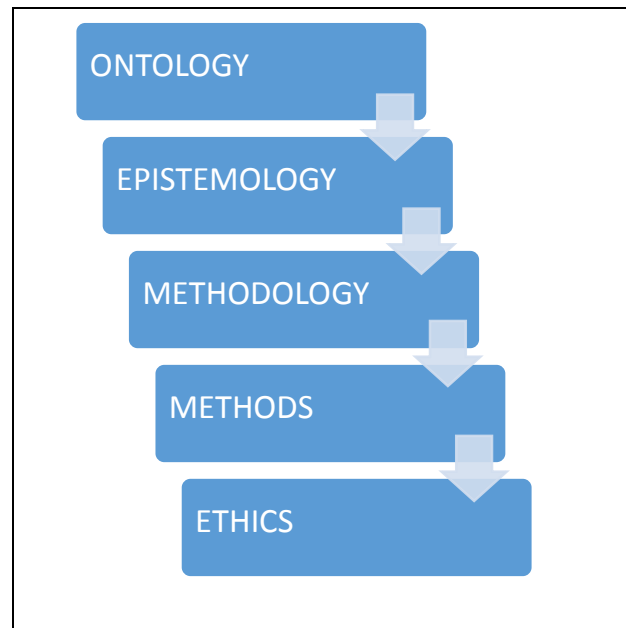
(Crotty, 1998:4)

Epistemology is related to knowledge *"how we know what we know"* (Crotty, 1998:8). Knowledge for everyone is consumed by theory and beliefs we have of the source and construction of knowledge. Epistemology is therefore concerned with providing the philosophical grounding to ensure that the decisions we make about knowledge choices are sufficient and reliable. (Crotty, 1998; Saunders, 2007). Epistemology therefore informs the methodology about *"what kind of knowledge the research should focus on"* (Pole & Lampard, 2005).

Crotty (1998) recognises that ontology and epistemology are dependent on each other and difficult to separate when discussing *"the construction of meaning"* (ontology) and *"the construction of a meaningful reality"* (epistemology) as separate concepts. Both therefore tend to merge together.

Methodology as in epistemology plays an important role in distinguishing the way the research is conducted by combining the way we think and act to the way we gather knowledge Pole and Lampard (2002). The methodology is viewed as the gateway to knowledge for the research and becomes the strategy or action plan for the choices of methods made to gain that knowledge and achieve the objective of the research Crotty (1998). Section 3.3 further explores how Pragmatism combines the three elements, ontology, epistemology and methodology.

3.3 Pragmatism

It is difficult to envisage a strategy or research design without consideration of ontology, epistemology and methodology as briefly described above. In addition the research question underpins the thought processes around those three areas. Research is carried out and informed by considering the background of theory, methodology assumptions and choice of methods (Crotty, 1998). Methodology and methods choices are based mainly on the nature of the research question. However methodological choices need to be justified; based on a set of assumptions about the philosophical position of the researcher; the subject question and integrated into the research design (Bryman and Bell, 2007; Saunders et al, 2007). With reference to this thesis that question is:

"What are the Factors that Influence the Effectiveness of Anti-Money Laundering Policy Implementation in the UK"?

This author adopts realist ontology and the philosophy of "*Pragmatism*" as the epistemological position for this research. There is a benefit to the role and place for realistic pragmatism in mixed method research (Lipscomb, 2011). The term *"ontology"* is the study of *"being"* denoting both the study of *"what is"* and *"what exists"* and the study of *"what it is to be, or exist"* (Crotty, 1998; Lawson, 2004). The combination of knowing *"what is"* (ontology) and *"what it means to know"* (epistemology) sit within the research framework to drive the methodology and methods strategy (Crotty, 1998).

There are many ontologies and epistemology perspectives however realist ontology accepts that a reality does exist and that this is independent of any cognitive process (Crotty, 1998). This research will benefit from realist ontology as the researcher accepts the existence of the situation that created the research question. For example that AML policy was created as a result of human interaction, that through observation and interaction the stakeholders construct the situation that allows them to manage their role within that framework. As Crotty suggests: *"social reality is regarded as the product of processes by which social actors together negotiate the meanings for actions and situations"* (Crotty, 1998:96). With this in mind the importance of a compatible epistemology to frame the research is necessary.

As an epistemology, pragmatism offers the capability of practical application and the utilisation of methods that can work effectively to produce the required results

(Crotty, 1998). Table 3.1 provides a summary of the elements of the Pragmatist Philosophical Paradigm:

Table 3.1*: **Summary of the Pragmatist Philosophical Paradigm**

Paradigm	Pragmatist
Methods	Mixed methods - Quantitative + Qualitative
Logic	Deductive + Inductive
Epistemology	Both objective and subjective points of view.
Axiology	Values play a large role in interpreting results.
Ontology	Accept external reality. Choose explanations that best produce desired outcomes.
Causal Linkages	There may be causal relationships but cannot be pinned down.

(Source: Adapted from Tashakkori and Teddlie, 1998:23)

Pragmatism is acknowledged as an American philosophy founded by Charles Sanders Pierce and William James with further transformation by John Dewey. Although there are many streams of the pragmatist philosophy they also have many common characteristics. Pragmatist's emphasis the practical nature of knowledge, as an instrument for getting things done; "*the issue of what works most effectively*" (Crotty, 1998:72). How we deal with a problem is determined by the practical application of our thoughts. Thoughts guide action and the results are tested by the practical consequences of our beliefs. (Crotty, 1998; Saunders et al, 2007) Many of the terms used within the pragmatist's philosophy in describing the practical application are relevant to this research. Terms such as

experience, reflection and verification will become evident as the research progresses. The application of methods for this research as suggested above needs to be practical and effective. From a pragmatist viewpoint using ideas as instruments and using the methodological principle that analysis in certain contexts need certain kinds of action draws the research to the use of a mixed method design.

Pragmatism was not the first choice as a philosophical position for this research and much thought had gone into the use of positivist position. The researcher has come from a policing background. As a Detective within Economic Crime Bureau much of the process of investigations had to go through a sequence of activities. Each segment of an investigation had its own box and each was put together like *"building blocks"* to build a case. Positivists conduct research in a scientific manner and maintain the objective of explaining the problem in a logical manner. In some respects the author was drawing from his own experience to answer the research question but by doing so was also restricting the methods that could be used in the research design.

Pragmatism offered a flexible approach that uses the strengths of discipline within the quantitative and qualitative techniques that will give greater validity to the results (Greene, 2008). The research now has a logical, sequential, organised, process with outcomes determined through a sound philosophical underpinning using natural (qualitative) and scientific (quantitative) methods to build and produce reliable results (Easterby-Smith et al, 2002; Saunders et al, 2007). Section 3.4 will discuss the research strategy and the use of mixed methods design for this research.

3.4 Research Strategy

The strategy is designed to provide the research with a complete picture of activities that roll out in a sequential manner to achieve the objective of the research question. *"What are the Factors that Influence the Effectiveness of Anti-Money Laundering Policy Implementation in the UK: Exploring Money Laundering Crime and Policy"?*

As the research question suggests, this research is exploratory. Pragmatism compliments the use of mixed methods design and the strength of mixed methods this author sees as the best method of *"design quality"* to achieve the expected outcome for this research (Tashakkori and Teddlie, 2008).

The following aims identified in chapter 2 would assist the researcher towards finding the appropriate solution to this question. These are provided in Table 3.2.

Table 3.2 Aims of this research

1. To identify and draw from literature in the AML arena evidence of themes that are component activities that could be used as a starting point for this research.
2. To establish a research strategy that can develop the themes identified and follow a logical sequence of activities to a position where the results will produce an answer to the research question.
3. To use methods in the gathering and analysis of data that will complement the research strategy, that is reliable and valid in respect of the researcher's philosophical position and can be replicated for future research.
4. To ensure the research is compliant with all aspect of ethical considerations and that the research is ethically and morally sound.

In order to fulfill the aims of this research an exploratory sequential research design is appropriate. The key dimensions of the research are therefore set out in four phases. Each phase in the research strategy builds on the dataset of the previous phase.

Phase 1 Theme Development

Deals with establishing themes from literature as a starting point for this research.

Phase 2 Focus Groups

Deals with the collection and analysis of data from Focus Group Interviews.

Phase 3 Questionnaires

Deals with the collection and analysis of data from Survey Questionnaire.

Phase 4 Component Verification

Deals with the verification of the results of Phase 3 through a *"verification group"*.

By following this strategy and the utilisation of mixed methods the approach considers a solution that is practical, actionable and verifiable. It is also expected that through the use of multiple methods the reliability of the data will be improved (Cresswell, 2003; Greene, 2005). Figure 3.3 outlines the strategy for this research.

Figure 3.3 Research Strategy for this Research

Literature Review

Phase 1 Theme extraction from extended literature around money laundering measurement.	**Phase 2** Focus Group interviews with five groups of expert stakeholders.	**Phase 3** Survey Questionnaire to an extended population of the experts in Phase 2.	**Phase 4** Verification of phase 3 results using interviews of representatives of each of the original focus groups.

Analysis and Findings from each Phase of the Research Informs the next Phase until the final analysis in Phase 4.

Each phase of the research combines qualitative and quantitative components that can achieve various aims, including corroborate findings, generating more complete data, and using results from one method to enhance insights attained with the complementary method (Morgan, 2006; Creswell, 2007). Mixed methods therefore compliment the sequential nature of this research by applying practical applied research, integrating different perspectives to help interpret the data. The qualitative methods of focus group interviews will validate and extend the themes drawn from literature. The results of the focus group interviews will provide a

foundation for subsequent quantitative research. This will be achieved through questionnaire development, questionnaire distribution and determination of the statistical associations from the analysis of that data (Greene, 2005). This will be followed by a fourth phase to verify the results of the quantitative analysis.

The author acknowledges his contribution to the research methods chosen and accepts sometimes change is necessary within those chosen methods to achieve the required results. The research strategy initially consisted of one to one interviews of individuals from five groups: law enforcement, accountants, prosecutors, MLROs and criminal offenders followed up with a questionnaire to a sample population from the same agencies. As discussed in section 3.7 Ethical Considerations; the interview of offenders and the questionnaire distribution in prison establishments created ethical and logistical difficulties. The strategy was reviewed and changed to conduct focus group interviews with all groups including ex-offenders and follow up questionnaires would be distributed to all groups except the offenders group. The ex-offenders group would however be included in the verification of components process at phase 4 of the strategy.

From a pragmatist perspective the author is part of the research process. His knowledge in the subject area can provide access to participants and understanding of the terminology used during interviews. The contribution extends to the practical investigative background that employs practical applied research techniques (Saunders *et al*, 2007).

3.5 Mixed methods

Mixed methods, in which quantitative and qualitative methods are combined, are valuable, because they can capitalise on the respective strengths of each approach (Curry, Nembhard and Bradley, 2009). This is confirmed by Cresswell (2009) who suggests that qualitative and quantitative components may be performed concurrently or sequentially, and emphasis may be placed on either component or equal weight given to both.

A number of authors who have written about research methods and used mixed method design include: Teddlie and Yu (2007), Tashakkori and Teddlie (2009), Cresswell and Clark (2011). Dawson *et al* (2002) who provide a broad discussion of the subject. Mixed methods are used when the single method of quantitative approach or qualitative approach is inadequate. As previously suggested a quantitative approach may follow an objective positivist perspective, however this method would not be able to gain the multiple perspectives and understandings from respective participants in a focus group. Likewise a qualitative approach may follow a subjective interpretivist approach but have difficulty applying statistical analysis to the research problem. Therefore this research would benefit from the combination of both qualitative and quantitative methods in order to develop a complete picture of the research problem (Bryman, 2006). It is important to demonstrate that mixed methods is appropriate for this research design by determining the strengths and limitations of mixed methods in each phase of this research. Phase 2 focus group interviews, and phase 3 questionnaire development and distribution, apply both qualitative and quantitative techniques in their design and analysis. A short summary demonstrating the strengths and limitations to deploying a mixed method design

for both phase 2 and 3 is provided below.

Phase 2 - focus group interviews involves the interview process and subsequent text analysis. The strength of the method is the interaction of participants in each group, the ideas and opinions that the method produces and the emerging results from the text data analysis (Hair; 2003). For phase 3 survey questionnaire and statistical analysis the validation of themes from the interviews is necessary. The limitations of the method refer to the small number of participants and the interpretation of data being dependent on the researcher. However in this research the number of focus groups involved provided a mix of ideas from five different agencies and the number of participants within each group were within the range (4-6) recommended by Fowler (2009).

Phase 3 Questionnaires follow phase 2 with the development of the questionnaire and the use of statistical analysis to identify the underlying factors. The strength of this method refers to the conduct of the research that if it is carried out correctly, the result will be a precise illustration of the research problem. The quantitative element within mixed methods research is based on a deductive approach that emphasises the principles of scientific reasoning, moving from theory to data and the need to explain causal relationships between variables through quantitative data collection methods. A large sample size is required to generalise conclusions and apply controls to ensure the validity of data.

A mixed method approach in which data collection involves both text information as well as numeric information, captures the best of both qualitative and quantitative approaches (Cresswell, 2003). For this research mixed methods

helped answer the research question by integrating data from relevant literature, expert stakeholders in focus group interviews, survey's and participant verification of the results. By mixing both qualitative and quantitative data the breadth of data and depth of understanding of the subject and corroboration is increased. This provides a more robust method than the use of either approach on its own. Table 3.3 provides a reminder of the mixed methods employed in this research.

Table 3.3 Triangulation of Methods in this Research

Phase 1	Qualitative Method	Identification of Themes
Phase 2	Qualitative Method	Focus Groups to validate themes
Phase 3	Quantitative Method	Survey Questionnaire
Phase 4	Qualitative Method	Focus Group participants to confirm interpretation of results

In evaluating the strengths and weaknesses of qualitative and quantitative approaches in mixed method research the strengths of both methods encapsulate the objective of the research to produce a reliable replicable method of research to answer the research question. The limitations previously discussed relating to the elements of mixed methods design have been mitigated by the actions taken in the steps of the research process by the methodical approach to data collection, analysis, record keeping and ethical considerations. The nature of the research question required a mixed method designed of data collection and analysis that would produce reliable, trustworthy and dependable results.

Reliability and validity in mixed method research is the extent to which the

research study, process and findings, can relate to a quality research that is defensible to the research community (Onwiugbuzie and Johnston, 2006). Each phase of the research acknowledges the importance of validity and reliability and can defend those elements through the processes of investigation and analysis.

3.6 Reliability and Validity

The research starting point from introducing the literature to the study was the identification of themes relevant to the AML process. The conduct of focus group interviews and the collection and analysis of data is reliant on the credibility, skill and competence of the researcher and the ability to draw correct inferences from the data (Cresswell, 2003, Onwiugbuzie, 2006).

Credibility, transferability and dependability in this research came from: the processes of the adoption of themes from the literature review that surrounded the money laundering environment and not influenced from the authors own knowledge. The method of presentation of themes to the focus groups through question prompts; the collection of data from the focus group interviews with a digital recorder; methodical analysis of the data by reading, re-reading, reducing, cross checking and finally re-analysing through the software programme NVIVO9. The threat of bias was reduced by applying open-ended questions which allowed free flow of discussion without influence from the researcher. The participants were experienced and knowledgeable within their own areas of law enforcement financial investigators, accountants, prosecutors, MLRO's and ex-offenders and would provide a richness of data. The participants attended voluntarily and were advised of the confidentiality and anonymity of the process. They could also leave the process at any time. As a result of the above criteria in

this respect contamination was not an issue.

The quantitative methods in phase 3 involved questionnaires and statistical analysis. Validity therefore as previously suggested emphasised the instrument of measurement (the questionnaire) and the interpretation of that data (statistical analysis) measuring what it is supposed to measure (Saunders et al, 2009). Survey questionnaires were designed using data, validated from the qualitative method of focus group interviews and text analysis. The data was further validated by focusing on questionnaires from previous academic study in the AML area and testing the questionnaire through consultation with experienced members of the target group (Hair et al, 2003). These are valid questions because they have come from other studies and have already been published. Table 3.7 in section 3.8.1 provide examples when themes were drawn from published work. Table 3.19 in section 3.8.3.2 provides an example of how published academic questions have been utilised in this research.

In terms of construct validity which refers to the items within the questionnaire measuring hypothetical constructs or concepts (Creswell, 2009), in this research were identified through a valid and robust analysis process in the qualitative phase of this research. The pilot study for the questionnaire validated the survey instrument after pre-testing by 14 participants. As Cresswell (2009) suggests construct validity also includes the result of the scores serving a useful purpose or having positive consequences when used.

 The object of this research was to establish to what extent the factors that influence the effectiveness of AML policy in the UK could be determined. The

results would provide a strong underpinning that identifies what is important and can make a difference for policy makers and regulatory agencies in the AML arena, as well as other contributions to research as previously discussed in this chapter.

The statistical analysis method used in this research presented a number of testing methods to determine the validity of the data collected from the questionnaire. "*Quantitative research uses quantitative methods of assessing the construct validity of instruments*" (Onwiugbuzie and Johnston, 2006). A Chronbach Alpha tests the internal consistency that each of the items measures the same latent variable reliably. This is further discussed in the analysis chapter, section 4.4.6.

Reliability in research refers to the extent a research can be replicated and produce similar results (Tashakkori and Teddlie, 1998). According to Golafshani, (2003) the term reliability is generally used to test or evaluate quantitative research, however should be used in all research. This pragmatic research employs both qualitative and quantitative methods at particular points and as such requires reliability to produce good quality research. The quality concept in qualitative study has the purpose of generating understanding whereas reliability is used to evaluate quality in quantitative research with the purpose of explaining (Patton, 2001).

In this mixed method research design the consistency of the research is achieved when the steps of the research are verified. On the qualitative phase this is carried out through analysis of the items of raw data, the data reduction reports

and process notes as in the case with the focus group interview transcript analysis (Campbell, 1996). On the quantitative phase this was carried out through testing and re-testing the questionnaire through pilot and data instrument of measures for consistency through statistical analysis.

Finally, to conclude the interpretation and validation of the results from the quantitative analysis a further phase of qualitative analysis took place. This triangulation of methods identified aspects more accurately than one single method and provided corroboration of themes from literature through focus groups interviews, surveys, and statistical analysis and in the final analysis using individuals to verify the components. The triangulation of methods the author feels contributed significantly to the research and is fully discussed at section 3.8.3.12. As Morgan (1988) contends;

> "*To often the tendency is to throw every possible variable into the analysis, then retreat too our armchairs and speculate about what created the results, asking the participants is a better strategy*"

(Morgan, 1988:35).

Equally important in interaction with participants is the ethical conduct of the research to ensure participants are not harmed or exploited (Liamputtong, 2011). Section 3.7 discusses the ethical considerations in this research.

3.7 Ethical Considerations

Ethical considerations form an important part of any research. Northumbria University Code of Ethics Policy has been followed throughout all stages of this research and approval sought. (Copy of approval letter provided at Appendix 3.1).

Amended Ethical approval forms have been completed and approved at each change in the research process as appropriate. The seven key ethical issues as discussed by Yates (2004) in terms of access, gatekeepers, informed consent, deception, right to privacy, right to withdraw and self-presentation have also been considered. Due to the participation of ex-offenders in this research and the potential problems that entailed, two interviews of the author have been conducted as part of the Ethics Committee annual audits.

Ethics considerations in this research began at an early stage of the construction of the research strategy. Part of the initial strategy consisted of interviewing stakeholders in the AML environment that could significantly influence the AML process. One of those groups (the subject of this section) was offenders, who were at that time, incarcerated in prison establishments.

The research method was to interview a selected number of offenders who were incarcerated for acquisitive crime; for example crime that produced a monetary benefit such as selling drugs. Individuals had been identified to participate in the interviews and contact was made with prison establishments to provide the necessary consent. The ethical questions that arose from this process (such as questions that might extract an incriminating response) and the logistics of conducting the interviews safely, suggested a review was necessary. Focus group interviews of all the groups was chosen as an alternative method that would provide similar data to that expected in the first strategy, however some ethical considerations still remained.

Special consideration was given to two areas that involved former criminals

participating in the research. The first was in relation to the focus group interviews in phase 2 of the research and the second in relation to distribution of questionnaires to a similar population in phase 3 of the research.

Dealing with the first issue involved an introduction through a third party to a former prisoner who was now working within a government community scheme. He would eventually be one of the participants in this ex-offender group. A meeting was arranged with him to discuss the research and the objectives of the focus group interviews. A suitable venue was offered at a local community centre and a list of the other participants who would be in attendance was made available. The author was aware of the background of the participants of this group (they were well known to him from his previous policing background) however, this was not a deterrent to completing the interviews. An introductory email was forwarded to each of the participants along with an Informed consent form that introduced the research and purpose of the research. The form also detailed the ethical parameters that guided the research as part of the Northumbria University Ethics considerations and the anonymity and confidentiality aspects of research participation in general (Copy of informed consent form attached at Appendix 3.2).

The second area for consideration related to the distribution of questionnaires to offenders within a prison environment. A number of options for distribution to this group were considered. Questionnaires were distributed in hard copy through one point of contact within the prison administration office or the questionnaires would be completed on line either via the survey monkey[41] link or via email. After

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[41] Survey monkey is an online survey site that provides templates for survey design and implementation. Data recorded by the survey monkey site can further be exported into programs such as SAS or SPSS for statistical analysis.

discussion with the prison authorities it was suggested providing hard copy questionnaires to the prisoners was the most appropriate method to get responses. The on-line method would create too many complications with prisoner access to internet and potential for abuse.

Through the administrative contact a questionnaire was sent to the prison administrative office. They would distribute the questionnaire to 30 individuals and collect the questionnaires via the same process. The questionnaires would be forwarded from the same contact. Organisational consent would be obtained along with consent of the participants. The latter would be provided by completing a consent question on the questionnaire itself. There would be no necessity for any contact whatsoever between the researcher and the participants. The questions were not in a format that allowed participants to display answers that might incriminate themselves or divulge any information not relevant to the research.

After a four week wait no responses were forthcoming. Discussions with the administrator indicated the mistrust of offenders completing questionnaires in prison. Although this was a disappointing response that ex-offenders would not be represented in the questionnaire it did not detract from the final responses received from other groups. The total responses were 272. Furthermore the results of the analysis of the questionnaire would be presented to one of the original participants of that group for verification and comment.

All hard copy data collected for analysis is retained in secure cabinets and data held in databases that are password protected. At the conclusion of the research

the material held in various devices will be disposed of as instructed in the University Data management policy.

3.8 Methods

This research required a practical data collection process that flowed from each phase of the exploratory sequential design. Figure 3.4 provides a visual description of the research design and the methods used in each phase of the research. This is followed by a discussion of the processes at each stage. Prior to the detailed discussions on each of the four phases, it was proper to briefly review the sampling strategy for each phase. Each of the approaches used will be further discussed at each phase. Table 3.4 summarises the sampling procedures for each of the primary data phases.

Figure 3.4: A visual representation of the Methods at each Phase

Literature Review
AML Policy – FATF Recommendations - Measurement of Money laundering

Phase 1
Theme
Identification

Extraction of
themes
Reading
Identifying
Corroborating
Validating

Phase 2
Focus Group
interviews

Stakeholders
Analysis of
transcripts
Keyword
search
NVIVO 9
Quotations

Phase 3
Survey
Questionnaire

Exploratory
Factor Analysis
Principle
Component
Analysis

Phase 4
Component
Verification

Sample from
each focus
group
Comments

Final analysis will draw from each phase to support the results.

Table 3.4 Summary of sampling procedures for primary data

Four phase sequential research	Sampling procedures/methods	Authors and Groups
Phase 1 - Theme Identification Informal Thematic Analysis	Six research models estimating money laundering and effectiveness in AML. FATF recommendations in AML prevention, detection and enforcement. Purposively selected giving a geographical spread and a wide spectrum in relation to AML processes. Dated between 1991 and 2011.	Walker (1999) (1999a) (2005) Van Duyne (2008) Fleming (2005) Pietschman &Walker (2011) Ferwerda (2008) Unger (2007) FATF (1991) (2003)
Phase 2 – Focus Groups	Invite to four stakeholder groups in AML environment responsible for prevention, detection and enforcement of AML. An additional group of ex-offenders also invited to participate. Purposive sampling of those with experience, knowledge in AML area. Communication by phone and email. Detailed explanation in section 3.8.2.	Law Enforcement group Investigators of financial crime Forensic accountants who investigate financial crimes. Prosecutors MLROs from banks Ex-offenders
Phase 3 - Questionnaires	Purposive sampling with participants from four groups of organisations law enforcement, accountants, prosecutors and MLROs. The four groups are from a wider population of those selected for focus groups in phase 2 as their roles were within the selected criteria of AML. Detailed explanation in section 3.8.3.	Same groups as phase 2 selected through the use of working groups and associations in the UK of which the author was a member. Link to survey monkey allowed participation in questionnaire and maintained anonymity and confidentiality for respondents.
Phase 4 – Component Verification	A selection of individuals (one from each group that participated in the focus groups interviews) purposive sampled. Their task was to answer three questions relating to the results of phase 3 questionnaire analysis. For validation of those results. Detailed explanation in section 3.8.4.	One member from each of the original focus groups. Selected by email and phone to participate. No prior selection, simply who was available from each group at the time.

Phase 1 was the starting point for this research. The objective of phase 1 was to identify theme categories. Theme is defined in Collins English dictionary as "an idea or topic expanded in a discourse…discussion." (www.collinsdictionary.com). In the context of this research themes are significant activities within the AML framework that describe how money laundering is prevented, detected and enforced. Once identified, themes are presented through focus group interviews to key stakeholders to discuss the significance of each theme and validate their inclusion in this research. There are a number of considerations in the choice of method for theme identification: firstly, the methods used to select appropriate themes need to follow a robust process; secondly, the data needs to be analysed thoroughly and interpreted in light of what is known about the issues being explored. The process applied if replicated should attain the same results (Braun and Clarke, 2006). At the conclusion of this phase the themes identified need to provide an accurate understanding of the bigger picture.

There are many methods of document and text analysis, some of which were considered for this part of the study. These are presented in Table 3.5. However, were found unsuitable due to the many differences in selection of data. Some methods such as grounded theory are designed to select data to develop theory; others are methodological processes as opposed to a method and did not fit with the theoretical perspective of the researcher and the research being conducted. The reasons for this relate to the pragmatic perspective of this research and the flexibility required to select data through a combination of objective and subjective processes.

Table 3.5 Qualitative approaches to Analysis[42]

Author	Approaches
Merriam (1998)	Ethnographic Analysis Narrative Analysis Phenomenological Analysis Constant Comparative Analysis
Bernard (2000)	Hermeneutic/Interpretative Analysis Narrative/Performance Analysis Discourse Analysis Grounded Theory Analysis Content Analysis Cross Cultural Analysis

The method chosen for this phase 'theme identification' follows an informal method of 'thematic analysis' that uses the researchers judgement, as a key tool in determining crucial themes, but also the stability of a formal process of theme analysis.

The meaning of theme follows Ryan and Bernard (2003) inventory of meaning from 1932 to the present era. (Ryan and Bernard, 2003:86-87) They suggest that Opler (1945) provided the first definition of theme:

> *"In every culture are found a limited number of dynamic affirmations, called themes, which control behaviour or stimulate activity. The activities, prohibitions of activities, or references which result from the acceptance of a theme are its expressions…The expressions of a theme, of course aid us in discovering it"*

> (Opler, 1945:198-199).

Opler describes three principles of thematic analysis. The first suggestion is that themes are discoverable because they are visible as expressions in data and

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[42] For more detail on each of these approaches to analysis see: Merriam (1998) and Bernard (2000).

expressions mean nothing without a reference to themes. The second principle suggests some expressions of a theme are more agreeable than others and stand out whilst others are less visual. The third principle suggests themes are culturally, related or intertwined. Each of these principles can be applied through the following measures:

> *"The importance of any theme is related to…how often it appears…how pervasive it is across different types of cultural ideas and practices… how people react when the theme is violated and the degree to which the number, force, and variety of a theme's expression is controlled by specific contexts"*

> (Ryan and Bernard, 2003:87).

It is with the above principles in mind that the search for themes in literature began. The key criteria for selection that informed the literature search came from the research question *"What are factors that influence the effectiveness of AML policy implementation in the UK".* Although the research in AML is pertinent to the UK system the search for literature extended beyond the UK, as the subject matter has a global consequence and global interpretation. The criteria for selection therefore relates to all processes within the AML environment around prevention, detection and enforcement.

3.8.1 Phase 1 Theme Identification

This author conducted a narrative literature review provided with the assistance of internet, Northumbria University library and Queens University library for related books, journals, manuals and articles on money laundering, anti-money laundering, AML policy, organised crime and terrorism. The author's supervisors also provided assistance in supplying and directing sources for this study. The

aim was to draw from established literature around money laundering and money laundering policy, relevant themes that could provide the theme categories for this research.

There is a wide range of literature that relates generally to crime and financial crime, however data in the field of AML is limited (Masciandaro, 2004; Verhage, 2011). The author needed to find material that concentrated on AML processes, that was specific and could be used to feed directly into, and drive the focus group phase of this research. As discussed earlier in Chapter 2, Section 2.2 researching the history of money laundering provided a map of events with specific points of reference. Those reference points provided a beginnings to the search for documents relevant to the AML environment, which through analysis would accurately describe the themes required.

As suggested above, three main areas in the AML literature were identified that would assist this research.

a) FATF recommendations: These recommendations represent the consensus of 49 member countries and their evaluation of preventative measures to combat money laundering and terrorist financing.

b) The scale and measurement of money laundering: These are estimates of the cost of money laundering in terms of crime data and crime prevention.

c) Cost of the effectiveness of AML: This represents research on the effectiveness of AML policy and includes regulatory impact on reporting institutions.

Themes were determined from all of these areas to ensure a full representation of key aspects of AML environment.

The first event deemed significant was the creation of FATF in 1989. Documented in 1991 were the FATF recommendations for combating money laundering and later extended in 2003 to include terrorist financing. Those recommendations were deemed important because they were the first real assessment of AML processes and requirements for governments to put in place AML measures. A flow of activity followed the FATF recommendations and a number of related Directives came from the European Union to fellow member states. Merging the measures within the Directives into existing legislation would apply reassurance globally that all countries were playing their part to implement AML policies. As documented in Chapter 2 each time FATF reviewed their recommendations or added further recommendations the EU would follow up with a new Directive.

The FATF Recommendations are based on the discussions and consultations of representatives of 49 Countries. The remit of those representatives was to identify areas within the money laundering environment that required immediate action to prevent and detect money laundering activity on a local and global level (FATF Report, 2003).

The literature review in chapter 2 discusses the extent of the FATF influence in the AML/CTF arena, however a short explanation of each theme identified from the FATF recommendations is presented here:

1. **Legal systems**

    Legal systems refer to the extent that all countries should apply a Money laundering offence to all categories of crime and not only serious offences. In addition a wide list of predicate offences should be included in their Legislation.

2. **Restraint and Confiscation**

    Restraint and Confiscation refers to the extent that Countries should adopt measures to prevent the dissipation of assets by criminals and third parties. Measures should be implemented to seize, freeze and confiscating property and cash that has been derived from money laundering offences.

3. **Money Laundering Prevention**

    Money Laundering Prevention refers to the extent that Countries should ensure Financial Institutions conduct proper due diligence on all account holders and cash transactions within their institution. This extends to obtaining appropriate identification documentation and carrying out enquiries to ensure the account holder is who they say they are. Further instructions apply to dealing with politically exposed persons and Government officials. Reporting of suspicions of money laundering by all institutions is required and adequate administrative processes and policies are to be put in place to ensure all staff are aware of their responsibilities.

4. **Regulation and Supervision**

    Regulation and supervision refers to the extent that all financial institutions should be regulated and supervised to ensure they are compliant with all FATF recommendations. At the same level all designated non-financial institutions such

as casinos or money exchange bureau's should be effectively licenced, regulated and monitored to they are effective and compliant in anti-money laundering.

5. Law Enforcement Powers

Law Enforcement powers refer to the extent that Countries should set up Financial Investigation Units (FIU) in order that timely analysis and dissemination of reports from financial institutions and other regulatory bodies are carried out. That specialist financial investigation officer should be trained to conduct money laundering investigations and have access to all information or make application to receive information from financial institutions.

6. International Co-operation

International co-operation refers to the extent that all Countries should act expeditiously and co-operate fully, with flexibility, on all matters of mutual legal assistance, requests for information and extradition with other Countries. Co-operation extends to requests for bank documents, seizing and freezing of assets and may include asset sharing between jurisdictions.

The six themes identified from the FATF recommendations provided a key starting point for this research, however as previously indicated, each phase of this research informs the next phase. The importance of phase 1 in deriving the correct themes for phase 2 is paramount. In order to ensure nothing was missed a further analysis of literature that reviewed the measurement and effectiveness of money laundering was undertaken.

The second area deemed relevant to this study followed a review of literature were authors attempted to measure the scale of money laundering. This was an area the author had previously examined, as his first preliminary look at money laundering literature was in order to estimate the cost of money laundering in the UK. In terms of measurement the work of Walker (1999, (2005) in particular is substantial and has been followed by a number of the more recent authors containing similar reference material.

The third area viewed related to research that measured the cost of the effectiveness of AML policy. Policy includes regulation for reporting entities. The methods chosen to evaluate this area included the use of traditional and modern methods. Traditional methods looked at output indicators that measured the obligations and controls introduced by AML regulation. Modern methods of sophisticated analysis used economic studies, prompted by banks and the regulation imposed on them and comparing costs and benefits of the different legislative options.

The rationale behind viewing all of this literature: FATF recommendation; scale of money laundering and cost of AML effectiveness would ensure that a broad perspective of money laundering concepts were considered. Whilst it is accepted that it is the author's choice of variables from this literature it is not a random choice and is based on justification and objectivity. The literature chosen is comprehensive and relevant to the research. In addition the method of analysis will compare choices from each area. By identifying and validating those variables through analysis those themes could feed directly into the focus group interviews. As Pole and Lampard (2007) suggest:

"Existing data may be used in a variety of ways during the early stages of a research project; they may provide a starting point or a benchmark, or they may alternatively contribute to aspects of the research…"

(Pole & Lampard, 2007:8)

Table 3.6 presents the areas of research literature used to identify themes that present the AML process from 1999 to 2012. These include the FATF AML policy recommendations, Literature that identified criteria for the measurement of the scale of money laundering and literature that concentrated on AML policy effectiveness. Not all of the literature available is included. In terms of selection and sampling the number of data sources are relevant. Braun and Clarke (2006) suggest the samples used can be small or large as long as reviewing additional data would not lead to the identification of additional themes. This is acknowledged as one of the disadvantages of this method as what is unknown or not seen cannot be validated. (Bernard, 2000; Braun and Clarke, 2006). The response to this issue is to ensure that the analysis selects thoroughly and robustly what is necessary to achieve the objectives of the research (Braun and Clarke, 2006). It is expected that to have analysed a larger number of research literature in the three areas would not have produced any more meaningful and useful themes.

Table 3.6 Sample choice of literature for theme selection

Author	Literature choice for identification of themes	Methods
Walker J (1999; 1999a; 2005) Scale of money laundering	"Measurement of money laundering" To identify methods and trends in money laundering in and through Australia since 1995	Survey questionnaires
Van Duyne P (2008) Scale of money laundering	"In search of crime-money management in Serbia"	Interviews with groups from Public and Private agencies and statistical analysis from government records data
Fleming M. H (2005) AML policy	"UK Law Enforcement Agency Use and Management of Suspicious Activity Reports: Towards Determining the Value of the Regime"	Interviews, questionnaires and document analyses. Statistical analysis of Government records
Ferwerda J (2008) AML policy	"The Economics of Crime and Money laundering, Does Anti-money laundering Policy reduce crime"?	Case studies Analysis of mutual evaluation reports on money laundering using quantitative statistical analysis
Unger B (2007 Scale of money laundering	"The Scale and Impact of Money Laundering" Measuring money flows in Netherlands	Quantitative techniques and statistical analysis of Walker model above
FATF recommendations AML policy	FATF 1990, 2004, 2009	40+9 recommendations to be incorporated into member country legislation and regulation

The process of identifying themes as suggested above was based on a loose, informal thematic analysis system. The emphasis was on the reading of literature and pinpointing characteristics in those areas that previous researchers (Walker, 1999; Van Duyne, 2008; Fleming, 2005) and others, had looked to include as measurement variables in their research. *"In the informal mode, investigators*

simply read the text and note words or synonyms that people use a lot" (Ryan and Bernard, 1998:98).

The focus of the analysis was not on the unit of text as in content analysis, when counting specific words or occurrences takes place, but a wider context of what area would derive the answers to the research question. In this research each specific area used was important. For example Walker (1999) determined *"crime types"* as an important variable: Crime types brings into question *'predicate offences'* and *'stand-alone money laundering offence'*. What this research was looking for was dominant features that have wider implications. The analysis of the literature focused on characteristics in AML that were repetitive; and that all themes being equally valid for the focus group interviews in phase 2. *"Whatever style of documentary analysis a researcher adopts, there is a common need to document the link between the research findings and the documents from which they have been derived, and more generally for the researcher to validate their conclusions"* (Pole and Lampard, 2007:165).

Table 3.6 above lists the most prominent research in the area of money laundering measurement; however as previously suggested the work of Walker (1999) received most attention from academics as he was the first to attempt an estimate of the global cost of money laundering. Research carried out by Walker related to measurement of the effectiveness and cost of money laundering and his attempt to make estimations based on variables around AML process. By analysing his work and drawing from his estimation method it was possible to identify particular areas he used as measurement variables. By coding that information it was possible to compare and contrast those elements with other

research that attempted to estimate money laundering. Drawing comparisons of the variables applied by academics in this area provided reliability that the correct variables had been chosen for this research.

At this preliminary stage of the research it was important not to restrict the identification of themes by being too specific. The themes identified required to be from a wider concept within the AML framework to allow full discussion of the themes at stage 2. A detailed discussion of the literature relating to money laundering measurement has already been provided. Chapter 4 will provide the results of the analysis from phase 1 Theme development. A number of examples are provided in Table 3.7 to show the sequential system of analysis.

Table 3.7 Examples of Theme Identification

Author	Theme	Theme	Theme	Theme
Walker (1999) **Used a number of variables in his attempt to estimate the cost of money laundering**	**SARs**	**Crime Types**	**Spend**	
Van Duyne (2008) **Research into Serbian crime money interviewed groups and individuals in relation to organised crime and money laundering**	**SARs**	**Crime Types**	**Spend**	
Fleming (2005) **Research into the value of the SAR reporting regime interviewed groups of experts and individuals; carried out statistical analysis and document analysis**	**SARs**	**Crime Types**	**Spend**	**Asset Recovery** **Restraint & Confiscation**
FATF (1991) (2003) **40+ 9 Recommendations from FATF on AML/CTF**	**SARs**	**Crime Types**	**Spend**	**Restraint & Confiscation**

The above examples show a number of themes that can be identified as recurrent throughout the analysis and therefore suitable for phase 2 focus group interviews.

The inclusion of asset recovery and restraint and confiscation in the Fleming (2005) and FATF recommendations literature is because both are loosely related to the terms 'spend' 'crime types' and 'SARs' so at this stage are suitable to stand alone as a theme for phase 2 focus groups (asset recovery is part of the restraint and confiscation process as such will be included under the term restraint and confiscation). Validation of each theme is provided through recurrence in the analysis of relevant literature that concentrates on money laundering measurement and AML Policy effectiveness. Each theme could now be directed to phase 2 focus group interviews for confirmation.

3.8.2 Phase 2 - Focus Groups

The objective of phase 2 is to determine which themes identified in phase 1 should form the constructs that would assist the development of a survey questionnaire. A number of questions arise from that statement.

- What research method would achieve the objective of phase 2?
- Who would have the knowledge to determine the choice of themes?
- How do you access participants who would have information to assist the research?

There are a number of methods that could be used, however only one that this researcher believes would achieve the objective. From a pragmatist perspective people's knowledge, views, understandings, interpretations, experiences and interactions are meaningful properties of the social reality which the research question is designed to explore. A legitimate way of generating data from these elements is to interact with people, talk to them and listen to their stories and experiences (Pole and Lampard, 2005). The method chosen to achieve this was

focus group interviews *"Focus groups are useful when it comes to investigating what participants think, but they excel at uncovering why participants think as they do"* (Morgan, 1998:25).

The purpose of the focus group interviews is for knowledgeable participants who work in the AML arena to discuss their experiences relative to the themes provided; to provide acknowledgement through those experiences of the validation of the themes for this research. "*The research question should focus on how participants describe and make sense of particular elements of their lives*" (Cassell and Symon; 2004:14)

Focus group interviews as a method to gather data is preferred in some cases and avoided in others, (Morgan 1988) so it is vitally important to justify the use of focus groups in this research to answer the research question *"what are the factors that influence Anti-Money Laundering policy implementation in the UK"* AML policy is unique to particular sectors of AML regime so it is important to explore those areas with individuals who have a closeness to the subject.

One of the practical strengths of focus groups is the fact that they are comparatively easy to conduct when other methods such as individual interviews can be prohibitive. Individual interviews reaching the numbers of participants involved in focus group interviews would have been time consuming. Individual interviews would also have involved drawing up a full list of questions that could not have entered the full extent of the AML process without becoming cumbersome and in any event inflexible.

Procedurally focus groups have strengths in their ability to explore topics *"focus groups can also provide fertile ground for eliciting anecdotal material and are therefore "seed beds" for germinating vignettes for use in questionnaires"* (Kitzinger, 2005:59 quoted in Lliamputtong, 2011:90). In addition focus group interviews are at an advantage as they can produce valuable data with little direct influence from the researcher (Morgan 1988). The lack of control however can lead to less control over the data generated unless the direction of discussion can be restricted. Thus it is important to keep the discussions within the parameters of the research question and the object of the focus group. One way of doing this is by using a list of question prompts to keep the discussions on track. The research interview should not be based on a formal set of interview questions to be asked, word for word (Cresswell, 2007) and as such:

> "*The interview should use an interview guide listing topics which the interviewer should attempt to cover in the course of the interview, and suggesting probes which may be used to follow up responses and elicit greater detail from participants*"

> (Cassell and Symon, 2004:15).

Preparation for the focus group interviews involved setting out a plan of action. Morgan (1998) sets out four basic steps which can be further broken down into particular decisions:

- Planning

- Recruiting

- Moderating

- Analysing

- Reporting

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The planning phase considered practical considerations such as: what groups should participate; number of participants; location; recording data; dates and times of sessions; questions and ethical considerations (Stewart, Shamdasani and Rook, 2007; Morgan, 1998). Each step will be covered during the discussions below.

Recruiting participants for the focus group interviews took into account the aim of the research, its theoretical, epistemological and methodological position. The researcher's *'worldview'* (Cresswell, 2009) in terms of *'set of basic beliefs to guide action'* (Guba, 1990) has been well documented in section 3.3. The author has influence in the research process. Questioning who should be recruited and why subjects the research to issues of reliability. However, from an epistemological perspective key experts hold the knowledge and experience of *"what it means to know"* through their observation and interaction in the subject area.

Pragmatism offers the practical application of methods that work effectively to produce the required results. Flexibility is necessary and the recruitment of participants from five groups in differing dimensions of the AML process will provide the knowledge required for phase 3 of the research. As suggested by Morgan (1998) and Liamputtong (2011) focus groups rely on purposive sampling strategy to ensure the correct participants are chosen according to the aims of the research. *"Purposive sampling method adds power to focus group research because it selects "information-rich cases" which can best generate the desired data"* (Liamputtong, 2011:51)

The number of focus groups necessary for the research to obtain the saturation of information necessary was considered by following Kreuger (1994) and Morgan (1998) suggestions of using between three to five groups. The determination in deciding on how many groups were required extended to the underlying diversity in what people had to say, when the groups become repetitive then the stage of theoretical saturation has been reached (Morgan, 1998; Liamputtong, 2011). However, this research required the voice of each of the diverse groups from different organisations, and in that respect the number of groups was predetermined as five groups. Morgan also draws attention to the practicalities of managing focus groups (delivering the required data; enough participants; appropriate samples; relevant questions; background of participants and ethical issues) whether small or large as the decision to the number of groups is based on the needs of the specific project (Morgan, 1998). Each group brings their own knowledge and opinions from their area of expertise.

As each group is from a different area of the AML process (prevention, detection, enforcement and ex-offenders) it was necessary to ensure the objective of the focus group was always in sight and enough data was obtained to provide a reliable answer to the research question (Liamputtong, 2011). The goal of the focus groups was to validate existing themes extracted from the literature and through discussion identify further relevant themes; therefore the repetition of similar views across the groups emphasises their validity of the existing themes as important constructs for the questionnaire survey. Stopping the discussions after the second or third focus group interview because of repetition would not have given this research the answers it required and would have lost the rich source of data that underlined the responses in the discussions.

In addition to the number of groups, the number of participants is also important. The number of participants for each group according to Kreuger and Casey (2000) should be between six and ten participants. Smaller groups they suggest have greater potential to produce greater results as more opportunity exists for discussion by individuals. Smaller groups are preferable as they allow individual views to be heard and discussed. The five groups involved in this research contained an average of 4 to 5 participants per focus group.

> *"Smaller groups provide more room for all participants to speak and to explore the discussed issues in greater detail and this often leads to more relevant and interesting data"*

> (Liamputtong, 2011:42)

The final consideration in this area was the group composition. It was quite apparent that the topic in this research was the draw that would get maximum interaction from participants. Each group's composition required an interest in common that would create comfort within the group and enhance a more fluid discussion among participants. (Morgan, 1998; Liamputtong, 2011). Each group had the topic of interest within their background and experiences but each group had a different perspective from that environment and it was that perspective that was a valuable commodity for this research.

> *"In focus groups, the topics are discussed in a "known context" because people who shared experiences are brought together…because of the shared experiences, focus groups, highlight the collective view rather than the individual view, although the individual experiences are also clear in the discussions"*

> (Liamputtong, 2011:37)

For recruitment it was important in terms of sampling that the focus groups used were representative of the investigative issue. For example (main areas of anti-money laundering population). The sample consisted of five groups from the target audience: law enforcement and prosecutors represented the enforcement population with accountants and banker's representing the regulatory population. Ex-offenders were used from a crime perspective. Each group were chosen because they would provide a broad perspective of the AML process (Patton, 2002).

"The goal of focus groups is to gain insight and understanding by hearing from people in depth, and this requires selecting a purposive sample that will generate the most productive discussions in the focus groups"

(Morgan, 1998:56).

As will be discussed below a key individual from each group nominated the participants for their own group to attend the focus group interview. This was based on their familiarity, interest and knowledge of the subject.

Adding the ex-offenders to the focus group interviews added a rich source of data that had not been accessed in this area relating to this subject. The original plan was to visit offenders in prison to interview them, however, the ethical considerations around this were difficult with concern from the ethics committee for the safety of the researcher and potential compromising of the participants when interviewed. The inclusion of offenders or ex-offenders was still an area worth pursuing and after visiting a University summer school in Turkey and as a result of presenting this research an opportunity arose for communicating with an

ex-offender in Belfast. A student also present at the summer school was in contact with an ex-offender who was researching a PhD in Belfast. Contact was made with this person and a meeting arranged when this research could be discussed. As a result of that meeting the focus group with a number of ex-offenders took place. The inclusion of this group added an extra dimension to the research profile. AML is not just about the voice of those from Regulators and law enforcement and this inclusion provided insights that might never have been found. In one such example a discussion with this group extended to an area around one of the themes (shadow economy). Discussions related to crimes such as cigarette smuggling and tax evasion which were classed by this group as acceptable crimes. This suggestion of acceptable crime provided an added dimension to the underlying explanation of the shadow economy which may not have been drawn out in other studies. It also adds to the discussion around the theoretical underpinning of this research that crime is committed based on an individual's weighing up of the costs of committing a crime and benefits obtained from crime. If a criminal does not believe a particular activity for example cigarette smuggling is criminal then his choice to commit that offence is obscured by his negative reaction to the crime. This position perplexes the rational choice position as he cannot weigh up the costs and benefits of the crime based on his belief that it is not a crime. Merging data such as this with data from other groups provides a unique insight into the thought processes of the different groups.

Recruitment of participants for the focus groups was easier for this researcher than for previous researchers in this area. *"Recruitment may be the least glamorous aspect of focus groups, but it is absolutely essential to their success"* (Morgan, 1998: 85). As mentioned in other empirical studies in the Literature

Review in Chapter 2, Levi (1999), Levi and Reuter (2006), Van Duyne (2008), Unger (2009), Verhage (2010), suggest access to participants has proved problematic. Van Duyne (2007) noted difficulty trying to secure participant engagement in his research in Serbia with meetings being cancelled or participants just not turning up. Apart from the general difficulty of recruiting participants for focus groups in any research (Morgan, 1998; Liamputtong, 2011) much research in money laundering estimations, as discussed earlier, records similar problems, thus many of the methods used are statistical methods of data analysis based on figures provided by government agencies (Masciandaro, 2007; Schneider, 2010). The reason may be that access to participants for any other method of qualitative research prohibits that approach. However this research found the recruitment of experts from four of the focus group areas; law enforcement, accountants, prosecutors and MLROs was made easier due to his previous professional background, membership of relevant associations and networks (Kreuger, 1994; Morgan, 1997).

Recruitment was made by phoning a contact within each group that was known to the author. To avoid bias in recruitment the author had no part in deciding who would participate in the interviews. A contact was sufficiently placed within each organisation to make decisions on: agreement to proceed with the interviews; where the interviews should take place and when and who should participate in the interviews within that organisation. The key individual would nominate participants who were knowledgeable on the subject, who would freely discuss their experiences and give opinions, and have at least 2 hours free on the date of the interviews. A letter outlining the research was followed up by an email. An

informed consent form was included in the email for each participant and was presented prior to the interviews commencing.

In comparison to the recruitment of the four groups above setting up the ex-offenders focus group was fraught with difficulties. The main difficulty related to ethics (as previously explained and further discussed in the ethics section 3.3). The concerns surrounded the safety of the researcher, the location of the meeting and the conduct of the focus group that would not compromise the position of the participants. Ethics approval was sought and approved by the University's Ethics committee and the focus group with ex-offenders was arranged within one month in November 2011. The meeting took place in a local Community Centre and was the final focus group out of the five groups. All of the focus groups procedurally followed the same format as listed in Figure 3.5.

Figure 3.5 Focus Group Format

Introductions
Collection of the informed consent forms
Introduction as to the purpose of the focus group interview and the fact it would be tape recorded and notes taken
Introductory question asked what was important to the group about money laundering
Discussions relating to question prompts and any further questions/discussions that flowed from the discussions
All interviews completed after approximately 1 hour duration

Prior to the focus group interviews in June 2011 a lengthy discussion took place with an ex-law enforcement representative with extensive experience in the AML industry. Those discussions took place during the evenings over a seven day period while working together in Bosnia & Herzegovina. The discussions centered on the themes previously drawn from literature and the AML process.

This colleague was a previous head of AML department in the West Midlands Police in UK and had vast experience in the AML process. This interview was not part of the initial research design but the opportunity presented itself after discussions with him about the research. What he provided was reassurance that the experts within the focus groups would have knowledge in the area sought. He also viewed questions already developed for use in the focus groups and through our discussions advised reducing them to a more manageable format.

A decision was taken to utilise the revised version of the question prompts for the focus group interviews. The focus group interviews could have proceeded without question prompts with only the moderator directing the process, however, a pragmatist perspective provides for researcher involvement and having question prompts is both practical and a legitimate course of action. In addition the flexibility of a pragmatist perspective allows the creation of ideas and instruments that gets *"what needs done"* in the research (Morgan, 1998; Tashakkori and Teddlie, 2009; Liamputtong, 2011).

The purpose of the discussions was to identify question prompts for use in the focus group interviews. This would invite discussion around particular areas if the flow of the conversations became stifled or went in an unrelated direction. The purpose of the inclusion of the *'expert view'* was to add validity to the interview process and ensure the correct questions prompts were prepared to provide depth of conversation and a rich capture of data. The pre-test ensured any mechanical problems were alleviated (Sarantakos, 1997).

An example of the type of question drawn from the discussions with the expert is produced below at Figure 3.6. Prior to this multiple questions had been considered to aid the flow of discussions, however this would have made the flow of the discussions in the focus group more like a question and answer session with a group instead of insightful discussion, opinions and antidotal discussion (Fowler, 2009; Morgan, 1998). Figure 3.6 below provides a list of original questions which has been reduced to one single question. This final question became one of the actual question prompts.

Figure 3.6 Example of original group of questions

Example of four questions being reduced to one question
Q1 *"Does the legal system make it too difficult to prosecute money laundering offences"?*
Q2 *"Does the cost of investigation money laundering act as a deterrent to law enforcement investigating the crime"?*
Q3 *"Is appropriate training provided to the judiciary and stakeholders in the investigation process to ensure successful prosecutions"?*
Q4 *"Is the use of SAR's an effective method of identifying money laundering and the methods used"?*
Final question prompt used *"Is the preventative process effective"?*

Reducing the number of questions from four to one allowed more effective discussion and kept interruptions to the discussion flow to a minimum. Flexibility within the focus group itself allows the re-introduction of any question that might provide additional data for analysis as Liamputtong (2011) suggests: *"most interview guides consist of fewer than a dozen questions, although the moderator is frequently given considerable latitude to probe responses and add new questions, as the actual interview progresses"* (Liamputtong, 2011:62).

The process setting up all the focus groups was time consuming and challenging. Many phone calls and emails were needed to the various participants to arrange dates and times when everyone would be available together was time consuming. Coupled with the logistics of finding suitable accommodation that all participants could travel to within a reasonable distance and time was frustrating. Contact was made with a colleague who was using interview methods to conduct research on behalf of the Police Service of Northern Ireland with a request to make use of his accommodation. Through that correspondence, contact was made with the Rehabilitation Centre for ex law enforcement officers located ten kilometers from Belfast City Centre. The use of a room at this facility and the location of the facility itself left it unsuitable to conduct the interviews with the five groups and also in terms of cost, to the researcher.

Through delicate negotiation a representative of each of the groups provided a room within their own offices to conduct the interviews. As each of the representative groups were located in Belfast this arrangement provided the necessary logistical stability to conduct the interviews. Table 3.8 provides details of the interview locations. The interviews were carried out over a four week period in all of the above locations and conducted consecutively. The data was recorded from each of the focus group interviews using a digital recorder and was converted to an audio file saved on computer (Kreuger, 1994).

Table 3.8 Details of focus group interview locations

Focus Group	Location
Law Enforcement	Conference room at Knocknagoney Police Station
Accountants	Conference room of an Accountants firm in Belfast
Prosecutors	Conference room of the Public Prosecutors Office in Belfast
Financial Institution	Conference room of a major Bank in Belfast
Ex-Offenders	Conference room of a local community Centre in Belfast

Copies of the files were made to prevent loss of the data and protected in accordance with Newcastle Business School procedures on data security. Each interview lasted approximately one hour. Table 3.9 provides a description of the participating groups the number of participants and gender. Although the procedure for the implementation of each focus group was similar, each had their own challenges.

Table 3.9 Participating Focus Groups

CATEGORY	NUMBER OF PARTICIPANTS	GENDER
Group 1 Law Enforcement	6	5 – Male 1 - Female
Group 2 Accountants	5	4 - Male 1 - Female
Group 3 Prosecutors	5	2 – Male 1 - Female
Group 4 Financial Institutions	3	2 – Male 1 - Female
Group 5 Ex-Offenders	4	4 - Male

The law enforcement group was the first focus group and all participants were eager to tell their story and give their views on the subject. The author was the moderator for all of the focus group interviews. There was an obvious ease within the room and no feeling of awkwardness or tension. The passion for the subject by some individuals was sometimes overwhelming with some gestations and raised voices. In some instances with this group it was easier to let the discussion flow continue, even if going off tangent, rather than stop the discussion to change direction and lose the momentum that was created. Pragmatism offers that observation choice within mixed methods, to get the best result from the method (Saunders, 2007).

The accountants group was also passionate about the subject. One thing that was clear with this group as in all of the interviews was that each relayed the subject from within their own perspective and their own environment. This is one of the strengths of focus groups, to integrate different perspectives to help interpret the data (Morgan, 1998; Saunders et al, 2007). Concern from this group about the role and activities of other groups within AML: for example SOCA not taking on *"Mr. Big"* criminals or Prosecutors not prosecuting *"stand-alone"* money laundering offences could have been construed as criticism and that their own role was the most important. However some groups were self-critical, for example; accountants were critical in relation to the lack of effort by members of their own organization, in making suspicious activity reports (SARs). That aspect showed them reflecting on their own role, within the focus group discussions and the importance of commenting on that issue.

The Prosecutors group did not appear as enthusiastic as the first two groups and a possible reason for that is prosecutors deal with many different types of crimes not only money laundering. So they may not have closeness to the subject as some of the other groups. However Prosecutors are the only ones who prosecute money laundering so it was important to get their perspective. Use of the prompts was more relevant for this group in order to get the discussions targeted in the right areas.

The Money Laundering Reporting Officers although very courteous (as were all the groups) appeared to be very busy and on first introduction explained the need to get to a further meeting after the focus group. The focus group still lasted the 1 hour that was initially suggested but the statement left a slight bitter taste of *"let's get this over with"* quickly. The discussions flowed very well and the dominance of one speaker had to be managed to allow other opinions to come through. Seating for focus groups as suggested by Hennink (2007) should be in a circle format were participants can face each other. This arrangement helps discussion and alleviate dominance by any one speaker by allowing the moderator to gesticulate away from the speaker to another participant.

The format of all the focus groups in this study was seating around a conference table. This format had the same effect as the circular format and the moderator on this occasion was able to turn his vision to another participant for their views. To further manage this the moderator also directed questions to other participants in the first instance.

The ex-offenders group was one of the most worrying groups to visit. Even with the reassurance from my contact for my safety, the area the focus group was being held and the participants involved had potential for difficulty for an ex-Police officer. In addition expectations of the participants knowledge in the area of AML was very low, expectations of their interest was also very low, however the fact that four persons attended showed that expectations can sometimes be wrong. Although the data from this group provided material not previously obtained from a criminal perspective in AML, much time was spent explaining some of the processes of which they were uncertain.

Much of the difficulty in managing the focus groups was eased by the author taking the role of moderator. One of the positive impacts of taking this role was having knowledge of the subject under discussion. Combining roles of researcher and moderator in focus groups can also be seen as problematic. Moderator collects the data and has an immediate impact on the quality of the data (Morgan, 2007). Expression, body language, tone of voice, dress and social status can all produce bias as well as the way questions are asked. However bias as moderator can be reduced. The moderator in the focus groups in this study was aware of the negative attributes above and maintained a neutral position.

Questions were asked in a manner that did not influence the answer but allowed the discussions to flow. Bias cannot be fully alleviated however it can be substantially reduced as the author accepts in this study. As knowledge of all the systems within the AML process was a pre-requisite to taking this role. Being flexible in the approach to each group and seeing the strengths and weaknesses

of individuals within each group and adapting to that composition can be very beneficial:

> *"The task of the moderator is to stimulate the participants to engage actively in the discussion of the topic, the moderator also needs to be flexible enough to manage the group to proceed in the direction the focus group should take…moderator is not only a leader but a navigator"*

<div align="right">(Liamputtong, 2011:60).</div>

In order to validate the themes drawn from literature consideration was made to present the themes on cards in front of the participants, for their comment. However, this process presented a difficulty as presenting the themes directly to the participants may imply influence. What was required was the validation of the themes through the discussions rather than the participants being presented with a list. The question prompts for focus groups (provided at Appendix 3.3) were used as the instrument of enquiry to allow the themes to emerge through the discussions. Analysis of the data would determine if the themes were validated or not.

Table 3.10 provides an example of the use of a question prompt in a focus group interview to draw out a response that validated a theme. The theme that is validated is suspicious activity report (SAR). The question prompt does not mention the word SAR but is designed to question the particular area within the AML arena that the SAR would sit. *"Is the AML preventative process effective"?* The sample from the response indicates that SAR was recognised as an important issue in the preventative process. While the question prompts could also be said to influence the outcomes and identify the themes, it is the

discussions that follow the prompts that highlight the relevancy of the theme as in the example provided. The research benefits in validity if, it is shown, that the themes emerge from analysis of the discussions from the focus group data. All of the groups discussed the SAR process and the quote used in the example below is taken directly from the data provided by group D, MLROs. A sample of quotations is provided at Appendix 3.4. All of the themes were identified and validated through reading and highlighting text that surrounded a theme area. These were provided in quotes from the text and compared between groups for validation. Method of analysis is fully discussed at section 3.8.2.1.

Table 3.10: Example of Theme validation in Focus Groups.

THEME	Suspicious Activity Reporting (SAR)
PROMPT	"Is the AML preventative process effective"?
DISCUSSION	"Well it's seen as something we have to do and I suppose there are negative aspects to it in that, we don't really see any positive outcomes from the SAR process. Whilst it's recognised that it's important, but I think it is generally deemed to be an exercise because there's not a lot of feedback as to how useful it actually is".

At times even when a question prompt didn't stimulate discussion of a theme, what did emerged was a rich vein of data that disclosed thoughts, behaviors and underlying dimensions that are valuable insights to the undercurrent of AML arena.

A full analysis of the results is presented in Chapter 4 Section 4.3 however the example below gives a representation of data that came from one question. The extract has been deliberately cut from the text from group E ex-offenders as the

response offers a unique insight into many aspects of AML process from group E perspective. The response relates to a question about levels of money laundering put to the ex-offenders focus group interview. The example is provided to show the response which is much wider than the question intended, however the response is drawn from knowledge and experience and puts the question in context of the bigger AML picture, providing more valuable information than if the flow of the discussions had been stopped mid-way. The text has not been edited in order to maintain the character of the respondents' comments. *"Too much editing and cleaning tends to censor ideas and information"* (Morgan, 1998:167).

Focus Group Interview – Example of a Question prompt response: Group E Ex-Offenders:

Question	Answer
"Do you think that there are levels of money launderers, and how many are there	"I mean if that did happen here because if you take, and I'll not mention the guy's name but, you know there's a guy and he's still operating here, but I mean he was the money launderer for the provos, I mean he was the one that set the (inaudible) and he's still doing it, you know, and if he doesn't buy the companies he buys in till them. So legitimate companies know who they are but they still allow him to buy in so that he can, you know what I mean, so that, I mean that, there's no question that went on, the provos were very sophisticated at it cos they had him doing it, and he still does it, you know, whereas I suppose loyalist organisations it's a bit like you said, you know, if they got a couple of bob you know it was kept in a tin box in the house So there's no question that happened that way like, and you know in fact I was just talking to somebody today and they mentioned the guy and it was over a property and this guy owned the property and when he

Continued	told me who it was I said, he was offered money for it cos they wanted to demolish it, and the company was a well-known company and I said to him do you realise who he is, and he went no and I says, well you should know, cos the guy was in an official republican, and I said to him well he's the guy that launders the money for the provos, and obviously that organis-, or that large company, they're involved in that. And (inaudible) pitch at (inaudible), not that long ago, that same company. So I mean, but, Continued
	and I mean it, I had even forgot about this conversation, but that's so, so you're right, and there's another case, I don't know if you're aware of this case, in Birmingham, the Johnstons and the Bergers, they were West Indians and Africans. And if you remember, do you remember the young woman was killed in the, in the hairdressers, it turned -
So would you say that street level stuff isn't really touched?	Well it was the Johnstons and the Bergers, and the Johnstons and the Bergers both were up to their necks in crime, but, I can't remember which ones it was but one set of them actually, they put all their money into big companies and they had this guy was, he was one of the family, he put all the money in, he invested it all, and the other ones spent their money like that, so they were prostitutes, cars, all that sort of stuff, and bling, and they were running about. And the ones that were doing all that were actually complaining because all the other ones had all the money and they were doing, you know what I mean. And, so, there was this like sort of thing you know, one group was saying, them fucking bastards, they get everything and the peelers don't touch them and they're lifting us all the time - and they were having this sort of like war between themselves, and that's what was happening, because one was doing it very well and they were, they were spending it as quick as they got it. So they were going out, spending it on women and all that sort of stuff. And that's, that's a classic example of what you're talking about - in terms of in Birmingham.
	But, but, just on your question there, I think it seems to be that there must be, you know,

Continued	which you could probably say about most laws, a law for one and a law for another because it seems like that sort of lower level involvement in reaping the benefits of crime isn't addressed through money laundering the same way that higher stuff would be because if that was the case you don't hear them recovering assets off people that's maybe making two or three grand occasionally, it's the assets of people that seemingly have you know four houses and, Continued
	and you know an apartment abroad and a couple of cars and you know, putting it in their wife's name and all the rest of it, so…and I didn't know until you said that about the cigarette people, but you can bet most of that's not in their names, it is in their wives' name or somebody else's name or family names….Well it's, I'm not saying legitimate, but it seems like you know if the law is to tap into the higher echelons of it they maybe feel that if you take that out you, in some indirect way do away with the lower stuff.

Section 3.8.2.1 describes the method of analysis for the focus groups. The report from the analysis results of the focus groups will be discussed in chapter 4.

3.8.2.1 Method of approach to analysis of focus group data

The objective of this analysis is to search the transcripts of the recorded conversations from the five focus groups, looking for validation of the themes and any emergent themes. As Morgan (1988) suggests there is no single solution to the problem of analysis and each topic and the objective of analysis will benefit from its own method. The frameworks of Leech and Onwuegbuzie (2007) suggest several qualitative analysis techniques for focus group data, these include: Constant Comparison Analysis - Keywords-in-Context - Classical Content Analysis - Discourse Analysis**.** For a detailed analysis of each method see, Potter and Wetherell (1987), Glasser and Strauss (1992) Morgan (1997) Fielding and

Lee (1998). The purpose of the focus group interviews in some respects determines the analysis techniques. As the purpose of the focus group interviews was to record the discussion of opinions, experiences and activities of experts from the AML arena an amalgamation of the techniques above that appeared most appropriate were used. Using a combination of each method adds validity to the results of the analysis process that nothing is missed. Table 3.11 provides a summary of those methods:

Table 3.11 Summary of analysis techniques used for focus group text

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Selective Coding – The researcher develops one or more themes that express the content of the groups.

Key Word text - Represents an analysis of the culture of the use of the word and conceptualising of words that are considered central to the development of themes and theory.

Discourse Analysis
Examines the use of words and phrases to ascertain how individuals account for experiences, events and locations.

Advantages of using the three methods
The techniques can be used across groups, between groups and within groups (Fielding and Lee, 1998).
An effective approach to understand the phenomena (Ke and Wenglensky, 2010).
Flexibility of use of methods (Braun and Clarke, 2006).
Can be used on large data sets (Greg, 2012).
Interpretation of themes is supported by the data collected (Greg, 2012).
The methods allow for different activities to emerge from the data (Johnny, 2009).
The practicalities of the use of the methods are advantageous (Morgan, 2009)

Disadvantages of using the three methods
Each come from different disciplines within Qualitative research and could be viewed as contradictory (Greg, 2012).
Requires high level experience and patience on the part of the researcher (Ke and Wenglensky, 2010).
Discovery and verification of themes can be merged together and cause confusion (Charmaz, 1988).
Flexibility can make it difficult to concentrate and focus on the analysis objective (Braun and Clarke, 2006).
Limited interpretative power if analysis excludes theoretical framework (Braun and Clarke, 2006).

The researcher has a background in the AML area and could understand and account for the terminology and context of the data. As Onwuegbuzie (2009) suggests: "*no framework has been provided that delineates the types of qualitative analysis techniques that focus group researchers have at their disposal*" (Onwuegbuzie, 2009:4). The amalgamation of several techniques is a valid strategy to use.

Each interview was transcribed with the assistance of a software package *'Dragon naturally speaking'*. Although time consuming it was a process that provided a closeness to the data for analysis purposes (Kreuger, 1994; Morgan, 1988). Each transcript was also secured to prevent loss by photocopying and retaining a copy on an external hard drive. Transcripts were re-read to ensure clarity and accuracy.

After transcription the method of analysis began by re-reading each groups transcript to get a clear understanding of the flow of the discussions. Transcribing previously provided closeness to the data that allowed preliminary highlighting of relevant sections of the text. These were marked with a highlighter and notes made to the side of the text as to which theme the text related. A cross reference table was used to highlight agreement or dissent within and between the groups. (Kreuger, 1994; Wilkinson, 2004). Kidd and Marshall (2000) suggest the focus of analysis should also be on the individual and the group instead of only the unit of analysis. Information contained within the text on consensus and dissent between individuals and groups can increase the richness of the data (Kitzenger, 1994; Sim, 1998). This suggests: *"Information about dissenters would increase the descriptive validity, interpretive validity and theoretical validity associated with the*

emergent themes, which in turn, would increase understanding of the phenomenon of interest" (Onwuegbuzie, 2009:5).

Microsoft Word "search and find" was also used to ensure nothing was missed by highlighting themes and identifying their occurrence in the text. The portion of that text was re-read to provide the context of the discussion and its relevance. The text was produced as a list of quotations from each group that either discussed a key theme or introduced a new theme (Morgan, 1998; Liamputtong, 2011). The sample of quotes is presented at Appendix 3.4.

The five focus groups produced an average of 10,000 words of text per focus group. The above technique would provide the necessary familiarity with the data to identify recurrent themes, similarities between the groups and highlighted text for future use in generalisation of the text. However, in order to ensure reliability of the manual text analysis method the software technique NVIVO9 was utilised. This analysis method provided additional validity for the manual process described as all data had to be inputted on to the NVIVO software. In addition the software would only deliver results based on the instructions given. Despite being a quicker process the author could only direct responses from the software based on the information already gleamed.

The use of NVIVO did not produce any additional themes for this research. The use of Computer assisted qualitative data analysis software (CAQDAS) offers a number of advantages to the researcher in relation to the analytical approaches adopted. (Saunders et al, 2003). The additional use of this technique and manual

scrutiny would apply the rigor and trust required to produce quality results in qualitative analysis (Welsh, 2002; Cresswell, 1998).

In order to set up the data, each coded interview transcript was imported and set up as a case. The themes drawn from literature were also imported so that any comparisons would be made between the cases (Themes and transcripts). Each of the prompt questions was set up as a query and the data extracted using NVIVO9. The results provided all responses in that subject area (as questions were not put directly to each group in the same manner i.e. word for word, but rather questions around the subject area). Results were also obtained by running an extraction using terminology from the manual analysis (these were areas highlighted during reading and re-reading) and themes drawn from literature. (Gibbs, 2004). This set of results contained responses from participants who quoted a particular word or phrase during the focus group interviews.

The results have been recorded on Microsoft Excel and Microsoft Word for inclusion in the research and for security of data. This provided all text that used those themes and related descriptions within all the focus group transcripts. It was up to the researcher to label those context statements for and compare/merge them with the original themes. The above processes of re-reading, highlighted text coding, word search and NVIVO ensured nothing was missed and the results would became the constructs that will provide the basis for the development of the survey questionnaire.

Described below at Tables 3.12, 3.13, 3.14 and Figure 3.7 are examples of the three areas of analysis that produced the results. Linking the extract in the

transcript to the themes shown in the examples does require knowledge of the activities of money laundering. This is an advantage held by this author and makes interpretation of the discussions easier. It also allows labelling of the appropriate theme to encompass the detail in the text. Table 3.12 provides an example of how one group discusses a scenario around the movement of money from criminal activity, which can be categorised around the theme *"criminal spend".* The text is part of a larger group of text that categorises two groups of criminals and how they spend their criminal money. One group of criminals spend their ill-gotten gains as they get it and could be termed self-launderers, whilst another group who may be organised crime gangs or individuals who gather substantial criminal funds and require the services of professional money launderers. The discussions in this area are an acknowledgement that criminal spend is an important activity for inclusion as a theme in this research.

Table 3.12: Example of theme validation "Criminal Spend".

TRANSCRIPT
"I would say there is professional money launderers at the top end, there has to be, whether it's laundering cash or just laundering cheques or money that's come across a computer screen that's just bouncing around different accounts. I mean there has to be. Someone who launders money, big sums, it's going to be pretty much a full time job, and they're going to take their cut for that".

VALIDATED THEME
Criminal spending

Table 3.13 provides an example of how one group discusses a scenario around training staff on AML to satisfy regulators. One of the issues identified was the power regulators had to arrive unannounced in financial institutions to inspect their compliance procedures. The effect this had on banks was they were more concerned to show they were doing everything that was required of them. They

were more fearful of the regulator finding fault than they were in making suspicious reports. The importance of this affect can be categorised as a new theme "regulatory control".

Table 3.13: Example of introduction of new theme

TRANSCRIPT
"So we do find it beneficial and you know one of the things that we have to do is demonstrate competency so if the regulator, if the FSA are coming in, as they have done and asked to see what type of training we provide and how do you measure competency, yes there's a bank of questions that the person has to answer".

VALIDATED THEME
Regulatory control

Table 3.14 provides an example of how the analysis of the focus group transcripts validated the SAR theme using the quotation method. Each quotation discusses the aspects of the SAR regime highlighting suspicious reports as significant.

Table 3.14: Example of the use of quotations to validate the SAR theme

> **GROUPS**
>
> **Group 1 Law Enforcement**
> "It's a resource issue. If you could spend four or five hours on every SAR, well then you're going to pick up more criminality. Whereas if you have 20 minutes to spend on it, or ten, you know boils down to".
>
> **Group 2 Accountants**
> "But in a lot of cases that is determined largely by the information and explanations given to us. So we're not sitting there, you know, suspiciously looking at all our clients thinking, is he a drug dealer, is he a money launderer"
>
> **Group 3 Prosecutors**
> "I think, when it comes to banks and you know estate agencies and places like that, I think as regards their SARS obligations you know I'd say they're fairly much compliant with it, and I don't think there'd be a difficulty there but, the likes of car dealerships and places like that, it's a different kettle of fish there, where they're much more localised".
>
> **Group 4 MLROs**
> "I don't know what you're like, but business managers are not as quick to send in SARs as the retail staffs are, the branch staff, they are very clued in".
>
> **Group 5 Ex-offenders**
> "I would presume if people knew about it, it would be the ultimate deterrent, because if I'm earning 20 grand a year and I go and make a lodgement of ten grand, knowing that that'll kick start some sort of investigation, there's no way in a million years if I know that I'm going to go in with ten grand".

Figure 3.7 displays the SAR query search within NVIVO and the potential elements are displayed on the feeds directly from that request. Each feed can be examined to ensure nothing was missed in the previous examination of the data. On examination of figure 3.7 the results can be followed to view the full text in each feed, for example: reporting, number of SARs and deterrence is displayed below in a number of the tentacle's flowing from the center.

Figure 3.7: An example of the results of an NVIVO search on "SAR" that identified text

The results of the text data analysis on NVIVO show that the focus group interviews have validated a number of themes that originated from literature. On some occasion's text within the transcripts described activity that fell outside of

the original themes. For example in table 3.15 the term compliance describes activity closely aligned to SAR; the term penalties describe activity closely aligned to policy/enforcement and similarly with opportunity and crime prevention. When the context of a discussion in the interviews described an activity that is closely associated to an original theme, that description was maintained under that original themes as their meaning and/or activity was similar. Described as *'theme maintained'* in the example below in Table 3.15.

Table 3.15: Examples of Theme Labeling when the activity discussed had similar characteristics to the original theme.

DESCRIPTION	THEME
Compliance	Suspicious Activity Report (SAR) Theme maintained
Penalties	Policy/Enforcement Theme maintained
Opportunity	Crime types Theme maintained
Crime Prevention	Policy Theme maintained

The methods described above have produced a set of themes that arrived from analysis of the text from focus group discussions. Table 3.16 provides a full list of those themes. What will be noted is that included in the table will be themes that have been confirmed from the original set from phase 1 and additional themes that have emerged from the discussions, in the focus group interviews. Chapter 4 provides a full discussion of the analysis and results for focus group interviews, however, it is important to show the sequence of the analysis method

within this section. The table shows the agreement between each group of the confirmed themes.

Table 3.16: Full list of Themes from Analysis of the Focus Group Interviews.

Focus Group Interviews	Identifiable Themes confirmed from original set	Identifiable Themes in addition to original Set
Focus Group 1 Law Enforcement	SAR Crime Types Public Interest Shadow Economy Cost v Benefits AML Legislation	Enforcement Penalties Prosecution
Focus Group 2 Accountants	Crime Types Expenditure Suspicious Activity Report Confiscation	Enforcement Income Legislation Deterrent effect Opportunity Level of Criminals
Focus Group 3 Prosecution Service	Restraint of Assets Cost v Benefits SAR Process	Policy/Regulation Crime Prevention Prosecution Service Procedures Punishment Resources Bank Risk Complexities of AML cases
Focus Group 4 MLRO's - Banks	Legislation/Regulation Reporting SAR Quality	Investigation Levels Level of Crime Acceptable Crime Incentivisation Crime Motivation/Cash
Focus Group 5 Ex-offenders	Crime Spend Asset Recovery Legislation SAR Process	Policy/Regulation Credibility of Criminal Crime Deterrent

Table 3.17 merges both sets of the above themes as one complete set of themes

to aid the development of the questionnaire survey in phase 3.

Table 3.17: Merged set of themes available for Phase 3 – Questionnaire Development.

Themes	Themes from text analysis
Legislation	AML Legislation Enforcement POCA Deterrent Cost v Benefits Punishment Prosecution Policy/ Regulation Crime types Punishment
Criminality	Crime prevention Levels of criminals Public perception Crime types Opportunity Criminal compliance Confiscation
SAR Process	Restraint of assets SAR/Quality Compliance Resources CJS Reaction
Spend	Acceptable crime Motivation/ cash Crime spend
Influence	Education of law Crime deterrents Professionalism Resources Power/influence
Others	Obligations Bank risk Incentivisation Asset recovery Education

The themes provided in phase 2 will now link the focus group data to the development of the questionnaire survey. In addition to providing the list of themes the focus group data will assist in the item and scale construction of the questionnaire by using the thoughts, opinions and processes discussed by the respondents. Section 3.8.3 focuses on the quantitative method of the mixed method design and phase 3 of the research; the development, distribution and analysis of the survey questionnaire.

3.8.3 Phase 3 - Survey Questionnaires

The objective of phase 3 was to develop a rigorous questionnaire using the themes identified in phase 2 that would obtain data from a wide audience of experts in the AML arena. Statistical analysis of the respondent's data could then be applied to answer the research question. The focus group interview data therefore had two features: the data determined the themes for questionnaire development and; through the discussions provided the sources of items for each question (Discussed in section 3.8.3.1). The features presented in those items and the relationships between them would be determined using the reduction techniques in factor analysis (Discussed at section 3.8.3.3).

Statistical analysis can be used to describe a significant relationship between one or more variables and reduce those to the most significant and relevant factors (Salkind, 2008). The questionnaire is designed to link the themes identified from analysis of the focus group data and the research question, to identify the factors that influence Anti-Money Laundering (AML) policy implementation in the UK. Quantitative methods focus on using specific definitions and carefully

operationalising what particular themes and items mean (Salkind, 2008). Using the quantitative method in this research provided direction that would lead to the reliability and validity of results from questionnaire development and statistical analysis. Table 3.18 describes the process of development of the questionnaire that was used and is further discussed in section 3.8.3.1.

Table 3.18 Process applied to Questionnaire Development

Themes	Themes were validated through analysis of focus group interview text
Questionnaires	Viewed from prior academic study
Questions	Questions developed through analysis of focus group interview text
Statistical analysis technique	Factor analysis through SPSS
Statements	Statements developed with the consideration and inclusion of above four processes
Questionnaire	First draft applied to pilot
Questionnaire pilot	14 Participants involved
Adopted Questionnaire	Completed and accessed through a link on Survey Monkey

3.8.3.1 Questionnaire design

The development of the survey questionnaire followed the guidance of Dillman (2000, 2009) who sets out a series of considerations for the design and format of a questionnaire survey.

1. What is the specific goal or purpose of the survey?

2. What are the topics in the survey...primary and secondary topics?

3. What kind of information do you want from the participants…define the concepts?

4. Determine the content of the survey. What is the scope of

the study? How does content relate to the topics?

5. Consider question wording and the order they appear.

6. Determine survey length and format, considering time to complete the survey and responsiveness of participants to design.

7. Consider response categories, multiple choice? Likert scale? How should they be grouped together?

8. Make response categories consistent. For example, how many points to include on Likert scale? Keep layout and amount of these options consistent.

9. Consider question wording to avoid sensitivity or bias. Build trust with respondents through the questions.

10. Minimise apprehension – support respondents through completion of the survey by encouragement and confidence in anonymity and confidentiality of the survey (Dillman, 2000).

The questionnaire survey was a self-administered questionnaire which could be accessed through survey monkey[43]. Using this method would provide a quick and easy access for participants and practical collection methods for the researcher. Sampling choice is discussed at section 3.8.3.5. A sample size of 400 responses from the four groups was the target to provide a suitable number of cases for factor analysis (Morgan, 1998; Tabachnick & Fidell, 2007; Fowler, 2009). It is expected with survey questionnaires that the response rate is generally low. Taking into account missing values due to incomplete questionnaires the number of responses or N value would decrease. Allowing for the above in this case did return 272 responses. The alternative to sampling adjustments is to build knowledge through studies that provide results, indicative of a similar population. A detailed discussion of small sample size is also provided in section 4.4.1.

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[43] Surveys can be accessed at www.surveymonkey.com

3.8.3.2 Data analysis considerations

The appropriate data analysis technique for analysing the questionnaire data was considered before the complete list of statements was developed. Hair, Black, Babin and Anderson (2010) provide an extensive classification of the various multivariate methods available. Their classification is based on three judgements which they suggest the researcher must make about the research, the research objective and nature of the data being examined. The answers to the three questions will determine the appropriate techniques to use.

1. Can the variables be divided between dependent and independent classifications based on some theory?

2. If so, how many variables are treated as dependent in a single analysis?

3. How are the variables, both dependent and independent, measured?

(Hair, Black, Babin and Anderson, 2010)

A dependence technique is defined as:

> *"one in which a variable or set of variables is identified as the dependent variable to be predicted or explained by other variables known as independent variables"*

(Hair, Black, Babin and Anderson, 2010:13).

An interdependence technique is:

> *"one in which no single variable or group of variables is defined as being independent or dependent"*

(Hair et al, 2010:14).

In this research there is no dependent variable to be predicted or explained, rather all the variables in the set are analysed simultaneously to identify an underlying structure to the set of variables. It should be noted that the term 'variable' and 'item' are interchangeable in the context of this research. To identify structure the technique best suited to this research was factor analysis. The decision to use factor analysis centred on the above justifications and the following criteria: aims and objectives of the research and the results the analysis would bring to the research. (Pole and Lampard, 2002). Factor analysis is discussed at section 3.8.3.7. A final consideration was the transfer of the questionnaire data from survey monkey to suitable analysis software. Surveys that use survey monkey and Likert scaling measurement allow exporting of the data to (SPSS) for direct analysis (Pole and Lampard, 2002; Fowler, 2009).

The questionnaire was split into sections that represented each theme area which had previously been identified from literature and confirmed through focus group interviews. The themes in each section are therefore a combination of corroboration of the literature and focus group analysis. Appendix 3.5 provides a copy of the questionnaire. Table 3.7 at section 3.8.1 previously provided examples of how themes were drawn from literature and provided the section headings in the questionnaire.

Each section of the questionnaire was designed using statements as opposed to specific questions. The participants were then asked to agree or disagree with the statements provided for each section. Table 3.20 further illustrates each question and the scaling used. The process follows Trochim (2009) question design considerations, which are summarised as:

- Determining the question content, scope and purpose.

- Choosing the correct response format for collecting information from the respondent.
- Wording the question to get responses related to the issue of interest.

Data for developing statements was provided from three areas:

1. Previous academic questionnaires.

2. Focus group interview data.

3. Questions developed by the author from focus group interviews.

The process adopted was to read through the questionnaires for questions that related to the theme areas. The next stage was to merge those questions with the previous set of developed questions and related comments from focus group interviews. The objective was to develop a statement that would get a response linked to the theme area. As discussed in Chapter 2 questionnaires used in previous research relating to money laundering measurement were sought from academics involved in their own research in the area of AML (Fowler, 2009). The focus of the statement development was to generate items that describe specific attitudes within the AML process and linked to the themes already identified. Table 3.19 provides an example of a question from section 3 of the final questionnaire survey. This question is developed from viewing two independent questions from separate academic questionnaires related to AML policy (provided). A related comment from one of the sources in the focus group interviews is also provided. The final question developed for the questionnaire relates to the above three occurrences.

Table 3.19: Developing Statements for Survey Questionnaire

Questionnaires	Question on AML Policy
Academic questionnaire 1	*"There are several reasons for banks to invest in compliance. What is, according to you, the most important goal of compliance!?*
Academic Questionnaire 2	*"How compliant is your country to FATF Recommendations 1-20"?*
Focus Group Interview Source for section 3 question Survey	*"And the likes of the FSA who are well financed can regulate with fear I suppose, were the banks are taking the cost of the resources out of the profits."*
Final Questionnaire Question 9r - Section 3	*"Please indicate the extent to which you agree or disagree with the following statement: AML compliance costs are reasonable given the overriding importance of integrity of the financial system".*

Using statements in the questionnaire allowed the use of substantially more links to the themes than individual questions and would contribute more to the research objective as the data would be specific to the themes. By using specific questions the respondent would be restricted to answering only the questions presented. Having too many questions would have increased the size of the questionnaire and the length of time to complete it. In turn this would have reduced the response rate as respondents would not be inclined to complete a lengthy questionnaire (Fowler, 2009).

In addition using closed questions is usually a more satisfactory way of creating data as opposed to open questions (Fowler, 2009). The importance of analysis and how the questions would be measured was the next consideration:

"*Designing a question for a survey instrument is designing a measure, not a conversational enquiry….an answer given to a survey question is of no intrinsic interest. The answer is valuable to the extent that it can be shown to have a predictable relationship to facts or subjective states that are of interest*"

(Fowler, 2009:87).

The self-administered questionnaire was measured using a five point Likert scale from strongly agree to strongly disagree with each question labeled to indicate the choices available. Table 3.20 provides an example of question 7 included in the survey questionnaire to visually demonstrate the format, measurement range and design of the questions:

Table 3.20: Example of the format of questions in the Survey Questionnaire.

Please indicate the extent to which you agree or disagree with the following statements.					
	Strongly agree				Strongly disagree
Criminals rationally choose to commit an offence without considering the risks.	0	0	0	0	0
Criminals are more aware now of AML policy than when it was introduced in 2003.	0	0	0	0	0
Criminals do not consider AML policy before deciding to commit an offence.	0	0	0	0	0
Money laundering controls are a key component in winning the war against organised crime.	0	0	0	0	0

This method was more favorable than other methods available such as semantic differential which measures polar opposites of a given situation (Pole and Lampard, 2002). Using Likert scales as a measurement method in research as summed by Bertram (2002) has advantages such as being simple to construct; have reliable results and are easy for participants to read and complete. The disadvantages include; participants avoiding extreme response items, or agreeing statements as they are presented in order to please the researcher, or to look more socially favorably. The main component however of using questionnaires relate to demonstrating validity and ensuring the questionnaire measures what it sets out to measure (Bertram, Pole and Lampard, 2002; Fowler, 2009).

The questionnaire has 13 questions which consist of measurement in nominal, ordinal and interval scales (Salkind, 2008). Question 13 completes the survey questionnaire by providing an open ended question asking respondents to provide comments as to what they would change in the AML system. The method of analysis for this question uses a simple informal method of listing each comment and comparing them with the results of phase 4 component verification. Those discussions will be provided in the Analysis Section 4.4.1 of Chapter 4.

3.8.3.3 Pilot study

The object of the pilot study was to purposefully test the various aspects of the questionnaire to ensure the format, length and instructions relating to the research were clear to the recipients (Saunders, 2009). A further object of the pilot study was to *'time'* the completion of the questionnaire so that clear instructions to future recipients would be available. The first draft of the

questionnaire was further discussed with a quantitative expert within Northumbria University. For validation of the questionnaire the pilot study took the following steps:

Step 1   A member of each of the five groups of expert organisations who participated in the focus groups was sent an email with a request to participate in the pilot. Two additional experts not part of the focus groups were also contacted. Seven Doctoral students from Northumbria University were also asked to participate in the pilot.

Step 2 Instructions were provided to all participants on how to access the questionnaire from an email *'link'* to survey monkey. A number of participants who lived locally received paper copies of the questionnaire.

Step 3   The instructions for participants asked them to view the design and format of the questionnaire and comment on any changes that may apply. A number of participants were asked to complete the questionnaire and time that process. All of the participants were asked to comment on their understanding of the statements that applied to each question (Cresswell, 2003; Saunders, 2009).

Purposive sampling was used to identify the individuals to participate in the pilot of the questionnaire. The sample is not representative of the population but contain the particular characteristics necessary for pilot of the questionnaire. Individuals from the focus group interviews were chosen because of their knowledge of the subject and because they had already participated in the research and therefore had knowledge of the focus of the research. Two

participants were chosen because of their independence of the research. One of them had knowledge of the subject and the other limited knowledge of the subject. Seven doctoral students who used questionnaires in their own research would apply their knowledge to test the format and proof read the questions contained in the questionnaire. The pilot of the questionnaire was carried out over a period of two weeks. There was a 50% return on the pilot out of the 14 participants. Following return of the feedback, corrections were made to the questionnaire in light of those comments. A full list of comments is provided at Appendix 3.6; however the main comments are as follows:

a) Changing the abbreviation AML to its full title.

b) Order of 5 point Likert scale not shown.

c) Spelling mistakes.

d) Good structure.

e) Questions clear.

f) Put a "thank you" note at the end of the questionnaire.

g) Timing of questionnaire

The pilot of the questionnaire was a valid process to validate the survey instrument (Cresswell, 2003; Fowler, 2009; Saunders, 2009). Re-drafting the questionnaire using the feedback from the respondents provided a questionnaire that was reliable and effective and that would fulfill the objective of the research.

3.8.3.4 Sampling choice and administration of questionnaires

Non-probability sampling (purposive sampling) was suitable for this research. Other methods included Probability sampling (random sampling), for more on

these methods see Pole (2002), Cresswell (2007). Purposive sampling provided the use of a sample not necessarily representative of the population, but best placed to contribute to the research. The population for this research and included for the survey was representatives of four group's: law enforcement, accountants, prosecutors and money laundering reporting officers. There was no control over who, in those groups, would complete the survey. This method ruled out the possibility that the end results were biased by the way in which the sample was chosen. Table 3.18 describes the non-probability sampling plan using purposive sampling technique.

Table 3.21: Sampling Plan

Sampling Method	Non-probability sampling Purposive sampling
Sampling Groups	Law Enforcement Accountants Prosecutors MLRO's
Location **Techniques**	United Kingdom Survey Monkey Email link
Access	Working groups Associations Training Academy Financial Institutions
Responses	272 Responses

The surveys were sent to institutions and working groups within the designated groups. Experts with working knowledge of the AML process within those groups were the target group for the survey. Many emails were sent in order to get the

number of responses necessary for analysis. Some duplication was necessary as the author had no knowledge of who had completed the survey and some respondents will have received multiple requests. Although the author was a member of a number of working groups with extensive membership, he had no influence or knowledge of whom within those groups would complete the survey.

The questionnaire was accessible through survey monkey and accessed by respondents via email link. The responses were collated over a two month period prior to exporting on to SPSS for analysis. Exportation could have been carried out periodically as the results arrived but the decision was to wait until all responses were collated and to export all those responses in bulk to SPSS.

An introduction to the research accompanies the questionnaire on survey monkey and outlines the purpose of the research, including the anonymity and confidentiality aspects of the research (Bryman, 2012). Electronic surveys are increasingly common and used extensively by academics and market researchers (Saunders et al, 2009) and apply the same ethical standards as paper based surveys. A final response of 272 surveys had been submitted, which accounted for a 53% response rate. Section 3.8.3.5 will explain the method of analysis using SPSS. The results of the analysis will be provided in Chapter 4.

3.8.3.5 Analytical strategy for the questionnaire

The objective of the questionnaire survey was to seek responses to statement items that were built around the theme concepts identified from the qualitative phase of the research. The data has been analysed using SPSS Version 19.0 for windows, a statistical package for the social sciences. Typically descriptive and

inferential statistics as a statistical analysis method are applied to questionnaire or survey data (Saunders, Lewis and Thornhill, 2009). These include correlation analysis and other regression analysis techniques (Tabachnick and Fidell, 2013).

A range of statistical analysis techniques in SPSS were used including; descriptive statistics and frequencies to summarise and describe the data trends using the means and standard deviation, correlation matrix was used to describe the relationship and strength between the variables. The variables examined can be positively related, negatively related or not related (Hair, 2010). Thereafter factor analysis using principal component analysis and varimax rotation was applied.

As the research would produce a large data set of different variables and questions a statistical technique that would reduce that set into a more manageable state to understand it was required. Factor analysis provided that technique. The resulting components became composite of the specific items which could be interpreted and explained (the terms factors and components are interchangeable but to avoid confusion will continue using the term factor). The relevant factors in this research are a facet of the broader evaluative dimensions. The Factor scores were saved to test for differences in the groups using (ANOVA). All statistical tests were applied using a significance level of five percent $P < 0.05$.

Prior to the utilisation of factor analysis techniques a number of assumptions should be met. The first relates to the correct data and that the data is interval level and normally distributed. The second relates to specification error and the

inclusion of the correct variables in the model. The third relates to sufficient sample size. As the first two assumptions have been met in the conceptual stages of the research, sample size will be discussed next in section 3.8.3.6. The flow chart showing the five steps for factor analysis is provided at Figure 3.8. This section continues with a discussion of each technique used in this study.

Figure 3.8: Five step Plan for Factor Analysis

Step 1 - Is the data suitable for factor analysis?

Step 2 – How will the factors be extracted?

Step 3 – What criteria will assist in determining factor rotation

Step 4 – Selection of rotational method

Step 5 – Interpretation and labelling

Source: (Williams, 2010:4)

3.8.3.6 Sample size

Determining if the data is suitable for factor analysis refers to the size of the sample and the strength of the relationship among the variables. (MacCallum and Wideman, 1999). The number of respondents to the questionnaire was 272, due to missing data 164 subjects were suitable for factor analysis. Missing data occurred when respondents failed or refused to answer one or more questions in the survey. In this case many of the cases removed were because respondents had completed only half the questionnaire. Data screening and missing values are fully discussed in Chapter 4 section 4.4.2 however at this stage it is important to justify the small sample ratio used in this research.

There are many diverse opinions on the issue of sample size. As already suggested Tabachnick (2007) rule of thumb guides the sample size to 300 cases needed for factor analysis. The sample size as Hair et al (1995) suggests should be 100 or larger. The sample size in this study was: n = 164. A further suggestion is to have at least 5 times as many observations as there are variables to be analysed (Bryant and Yarnold, 1995; Hair et al, 1995). However, (Comrey, 1973; Sapnas and Zeller, 2002; Zhao, 2008; Winter, Dodou and Wieringa, 2009) indicate that it is possible to conduct factor analysis with a smaller sample size. There are two categories of recommendations concerning minimum sample size in factor analysis. First category: that the absolute number of cases (n) is important, second category that the subject-to-variable ratio (p) is also important (Zhao, 2008).

For small sample size, Sapnas and Zellar (2002) suggest a sample as small as 50 is sufficient for factor analysis; Gorsuch (1983) recommends n should be at least 100, Kline (1979) supported this recommendation. Such rules of thumb can sometimes be misleading and may not take into account some of the complex dynamics in factor analysis (MacCallum, Widaman, Zhang and Hong, 1999).

In terms of participants required for each variable (subject to variable ratios) opinions also differ as Zhao (2009) has suggested:

- A ratio of 20:1. Hair, Anderson, Tatham, and Black (1995), in Hogarty, Hines, Kromrey, Ferron, & Mumford, (2005)

- Rule of 10. There should be at least 10 cases for each item in the instrument being used. (David Garson, 2008; Everitt, 1975; Everitt, 1975, Nunnally, 1978, p. 276, in Arrindell & van der Ende, 1985, p. 166; Kunce, Cook, & Miller, 1975, Marascuilor & Levin, 1983, in Velicer & Fava, 1998, p. 232)

- Rule of 5. The subjects-to-variables ratio should be no lower than 5 (Bryant and Yarnold, 1995, in David Garson, 2008; Gorsuch, 1983, in MacCallum, Widaman, Zhang & Hong, 1999; Everitt, 1975, in Arrindell & van der Ende, 1985; Gorsuch, 1974, in Arrindell & van der Ende, 1985, p. 166)

- A ratio of 3(:1) to 6(:1) of STV is acceptable if the lower limit of variables-to-factors ratio is 3 to 6. But, the absolute minimum sample size should not be less than 250.(Cattell, 1978, p. 508, in Arrindell & van der Ende, 1985, p. 166)

- Ratio of 2. "[T]here should be at least twice as many subjects as variables in factor-analytic investigations. This means that in any large study on this account alone, one should have to use more than the minimum 100 subjects" (Kline, 1979, p. 40).

Source: ZHAO, N. 2009. Minimum sample size in factor analysis [Online]. [Accessed 11/03 2014].

Studies undertaken to test these guides suggest there was no minimum level of *N* or *N:p* ratio necessary to achieve good factor recovery across these conditions (Hogarty et al, 2005). The justification for factor analysis method of analysis with small sample size and subject to variable ratio is justified. In this research the ratio 3:1 applies. See Arrindell, Van Der Ende, Cattell (1978), Hair, Anderson, Tatham and Black (1995), Garson (2008).

3.8.3.7 Factor analysis

Factor analysis is used in this study to analyse interrelationships among a large number of variables with regard to their underlying dimensions (factors) (Hair et al, 2010). The objective for using factor analysis in this research is to find a way to reduce the data contained in a number of original variables to a smaller set of variates (factors). Factor analysis will search for inter-correlations of the variables

contained in the questionnaire (Salkind, 2008).

Factor analysis is used to better understand the relationships between respondents' views on specific areas of AML environment; legislation, criminality, SAR process, spend, influence and other activities. Analysis will combine these variables into a smaller number of components or factors by analysing the responses to the questionnaire. *"By providing an empirical estimate of the structure of the variables considered, factor analysis becomes an objective basis for creating summated scales"* (Hair et al, 2010). The components produced, will support the objective of this research to identify the factors that influence the effectiveness of AML policy implementation in the UK.

3.8.3.8 Data cleaning and data screening

Data cleaning and data screening refers to the examination of all the input of data on SPSS to ensure the entries are correct and checking for missing values in the complete data set, prior to any analysis taking place (Field, 2009; Hair, 2010). The data in this research was transferred from another source (survey monkey) therefore the data was examined for errors using the frequency tool in the descriptive function in SPSS. The frequency table produced provides the range for each item and frequencies for each variable. Examining the labels and measures for each variable and referring back to the variable view in the data set will identify errors and provide reassurance that the data is entered correctly.

Missing values were examined using the descriptive statistics function on SPSS. A number of charts and tables produced from this function provided an indication of the missing values and missing cases. In addition using the exclude list wise

and exclude pairwise tools can identify which cases and which values are missing. A decision can be made if the cases should be removed. Bar charts and tables are also used to illustrate the responses to each question. The descriptive table and frequencies table for each variable produced from SPSS provides an excellent summary of the data sample and measures (provided at Appendix 3.7 and 3.8 respectively). These include N value, mean, standard deviation, minimum maximum range and the distribution of data illustrated by Skewness and Kurtosis.

It is difficult to understand why some respondents only completed parts of the questionnaire, possibly an error on their part or time constraints or some other reason. However in order to produce reliable and valid results, data screening was important as missing cases and missing values can distort the results of the analysis (Field, 2009; Hair, 2010). As the categorical variables rank order scaling questions are being analysed separately they will not be included in the factor analysis and will not form part of the correlation analysis. The types of statistical tests carried out in response to the survey questions depend on the type of data produced. There are three types of questions included in the questionnaire: demographic, rating scale and rank order scaling. The tests appropriate for the analysis of each question is summarised in Table 3.22.

Table 3.22: Overview of statistical tests used to analyse survey data

Question number	Question(s)	Format of response category	Data analysis technique
Section 1 Question 1	Can you indicate from which group of respondents you belong?	5 choices plus (other)	Pearson chi-squared
Section 1 Question 2	Please indicate your gender?	2 choices male-female	Pearson chi-squared
Section 1 Question 3	Please indicate your age range from the following?	Choice of range between 18-61+	Pearson chi-squared
Section 1 Question 4	Thinking from your own perspective, please indicate the extent that you agree or disagree with the following statement?	Rating scale question Choice of 5 responses Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Section 2 Question 5	Please indicate the importance you attach to each of the following as a method of laundering money?	Rating scale question Choice of 5 responses Five items on a Likert scale (very important, important, neither important or unimportant, unimportant, very unimportant)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Section 2 Question 6	Please indicate your views on a scale of 1-8 which of the following crimes you consider provide the most funds for laundering money?	Rank order scaling Choice from 1-8	Descriptive and frequency tests on SPSS
Section 2 Question 7	Please indicate the extent that you agree or disagree with the following statement?	Rating scale question Choice of 5 responses Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Section 3 Question 8	Please indicate your views on a scale of 1-8 the extent that the following professions are likely to be used for money laundering?	Rank order scaling Choice from 1-8	Descriptive and frequency tests on SPSS
Section 3 Question 9	Please indicate the extent that you agree or disagree	Rating scale question Choice of 5 responses	Factor analysis Correlation

(Continued)	(Continued) with the following statement?	(Continued) Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	(Continued) Principal component analysis One way ANOVA Differences between groups
Section 4 Question 10	Please indicate the extent that you agree or disagree with the following statement?	Rating scale question Choice of 5 responses Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Section 5 Question 11	Please indicate the extent that you agree or disagree with the following statement?	Rating scale question Choice of 5 responses Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Section 6 Question 12	Please indicate the extent that you agree or disagree with the following statement?	Rating scale question Choice of 5 responses Five items on a Likert scale (Strongly agree, agree, neither agree or disagree, disagree, strongly disagree)	Factor analysis Correlation Principal component analysis One way ANOVA Differences between groups
Question 13	Please provide your comments as to what you would change in the AML system?	Open ended question	Qualitative method

In addition, whilst performing factor analysis a number of tests are considered to ensure the factors are determined correctly: Communality of the variables, number of factors/number of variables, size of loading and model fit are all applied during the factor analysis process, thus ensuring a reliable and validated method. Firstly to determine the strengths of the variable relationships the correlation analysis is applied.

3.8.3.9 Correlation matrix

The correlation matrix presented under the descriptive feature in SPSS presents the intercorrelations between the variables. The dimensionality of this matrix can be reduced by visually scanning for variables that correlate highly with a group of other variables, but also for others that do not correlate with other groups. The removal of the variables that do not correlate from the matrix can reduce down to the underlying group of variables or factors (correlation matrix of all the variables is provided at Appendix 3.9).

Two further tests using SPSS can test the factorability of the data. Bartlett's test of sphericity recommends significance at ($p<0.05$) and the Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy should range between 0-1 with 0.7 being the cut off value representing factorability. Data that falls below these measures should be excluded (Wilkins and Huisman, 2011). Kaisers criterion or eigenvalue rule suggest that only factors with an eigenvalue of 1.0 or more can be retained for further analysis. The eigenvalue of a factor extracted represents the total variance explained by that factor. Criticism of this technique holds that relied on its own, too many factors can be retained. However in combination with Catell's scree test this technique can be refined. SPSS using Catell's scree test can plot the eigenvalues on a chart in the shape of a curve. Once the curve changes direction and becomes horizontal Catell suggests retaining those factors above the elbow or break in the curve. By applying this method can reinforce Keiser's value but can disregard those factors that are irrelevant or explain less of the variance. (Chapter 4 section 4.4.3 will provide details of the actual measures within this analysis).

3.8.3.10 Principal component analysis

Out of a variety of methods the principal component analysis method within factor analysis is the most commonly used method used to extract or identify the underlying factors. These are the smallest number of factors best used to represent the inter-relationships among the variables. Determining which factors best describes the underlying relationship can be approached from two positions, exploratory or confirmatory. In this case it is best approached from an exploratory position. Exploratory factor analysis is used in this research and provides the solution by allowing experimentation of the data until a satisfactory structure is found. There is no prior theory as in confirmatory analysis and factor loadings are used to instruct the factor structure of the data, confirmatory analysis is used to test the extent a researcher's *a-priori theoretical* pattern of factor loadings or pre specified constructs represent the actual data. (Hair et al 2010). In this research in order to reach a satisfactory number of factors *"fit for purpose"* a number of items that were inconsistent were removed and the data re-run until a satisfactory structure was achieved.

3.8.3.11 Orthogonal Varimax rotation method

PCA (as in this research) uses orthogonal varimax rotation to interpret the factors. If left un-rotated the factors would unlikely achieve an adequate interpretation (Hair, 2010). Rotating using factor loadings will make the variables/items representative of the factor and therefore simplifies the factor structure for interpretation and labelling. Orthogonal rotation using varimax provides a simpler separation of the factors. Simple structure means a condition in which variables load at near 1 and which indicate significance; similarly variables that load near 0 are not significant. Simple structure therefore simplifies the task of interpreting

the factors. In contrast to orthogonal rotation, oblique rotation which can also be used allows correlated factors instead of maintaining independence between rotated factors.

The factor loadings in a rotation method are guided by sample size. Factor loadings greater than $\pm$ 0.30 are considered to meet the minimal level of interpretation of structure and require a sample size of 350: Loadings greater than $\pm$ 0.40 are considered more significant and require a sample size of 200. Loading $\pm$ 0.50 or greater are considered practically significant (Hair et al, 2010). A loading >0.40 was the requirement in this research as the sample size was n=164. Statistically 0.40 follows the guidelines provided by Hair et al (2010) for significant factor loadings based on sample size and ensures practical significance as 0.40 translates to 20% of variance accounted for by the factor.

As discussed above there are a number of techniques within SPSS that can assist in the decision as to the number of factors to retain. These are Kaiser's criterion and Catell's Scree test. A third test for reliability and validity of factors is the Chronbach Alpha test. Chronbach's alpha reliability test is a measure of internal consistency that will show how closely related the set of items are in each factor group. The output is assessed by following the rule of George and Mallery (2003) which indicates acceptable values. The values ranged from those greater than 0.9 (Excellent), greater than 0.8 (Good), greater than 0.7 (Acceptable), greater than 0.6 (Questionable), greater than 0.5 (Poor), and less than 0.5 (Unacceptable). Chronbach alpha reliability coefficient normally ranges between 0 and 1. The closer the coefficient was to 1.0, the better the consistency of the items (variables) in the scale. Chronbach alpha coefficient increases either as the

number of items/variables increase, or as the average inter-item correlations increase. The analysis and results of the above methods are produced at Chapter 4 section 4.4.1.

3.8.3.12 Triangulation of methods

Figure 3.9: Triangulation of methods

Phase 1 Theme Identification
Phase 2 Focus group interviews

Phase 3 Questionnaire

"What are the factors that influence the effectiveness of AML policy implementation"

Phase 4 Component verification
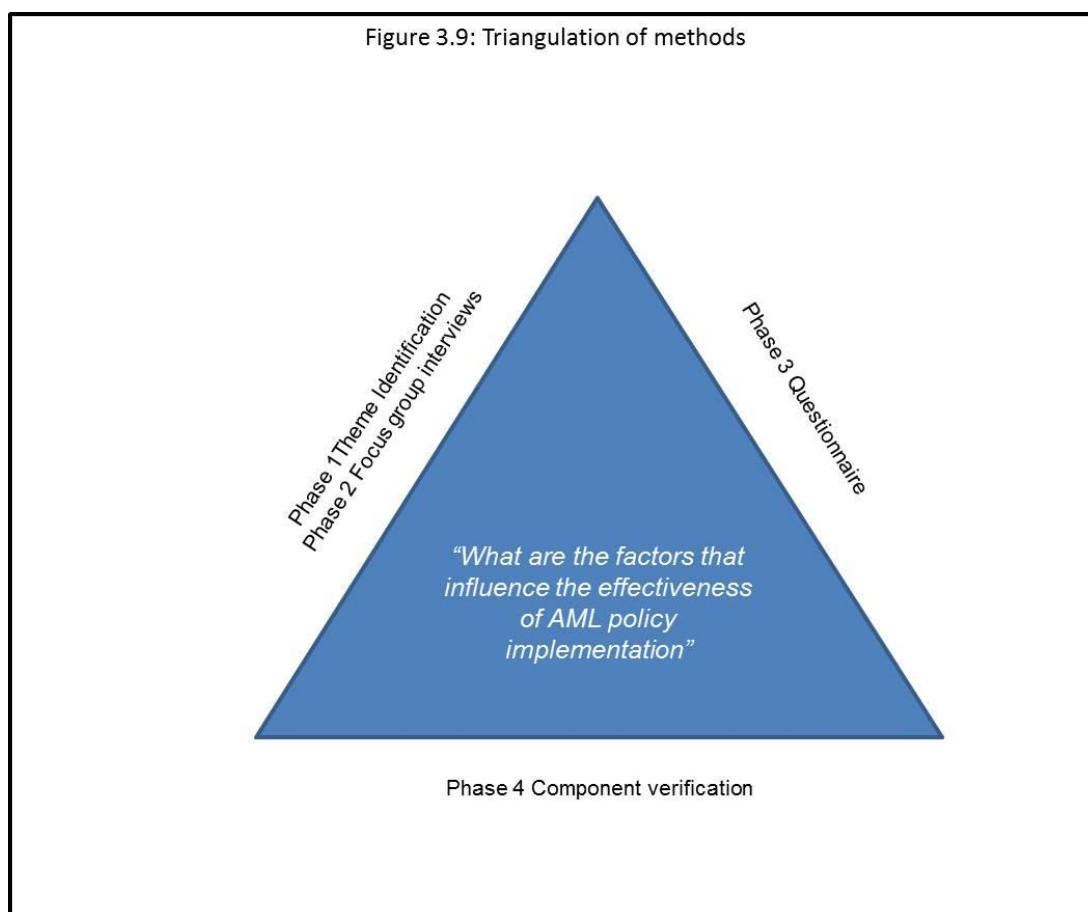
At this point in the thesis it is worthwhile considering the direction of the research and how phases 1 theme identification; phase 2 focus group interviews and phase 3 questionnaires have developed the research. The sequential design allows data to flow from one phase to the next to inform and enrich each phase in the research. Consideration is necessary at the final phase 4 component verification, to apply a method of validation that would result in greater confidence in the findings of the statistical analysis. As figure 3.9 above suggests qualitative

methods of investigation in phase 1 and phase 2 have been combined with quantitative methods in phase 3. Morgan (1997) argues that the combined use of quantitative and qualitative methods will contribute *"something unique to the researchers understanding of the phenomenon under study…known as triangulation"* (Liamputtong, 2011:93). The triangulation of methods will be complete by validating the results using a qualitative method.

Triangulation is often used to cross-check the results from both qualitative and quantitative approaches (Bryman and Bell, 2007). In addition to allowing the cross checking of data, using both methods in conjunction with each other allows access to different levels of reality. Multiple perspectives become available and a broader level of interpretation can add value to the validation process whether the results are corroborated or not. The objective of the final phase of this research design is to use the triangulation of methods to add validity to the results and robustness to the methodological approach (Bryman and Bell, 2007).

Focus groups can be deployed as a follow up to in-depth interviews and individual interviews can be deployed as a follow up to questionnaire surveys (Bryman and Bell, 2007). In this research rather than using a statistical method to confirm the results of the factor analysis, more contextual data would be obtained from triangulation using a qualitative method. A short survey instrument will be used in the final phase of this research. Triangulation of methods therefore will provide responses from individuals who are more closely aligned to the subject; provide corroboration of the results and provide data that will develop understanding of a complex AML concept (Liamputtong, 2011). Section 3.8.4 describes the use of

individuals from the original focus groups as the follow up method to confirmation of the quantitative results.

3.8.4 Phase 4 Component verification

Phase 4 component verification is the concluding process used to verify and interpret the results of the statistical analysis. As Stewart suggests: *"Focus groups can also be employed as a confirmatory method"* (Stewart et al, 2009: 590).

Justification for this method can be found in the work of Makhoul and Nakhash (2007) that used focus groups to verify the results of quantitative community indicators. They suggested the qualitative contribution was more sensitive to the contextual meaning than the quantitative approaches; however both approaches contributed to the completeness of the phenomenon of interest and provided additional pieces of the puzzle. In their research they contend that if they did not go back to the original groups to verify the collected data, their intervention planning might have missed important issues which required attention (Liamputtong, 2011). Using all or some of the original focus group participants in the follow up method is widely acknowledged. Patton (2002), Cho and Trant (2006) Lambert and Loiselle (2008) Padgett (2008) and Liamputtong (2011).

Using a sample of the original focus group participants in this research will contribute something unique to the understanding of AML process and help facilitate the interpretation. Each participant has expert knowledge of the AML environment; presenting the results to them and asking how the results make

sense to them will illicit results that will have more meaning and more depth than from a statistical confirmatory method. (Morgan, 1988; Liamputtong, 2011).

3.8.4.1 Survey instrument, pilot test and feedback

The survey instrument was designed by considering a number of important factors Dillman 2010):

- A short survey instrument was required with open ended questions to allow detailed responses

- The main objective being to verify the results through comments in response to the above three questions

- The question "*do you agree with the result obtained through factor analysis*" may have provided a yes or no answer but not have given the opportunity for extended responses

- The three questions should provide participants the opportunity to relay responses that relate to both the research question and verification of the factor analysis results

In light of the above considerations three suitable questions were designed that would gather the appropriate responses. Once the survey instrument was completed it was piloted with one individual with an AML background but unconnected to the original focus groups. The completed survey was returned within a couple of days and the first note acknowledged that the factor results were significant; in his opinion, and therefore validated. This response acknowledged that the questions without directly asking if the factors were valid produced the correct response. Further responses relating to all three questions were also supplied. No issues were found that required a review of the introductory letter or of the three questions.

Following the pilot feedback, phase 4 verification could proceed. The results of

the factor analysis were provided to five participants, one from each of the five original focus groups of Law Enforcement, Accountants, Prosecutors, MLRO'S and Ex-Offenders. Each participant was contacted by email with detailed instructions (Copy of the email is provided at Appendix 3.10). Each participant was asked to comment on the results of the factor analysis by viewing the labelled factors and to answer the following questions relating to those factors in their responses. Questions used for the verification process are summarised in Table 3.23 below.

Table 3.23 Questions to Participants

Question 1 *"In light of the statements underlying each factor how do you see them informing policy in the AML arena"?* **Question 2** *"Do the statements suggest that current approaches are effective?* **Question 3** *"How do you see the interpretation of these results in light of the research question"?*

The responses in some respects were brief and purely acknowledged their agreement of the factor results and others provided a more detailed response. Following up interviews with the original focus group participants is a recognised method. (Morgan, 1998) *"The researcher can generate initial data and then go on to follow up and obtain more data were necessary to answer the research question"* (Liamputtong, 2011:94). The results of the verification process are provided in the Analysis Chapter 4 section 4.5.

3.8.4.2 Examining group differences

Examining group differences was not an objective for this study. However, in light of the use of groups in both the qualitative and quantitative phases and potential significant differences between and within the groups, a further analysis was necessary. This section describes the method of grouping the respondents from the questionnaire and the analysis method used.

Question 1 of the questionnaire asked respondents to indicate which group of experts they belonged: law enforcement, accountants, prosecutors or MLROs. Analysis of Variance (One-way ANOVA) on SPSS provides a method of determining the difference between the responding groups who completed the questionnaire survey. The data necessary for the assessment was already contained within the data file on SPSS from the previous factor analysis. As the number of respondents from group B Prosecutors (4 responses) was low they were amalgamated into a new group (Enforcement) for this analysis.

The resulting P value can be used to test the null hypothesis that data from all groups are drawn from populations with identical means (MacCallum and Wideman, 1999 ; Field, 2007; Tabachnick and Fidell, 2007; Wilkins and Husman, 2011). One–way analysis of variance (ANOVA) tests if the means across a number of groups are equal. Test statistic "F" represents a standardized ratio of variability in the sample means relative to the variability within the groups. The F ratio is computed from the ANOVA table and the P value is computed from the F ratio. The Sig or P value was calculated on group responses to factors 1, Sentencing/Deterrent; Factor 2, Compliance Reporting and Factor 3, Criminal

Knowledge. Any value less than 0.05 is significant and any value greater than 0.05 is not significant.

An ANOVA test show's if there was a significant difference between the groups however the test does not indicate which of the groups differ. In order to separate the groups after the initial ANOVA test a Post-hoc test is carried out using Tukey "honestly significant difference (HSD)" test comparison.

Question 2 and question 3 of the questionnaire sought responses from participants of their age (from an age range 18-61+) and gender. As the data relating to these responses was contained within the data file a test was run to extrapolate the results from these questions. A chi-square test is a simple procedure on SPSS to produce and present these results. The analysis and results of the different groups is provided at Chapter 4 section 4.4.2.

3.9 Chapter conclusion

This chapter outlined the strategy for this research. The strategy took into account the research question, the theoretical concept under study and the epistemological position of the researcher. A number of aims were discussed to provide direction to the research. The strategy took into account the mixed method design and separated the research into 4 manageable phases.

Phase 1 Themes	Provided the development of themes from literature on money laundering measurement as a starting point for the research which included FATF recommendations
Phase 2 Focus Groups	Provided the collection of data through focus group interviews as a validation of existing themes and identification of emergent themes
Phase 3 Questionnaires	Provided the collection of data through survey questionnaire and statistical analysis using factor analysis
Phase 4 Component Verification	Provided the verification of the results of factor analysis using individuals from the original focus groups as the verification group

The qualitative phase of the research identified participants for focus group interviews from law enforcement, accountants, prosecutors, MLRO's and ex-offenders who could provide opinions on Anti-Money Laundering. Meticulous methods were employed to collect, analyse and record data. The confirmation of themes arose from this analysis. The themes are to assist in the development of a survey questionnaire in the quantitative stage of the research. The development of the questionnaire survey was assisted with data from similar areas of research in the AML area. Statements formed the questionnaire items and these were measured using five point Likert scaling. The questionnaire was pilot tested prior

to distribution through survey monkey. The results of the survey were exported to SPSS and analysed using factor analysis techniques.

The results of the statistical analysis were sent to a representative of each of the original focus group participants for their comments. These comments will form part of the conclusions to this research in chapter 5.

Reliability and validity throughout the study was delivered through the steps of the process and the techniques in the analysis of the data in both qualitative and quantitative phases of the research. Chapter 4 will discuss the analysis of each of the 4 phases.

Chapter 4: Data analysis results and discussion of findings

4.1 Introduction

Chapter 4 presents the analysis and results followed by a discussion of the findings of all the data relating to the research question:

"What are the Factors that Influence the Effectiveness of Anti-Money Laundering Policy Implementation in the UK"?

The following aims assisted toward finding the appropriate solution to the question:

1. To identify and draw from literature in the AML arena evidence of themes that relate component activities that could be used as a starting point for this research.

2. To establish a research strategy that would develop the themes identified in phase 1 and follow a logical sequence of activities to answer the research question.

3. To use methods in the gathering and analysis of data that will complement the research strategy that are reliable and valid in respect of the researcher's philosophical position which can be replicated in future research.

4. To ensure the research is compliant with all aspects of the University ethical considerations.

A reminder of the sequential nature of this research relating to the analysis is provided below in Figure 4.1.

Figure 4.1: Illustrates the sequential mixed method design
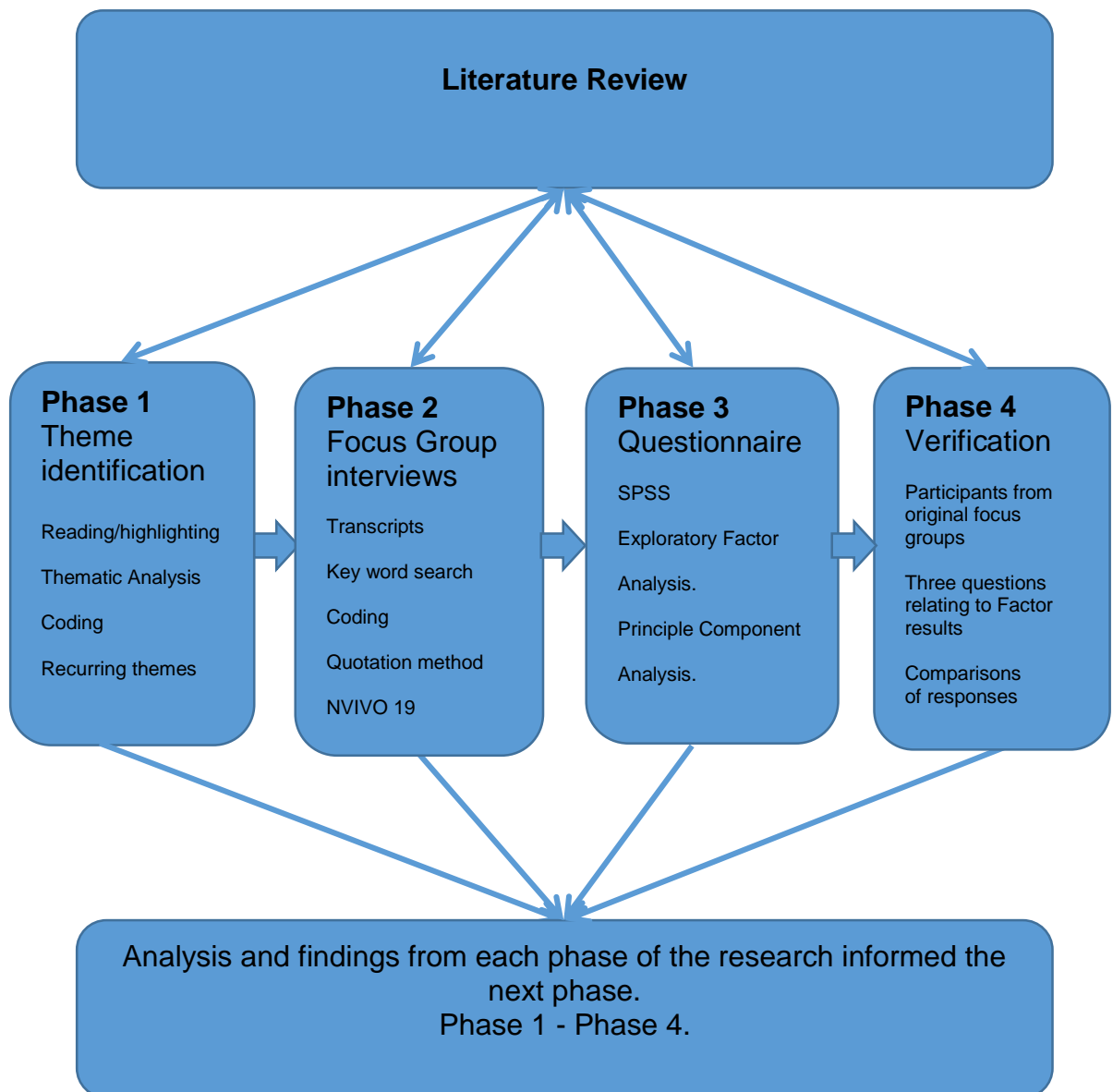
Phase 1 discusses the identification of themes from literature that surrounds FATF recommendations, scale and measurement of money laundering and cost of the effectiveness of AML policy as a starting point for this research. Phase 2 discusses the analysis of the focus group interview transcripts that determine the verification of themes. Phase 3 discusses the analysis of the questionnaire responses which utilise factor analysis to determine significant

components/factors and one way ANOVA (Analysis of Variance) to determine group comparisons. Phase 4 discusses the analysis of the verification of factors using a sample of individuals who participated in the original focus groups. The construction and utilisation of methods in each phase are previously discussed in Chapter 3.

Because of the sequential nature of the methods used and in order to fully present the findings of this research, the analysis of each phase will be presented separately. This will be followed by a concluding section that discusses the findings from the verification group in phase 4. In order to achieve the aims of this research as discussed in Chapter One and Chapter three, it was important to draw relevant themes for inclusion in phase 2 and the sequential design strategy that flows into phase 3 and phase 4. The analysis and findings of Phase 1 are presented in the following sections.

4.2 Phase 1 Identification of Themes from Literature

The objective of phase 1 was to provide a starting point for this research by identifying themes relevant to the activities performed by stakeholders in the anti-money laundering environment. The literature review in Chapter 2 has already suggested that specific literature relating to Anti Money Laundering policy is sparse. However, there is an abundance of literature in three areas from which the themes required for this research could be drawn. The first area relates to recommendations from the Financial Action Task Force (FATF, 1989); an Inter-Governmental Organisation that provided Anti-Money Laundering (AML)

recommendations on a global basis. 49 recommendations[44] were included in the FATF literature; however this research analysis drew six themes deemed appropriate for this research that encompassed the activity discussed in all of the recommendations. Table 4.1 provides the themes drawn from the FATF Recommendations. As can be seen from the description on table 4.1 each of the themes chosen came from recommendations that encompass a number of characteristics within that particular area. Each theme is relevant as 49 countries deemed those areas of AML as significant areas to apply to combat money laundering and terrorist financing.

Table 4.1: Themes drawn from FATF Recommendations

FATF Recommendations	Research Analysis Themes
Recommendation 1,2	Legal Systems
Recommendation 3	Restraint and Confiscation
Recommendations 4-22,33-34	Money Laundering Prevention
Recommendation 23-25	Regulation and Supervision
Recommendation 26-32	Law Enforcement powers
Recommendation 35-40	International Co-operation

The second area relates to research that studied the scale and measurement of money laundering. The inclusion of this concept can be answered by resolving the question "why measure money laundering"? The quantification of money laundering is relevant because it provides a measure of the phenomenon and its impact on the legal economy, it influences risks to financial institutions through their transactions and determines measures to counter money laundering activity

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[44] FATF Recommendations can be found at www.fatf-org

(Biagioli, 2008). Therefore the models used to measure that activity incorporate many methods and techniques that provided key areas for the identification of themes for this study.

The third area relates to the cost of the effectiveness of AML policy. As previously suggested research in this area has used output indicators as a means to measure and evaluate the effectiveness of countermeasures adopted to combat money laundering. The output indicators referred to relate to obligations and controls introduced by AML regulations. As in the above 'scale of money laundering concept' this area also provides key areas for the identification of themes for this study.

Table 3.4 in Chapter 3 provided a description of previous research in the AML environment relevant to this study. Included in the table was a description of the methods used by researchers to obtain data to measure two areas: a) the scale of money laundering and b) the cost of the effectiveness of AML policy. Table 4.2 below provides a similar description however presented in this table is the inclusion of themes identified from both areas of literature for this research. The column marked *'Themes'* in Table 4.2 provides a list of the themes identified from each authors work. Similarities from each author can be seen throughout this column such as crime reports, crime trends SARs and spending activity.

Table 4.2: An extension of Table 3.6 Chapter 3

Author	Research	Themes
Walker J (1999; 1999a; 2005)	"Measurement of money laundering" To identify methods and trends in money laundering in and through Australia since 1995	Crime reports Crime trends Crime types Policy Regulation Organised crime Prevention of ML Bank secrecy Shadow economy
Van Duyne P (2008)	"In search of crime-money management in Serbia"	SAR reports Crime reports Spending activity Policy Regulation
Fleming M. H (2005)	"UK Law Enforcement Agency Use and Management of Suspicious Activity Reports: Towards Determining the Value of the Regime"	Asset recovery Restraint Confiscation SAR reports Crime reports Policy analysis Investigation Criminal spend Criminal behaviour Regulation
Ferwerda J (2008)	"The Economics of Crime and Money laundering, Does Anti-money laundering Policy reduce crime"?	Case studies Document analysis Crime types Policy analysis Crime stats Interviews Victim surveys FATF recommendations AML Policy Regulation
Pietschmann T and Walker J, (2011)	"Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes"	Cash movements Criminal spend Recorded crime Crime stats Policy analysis Drug crime Investments Proceeds of crime

(Continued)	(Continued)	(Continued) Currency demand Shadow economy
Unger B (2007	"The Scale and Impact of Money Laundering" Measuring money flows in Netherlands	Crime reports Crime trends Crime types Policy Regulation Organised crime Prevention of ML Shadow economy

The identification of the themes provided in table 4.2 was developed using the following process. By reviewing the literature of the authors; noting their discussions around methods of measurement; their understanding of AML concepts; the AML activity that was deemed relevant for inclusion in their research and the organisations they had access to for collecting data. The extract provided below from Ferwarder (2008) *"The Economics of Crime and Money laundering, Does Anti-money laundering Policy reduce crime"?* provides a visual illustration of this method and the marking up of the themes identified. The highlighted portions illustrate the original documentation and the importance of 'crime types', victim surveys and 'crime statistics' activities in AML policy effectiveness.

(Ferwarder, 2008:908-909)

Since crime is, by definition, an illegal act, it is likely that every method used to measure the actual amount (or level) of crime is inaccurate. "Data on the extent and variety of criminal activity pertain almost exclusively to crimes in which victims report the offense to authorities" (Levitt and Miles, 2007:458). This limitation also constrains the empirical part of this paper.[5] There are many kinds of crime statistics, but basically they can be divided into two groups: police-recorded and based-on-victim surveys. The first is the amount of crime detected by the police or similar law enforcement agencies. The most reliable sources for this kind of data are the European Sourcebook of Crime and Criminal Justice Statistics and the crime statistics gathered by Interpol and the United Nations. The latter, victim surveys, are statistics that are gathered by interviewing households or individuals trying to detect the victims of crime. The most reliable statistic of this kind is the International Crime Victims Survey (ICVS).

Both kinds of data have their advantages and disadvantages. Police-recorded crime statistics are often readily available, are reliable in terms of the right classification of the crime, and are not biased by the perceptions of individuals. The downside is that these crime statistics are only measuring the amounts of caught crime, which means that crime is always underestimated. However, this will not hurt the empirical research if the rate at which actual crimes are [5]

My conclusion is that for this research, police-recorded crime statistics are the best possible proxy for crime, because of its better availability and because it includes more crimes that are relevant for money laundering,[7] which is in line with most of the studies in this research field (Eide, 2000:366). For this research, the European Sourcebook of Crime and Criminal Justice Statistics is used, since it has comparable data on almost all of the countries in the dataset.[8] The selected countries are all developed countries, with many of them in the same region (Europe).

A discussion of each of the areas of literature used has already been provided in Chapter 3. Merging both sets of data provided powerful acknowledgement of the kind of activity that is important in the AML environment. Section 4.2.1 discusses the emergence of the themes for phase 2 of this research.

4.2.1 Final set of themes

The final set of themes was developed using the following process: FATF recommendations apply to a wide range of AML activity and as such provided the main theme headings. Themes drawn from literature were allocated under one of the main FATF headings. Rather than have too many similar themes a number of the AML processes could be allocated under the one heading. Table 4.3 provides a visual demonstration of the allocation of themes from each location.

Table 4.3: Allocation of Themes

	Legal System Regulation and Supervision	Law Enforcement	Money laundering Prevention	Restraint and Confiscation International Co-operation
FATF Themes	Legal System Regulation and Supervision	Law Enforcement	Money laundering Prevention	Restraint and Confiscation International Co-operation
Literature Themes	Policy Regulation	Crime trends Crime types Crime reports Investigation Criminal behaviour	Prevention SAR reports	Bank secrecy Shadow Economy Proceeds of crime Restraint/Confiscation Cash movement
New Themes	Legislation	Criminality	SAR Process	Spend

By merging the themes drawn from literature to the FATF themes it became evident that some duplication would occur. In addition some of the FATF themes required to be re-labelled to extend the coverage of activity for that theme. For example FATF uses the heading 'restraint and confiscation', restraint and confiscation was also a theme identified from the literature review. As both of these activities were similar to cash movements, proceeds of crime and shadow economy the heading was re-labelled to include all of these activities under the theme heading *"Spend".* Similar circumstances applied to the headings *"Legal system"* and *"Regulation and Supervision"* which has now been changed to *"Legislation". "Law enforcement"* has now been changed to *"Criminality", "Money Laundering Prevention"* has now been changed to *"SAR Process"* and

"International Co-operation" has been removed to be included under the umbrella *"Spend"*. The re-labelling does not change the character of the themes but enhances the theme by giving it a wider scope of activity that will aid the discussions in focus group interviews in phase 2.

The above examples show that a number of themes have been identified throughout the analysis and therefore suitable for phase 2 focus group interviews. Validation of each theme is provided through recurrence in the analysis of relevant literature that concentrates on AML recommendations, money laundering measurement and AML Policy effectiveness. Each theme could then be directed to phase 2 focus group interviews for confirmation. This is discussed in Section 4.3.

4.3 Phase 2 Focus Group interviews and analysis

Focus group interviews were made up of five groups from key stakeholders involved in the AML process. The groups included law enforcement and prosecutor groups from a criminal justice perspective, accountants and MLROs from a regulatory perspective and finally ex-offenders from a social behavioural perspective. For ease of referencing when discussing the results each group has been identified as follows:

Law Enforcement	Group A
Accountants	Group B
Prosecutors	Group C
MLROs	Group D
Ex-Offenders	Group E

The primary objective of the focus group interviews was to validate and extend the themes identified in phase 1 from literature into themes for questionnaire development and subsequent analysis. Morgan (1997) suggests, being confident whether focus groups are appropriate for a research project or not is to ask *"how actively and easily the participants would discuss the topic of interest"* (Liamputtong, 2011:8). Four of the stakeholder groups who participated in the focus group interviews were subject experts within the AML process. The remaining group ex-offenders provided a new dimension to this area of research for data collection. All of the groups were enthusiastic and informative. The themes provided for the focus groups from phase 1 include:

Legislation   Criminality   SAR Process   Spend

After analysis of the focus group data the themes were extended to include: **Influence** and **Other activities.** Section 4.3.1 discusses the process of analysis that identified further themes and results.

Legislation Criminality SAR Process Spend Influence Other Activities

4.3.1 Analysis and results of Focus Groups interviews

Question prompts were used to introduce the themes to the groups. The prompts also provided a suitable reference to conduct the interviews and regulate the flow of discussion. A description of how the focus groups were constructed and conducted was provided in chapter 3. Table 4.4 below provides an example of the question prompts used.

Table 4.4: Example of Question Prompts for Focus Groups.

> Q1. What are your views on sentencing and confiscation as a deterrent?
>
> Q2. What are your views on incentivisation - money making exercise or deterrent?
> Q3. What is your view on hierarchy of crime i.e. organised crime?
>
> Q4. Are there levels of money launderers?
>
> Q5. Are there professional money launderers?

The five focus groups produced approximately 60,000 words of transcript. Analysis of the transcripts followed the guidance of Morgan (1998) who suggested that the analysis applied to focus group data should fit the purpose of the research. In this case the purpose of focus groups was to validate themes. During this analysis the object was not to search for how many times each theme would be used but to look at the theme activity and the importance each group focused on that activity through their discussions. Following this process would highlight themes for validation.

Analysis of the focus group data provided a series of quotations from the transcribed text. (An example of the quotations has been provided at Appendix 3.4) The quotes were chosen as a direct result of the reading and re-reading of the transcripts from each group (the unit of analysis) and highlighting text that described a particular theme (the code category). In each example provided a direct link can be seen between the theme and quotation in the text. Key word search was an additional method used to identify further quotations based on themes already provided and to ensure nothing was missed that could impact on the results. A further search of the data involved the use of NVIVO software. This

technique did not produce any further results however was an additional tool to add validity to the process.

The analysis was carried out by the researcher who was also the moderator within the focus group interviews (Liamputtong, 2011). As researcher and moderator, the role offered a number of advantages and a number of concerns. Whilst the role of both can be advantageous in that the direction of the discussions can be maintained in a more structured format. The researcher knows what he wants from the interviews and can control through questions the topics for discussion. A less structured interview would allow the individuals to pursue their own interests. A concern with the researcher being the moderator may also be seen as too controlling and that loss of rich data relevant to the subject may be lost (Morgan, 1998). The researcher being conscious of the above concerns provided a semi structured interview that allowed full flowing discussion, whilst maintaining a degree of control through the use of question prompts. The benefit of this process ensured a clear understanding of observation during the focus group interviews. Closeness to the data eased the analysis process, as some topical areas were clear from observation and others emerged from analysis of the data (Morgan, 1998). Table 4.5 provides an example of the process of analysis discussed when themes were highlighted.

Table 4.5: Example of Text Analysis highlighting a theme

Quotation	Theme
"Either one of those things should end up with a jail sentence of some sort as a deterrent…Well if they're convicted that's deterrent. But if they can't even get them into the court in the first place".	Deterrent
"I would say there are professional money launderers at the top end, there has to be, whether it's laundering cash or just laundering cheques or money that's come across a computer screen that's just bouncing around different accounts. I mean there has to be. Someone who launders money, big sums, it's going to be pretty much a full time job, and they're going to take their cut for that".	Level of Money Launderers
"where we were looking for lots of banking information for companies operating in Europe and in USA, you know there's a lot of, so clearly there probably, there is a trend I think in using Companies more".	Spending
"I don't know what you're like, but business Managers are not as quick to send in SARs as the retail staffs are, branch staff, they are very clued in".	Suspicious Activity Reports (SAR)
"So we do find it beneficial and you know one of the things that we have to do is demonstrate competency so if the regulator, if the FSA are coming in, as they have done and asked to see what type of training we provide and how do you measure competency, yes there's a bank of questions that the person has to answer".	Regulation

Table 4.6 provides an example of the emergence of a further theme as developed

from the transcripts.

Table 4.6 Example of analysis of focus group data from Group D that introduced a new theme.

TRANSCRIPT

"So we do find it beneficial and you know one of the things that we have to do is demonstrate competency so if the regulator, if the FSA are coming in, as they have done and asked to see what type of training we provide and how do you measure competency, yes there's a bank of questions that the person has to answer".

EMERGING THEME

Influence/Regulatory control

Table 4.7 provides an example of the process of theme validation within the focus group interviews when agreement existed. The example describes two processes: firstly the link between the theme and the quote is apparent as the quotation describes the deterrent value of sentencing and confiscation. Secondly the quotations show agreement between the two focus groups; Law Enforcement and MLRO through their discussions.

Table 4.7: Example of theme agreement between two groups

Focus Groups	Group A and Group D
Prompt	*"What are your views on sentencing and confiscation as a deterrent"?*
Quote from group A Law Enforcement	*"No I think the 2002 legislation made the confiscation process a lot easier and a lot more wide spreading against the criminal… certainly from my role as a confiscator that it's quite clear that they fear that more than they ever fear a prison sentence. That in itself the confiscation scheme and the 2002 Act has certainly made the criminals an awful lot more aware of what the powers that the police can do and can't do".*
Quote from group D MLRO	*"I would distinguish between the two, the actual sentence in terms of custody in money laundering cases in my experience is not of huge deterrent value because the sentences tend to be quite low. But it's the confiscation which I think is a huge deterrent that really hits them where it hurts, in their pocket".*
Theme	Deterrence/Legislation

Table 4.8 provides an example were no agreement existed between three of the groups. The example given demonstrates disagreement about the levels of crime targeted by Law Enforcement. One group suggests targeting a higher level of criminal such as drug traffickers and organised crime, while another suggests lower level criminals such as burglars, robbers and drug dealers are left alone. The third group suggests how the targeting of one level of crime has implications on the other levels. Appendix 4.1 provides further examples from the analysis of

the transcript were agreement and disagreement appeared between groups in

the focus group interviews.

Table 4.8: Emergence of Theme were disagreement existed

Focus Groups	Group B - Group D - Group E
Prompt	*"What is your view on hierarchy of crime i.e. organised crime"?*
Quotation Accountants	*"My perception is that they still go to very immediate and to high level, but they probably, I would imagine that the legislation's the same whether I'm putting, doing six grand a year of homers or doing 60 grand a year. But is there any scope then to make that a quicker process, that you know in terms of returning time that they get more hits with the smaller guy because the process is more straightforward…Because the smaller, below a certain threshold it doesn't seem to get touched at all".*
Quotation MLROs	*"Well it's, I'm not saying legitimate, but it seems like you know if the law is to tap into the higher echelons of it they maybe feel that if you take that out you, in some indirect way do away with the lower stuff".*
Quotation Ex-Offenders	*"And that's were the legislation seems to be used and you know we would love to see the legislation, from a professional point of view and from a decent member of side point of view as well, let's see it hitting the big boys".*
Theme	**Levels of Crime/Criminality**

However, when there is disagreement as in the case above, this suggests the theme is important. The fact that there is disagreement the theme should be included and questions can be developed in the questionnaire around that area of AML. As suggested by Smithson (2008):

> *"the main issue of analysis in focus groups should not be on what each participant says in a group context, but more on the discourses or themes that are produced within the group context"*. However Wilkinson (1998) argues that *"there is considerable potential for new techniques to analyse focus group data…that allow researchers to see how discourses or themes are jointly formed by participants within the group"*

<div align="right">(Liamputtong, 2011:175).</div>

Analysis of the transcribed text from the focus groups took into account the dynamics of the groups and the formation of the quotes by individuals that were based on discussions within the group setting.

Prompts served as a practical structure for organising the theme introduction to the discussions. The prompt guide also facilitated the analysis in the same manner when looking for comparisons within the groups (Morgan, 1998). However, because the dynamics of each group were different and each stakeholder group was from different areas of AML process, the purpose of the guide was less rigid than expected. The guaranteed flow of discussions did not center on each topic at particular points of the discussions. This meant that the results of the analysis was not pre-conceived but through the use of the prompts was able to validate the initial themes and emergent themes by using the method chosen. (Morgan, 1998; Stewart, Shamdasani and Rook, 2007; Liamputtong,

2011) As a result of the analysis methods the following 6 themes have been provided:

Legislation Criminality SAR Process Spend Influence Other Activities

The results provided in this analysis maintain the authenticity of the context of the interviews. There were two considerations concerning the use of text in quotations that require explanation: Firstly in order to maintain the authenticity of the discussions, the text has remained as spoken and has not been edited.

> *"Some editing may increase readability, but it is important that the character of the respondent's comments be maintained, even at times they use poor grammar or appear to be confused…focus group interviewing is to learn how respondents talk and think about a particular issue, too much editing and cleaning of the transcripts is undesirable and counterproductive"*

(Stewart, Shamdasani and Rook, 2007:111)

Secondly, the quotations drawn from the focus group interviews on some occasions are presented as individual or personal opinions; however the comments are from the lived experiences and perspectives on the topics discussed by participants in the groups. Experiences and perspectives are less limiting than attitudes and opinions as Morgan (1998) suggests:

> *"even self-reporting behaviour is more useful as data than are opinions… discussions of them produce a livelier group dynamic…people are more than happy to compare their different experiences…perspective implies a broader basis for specific attitudes and opinions".*

(Morgan, 1998:25)

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Validation as described above in the examples given, provided the themes for questionnaire development. In addition to the validation of themes there was a wealth of rich data that emerged from the interviews that provided a much deeper understanding of the underlying influences that directs decision making within the AML environment. Section 4.3.2 will present the results of the focus group interviews.

4.3.2 Focus Group Interview Results

In reporting focus group results Morgan (1998) suggests concentrating on what is important in the results and balancing the readability of those results, by maintaining the richness of the data uncovered and the summarisation of the topics. This section will concentrate on the themes provided by focus group interviews and the surrounding data that influenced their inclusion in this research. The themes are:

Legislation Criminality SAR Process Spend Agency influence Other Activities

In summary, the participants in the focus groups discussed issues that they were comfortable with, as the topics were within their own environment. There was consensus within the groups on some topics and disagreement on others. The findings suggest serious frustration in areas such as legislation, enforcement, regulation and prosecution of cases. Participants suggested that a review of those areas by legislators should be made, to provide a more efficient AML process. The following discussions of each theme highlight the areas referred to above.

Theme 1 Legislation

The legislation in the UK in relation to money laundering falls under the Proceeds of Crime Act (POCA) 2002. In broad terms legislation provides the rules by which society is compliant for the greater good of society. Those rules incorporate the enforcement of crime through prosecution and punishment of offenders through sentencing. As a prevention tool the legislation also acts as a deterrent to those considering an offence under the POCA. Much of the discussion in the focus groups around legislation related to the effectiveness of the legislation and how the legislation is used by enforcement agencies. Although POCA is seen as an important tool in the fight against money laundering by all of the participants in the groups there were contrasting views as to how effective the legislation was. In terms of sentencing some participants suggested that money laundering was seen as an attractive crime due to the disparity in sentencing across the UK. Courts were not providing the intended deterrent through sentencing after conviction and suspended sentences were seen to be a regular occurrence. Among the comments regarding legislation were the following:

> *"Either one of those things should end up with a jail sentence or some sort of a deterrent…Well if they're convicted that's deterrent. But if they can't even get them into the court in the first place".*

Quote from law enforcement

> *"I would distinguish between the two; the actual sentence in terms of custody in money laundering cases in my experience is not of huge deterrent value because the sentences tend to be quite low. But it's the confiscation which I think is a huge deterrent that really hits them where it hurts, in their pocket".*

Quote from prosecutors

Most of the participants expressed frustration with enforcement through the use of the legislation. Legislation not only refers to law enforcement but all the stakeholders that are bound by the legislation and regulation that follows from it. Enforcement as discussed by the groups drew issues relating to criminal knowledge, techniques and financial restraints that restrict law enforcement in doing their job. Among the statements regarding this problem were the following:

"Once it goes cross border it grinds to a halt because the natural jurisdictions don't want to work together. See your biggest issue for us in the level of crime that we're dealing with is, a lot of it is so slow for us to investigate because it is outside the immediate jurisdiction".

Quote from law enforcement

"If you're really going to tackle big style money laundering, there needs to be much more co-operation across countries otherwise I think it's, it's really difficult".

Quote from accountants

Restraint and Confiscation is part of the POCA and is an important tool in the law enforcement armoury. Criminals can be restrained from dissipating their assets while an investigation into criminal activity is on-going. If the individual is convicted a process is set in place that allows the crown to make application to the court to confiscate any assets that the person made from their current criminal activity and in some cases previous criminal activity. Many of the participants reported frustration with the prosecution service in delivering restraints in a timely manner before assets were dissipated by the criminal. Participants agreed the confiscation process was effective on its own but needed both the restraint and confiscation process to work together to ensure no assets were lost. Some participants reported influences in the confiscation process from various quarters

that implied abuse of the system and reported by others as a money making scheme for government. The following are comments from groups indicating their frustration:

> *"Without anything, any predicate offence to bolt onto that. Now that has changed a little bit but we're still having major problems getting restraints on both, in what is retrained and the length of time it has taken the PPS to do that".*

<div align="right">Quote from law enforcement</div>

> *"The last one that I dealt with I'm trying to ring the PPS before the barrister rings the PPS to tell them that he's just done a deal in the sum of. And I'm ringing the PPS to get in first to say he's trying to do a deal here and he shouldn't be doing a deal".*

<div align="right">Quote from law enforcement</div>

> *"the whole issue is to get the money in quickly…and its very commercially driven…SOCA that's the mind-set they need to bring…how can I make a profit in this".*

<div align="right">Quote from accountants</div>

Theme 2 Criminality

The theme *'criminality'* incorporates areas that reflect levels of money laundering crime, in terms of street level crime and organised crime; and perception of the types of crime investigated by law enforcement. The participants held contrasting views about the effectiveness of crime targeting by law enforcement. Some participants suggest lower level criminals are being targeted by law enforcement as they are easy prey. While other groups suggest low level criminals are left alone. On the other hand some participants indicated they would like to see more

targeting of the crime bosses as only a few high level cases are being brought before the courts. Some agreement is provided that suggests the sentencing of offenders for money laundering is relatively low and not in keeping with the seriousness of the offence as imparted by the legislation. Some of the comments that reflect these views are provided below:

> *"punitive sentencing…Makes money laundering an attractive crime if you have the werewithal to provide that service for other individuals, for the risk is relatively low but the pay back is high….Ask any criminal will he take a suspended sentence".*

> Quote from law enforcement

> *"I think some of our exposure to cases and, cases in which money laundering and legislation is, is the governing legislation. I think we have had, not concern but we have commented certainly in the past that money laundering legislation seems to be used against those low level drug dealer type criminals, the street dealer type and we haven't seen it as effective against the upper end of the drugs chain".*

> Quote from prosecutors

> *"what I do know is, there's so many layers of money laundering and we're saying from the guy in the street that sells you a £2 DVD, cos they're coming from somewhere, coming from somewhere to, to the higher echelons of money laundering, I don't, I can't see how it can be effectively policed or controlled or managed".*

> Quote from ex-offenders

The perception of crime relates to how the participants in the groups viewed particular crimes. This is important as many of the crimes committed relate to money laundering crime activities which are acquisitive crimes. POCA legislation can only operate when the predicate crime is an acquisitive crime of monetary

value. Sometimes this is viewed as a victimless crime as there is no physical hurt on an individual as in the case of an assault. Discussion that centred on the public perception of money laundering crime and how effectively it was dealt with provided an important viewpoint. The suggestion by some participants that crimes against the government are acceptable crimes or victimless crime; for example smuggling cigarettes or tax evasion, this was in contrast to some groups perceptions that they were not equipped to report crimes such as tax evasion or benefit fraud. Comments such as:

"The public, there's a message. There's a perception of acceptance within the community around crimes against Government, tax evasion".

<div align="right">Quote from law enforcement</div>

"And then you have individuals, and that's sometimes staff would struggle with the idea that the guy who's doing the homers[45], who's maybe doing 20, £30,000 a year homers, he's not a criminal, he's not a money launderer. In their eyes and it's more educating them to the point that that is still tax evasion".

<div align="right">Quote from banking sector</div>

Participants who are stakeholders who work in direct contact with the public also found difficulties with their staff rationalising reporting particular crimes. If the crime wasn't within their remit it was set aside. Comments such as:

"Yeah there's SARs you can categorise you know as being tax evasion, benefit fraud, then the other ones that you have no idea what's behind them ".

<div align="right">Quote from banking sector</div>

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[45] "homers" refers to carrying out work without the knowledge of tax authorities

From a community perspective some participants suggested when times are hard you turn a blind eye to some activity. Some individuals would see selling drugs by an individual as wrong but the same individual selling cigarettes or evading tax they seen as legitimate. Comments relating to these issues are provided:

> *"Now our difficulty is here, if we know that people are doing that and they get away with it we usually suspect that they're police touts, or they're working for the police".*

> *"Aye it's a wee bit like, you know white collar crime, you know what I mean, that sometimes people let it go. For all different reasons like. For legitimate reasons as well, in terms of getting the banks and other things bad names, you know…"*

<div align="right">Quotes from ex-offenders</div>

Theme 3 Suspicious Activity Reports

The theme *'suspicious activity report'* (SAR) was one of the most prolific topics discussed within all of the groups. SARs impacted on all areas of AML regime. SARs are information reports made by members of financial institutions on suspicious transactions within, to and from that institution.

As previously discussed SARs are a reporting regime for suspicions of money laundering and terrorist financing as a prevention and detection tool. Reports are made from financial institutions, regulatory agencies and high value dealers on account holders when there are suspicions of money laundering or terrorist financing. The reports are analysed by Financial Intelligence Unit of Serious and

Organised Crime Agency (SOCA[46]) and are forwarded to law enforcement within the area of reporting for investigation.

Analysis of the transcribed data from the focus groups identified conflicting views on the effectiveness of the SAR system. Views such as: information overload; resource intensive; information sharing; effectiveness of the SAR system is disputed amongst the groups. Some of the areas disputed related to the quality of the reports and the feedback from law enforcement to those that make the reports. Some participants saw the banks (who would be the main reporting institution) as not the best place to start investigations and looked outside of financial institutions to other regulatory institutions for reports. Entities such as lawyers, accountants, estate Agents and money service bureaus were mentioned. The comments below reflect those views:

> *"So I think you need to look wider than the financial institutions yes there's a volume of transactions goes through them, but they're not necessarily the best people to give you those key starting points".*

<div align="right">Quote from law enforcement</div>

> *"I think, when it comes to banks and you know estate agencies and places like that, I think as regards their SARS obligations you know I'd say they're fairly much compliant with it, and I don't think there'd be a difficulty there but, the likes of car dealerships and places like that, it's a different kettle of fish there, where they're much more localised".*

<div align="right">Quote from prosecutors</div>

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[46] SOCA have been renamed National Crime Agency (NCA) applicable from 13th October 2013

One group wanted feedback on the usefulness of SAR reports as opposed to another group wanting an update on the law enforcement investigation based on their report:

> *"I don't really want feedback on the report, but it would be helpful occasionally to know is this useful the way it's presented or is it absolutely no use".*

<div align="right">Quote from banking sector</div>

The main topic that groups agreed on reflected the number of reports made. Quality versus quantity which suggested more reports were of less value and put a strain on resources within the financial institution and investigative capability of law enforcement. The use of resources in the SAR process involves both law enforcement and financial institutions. It is the intention here to show that from the comments below, banks see the reporting process as a non-profit making part of their business, in which they have to resource. Law enforcement likewise do not have the resources to analyse all of the SAR reports that come to them from SOCA:

> *"It's a resource issue. If you could spend four or five hours on every SAR, well then you're going to pick up more criminality".*

<div align="right">Quote from law enforcement</div>

> *"There's absolutely no doubt about that, there's absolutely no doubt that the reporting institutions know stuff that we don't know. There's no doubt. Whether we utilise that or whether we exploit that is a completely different question".*

<div align="right">Quote from law enforcement</div>

> *"It would be nice to see, the levels of SARs drop in a sense… I don't see any level; I don't see any visible representation that the legislation is catching more people".*

<div align="right">Quote from banking sector</div>

The Financial institutions referred to above are guided and supervised by the Financial Services Authority[47]. Some participants referred to the '*light touch*' of regulators, particularly in the area of inspection and monitoring of Bureau de Change or Money Service Bureaus, and others of the fear of regulators (particularly Banks). Failure to comply with the regulations can lead to fines by the supervisory authority; and if facilitating money laundering by failing to make reports could be prosecuted and sentenced up to 5 years imprisonment. This fear of compliant behaviour prompted the following responses:

> *"The MSB regulations facilitate money laundering. In fact you have to ask the question why they exist in the first place." (MSB refers to Money Service Bureau)*

Quote from law enforcement

> *"Well we have an obligation to follow essentially the money laundering guidance notes".*

Quote from banking sector

> *"I was at a meeting hosted by HM Treasury of MLROs… the whole approach was quite theoretical I thought and very much driven by how much time do you spend per month as an MLRO in a firm. It's very compliance driven and to me there's little connection between what you do as an MLRO and what you would see as a very worthy fight against crime, it's purely trying to observe the rules".*

Quote from banking sector

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[47] Financial Services Authority (FSA) has now become two separate regulatory authorities: The Financial Conduct Authority (FCA) AND The Prudential Regulation Authority (PRA), 1st April 2013.

Theme 4 Criminal Spend

The theme *'spend'* or spending activity relates to how money flows through the financial systems and across borders. In doing so *"spend"* takes into account the level of criminal enterprise as it is assumed there is a difference in the spending activities of local criminals and international money launderers. There was general agreement from the groups about law enforcement playing catch up with money launderers and criminal enterprise. Cross border activity was frequently mentioned as a technique to thwart law enforcement investigations. Some participants experienced long delays in obtaining information from overseas. The importance of greater cooperation across borders was revealed in a variety of statements:

> *"Looking at the speed of international transfers, which is the big new issue, you know we're chasing money…for years we chased physical money, now we are chasing electronic movement of money and we are going after it with ILORs"[48].*

> *"International Letters of Request that take six months to get off the desk of the CPS…how many times does money go round the world in that time, that's only to get us to point one".*

<div align="right">Quotes from law enforcement</div>

Some participants felt that not enough emphasis was placed on preventative measures relating to criminal knowledge and how simple it was for criminals to learn police procedures. Some participants indicated criminals had access to too much information through police prosecution files, television and media. Even the Joint Money Laundering Steering Group (JLSG) guidance notes for banks to report suspicions of money laundering were readily accessible to the public.

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[48] *(ILROs refer to International Letters of Request)*

However a small number of participants commented on the choice of the criminal to commit a crime regardless of what knowledge was available to them. Similar comments included:

> *"No matter what legislation they introduce the crime will evolve to get round that legislation until they produce something to stop it".*

<div align="right">Quote from law enforcement</div>

> *"You know, that's the same, not just for financial crime, that's the same for any crime. You know, the criminal will learn from the police techniques. You know the criminal will learn oh my mate was caught and here's how the police caught him, so you know that goes through the prison anyway".*

<div align="right">Quote from law enforcement</div>

> *"I would assume that the success of which seems to be in money laundering is because money launderers know the policy and know the system, and that's how in my opinion it appears that the law is ineffective to do anything about it…I'm guessing there's billions worldwide that is getting through it".*

<div align="right">Quote from banking sector</div>

The views of the types of spending between different levels of criminals varied considerably among the participants. Some participants indicated the lower to medium level criminals spending ill-gotten gains immediately, whilst high level criminals would be more sophisticated at hiding it. Law Enforcement could not undertake all money laundering investigations as they did not have the capability to do so. It appeared for some participants that the level of criminal also indicated the level of sophistication that can be used to remove criminal money from the view of law enforcement.

"The guys at the top know that people are going to be coming after them…they knew that they were being watched, whereas the rest thought we can do what we like. There's a huge shadow economy at that level".

"Because one was doing it very well and they were, they were spending it as quick as they got it. So they were going out, spending it on women and all that sort of stuff".

One final area of frustration that was evident among a small number of participants related to movement of money through Money Service Bureaus (MSBs). Previously as discussed in relation to the SAR theme, MSBs were the subject of criticism due to lack of enforced regulation and inspection. As a consequence of that failing participants see MSBs as potential for laundering substantial sums of money. The following comments air those frustrations:

"I mean I really don't see in this day and age how a lot of these places exist (Money Service Bureau). One of them that were raided there about a year, 18 months ago, didn't even have a bank account. Didn't even have a business bank account and yet there was hundreds of thousands of pounds according to surveillance, being exchanged on a daily basis here… they are supposed to be regulated and inspected by HMRC but I know from experience they just go in, how's it going alright bye. Books weren't looked at. They are supposed to look at the audits and see what's happening".

Theme 5 Agency Influence

The theme *'agency influence'* takes into account the regulatory stranglehold on financial institutions relating to their obligations from POCA. Agency influence refers to two entities; firstly the Financial Services Authority (FSA) now the (FCA) who are the regulatory supervisor for financial institutions and secondly Serious and Organised Crime Agency (SOCA) now the National Crime Agency (NCA). The remit of the NCA is the civil recovery of criminal assets from prosecutions, failed prosecutions and independent civil recovery investigations. There is a strong sense among some of the participants particularly in financial institutions, that their role in AML was less about catching bad guys and more about applying the rules of compliance. It is because of those obligations financial institutions felt undervalued and more scrutinised than they should be. Some comments reflect that view:

> *"If the penalties weren't a factor and it wasn't regulatory they would do it at a minimalistic level".*

> *"The likes of the FSA who are well financed can regulate with fear I suppose, were the banks are taking the cost of the resources out of profits…the power engagement of staff of how intrusive the FSA can be is minimal. It's only when you get into this role of compliance you start to realise just how intrusive they can be".*

Quotes from banking sector

Financial Institutions have to have in place relevant AML training for all their staff. Some participants felt the training was a tick box for the FCA in that as long as they were showing staff training they were following the rules. One of the potential drawbacks of training as presented by a small number of participants was that the number of SAR reports increased substantially for two months after the

training took place and then dropped back to normal figures. This behaviour suggests that reports are made as a means of defence as opposed to quality reports based on actual suspicions, as the following observations suggest:

"So we do find it beneficial and you know one of the things that we have to do is demonstrate competency so if the regulator, if the FSA are coming in, as they have done and asked to see what type of training we provide and how do you measure competency, yes there's a bank of questions that the person has to answer".

"an external provider we use instructs the course for us…its extremely good at keeping records that it will give us how long it took the person to take the course, how many times they were in it, how many attempts they did…it's important we demonstrate that we have delivered that training".

Quotes from banking sector

As discussed *"Agency Influence"* also referred to the government strategy on asset seizure through SOCA. The incentivisation scheme refers to cash and assets seized under POCA going into the *"government tin box"*. Confiscated money from criminal activity can then fund community and crime fighting initiatives such as drug awareness projects in local communities. This venture received a positive response from all the groups that removing assets from criminals had a deterrent effect due to the financial inconvenience it caused. However participants from one group suggested the popularity of civil forfeiture placed more emphasis on civil recovery than criminal investigation.

"They SOCA was not a body designed to make convictions, cos they weren't in a criminal court, they were a revenue generating body and I think they should have been able to process the people and eventually get a conveyor belt of people coming through the courts with confiscation orders and giving the money up".

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"Because of the nature of work we do…it seems it had some added value…somehow ironic that the proceeds you know…criminality is put back into support other people to move away from it...trying to sus out does it become more important than actually the criminal investigation side of things".

<div align="right">Quotes from accountants</div>

On the other hand a number of participants suggested that due to the complexities of money laundering cases the matter should be referred for civil recovery by NCA as opposed to investigation by police for prosecution. In some cases it was the view of participants (law enforcement and accountants) that the agency has no interest. A number of participants suggested civil recovery is itself a complicated process even though civil recovery has a lower burden of proof than a criminal case. Civil recovery cases are based on the *"balance of probability"* whereas criminal cases are based on *"beyond reasonable doubt"*. The following comments remark on those frustrations:

"there's a lot of occasions I think why aren't going civilly against this person as opposed to launching a criminal investigation…we pulled a case we spent a lot of money on Counsel's fees to the point of not going through the court and SOCA could go for the guy civilly because he had the money still…we don't get anything from…any confiscated funds".

<div align="right">Quote from prosecutors</div>

Theme 6 Other Activities

As discussed previously in section 4.3.1 there were areas within the AML process that were deemed important but were not suitable to be placed as a standalone theme. However, as they were important areas to be discussed by the participants within the groups they did have an important place within the

questionnaire. *"Other Activities"* became the theme for those areas. The term *"Other Activities"* provided item statements within the questionnaire survey in a number of important areas not caught by the other themes. For example; crime motive, victimless crime and effectiveness of AML.

Participants generally agreed that criminals rationally chose to commit crime based on what they would achieve from the crime and the chances of getting caught for the crime. A small number of individuals expressed a new concept within this framework; the term *"credibility":*

> *"There may also be a bit of credibility about, around maybe serving a prison sentence as well in certain circumstances".*

> *"It's all, there's the emotion, there's the bravado, there's the legitimacy supposedly of what you're fighting for or against … and it wasn't a rational sort of weighing up pros and cons".*

> *"They'll feel that they don't want to let other people down by opting out of something and that, that's human nature no matter what age you are"*

Quotes from ex-offenders

There was a strong sense among some of the participants that some crimes are acceptable crime and a crime against the Government was not a crime. Comments reflecting this view included:

> *"You know it's a duty thing. They're not paying the duty, it's the cigarettes, it's the fuel, and they're robbing the state of money rather than the individuals".*

Quote from ex-offenders

"We're finding a lot more hidden assets, where assets are hidden in third party type thing".

Quote from prosecutors

"So you lose your money but, know what, sure -You're still knocking about".

Quote from ex-offenders

Members of all the groups expressed consensus that the AML regime was not effective. A number of participants expressed concern that the policy was ineffective because of the varying levels of criminality and targeting by law enforcement as *"easy touch"* as opposed to the more difficult and larger cases`:

"I mean…. is sort of founded on a black economy, it has been for many years, you know and people would rather say, buy their fuel cheap, their cigarettes cheap, get dodgy DVDs, they get CDs they get fake clothes, and that has to, there has to be a level up here for that stuff… no it's not effective".

Quote from ex-offenders

"springs to mind with me, you know about people that rob you with a fountain pen, you know, I wonder, you know, what sort of, what, what drive is there at that higher, top, you know from a policy point of view is there, I mean, is there enough of it".

Quote from ex-offenders

Varying views and agreement were expressed by the groups on the leading legislation POCA which constantly needs reviewed and updated. There was a strong perception by some participants that the legislation was draconian and lends to difficulties in investigation. Several participants agreed it was draconian,

but was so, because it was there to punish. Generally there was consensus that the legislation could be improved:

> *"No matter what legislation they introduce the crime will evolve to get round that legislation until they produce something to stop it".*

<div align="right">Quote from law enforcement</div>

> *"Doesn't look particularly effective to me, hear about the high profile ones but we all know what's going on around us on day and daily, so how effective is it?"*

<div align="right">Quote from ex-offenders</div>

Much emphasis has been placed by the groups on the banking system as an effective tool to combat money laundering. The banking system is the first port of call for AML. A number of participants agreed that when there is a failing in the system the criminal justice system is slow to react. The view from the participants that the justice system is slow to react also suggests the ineffectiveness of the system as the following comment remarks:

> *"I think there's a big issue about the orthodox approach or culture of the Criminal Justice System, which doesn't react quickly to things, processes take a long time".*

<div align="right">Quote from prosecutors</div>

There was a general perception that the time restrictions placed on restraint and prosecution are too restrictive. In addition, because of the complexities in money laundering investigation there should be no penalties for abuse of process in time delays in investigation. The following comment reflects that view:

"Money can be moved very quickly, the fact that restraint can be put on quickly is important, but the criminal process then is playing catch up all the time with that, and bank practices are very important in controlling the money laundering and being a means of combating it".

<div align="right">Quote from prosecutors</div>

However there was an indication of one area of AML policy being effective. For some participants regardless of the general ineffectiveness of policy agreed upon with other groups, the system sometimes does work, even though the motivation for the quick reaction in the case referred to below was to seize cash:

"The system works, the system does work in a sense that sometimes, because we have had a couple of incidents recently when HMRC have reacted to a SAR like very very quickly, like I'm talking In like literally within days…But their motivation was that they wanted to do cash seizures".

<div align="right">Quote from banking sector</div>

All participants did agree that the best preventative method was the SAR process. They believed that reports were being made, however this needed to be measured in terms of quality and quantity. They agreed that money laundering had been well documented during this past decade and that individuals were aware of what the banks did when money was transacted through bank accounts:

"I would presume if people knew about it would be the ultimate deterrent, because if I'm earning 20 grand a year and I go and make a lodgement of ten grand, knowing that that'll kick start some sort of investigation, there's no way in a million years if I know that I'm going to go in with ten grand".

"I would assume that the success of which seems to be in money laundering is because money launderers know the policy and know the system, and that's how…it appears that the law is ineffective to do anything about it…I'm guessing there's billions worldwide that is getting through it".

Quotes from ex-offenders

The results of the analysis from the focus group interview discussions presented in the above chapter have provided an abundance of material for the questionnaire development in phase 3. The aim of the focus group interviews was to use the experiences, perspective, opinions and knowledge from experts who are the gatekeepers of the AML process:

- To validate initial themes drawn from literature around Money Laundering measurement and AML Policy.
- To draw out emerging themes from discussions in the focus group interviews relevant to the AML process.

As a result of the analysis of the focus group interview discussions that drew on the participant's experiences, opinions, perspectives and knowledge the following constructs have been identified.

Legislation Criminality SAR Process Spend Influence Other Activities

The five focus group interviews that took place with the expert stakeholders discussed issues on AML which were prompted by questions linked to the initial themes. Analysis of the transcripts from those discussions validated the initial themes and introduced two additional themes. All of these themes are the

constructs that would underline the statement items that formed the questions for the questionnaire survey. Discussions on the development of the questionnaire are documented in Chapter 3. Section 4.4 will discuss the quantitative analysis and results of the questionnaire survey conducted in phase 3 of this research.

4.4 Phase 3 Questionnaire analysis and findings

The analysis discussed in this section is drawn from the results of data obtained from the questionnaire survey. Section 4.4.1 presents the demographics of the survey population. Three areas are discussed in phase 3 - questionnaire analysis. Firstly the responses to question 13 of the questionnaire will be explored; secondly the analysis of the item responses from the questionnaire will be conducted using factor analysis techniques; and thirdly the differences between the groups are examined. Each stage is produced in figure 4.2.

Figure 4.2: Three stages of analysis

Questionnaire	Questionnaire	Questionnaire
Phase 3 - stage 1 — Question 13 *"Please provide your comments as to what you would change in the AML system"?*	**Phase 3 - stage 2** — Questions 4,7,8,9,10,11,12 Factor analysis Principal component analysis	**Phase 3 - stage 3** — Questions 1,2,3 Examination of group differences on factor results One-way ANOVA
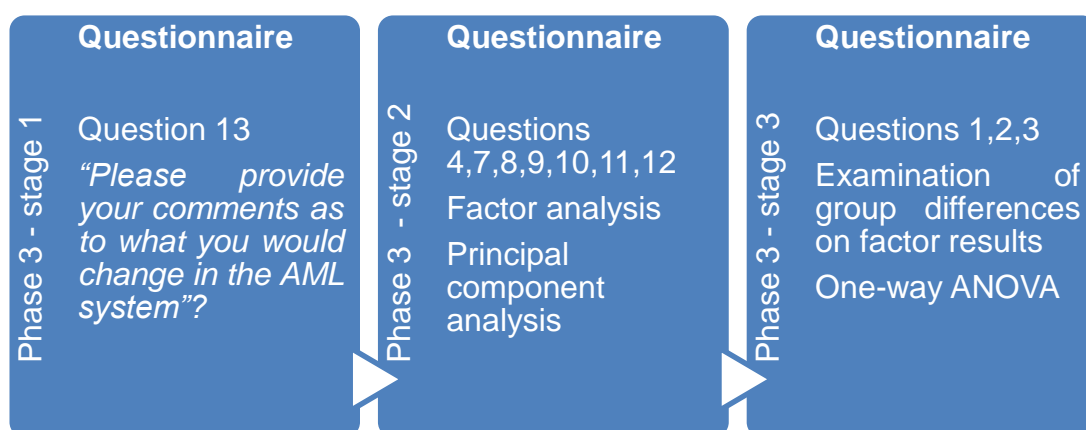
The purpose of the questionnaire survey was to extend the research question to as wide a population as possible within the AML arena, in order to achieve a

reliable consensus of data for examination. Before examining each stage of phase 3 a summary of the demographics is provided at section 4.4.1.

4.4.1 Demographics

Questions 1-3 on the questionnaire relate to demographics of the respondents. Using statistical analysis on SPSS the following demographics of the respondents in terms of age and gender were found: The number of respondents to the questionnaire was 272. Male responses totaled 212 (77.9%). Female responses totaled 51 (18.8%). There was 9 missing data = (3.3%). The age ranges for the respondents were grouped into four categories. The data above including the group each respondent was attached has been reproduced in Appendix 4.3. The author is not making any determination from the above demographics however the group demographics as shown may indicate the reason for outliers in the distribution of scores in some of the variables. In any event the information is supplied to give the reader a casual view of the questionnaire population.

The next section examines the responses to the open ended question 13 at section 6 of the questionnaire. This question was set to illicit views of respondents as to what they would change in AML system. The data from the responses would further contribute to the factor analysis results by verifying the underlying dimensions identified. The responses to question 13 are discussed below in section 4.4.2.

4.4.2 Comments and analysis (Question 13)

The following discussion relates to the responses to question 13 in the questionnaire survey. Question 13 of section 6 is the final question in the survey questionnaire. *"Please provide your comments as to what you would change in the AML system"?* A number of the comments will be presented here. As the comments are anonymous they will not be referenced as opposed to the comments from focus groups that are referenced. A full list of the comments from the participants is provided at Appendix 4.8.

72 responses were made to question 13 out of a total of 272 responses = 26%. After errors and irrelevant comments were removed 67 responses were suitable for analysis. From those responses a wide range of areas for change have been suggested. 10 respondents 15% indicated that stiffer penalties were needed to demonstrate enforcement action. 25 respondents 37% indicated the regulatory system was a key area for preventing money laundering and that tighter controls were required. 4 respondents 5% indicated a change in tactics and procedures for enforcement. Other areas that respondents suggested change included: additional training, additional resources, and better co-operation between agencies, use of confiscation powers and more emphasis placed on the use of Suspicious Activity Reports from all institutions. Comments reflecting those views from question 13 are presented, such as:

> *"The current laws and regulations in the UK relating to money laundering and the seizing of criminal property are adequate. What needs to be changed is their enforcement. In particular, there needs to be greater use of money laundering confiscation measures against corporations (including, but not confined to, banks) involved in financial crime. For example, companies found to have engaged in corruption in order to win commercial contracts should face charges of money laundering as well as bribery, much more severe sentences and more significant confiscation orders".*

Comments also suggest a more robust enforcement role from investigators and the judiciary to target offenders more severely through prosecution and sentencing. A comment from the following respondent goes further:

> "Were professionals are involved in ML they should be sentenced more harshly (they are not). When regulated entities are discovered to be ignoring the AML regulations they should be fined and SHUT DOWN, not just fined and allowed to carry on trading. E.G. Coutts Bank, Wachovia, etc. Investigating bodies should concentrate more on ML investigations as they see cases were (say) drug trafficking is concerned it's easier to go for the commodity. ML cases are NOT complicated but there is wholesale ignorance at senior crime managers level about the ingredients needed to successfully prosecute ML cases".

Comments such as those below also suggest penalties not only refer to the criminal element but also for breaches of regulation: *"Penalties for institutions that do not comply with AML regulations are not sufficient to properly incentivise them. Regulators are more concerned with getting a future job with the institutions they are supposed to supervise than in doing meaningful oversight".* This view is reflected in many instances however several respondents suggest other areas need to combine with sentencing to create a more powerful enforcement strategy, such as:

> "Greater use of the existing AML legal provisions (the ones we have are good enough and don't need changing, but they do need to be used more). 2. Tougher penalties actually imposed on banks and other institutions found to be involved in money laundering. 3. Greater use of confiscation and civil recovery provisions. 4. Greater enforcement of confiscation orders actually made".

The suggestion that confiscation should be enforced refers to both sides of the process; both as directed in the comment above refer to the confiscation of assets

after prosecution and the enforcement of any order made for confiscation by the court. Greater emphasis in this area has been suggested by respondents:

> *"To quote (I think) Louis J. Freeh, Director of the FBI The most efficient means of battling organised crime is to act against money laundering. With increasingly limited budgets I think law enforcement concentrate on other crimes which attract more public attention and which may be considered key performance indicators. There are a number of specialist financial crime investigators in the UK but I believe they focus on the "quick wins" rather than the complex organised groups that require time and resources to investigate fully and this needs to be reviewed. In addition, legislation in the UK needs to be reviewed in relation to people defaulting on confiscation orders and the lack of follow up in liquidating their assets obtained through criminal lifestyle".*

One of the most prolific areas of the AML system that respondents discuss is the reporting by financial institutions of suspicions of money laundering. Whilst many respondents comment that this is an important area for increased action the following respondent is quite clear in how the process should be dealt with:

> *"The SAR process is now so computerised, there is too much intelligence in the system. This needs to be filtered and profiled in a way that would highlight useful areas of investigation. The 43 forces in the UK do not necessarily have a unified approach to the investigation of SAR, money laundering or POCA matters, despite efforts to stress the importance of POCA. I would like to see money laundering cases managed as a target ops proceeds, a syndicate strength using all human and technical resources available, including surveillance and interception. It is time the facilitators, accountants and solicitors where taken out of the loop".*

Communication and co-operation between and within the major stakeholders in the AML system opens up a wide area of activity that respondents suggest needs action:

"More communication with law enforcement agencies. In theory, they should write the rule for businesses as they are the ones with the knowledge. Change is far too slow if you want to try and keep up with recent typologies" in addition *"I would suggest that there needs to be a more joint agency approach to the problem. This should include regular discussion with financial institutions, regulators and law enforcement personnel. This would assist in identifying varying typologies at an earlier stage".*

Training in AML at all levels including judiciary was an area that respondents felt was necessary to achieve that response. *"More training and education of the legislation and methodology to professionals and the police".*

The final comment encompasses a range of activity which is overseen by a change in attitude across the whole area of AML. In several instances the comments received indicate an attack or criticism on the AML system without much thought as to how the system could be changed. The following comment changes that view by referring to the problem and the solution:

"There needs to be a transformation of attitude across the AML system, in particular to address the following views: Professionals within the regulated sector generally view AML as a costly burden, and investment is limited to that which will be sufficient to avoid enforcement action or reputational damage. Law enforcement agencies have failed to grasp the opportunities to disrupt criminals by using money laundering legislation. Investigators view money laundering offences as a type of fraud and associate it with lengthy, tedious investigations. Senior management limit their enthusiasm to areas such as confiscation and cash seizure, viewing it purely as an opportunity to provide an income. AML policy has done little to influence these views and is often ignored or circumvented by agencies. The level of prosecutions and asset recovery, whilst improved under the POCA regime, still falls woefully short of some other jurisdictions, providing an irony when lauded by Government. A transformation of attitude will be a difficult and lengthy process, one which needs to be driven by an AML policy that is more effectively implemented".

4.4.3 Summary of question 13 responses

This section has discussed the responses to question 13 from the survey questionnaire *"Please provide your comments as to what you would change in the AML system"*. In general the comments suggested changes in a wide range of areas in the AML arena. Such comments included stiffer penalties for money laundering offenders, tighter controls in the regulatory system and a change in direction for law enforcement in relation to the tactics used to fight money laundering. Further comments suggest greater use of confiscation powers; the SAR process that incorporates all reporting institutions; training and agency co-operation. A final comment discussed a change in AML culture by all the stakeholders in AML environment that would create a new nexus to address all the problems. The next section provides the quantitative statistical analysis of the questionnaire responses.

4.4.4 Statistical analysis

The objective of statistical analysis is to establish a model represented by the results of analysis from the questionnaire survey. The themes at each section of the questionnaire are merely the concepts that each variable tested follows. The themes are not used as dependent variables to test for relationships with the independent variables, rather all variables were available for testing using factor analysis techniques. The goal of factor analysis as Reitveld and Van Hout (1993) suggest is to use factor analysis techniques to:

> *"reduce the dimensionality of the original space and to give interpretation to the new space, spanned by a reduced number of new dimensions which are supposed to underlie the old ones"*

(Reitveld and Van Hout, 1993: 269).

The model produced will be tested using a qualitative method, leaving any future research using this data for further statistical analysis such as regression or confirmatory analysis. Another important point to make in relation to the analysis is that this researcher is using the strength of factor analysis techniques as a means to provide a model that represents a clear view of the data. This researcher will use discretion and common sense in interpretation of the data and the techniques used, as these criteria are as important as the statistical tests themselves (Wilkinson, 1999). Each stage of the statistical analysis follows from section 4.4.5.

4.4.5 Data screening and missing data

A visual screening of the data on SPSS was undertaken to indicate and eliminate any data entry errors and miscoding. The Likert scale variables were checked for consistency and no unanticipated or inaccurate values were detected. The Likert scales were entered correctly corresponding to the designated coding plan (1 = strongly agree; 5 = strongly disagree). The category values also corresponded to the values in the designated coding plan.

The analysis began by looking at the descriptive statistics and frequency tables to get an understanding of the profile of the data. The statistics produced in SPSS made it clear that substantial data was missing and that outliers were present. The variable summary table is produced at Appendix 4.2 and is produced in descending order to show the multiple missing data from the latter part of the questionnaire. A further review of the data view in SPSS confirmed many questionnaires were only completed as far as question 6 in section 2. This equated to 40% of cases not valid. Figures 4.3, 4.4 and table 4.3 below provides

a summary of the missing values. Analysis of these figures show the majority of missing values apply to the latter stages of the questionnaire. 31 responses had been received in each of those missing questionnaires 38% out of 82 potential responses. As too many values were missing from those cases, they were deleted. Any further missing values were replaced with a discrete missing value 999.

Figure 4.3: Overall summary of missing values

Overall Summary of Missing Values

Variables   Cases   Values
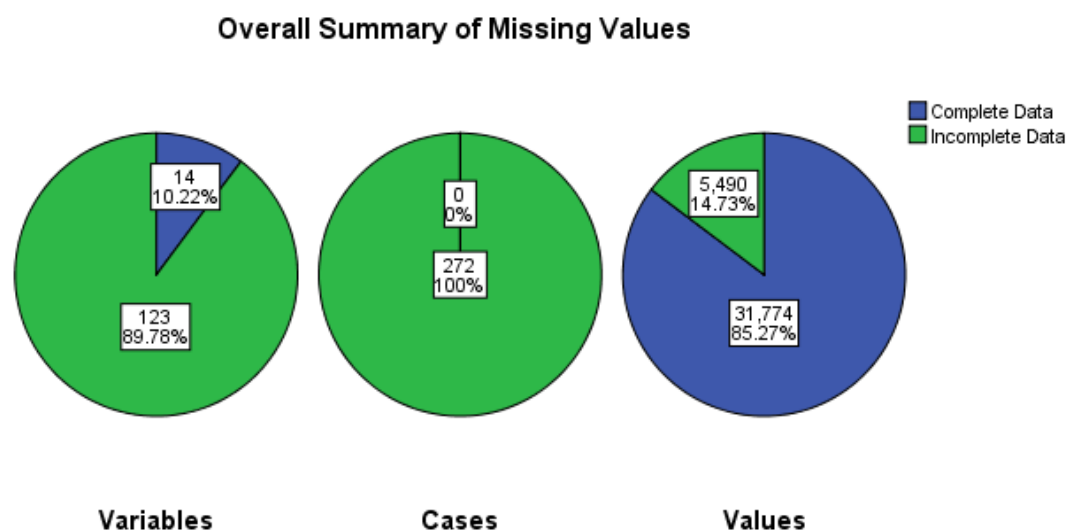
Figure 4.4: The 10 most frequently occurring-value patterns
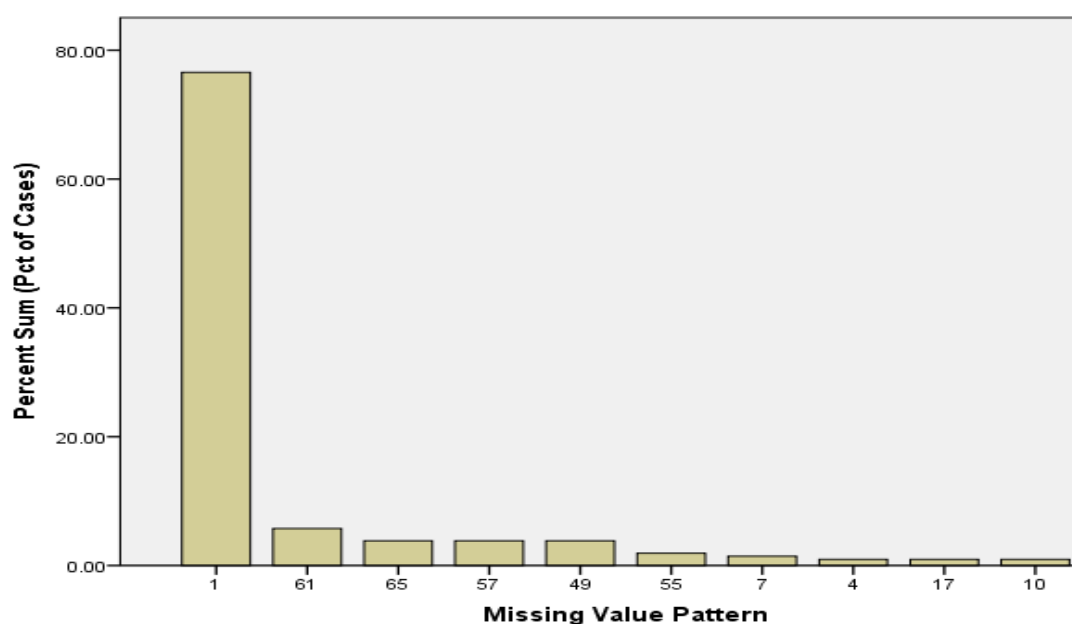
Table 4.9: Missing values pattern
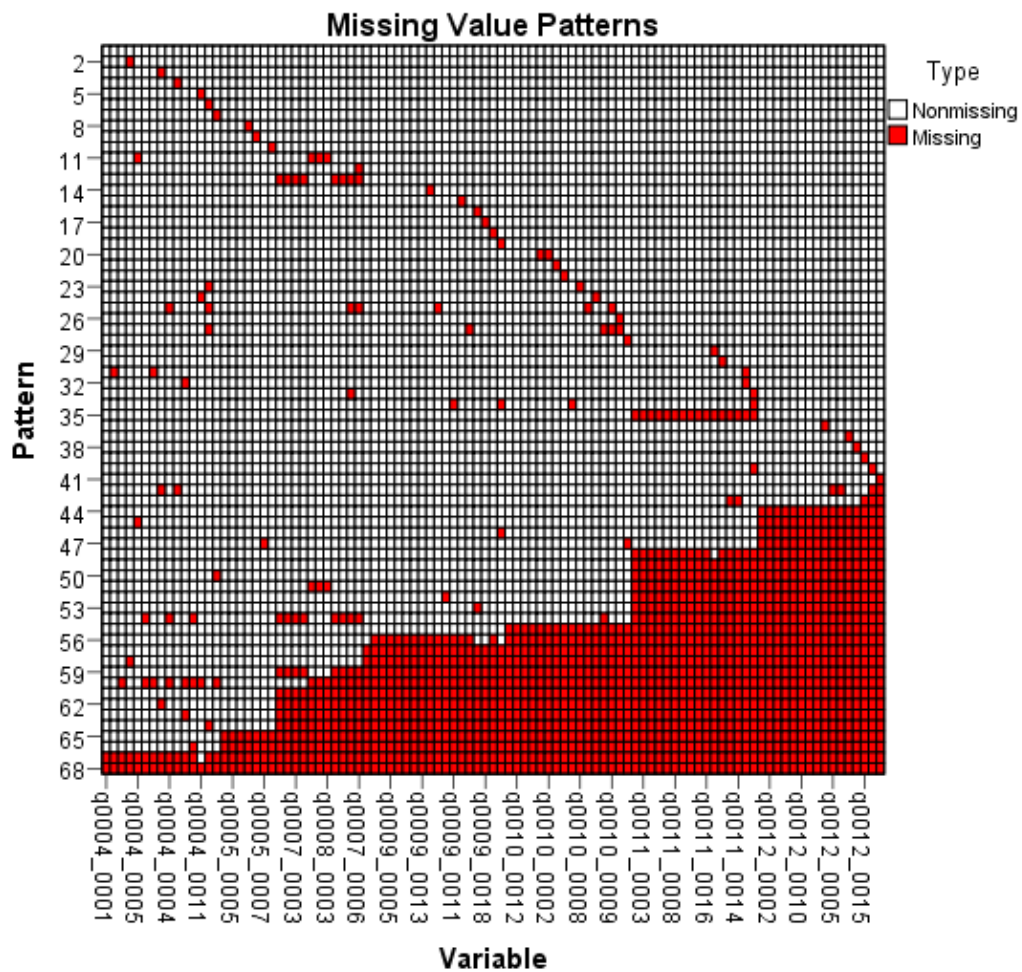
The analysis proceeded to test for outliers with 164 cases which included 89 metric variables. This was once again carried out using the descriptive function in SPSS. All of the scores for each variable were converted to standard scores. The sample size was greater than 80 therefore a case is an outlier if its standard score is $\pm$3.0. Each z-score was viewed on the data editor and checked in ascending and descending order for to identify outliers $\pm$3.0. There were no cases with outliers -3.0 but 21 cases with outliers +3.0. By comparing the descriptive output for each variable (mean and standard deviation) and examining the raw scores on the data editor no obvious reason was visible to account for the high scores. Reviewing the questions that contained outliers did not reveal any further

abnormality, however a reason for the heavy tailed distribution in some cases may be due to the mixture of distributions in the sub populations (as depicted in the population chart at Appendix 4.3). As Tukey (1977) and Dawson (2011) suggests in large samples, a small number of outliers is to be expected and may not be due to any anomalous condition. Further as the data will be subject to a robust statistical test (such as factor analysis) that can resist the effect of outliers (Pison, Rousseeuw, Filzmoser and Croux, 2003), the variables were retained.

An example of an outlier on question 4, item 12 *"Tax evasion is viewed in some communities as a non-criminal offence"* produced a z-score outside the $\pm$3.0 range of +4.22 as indicated below on Table 4.10 and on the distribution illustrated on Figure 4.5. The mean at 1.96 is within the range of 1-5 and the standard deviation at 0.74.

Table 4.10 Example of outlier identified for question 4, item 12

					Outlier 4.22641
Question 4, item 12 Tax evasion is viewed in some communities as non-criminal offence		**Frequency**	**Per-cent**	**Mean**	**Standard Deviation**
Valid	Strongly Agree	38	23.2		
	Agree	104	63.4		
	Neither agree or disagree	14	8.5	1.96	0.74
	Disagree	7	4.3		
	Strongly Disagree	1	.6		
	Total	164	100.0		

Figure 4.5 Distribution for question 4, item 12
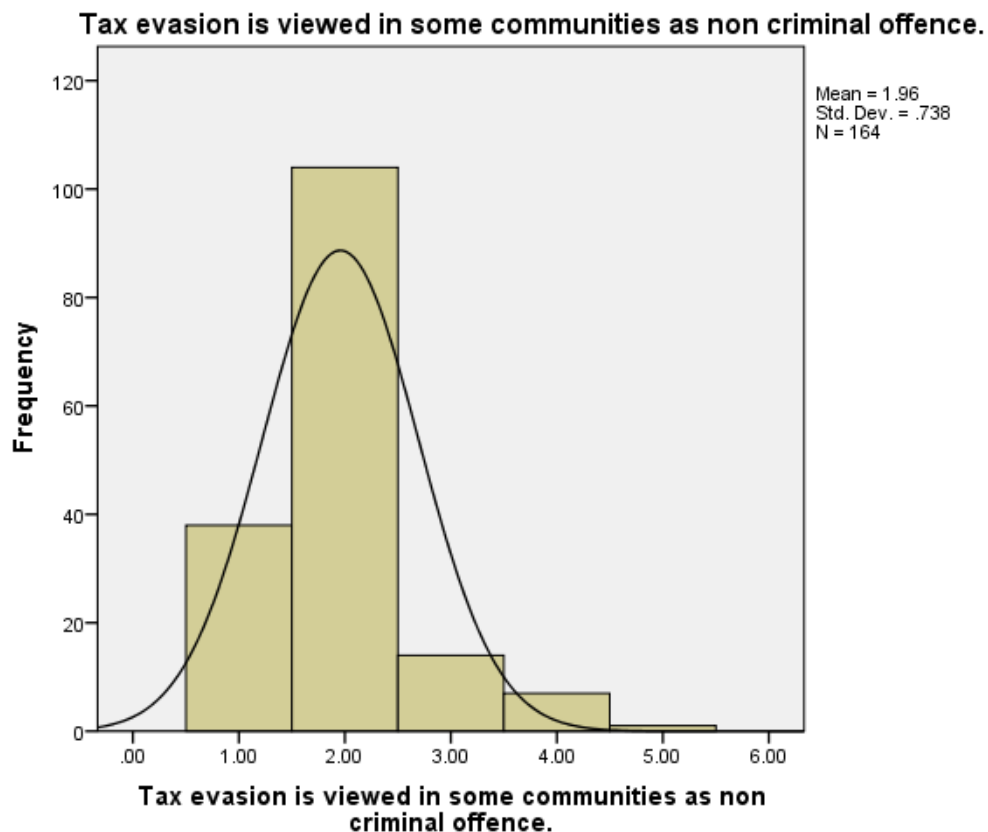
The next phase of the analysis of the results relates to the identification of the underlying dimensions of the statement items for each theme. Factor analysis is adopted to examine the most important dimensions influencing AML policy implementation in the UK. The following section presents that analysis.

4.4.6 Factor analysis (Identification of the underlying dimensions)

All categories within the AML range of statements were analysed to examine the underlying dimensions using factor analysis. The analysis was carried out following the procedures in SPSS. Each section of the questionnaire provided the respondents with statement items (for this research items and variables are

interchangeable). Items were scaled into a five-point Likert scale using a standard set of responses such as: *"Please indicate the extent to which you agree or disagree with the following statements."* 1 - Strongly agree through to 5 – Strongly disagree. The questions were divided into the 6 sections as shown in Table 4.11.

Table 4.11: Application of Questionnaire Structure

Section	Theme	Question Number	Item Number
Section 1	AML Policy	Q4-Q6	15 items
Section 2	AML Crime	Q7-Q8	8 items
Section 3	Suspicious Activity Reports	Q9	18 items
Section 4	Spending Activities	Q10	16 items
Section 5	Agency influence	Q11	16 items
Section 6	Other areas of AML process	Q12	16 items

As discussed in section 3.8.3.8 Chapter 3 the descriptive statistics for all the variables have been included at Appendix 3.7. Similarly the correlation matrix generated for all variables is included at Appendix 3.8. The analysis utilised 89 variables incorporating policy, crime, SARs, spending activities, agency influence and other areas. The descriptive summary suggests the mean values are all within the min and max range for each variable. There are indications of positive and negative skew in a number of variables particularly ML15, ML32 and ML53. Skewness quantifies how symmetrical the distribution is. However in terms of symmetrical distribution the skewness is within the range of 1.00 and -1.00 and as such is not substantial. Kurtosis quantifies whether the shape of the data distribution matches the Gaussian distribution which has a kurtosis of 0.0. ML75 has an excess kurtosis of 1.11. However in respect of skewness and kurtosis factor analysis is a robust technique and as a reduction tool will take account of the above values through the factor loadings.

Table 4.12: Descriptive summary for significant variables

Variables	N	Range	Min	Max	Mean	Std. Dev.	Variance	Skewness	Kurtosis
ML6	164	4	1	5	2.80	0.83	0.69	0.45	-0.24
ML15	164	4	1	5	2.12	0.99	0.97	0.85	0.27
ML25	164	4	1	5	2.73	0.98	0.96	0.22	-0.89
ML32	164	4	1	5	3.18	0.91	0.83	-0.02	-0.52
ML48	164	4	1	5	2.38	1.01	1.01	0.45	-0.60
ML49	164	3	1	4	2.14	0.84	0.71	0.60	-0.02
ML53	164	4	1	5	3.37	0.97	0.93	-0.44	-0.73
ML75	164	3	1	4	1.94	0.72	0.52	0.78	1.11
ML83	164	3	1	4	2.02	0.78	0.61	0.50	-0.01
ML84	164	3	1	4	2.16	0.87	0.75	0.42	-0.42
ML85	164	4	1	5	2.21	0.85	0.72	0.55	0.16
ML86	164	4	1	5	2.51	1.03	1.06	0.50	-0.60
ML87	164	3	1	4	2.26	0.74	0.55	-0.01	-0.46
Valid N	164								

ML6 = *"AML Policy in the UK appears to be effective"*
ML15 = *"Financial crime appears to be treated more leniently in court than other crimes"*
ML25= *"The regulators are an effective force to ensure reporting institutions comply with regulators"*
ML32 = *"The banking system in the UK does a good job in preventing the use of accounts to launder criminal money"*
ML48= *"Money launderers have to have knowledge of AML policy"*
ML49 = *"Money launderers have to be aware of law enforcement tactics"*
ML53 = *"The current regulatory AML framework is sufficient to dissuade professionals from being involved in money laundering"*
ML75 = *"Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court sentencing"*
ML83 = *"A person convicted of drug trafficking is likely to receive a more sever sentence than the person who laundered his money"*
ML84 = *"The penalties for money laundering crimes are too lenient"*
ML85 = *"Professionals are treated differently in court in sentencing for money laundering"*
ML86 = *"Financial crime which includes money laundering is not seen as a serious problem"*
ML87 = *"The disparity in sentencing for money laundering in the UK is too wide"*

The correlation matrix was used to determine the strength of the relationships between the variables. The closer the correlation coefficient is to 1 the more confident a linear relationship and the closer to 0 the weaker the relationship the closer to 0 (Hair 2010). The correlation matrix (produced at Appendix 3.8) provided a visual presentation of all the variables. In factor analysis the cut off value is the eigenvalue of 1, any correlations close to 0 are significant. P< 0.05 at the 0.05 level. As such it was possible to identify which variables or group of

variables correlated with each other, and which ones could be excluded with a view to reducing the data dimensionality.

A number of steps were required to produce the following results by excluding on each occasion items with factor loadings < 0.40. Confirmation that the test variables are inter-correlated are indicated by the Kaiser-Meyer-Oklin (KMO) and Bartlett's tests. On the final analysis the KMO result was 0.783 which exceeded Kaisers (1974) value of 0.6. The value also exceeded the expectations of Hair et al (2010) who suggested a model was unacceptable if the KMO < 0.5 and a model was good if the KMO > 0.8. The KMO result of 0.783 was therefore acceptable. Bartlett's test reached statistical significance (p = 0.000). The above results supported the factorability of the correlation matrix and provide reassurance that the data and the approach was a suitable method of analysis. Table 4.13 provides the results of the KMO and Bartletts test and the rejection of the null hypothesis that the test variables are not inter-correlated at the five percent significance level.

Table 4.13: KMO and Bartletts Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.783
Bartlett's Test of Sphericity	Approx. Chi-Square	781.003
	df	78
	Sig.	0.000

The results indicate significant variables as produced in table 4.14. The range varies from 0.68 indicating positive correlation to 0.00 indicating weak correlation. It is clear from the correlation matrix variables ML48 *'Money launderers have to*

have knowledge of AML policy' and ML49 *'Money launderers have to be aware of law enforcement tactics'* that a relationship exists with 46% of subjects agreeing the significance of the two items. Similarly on the right side of the matrix at variables ML83 *'A person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his drug money'*, ML84 *'The penalties for money laundering crime are too lenient'*, ML85 *'Professionals are treated differently in court sentencing for money laundering'* and ML86 *'Financial crime which includes money laundering is not seen as a serious problem',* a significant cluster of variables are grouped together. Clearly there are intercorrelations between the variables that do not correlate too highly which rules out any extreme multicollinearity. In addition the determinant is greater than 0.00001 at 0.02 which confirms no multicollinearity.

Table 4.14: Correlation matrix for significant variables

VAR	ML 6	ML 15	ML 25	ML 32	ML 48	ML 49	ML 53	ML 75	ML 83	ML 84	ML 85	ML 86	ML 87
ML6	1												
ML15	0.03	1.00											
ML25	0.22	-0.08	1.00										
ML32	0.42	-0.10	0.29	1.00									
ML48	-0.02	0.00	-0.04	0.10	1.00								
ML49	0.00	0.05	-0.03	0.09	0.68	1.00							
ML53	0.38	-0.08	0.39	0.39	-0.06	-0.05	1.00						
ML75	-0.08	0.23	-0.12	-0.15	0.07	0.17	-0.07	1.00					
ML83	-0.09	0.48	0.01	-0.02	0.11	0.16	-0.10	0.34	1.00				
ML84	-0.11	0.31	-0.04	-0.13	0.04	0.02	-0.24	0.45	0.55	1.00			
ML85	-0.12	0.28	-0.17	-0.04	0.05	0.10	-0.19	0.37	0.44	0.49	1.00		
ML86	-0.13	0.38	-0.13	-0.19	-0.07	-0.06	-0.15	0.31	0.43	0.41	0.43	1.00	
ML87	-0.05	0.41	-0.15	-0.19	-0.07	0.00	-0.13	0.36	0.45	0.47	0.51	0.49	1

a Determinant = .024

ML6 = *"AML Policy in the UK appears to be effective"*
ML15 = *"Financial crime appears to be treated more leniently in court than other crimes"*
ML25 = *"The regulators are an effective force to ensure reporting institutions comply with regulators"*
ML32 = *"The banking system in the UK does a good job in preventing the use of accounts to launder criminal money"*
ML48 = *"Money launderers have to have knowledge of AML policy"*
ML49 = *"Money launderers have to be aware of law enforcement tactics"*
ML53 = *"The current regulatory AML framework is sufficient to dissuade professionals from being involved in money laundering"*
ML75 = *"Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court sentencing"*
ML83 = *"A person convicted of drug trafficking is likely to receive a more sever sentence than the person who laundered his money"*
ML84 = *"The penalties for money laundering crimes are too lenient"*
ML85 = *"Professionals are treated differently in court in sentencing for money laundering"*
ML86 = *"Financial crime which includes money laundering is not seen as a serious problem"*
ML87 = *"The disparity in sentencing for money laundering in the UK is too wide"*

The extraction method employed was Principal Component Analysis (PCA), using the criteria to extract factors greater than 1. The first three components recorded eigenvalues above 1 and accounted for 58% of the total variance in the survey data. Table 4.15 describes the data value for each factor.

Table 4.15: Eigenvalues > 1 and Variance per Factor

Factors	Eigenvalue	% of Variance	Cumulative
1	3.728	28.679	27.141
2	2.040	15.692	44.341
3	1.744	13.415	57.786

The number of eigenvalues[49] greater than 1 is the number of factors to include in the model for interpretation. To further verify the first three factors Cartell's scree plot[50] shows the eigenvalues that are plotted successfully. Figure 4.6 provides the scree plot relating to the PCA. Attention should be made toward a spot in the graph where the plot levels out. The results for this research imply the knuckle or knee joint levels out at component 4, thus suggesting a three factor/component solution with eigenvalues >1 as displayed. This preliminary stage in factor extraction produced 3 factors.

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[49] Eigenvalue: The eigenvalue of a factor represents the amount of the total variance explained by that factor (Pallant, 2007).

[50] Scree plot: Is a graph plotting each component (X-AXIS) against its associated eigenvalue (y-axis). It shows the relative importance of each factor. The graph has a very characteristic shape (there is a sharp descent in the curve followed by a tailing off) and the point of inflexion of this curve is used as a means of extraction (Field, 2000).

Figure 4.6: Scree Plot of Principal Components Analysis
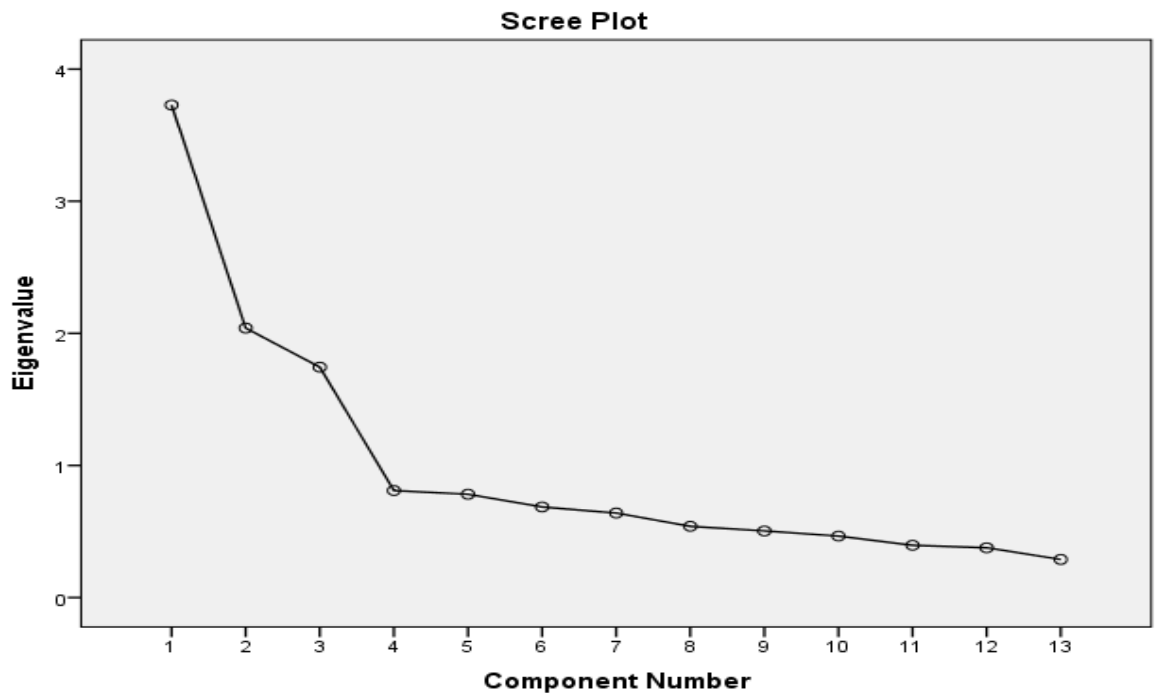
A table describing the 3 factors before and after rotation is provided at Appendix 4.4. Each component explains less variance that the previous one and this indicates the importance of each factor as shown on the table. Once rotated the component matrix gives a correlation between an individual variable and a particular factor by minimizing the number of factors on which variables have high loadings. Table 4.16 refers to the rotated component matrix and the factor loadings for each variable. It should be noted that in reaching this conclusion exploration took place by experimenting with the numbers (from between 3 – 8 factors) until the most satisfactory solution was found (Tabachnick and Fidell, 2007). Three factors gave the best representation of the underlying dimensions of the AML themes. The result that 58% of the common variance shared by the 13 variables can be accounted for by the three factors.

As a final measure of reliability and in order to test the internal consistency that each of the items measures the same latent variable reliably, a Chronbach alpha test was performed. The output was assessed by following the rule of George and Mallery (2003) which indicates acceptable values. The items for each component/factor are tested together to test their model fit. The results suggest the internal consistencies of the items are between acceptable and good, which indicates that reliability is constant. The co-efficient reliability value is also included in Table 4.16. The full rotated matrix is provided at Appendix 4.4 which consist of the factor loadings for each item onto each factor. The matrix is calculated after rotation for further interpretation and includes eigenvalues, communalities, variance and cumulative variance.

Table 4.16 Rotated Components Matrix Results

Components	Scale items	Factor loading	Co-efficient reliability
Sentencing/ Deterrent	The penalties for money laundering crimes are too lenient	0.782	0.772
	The disparity in sentencing for money laundering in the UK is too wide	0.781	
	A person convicted of drug trafficking is likely to receive a more sever sentence than the person who laundered his money	0.740	
	Professionals are treated differently in court in sentencing for money laundering	0.710	
	Financial crime which includes money laundering is not seen as a serious problem	0.659	
	Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court sentencing	0.649	
	Financial crime appears to be treated more leniently in court than other crimes	0.603	
Reporting/ Compliance	The banking system in the UK does a good job in preventing the use of accounts to launder criminal money	0.786	0.726
	The current regulatory AML framework is sufficient to dissuade professionals from being involved in money laundering	0.746	
	AML Policy in the UK appears to be effective	0.723	
	The regulators are an effective force to ensure reporting institutions comply with regulators	0.685	
AML Knowledge	Money launderers have to be aware of law enforcement tactics	0.908	0.806
	Money launderers have to have knowledge of AML policy	0.904	

Rotation converged in four iterations.

4.4.7 Results of factor analysis

The results showed an acceptable factor solution and that each item clearly loaded on each factor. The factors were labelled to reflect the interpretation of the scale items using the highest scores (Hair; 2010). The underlying meaning of the factor can be characterised by the label applied. Thus, according to the survey analysis, the dominant dimensions are contained within the three factor solutions described.

Factor 1 has seven items that loaded on the sentencing/deterrent factor. Six of those items originated from section 6, 'other areas' at question 12 of the questionnaire. The remaining item from section 1, 'policy' at question 4 of the questionnaire. The items mainly refer to how money launderers are prosecuted and the sentencing for their crimes being too light in comparison with other crimes. The label chosen characterises the 'sentencing' theme that emerges from each of the items.

Factor 2 has four items that loaded on the regulation/compliance factor. Two of the items originated from section 3, 'SARs', question 9 of the questionnaire and one each from section 1, 'policy', question 4 and section 4, 'spend', question 9 of the questionnaire. All items drawn on this factor positively acknowledge the strength of AML policy and the regulatory framework to prevent money laundering. The label chosen also characterises many of the activities that emerge from each of the items.

Factor 3 has 2 items that loaded on the factor 'criminal knowledge'. Each of the two items originated from section 4, 'spending activities', at question 10 of the

questionnaire. The label chosen does not reflect the original themes from which the items originated, however does reflect the underlying characteristics of the items for this factor. The items similarly reflect the view that those involved in money laundering require knowledge of how law enforcement apply their investigative techniques and of the policy itself.

Convergent validity can be accepted as 9 of the 13 items within the factor structure have shown a standardised loading of at least 0.7, ranging from 0.603 to 0.908 in value as indicated in Table 4.16 each being significant at 0.1 per cent level. Table 4.17 describes the labelling of items to each factor.

Table 4.17: Application of factor labeling

Factor/Label	Items
Factor 1 Sentencing/Deterrent	The penalties for money laundering crime are too lenient The disparity in sentencing for money laundering in the UK is too wide A person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his drug money Professionals are treated differently in court sentencing for money laundering Financial crime which includes money laundering is not seen as a serious problem Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court in sentencing Financial crime appears to be treated more leniently in court than other crimes
Factor 2 Reporting/Compliance	The banking system in the UK does a good job in preventing the use of accounts to launder criminal money The current regulatory AML framework is sufficient to dissuade professional from being involved in money laundering AML policy in the UK appears to be effective The regulators are an effective force to ensure reporting institutions comply with regulations
Factor 3 Criminal Knowledge	Money launderers have to be aware of law enforcement tactics Money launderers have to have knowledge of AML policy

4.4.8 Significance of factor loadings and cross-loadings

The significance of factor loadings have been discussed in Chapter 3 and followed the guidelines of Hair et al (2010) with factor loadings >0.40 considered acceptable for this study.

By viewing the rotated matrix in Appendix 4.4 cross-loadings can be observed on a number of factors. The variables included are: a person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his money, professionals are treated differently in court sentencing for money laundering, financial crime which includes money laundering is not seen as a serious problem, the banking system in the UK does a good job in preventing the use of accounts to launder criminal money, AML policy in the UK appears to be effective, and the current regulatory AML framework is sufficient to dissuade professionals from being involved in money laundering.

Following the guidelines of Hair *et al.*, (2010), the author addressed the issue of cross loadings by reporting the highest factor loading, as each were above the recommend communality level >0.50. The guiding principle being that variables that cross-load are generally deleted unless theoretically justified to maintain them, in addition variables must be 0.50 or above to meet the communality guidelines. The author is satisfied these requirements have been met.

4.4.9 Goodness of fit

Measures of goodness of fit of the three factors are taken from the results of a number of areas in the analysis process. The KMO at 0.783 is described as 'middling' degree of common variance and is acceptable; the percentage of

variance accounted for 58% of the total variance. Although this value is slightly below the 60% recommended by Hair *et al* (2010), it is also acceptable. The average communality for all 13 variables is 57%. According to Hair *et al* (2010) variables should generally have communalities >0.50 to be retained. Others suggest communalities >0.60 should be considered (Field, 2005). The highest communality in this study is 0.82; money launderers have to be aware of law enforcement tactics and the lowest 0.37; financial crime appears to be treated more leniently in court than other crimes. Nine of the remaining variables have communalities above 0.50 while two are below the 0.50 level. In conclusion the average is acceptable for goodness of fit as each variable is reporting a reasonable proportion of variance. Based on those indications all variables are retained.

In summary the 3 factors that influence the effectiveness of AML policy implementation in the UK can be interpreted as; sentencing/deterrent; reporting/compliance and criminal knowledge. The results of the factor analysis provided a more thorough understanding of the dimensions of all the variables included in the analysis. The following section continues with an examination to establish if any significant differences between the groups emerged, that responded to the questionnaire and in light of the results of the factor analysis. A one-way Analysis of Variance (ANOVA) was used for this purpose. Section 4.4.10 provides the results of this analysis.

4.4.10 Examining group differences

Group analysis determines if there are any significant differences, between and within the groups that participated in the questionnaire survey. The differences

relate to the three components identified in section 4.4 from factor analysis: Sentencing/Deterrent; Reporting/Compliance; AML Knowledge. In this section the report describes the significance between the groups: Group A Accountants, Group B Law enforcement, Group C Financial Institution and Group D Ex-offenders. The fifth group "Prosecutors" was amalgamated into the Enforcement group as the numbers of Prosecutors who completed the questionnaire was low. The analysis was carried out by applying One-way ANOVA using the software SPSS. The results of the analysis can be viewed at Appendix 4.5.

From the ANOVA tests there appears statistically, to be "no difference" between the groups and the remaining 2 factors. From the participant view factor 1 and factor 2 are accepted. This result in itself provides external validity to the process. All four groups are independently and statistically accepting of the remaining factors and those factors appear to be important dimensions for all the stakeholders. Factor 1 refers to sentencing and factor 3 refers to criminal knowledge around AML. Further discussion to conclude the findings from all the analysis will be provided in Chapter 5.

4.5 Phase 4 Verification and interpretation of Factor results

The objective of phase 4 was for participants to review the results of the factor analysis (3 components and their related variables) and respond to three questions relating to those results. The process involved using 5 participants (one from each of the 5 original focus groups) to comment on the results of the factor analysis described in section 4.4. Each participant was randomly chosen from each group and no prior notification was made. A copy of the email forwarded to

all participants is included at Appendix 4.7. The questions put to participants from each group are as follows:

Questions	Groups
"In light of the statements underlying each factor how do you see them informing policy in AML arena"?	Law enforcement Accountant Prosecutor MLRO Ex-offender
"Do the statements suggest that current approaches are effective"?	Law enforcement Accountant Prosecutor MLRO Ex-offender
"How do you see the interpretation of these results in light of the research question"?	Law enforcement Accountant Prosecutor MLRO Ex-offender

Reporting the analysis of the individual participants followed a similar process to that of the focus groups. Morgan (1998) suggests reporting what is important in light of the research question, in this case: *"What are the factors that influence the effectiveness of the AML policy implementation in the UK".* The five responses from representatives of each of the original focus groups: Law Enforcement; Accountants; Prosecutors; MLROs and Ex-Offenders were viewed, read and re-read to obtain familiarity with the material. Responses to each question were highlighted for agreement between the respondents, as well as documenting the explanations from participants as to the significance of each variable within the factors.

The questions were put to the participants to draw out responses that would verify or not, the factor results. In short, the process confirmed the results of the quantitative analysis.

The results of phase 4 verification (question responses) are triangulated (as depicted in figure 4.7 below and again in Chapter 5, section 5.5) with the analysis from phase 1 theme identification; phase 2 focus group interviews and phase 3 survey questionnaires. Discussion of the results from question 13 of the questionnaire will also be included as will the results of the group differences from the one way ANOVA. The findings are produced in the following section 4.5.1.

Figure 4.7 Results of the triangulation of methods

Phase 2 Focus Groups

Phase 3 Factor Analysis

Themes
Policy
Crime
SARs
Spend
Agency influence
Other activities

Phase 4
Verification of results
from
Individual participants

"Confirmed"

Sentencing/deterrent

Regulation/compliance

Criminal knowledge

Results
Sentencing/deterrent

Regulation/compliance

Criminal knowledge

Phase 1 Identification of themes from Literature

Theme identification
Legislation
Criminality
SAR process
Spend
Influence
Other activities

4.5.1 Results

The discussions follow each of the three questions that were set for phase 4 component verification. The findings section will apply the principles of deterrence, rational choice and economic regulation theory to evaluate the association between AML activities and AML policy.

Sentencing/deterrent

The 7 statements relating to the sentencing/deterrent component as shown in Table 4.16 refers to views surrounding the penalties for money laundering and related predicate crimes. The general pattern for the statements suggests a difference in sentencing between money laundering and other crimes. Money laundering is seen as a lesser offence and therefore treated more leniently in court. The consequences suggest money laundering is not seen as a serious crime and criminals are not deterred from committing money laundering offences. This view corresponds with Becker's (1968) utility view that the cost from crime should outweigh the benefits of crime in sentencing. However the deterrent value is not solely on sentencing for money laundering but from the confiscation that follows. It is the confiscation that appears a more effective deterrent.

There is however another element to the use of confiscation and that involves the dilemma between sentencing and confiscation. It appears that courts are inclined to give out lower sentences and prioritise confiscation as prosecutors have acknowledged;

> *"We've even had instances where the judges are starting to equate, they're starting to trade off a criminal sentence with a confiscation order"*
>
> Quote from law enforcement

This follows that if fines through confiscation are having a greater impact than sentencing there could be many implications relating to practice and policy for all the regulated entities and enforcement.

As expected all of the participants agreed with the proposition that the 7 statements inform policy. This view comes from the position that sentencing for

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money laundering is too lenient with a reluctance to prosecute professional for money laundering. One participant suggested the sentencing policy does not reflect the overall importance of money laundering as a serious crime. Another participant offered a view by suggesting the sentencing guidelines should be pursued through education of Judiciary, guidance through court of appeal and sentencing council. There was a suggestion that the results of this study should be presented to the Home Office to stimulate a review within the Public Prosecution Service and Judiciary. In general the view is that current approaches are inconsistent and reduce the effectiveness of legislation.

Evidence of more emphasis being placed on the confiscation side of proceedings is voiced by participants in focus groups. Defence barristers are instructed by their clients to *'make a deal'* on the confiscation side rather than appeal the sentencing as this participant suggested:

> *"No I think the 2002 legislation made the confiscation process a lot easier and a lot more wide spreading against the criminal… certainly from my role as a confiscator that it's quite clear that they fear that more than they ever fear a prison sentence. That in itself the confiscation scheme and the 2002 Act has certainly made the criminals an awful lot more aware of what the powers that the police can do and can't do".*

<div align="right">Quote from law enforcement</div>

The manipulation of the court system in this respect creates distrust between enforcement and judiciary. Sentencing and confiscation are weighted against each other to provide a fair conclusion to the offender; for example: there are two penalties for one crime: A conviction which can include a prison sentence and a confiscation of any assets from the crime (from the offender). In light of that understanding there appears to be a battle between the forces of law and order,

and the defendants defence team in order to get the best deal, according to this latest post:

> *"The last one that I dealt with I'm trying to ring the PPS before the barrister rings the PPS to tell them that he's just done a deal in the sum of. And I'm ringing the PPS to get in first to say he's trying to do a deal here and he shouldn't be doing a deal".*

Quote from law enforcement

In relation to the effectiveness of current approaches the following two comments relay the views of many of the participants involved in the research:

> *"Stricter sentencing for serious crime"*

and

> *"More effective enforcement of the existing regulations and laws. More accountability within the non-financial regulated sector. A regulator I can believe in".*

Quotes from anonymous respondent from questionnaire

The consensus from respondents to the component sentencing/deterrent was generally the same, the sentencing approach was not as effective as it could be. For one participant the disparity in sentencing for related crimes such as drug trafficking and money laundering did not make sense. Criminals seem to be able to work around the controls with emphasis from participants on the use of stronger penalties to create a more effective deterrent.

There is consensus within the group that interpretation of the results in light of the research question suggests that sentencing on its own is not an effective

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deterrent. There appears to be a distinction between the money laundering offence and the predicate crime in how they are prosecuted and sentenced in court proceedings. *"No message that money laundering and predicate crimes are equal"* One participant suggests sentencing is determined by the circumstances of the case and is only one component of the overall AML strategy to combat money laundering. There is general agreement among the participants that the *"sentencing factor"* is key to improving the overall effectiveness of AML policy.

Reporting/compliance

The 4 statements relating to regulation/compliance results as shown in Table 4.16 refers to views surrounding the reporting/compliance regime that directs financial institutions to make reports on suspicions of money laundering. The general pattern of the statements suggests the reporting regime is sufficient for its purpose and was effective. One statement refers to the effectiveness of regulators to ensure the banks are compliant. The results correspond with existing literature that suggests the main reason that banks are compliant is due to the consequences of fines and reputational risk generated by non-compliance (Verhage, 2011; Harvey, 2004; Masciandaro et al, 2001).

There was a mixed reaction to question 1 by participants concerning the 4 statements. Some participants agreed with the statements and that this was a key area to inform policy in AML, that the statements were an acceptance and an understanding of how important an area the reporting regime was. In contrast to this view one participant suggested the regime was not sufficient to deter or detect professionals involved in money laundering:

> *"The self-regulation by the majority of professional bodies is still an old boys network and is both unwilling and unable to detect the offenders in their midst".*

<div align="right">Quote from law enforcement</div>

Further comments indicate the protection of professionals through *"advice and guidance"* offered to them. Interestingly another some participants suggested the regulation should be extended to other entities involved in high value goods and Money Service Bureaus (MSBs). The regulation does apply to high value dealers and MSB's but comments suggest very little enforcement in these areas:

> *"No, no, it's the regulation is light touch, it's designed to be light touch, it's not that they are lax in their methodology. The regulation is wrong. A sweet shop has to produce better records than an MSB does".*

<div align="right">Quote from law enforcement</div>

A suggestion that more checks and surveillance is required for these entities:

> *"The MSB regulations facilitate money laundering. In fact you have to ask the question why they exist in the first place".*

<div align="right">Quote from law enforcement</div>

This message was reinforced by a member of the banking sector who suggested the regulators focus on banks because they (banks) are the lead agency for making SAR reports. This of course means that if something goes wrong it is likely to be within the banking sector. Banks do recognise that compliance is a *'cost centre'*, not a *'profit centre'* (Harvey, 2009, 2004; Bosworth-Davies, 2007) and the business lost through 'Know Your Customer' and 'Risk Based Approach'

impacts on bank business. This is confirmed by participants from the banking sector:

> *"And the other people, who maybe would be of an older school, see it as an imposition because it's a regulatory requirement, and some of the people who they actually potentially have to consider now from a SAR obligation are actually people who they were courting quite seriously for business".*

<div align="right">Quote from banking sector</div>

Striking a balance between loss of business and the banks recognition of their profit maximisation function and AML obligations has recently seen fines and sanctions imposed on banks on a number of high profile cases[51]. Regardless of the frustration in compliance non regulation is not seen as an option however discussions did intimate less change leaving more time to get used what currently exists.

> *"Yeah there's a benefit of it not being regulated, if it's there and it sits for a while it gives you some degree of stability. You know you can start to reinforce the important messages to your operation, I mean we're retail and business but one of our other parties is purely business, so their risk based approach is slightly different than ours. So if you keep changing legislation it then starts to muddy and people then don't know, I mean what is their focus, what is their policy"*

<div align="right">Quote from banking sector</div>

Bosworth-Davies also make this point which he posits that winning the war on money laundering will not happen with governments throwing more and more regulation at the compliance sectors. Partnership and co-operation within the sectors he suggests is the way forward (Bosworth-Davies, 2007). The picture emerging from this study is that banks are in agreement with this proposal. Encouraging the making of reports by other entities could be made easier as

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[51] HSBC and Barclays bank fines

suggested; by supporting joint enterprise with banks and regulators working in partnership:

> *"Remove the threat to MLROs under POCA. Regulators should be more collaborative i.e. engage in constructive discussions with firms. Proportionality e.g. having regard to most firms outside of banking, the sanctions regime is hugely expensive for very little benefit".*

<div align="right">Quote from banking sector</div>

In essence the contrast in the above views suggest that compliance relating to banks generally is sufficient but other parts of the banking business and those regulated agencies outside of banks is not.

In relation to the effectiveness of current approaches all participants agreed that statements associated with the component reporting/compliance indicated effectiveness in the reporting system. No further comments from the verification group were forthcoming in this respect. However, some recommendations for change highlighted regulatory control as deflecting from the original idea of compliance and it is this deflection that causes inefficiency in AML system as outlined below:

> *"There is too much focus on regulatory expectation rather than effectiveness of the system itself i.e. Focus on demonstrating to the FSA we have met their idea of what is required (not always in line with what legislation requires) rather than how effective the organization is in detecting ml. If we look at how much cash is seized vs how much is spent on compliance, the current regime appears very inefficient".*

<div align="right">Quote from banking sector</div>

These comments are echoed in literature: Bosworth-Davies strongly suggests government interference in setting the agenda for regulatory compliance. The 'bigger picture' he suggests is in getting financial institutions reporting 'suspicious activity' which extended the term 'reporting suspicious transactions'. The objective was to identify and repatriate lost billions from tax evasion and market irregularities. These are the big fish that can add recoverable assets to the government coffers (Bosworth-Davies, 2007).

In relation to the interpretation of the results in light of the research question the statements within the component reporting/compliance suggest the regulatory reporting regime is robust and effective. Most participants agreed with this component; however some comments suggest regulatory regime requires change in respect of professionals and their potential to be involved in money laundering:

> *"You cannot rely on a code of conduct and high social standing of an office to ensure members will not commit crime".*

Quote from anonymous respondent from questionnaire

This news is echoed by other participants who suggest the reporting regime should be extended and enforced beyond banks and toward professionals:

> *"More time and money needs to be spent in enforcing compliance within the small MSB businesses".*

Quote from law enforcement

One participant commented that the banks and regulators are praised for their contribution to the overall effectiveness of AML policy. Other professionals such

as accountants and lawyers are stifled by the AML framework the consequences of which they are not looked on in a favorable light. Change is seen as possible as one participant imparts that there is no suggestion that the current reporting and compliance regulations are either overbearing or unsustainable. There is however a strong notion that more can be done jointly by enforcement and regulation as suggested in this comment:

"More input from Law Enforcement, a realisation that the financial sector is a major contributor to UK plc and therefore needs strong regulation to ensure honesty; greater appreciation of lifestyle evidence by law enforcement, and a realisation that criminals spend their money rather than save it; there is rarely a pot of gold to be recovered, except from the launderers (who may of course have indemnity cover to pay, rather than losing their own assets".

Quote from anonymous respondent from questionnaire

Criminal knowledge

The two statements relating to component criminal knowledge as shown in Table 4.16 refer to views surrounding criminal knowledge of law enforcement procedures. The general pattern of the statements suggests knowledge is important for money launderers to prevent detection from criminal activity. Knowledge about police tactics is easily obtained through details of court cases, crime documentaries reported in television and media never mind the vast amount of data available through the internet. Participant from the various expert groups acknowledge that view:

"I mean if I was a criminal the first people I would employ would be, I would employ a good accountant to go through the JMSG guidance notes to see were the loopholes are. Or I would put someone inside a bank to understand where the bank is weaker, you know, is maybe potentially paying lip service"

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There is consensus from participants that money launderer's use weaknesses in the AML system to their advantage *"Criminals will establish very quickly where the weak links in particular banks are and will home in on that".* It appears however that nothing has changed in the last decade as Bosworth-Davies makes the point relaying an interview with a criminal by the Telegraph magazine 5th July 2003:

> *"You learn something every day in jail…useful skills…there is not much else to do so you talk about crime…you come out and you've got to start all over again…you've got to get money".*

(Bosworth-Davies, 2007:191)

That view adds a further dimension to the point that police tactics should be less visible and that law enforcement take steps to conceal tactics and be more flexible in their approach. Now we must also forbid criminals talking about crime in prison. The next comment puts all of the above into perspective:

> *"AML policy acts as a foil to money launderers drive to legitimise ill-gotten gains and so it will always be their objective to understand, test and if possible breach AML procedures".*

Quote from anonymous respondent from questionnaire

Is the answer then to create further legislation and regulation to further tighten up AML? Generally as agreed with participants AML policy needs to be continually

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reviewed to prevent it being undermined however many also agreed that policy should not be changed:

"In my opinion, there is no need of more regulation but more action and consequences for those who practise money laundering. In money laundering crimes, the message that crime does not compensate has not reached the public".

Quote from anonymous respondent from questionnaire

In relation to the effectiveness of the current approach most participants agreed the statement items in the component criminal knowledge were correct in the assumption that knowledge of police tactics and knowledge of AML policy can influence the effectiveness of policy implementation. However, one participant quite rightly pointed out that in answering the question, by viewing the two statements they do not confirm or refute the current effectiveness of AML policy. On reflection the question is unsuitable for this component because of the context of the statements:

"Money launderers have to be aware of law enforcement tactics" and
"Money launderers have to have knowledge of AML policy".

(Items from component 3 result)

The question is suitable for sentencing/deterrent and reporting/compliance components as these statements reflect positive and negative items. However in response to the participants comment Morgan (1998) suggests interpretation is more reliable when carried out by participants other than the researcher. In that respect the comment here is accepted and acknowledged.

What can be interpreted from this result is that in order to be more effective, it would be much better if money launderers knew less about law enforcement tactics and AML policy. The caveat to that interpretation lies with the following comment that suggests:

> *"Just for once, it would be good for the governing bodies would sit down with the investigators camp; Counter fraud departments to actually listen to how they stop us from doing a thorough investigation. Times that regulators are a hindrance more than a help".*

Quote from anonymous respondent from questionnaire

Co-operation and partnership are powerful allies and prevention and enforcement groups in AML could benefit from better relationships. It is acknowledged that regulatory bodies and enforcement agencies do not see eye to eye in their AML function, and why would they? The comments in the discussions in this study echo what is suggested in literature; financial institutions are conflicted in their roles between recruiting business, making money and informing on their customers. They receive very little feedback on the reports they do make (Ross and Hannon, 2007), are constantly hounded by regulatory authorities to ensure they are compliant and see no evidence that the results are effective. Law enforcement on the other side, do not trust banks to make quality reports, feel that they protect professionals by turning a blind eye to their activities and area evasive when asked for further information. In addition when law enforcement do try to prosecute for money laundering they do not have the full support of the CPS (Verhage, 2008; Bosworth-Davies, 2007; Harvey, 2004; Levi, 2006). The crux of the matter is effectiveness can be improved as indicated by the results of this study through co-operation and partnership at all levels.

In response to the question *"How do you see the interpretation of the results in light of the research question"* as suggested by a number of participants was difficult. The two statements in the component criminal knowledge are not reasons that AML policy is effective. Participants commented that money launderers react to change in law enforcement tactics. One participant suggested that, if through a criminals understanding of AML policy, they are deterred from using financial institutions and professionals to launder money, then it could be argued that AML policy is effective and limits the channels available to the money launderers (Ferwarder, 2009). That follows, as another participant suggests that any change in policy, must take account of current police practices and access to knowledge by criminals:

> *"An effective policy must therefore be flexible and as covert as possible".*

> Quote from prosecutors

Knowledge of AML policy and enforcement tactics extends beyond the borders of the UK and requires greater co-operation and collaboration from agencies in all countries. As literature rightly posits that money moves from one end of the globe to the other in seconds so prevention and enforcement needs to be up to speed in communicating requests for assistance and unification of policies. It is clear this problem exists as the comment suggests:

> *"Level of accountability on the front-end force needs to be a bit more. Make AML laws consistent in 'friendly' countries. Businesses/Firms to be encouraged to put more focus on AML controls. The UK accepts*

this but education of European countries or European parent companies is required. In Germany there is very much a ""tick-box"" approach, whereas the UK outside of financial regulation take a very different risk based approach treating everyone on a case by case basis".

<div align="center">Quote from anonymous respondent from questionnaire</div>

Money laundering investigations are changing from simple one man band companies to complex multiple companies and bank accounts that stretch over many borders. Thus making it more difficult for investigators to track individuals, companies and most importantly, money. Prosecutors acknowledge this change:

"just in the last 18 months to two years instead of getting a straightforward case were you get an individual or a company, you now get companies and they're chains and there's groups of them. And it seems, I'm not sure if it's deterring the crime as opposed to making them more determined not to get caught. Or not determined, more determined to have a limited company to take the fall for it were they can't be hit".

<div align="center">Quote from prosecutors</div>

The discussions above suggest agreement from the participants of the results of the factor analysis and the three components of sentencing/deterrent, reporting/compliance and criminal knowledge. However as indicated above there remains some debate around those activities and areas were the AML provisions can be improved.

4.6 Chapter conclusion

This chapter presented the analysis and discussion of the results of four phases in this research strategy. Each phase within the strategy had an objective that led

to the next phase and was sequential in nature. These are summarised as follows:

Phase 1 - Identification of themes; determined the themes identified from literature that applied to activity around AML environment. These included: themes identified from FATF Recommendations that Countries should actively apply, in order to prevent and detect money laundering offences; themes identified from literature around studies that attempted to estimate the measurement and effectiveness of money laundering. Analysis from literature in both these areas identified four themes that encompassed much of the activity in the AML environment.

Phase 2 – Focus groups; explored the accuracy of these themes by presenting them in the form of question prompts to four groups of subject experts and one group of ex-offenders. Analysis of transcripts from discussions with the five groups identified six constructs that would assist the development of a survey questionnaire. Four of the themes that had originally been drawn from literature had been verified and two additional constructs identified. A description of the analysis process that identified those constructs from the transcripts was provided.

Phase 3 – Survey questionnaire; here the themes were utilised to develop the survey questionnaire. Statements relevant to each theme became the focus of the questions in each section of the survey questionnaire. Each section of the questionnaire drew responses that relied on five-point Likert scales for measurement. The exporting of the questionnaire responses to SPSS provided the data base for statistical analysis. The data was subject to Principle

Component Analysis and argument for analysis using small sample was made. Prior to performing PCA the suitability of the data for exploratory analysis was assessed. This included Pearson Correlation test looking for correlations that existed between the questionnaire items. To further support the viability of exploratory factor analysis the Kaiser-Meyer-Oklin (KMO) and Bartlett's test were performed. The KMO result was 0.783.

Applying varimax rotation simplified the structure of the factors and identified three components. By viewing the items underlying each component they were sufficiently re-labelled to the terms: Sentencing/deterrence; Compliance and Criminal knowledge. A reliability test using Chronbach Alpha confirmed the factors suitable for inclusion.

One-way Analysis of Variance (ANOVA) was used to determine if there were differences between the group respondents and the three factors. The ANOVA test found significant differences for factor 2. Post Hoc tests identified which groups differed. Accountants differed in their view with law enforcement $p = 0.0016$ and Accountants also differed in their view with ex-offenders $p = 0.009$. The remaining groups showed no significant differences which implied agreement that the remaining factors are important dimensions for the groups.

Phase 4 – Verification and interpretation of factors; provided the final confirmatory process to verify and interpret the factors identified from phase 3 analysis. Five participants, one member from each of the original focus groups provided verification and interpretation of the factor results. The participants responded to three questions that referred to Policy, effectiveness of AML and interpretation of the results in light of the research question. The responses to these questions

were discussed in section 4.5.1 and triangulated with the results of each of the other phases. Although there was agreement that the analysis produced the correct factors to answer the research question, additional comments identified a number of underlying issues that suggest wider implications for AML and AML policy effectiveness. Chapter 5 will conclude the results of the research.

Chapter 5   Conclusion, Contributions and Research Implications

5.1. Introduction

This chapter sums up the findings of the research. The chapter opens with an overview of the study, an explanation of the subject area and what the research sought to achieve. A discussion of the specific findings is followed by a discussion of the implications of the research on anti-money laundering policy and practice. The chapter also provides the contributions of this research followed by the final section that discusses the limitations of the research and the opportunity for further research.

5.2 Overview

This thesis has examined influencing factors that contribute to the effectiveness of money-laundering policy and how it is implemented in the UK. AML has become a front runner in the fight against organised crime, drug trafficking and terrorism, as well as many other serious crimes and as such ML can be found operating at both a local level and at an International level. Locally it seems criminals will spend the proceeds of crime as they obtain it. All levels will use the financial system to launder money, however organised crime gangs and those operating at an economically higher level will use the facilities of international financial systems to launder their crime proceeds. Globally, AML challenges regulatory and enforcement agencies due to the use of the many jurisdictions used for money transfers, and through the complex web of companies and jurisdictions that organised crime travels. Difficulties extend to the lack of unified laws and regulations to tackle the problem. *"It is ironic that the international*

community would fail to produce a single, unified set of rules to take on a criminal activity that thrives precisely on exploiting differences in laws and regulations" (Morris-Cotterill, 2001:22). Although this study is confined to the UK AML system it does reflect on a bigger picture that draws legislation and regulations from bodies outside the UK.

Policy changes as the social and economic environment dictates, and as such, those changes are not always in the best interests of the stakeholders who implement and enforce AML policy. As suggested by Gnutzmann et al (2010) money laundering is a globally traded service and that the link in the chain of accountability for one financial transaction can be broken by another transaction. The suggestion is that policy is decided by the policy makers in determination of what they want to achieve from the policy, in essence, capturing profit from money laundering. The study draws some reference to what the AML strategy in the UK attempts to achieve.

The main aim of this study was to identify and evaluate the drivers that influence the effectiveness of anti-money laundering policy implementation in the UK: more specifically the research objectives are:

1) To identify and draw from literature in the AML arena evidence of themes that are component activities that could be used as a starting point for this research

2) To establish a research strategy that can develop the themes identified and follow a logical sequence of activities that will answer the research question

3) To use methods in the gathering and analysis of data that will complement the research strategy, that are reliable and valid in

       respect of the researchers philosophical position and can be replicated in future research

4) To ensure the research is compliant with all aspects of ethical considerations and that the research is ethically and morally sound

This research adopted a pragmatic approach utilising methods contributed from both qualitative and quantitative perspectives. Four phases of activity driven in a sequential manner provided the data for each stage. Phase 1 theme identification; phase 2 focus group interviews; phase 3 survey questionnaires and phase 4 component verification. As stated in the methodology chapter purposive sampling was adopted and found suitable for this study.

Engaging with the literature provided the starting point for this research by identifying the themes as suitable representatives of the important aspects of AML (FATF, 2014, Ferwerda, 2009, Schneider, 2008; Takats, 2007; Unger, 2007; Van Duyne, 2006; Masciandaro, 2004; Walker, 1999). Literature in this area was structured around estimations of the cost of money laundering, AML policy effectiveness and FATF recommendations. One of the key identifiers here was the use of the same concepts in each review and this placed certain assurances that the themes identified were the correct ones chosen.

Literature provided a backdrop of the legislative and regulation in AML that has been discussed over the last three decades. Many definitions of money laundering (some competing) have been discussed and the implications of the differing interpretations of money laundering and predicate crime definitions globally. The evolution of AML policy in the UK has been explained and there has been discussion around the influence of external factors such as 9/11, terrorist

financing and the implications of organised crime in terms of asset recovery and AML.

5.3 Conclusions

The results of factor analysis pointed to Sentencing/deterrent; reporting/compliance and criminal knowledge as significant components that apply to the research question: *"What are the factors that influence the effectiveness of AML policy implementation in the UK"?* and confirmed in the phase 4 verification process. However, the results should be clearly set out based on all of the data and how those results equate to the theoretical perspective and the literature, as alluded to in the previous chapters. This research is not about developing new theory around deterrence, rational choice or economic regulation. Those subjects are much bigger than this research could offer, however the results of this research do contribute to the thinking around those theories and particularly to extending the theory on rational choice.

In respect of deterrence theory it is believed by some theorists that crime reduction is based on the use of deterrents.

> *"The goal of crime deterrence, crime prevention, is based on the assumption that criminals or potential criminals will think carefully before committing a crime, if the likelihood of getting caught and or the fear of severe punishment are present. Based on such belief, general deterrence theory holds that crime can be thwarted by the threat of punishment, while special deterrence holds that penalties for criminal acts should be sufficiently severe that convicted criminals will never repeat their acts"*

> (Lyman and Potter, 2007).

If such is true then the results of this research has not confirmed this theoretical viewpoint: The items within component one sentencing/deterrent refer to the lack of clarity in sentencing for ML crime. Further comments within the research both in focus group discussions and questionnaire responses suggest sentencing is not a deterrent. What does appear to emerge is that the civil recovery process in confiscation is a stronger deterrent than sentencing.

Rational choice theory holds that, people who commit crime first of all consider the risks of detection and punishment for the crime as well as the reward of committing the crime successfully (Lyman and Potter, 2007; Cornish and Clarke, 1993). It is not possible to determine this viewpoint without reading the mind of the offender or asking them a question about their intentions. It is clear that some consideration is undertaken by offenders prior to committing an offence otherwise they wouldn't consider committing the crime in the first place. But does the thinking refer to questions such as? what happens if I get caught? What can I get out of this? Will I go to prison? Will I get fined? Or, is it something different that offenders feel as comments from this research refer to such as 'bravado' and 'credibility' of the offender:

> *"- it's all, there's the emotion, there's the bravado, there's the legitimacy supposedly of what you're fighting for or against … all that comes, and the risk, you know, I know people who knew that if, the very first second they stepped out on the street they're putting their life on the line, but they didn't really think it was going to be taken from them, you know….And it wasn't a rational sort of weighing up pros and cons".*

Quote from ex-offenders

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"There may also be a bit of credibility about, around maybe serving a prison sentence as well in certain circumstances".

<div align="right">Quotes from ex-offenders</div>

One thing is clear from the results of this study: when an offender is detected, prosecuted and convicted their thinking does start to evolve. The fear the offender considers is not about what the sentence might be, but what confiscation will be calculated. The process from this point appears from all parties (i.e. judiciary, defence barrister, police and prosecutor) to concentrate on the offender's assets. There has been much discussion in this research about the role of each of these agencies in the confiscation process. Each agency competes against the other for the best position as noted by some of the comments from participants in this study:

"We've even had instances where the judges are starting to equate; they're starting to trade off a criminal sentence with a confiscation order".

<div align="right">Quote from Prosecutor</div>

"because if there's more emphasis on the civil side why is there emphasis on the civil side, is it because it's an easier system, an easier way of getting money off people for the government".

<div align="right">Quote from ex-offender</div>

"But the bottom line of it is, you know the bottom line to your question is, confiscation is more of a deterrent than sentencing".

<div align="right">Quotes from law enforcement</div>

If criminal assets are seized, for example, through more use of confiscation, then crime will be deterred. However, as Fleming (2006) suggests, assets are only available for recovery if they are available and not spent, if the latter, then asset recovery will have the effect of a toothless tiger. By stretching this point further, there would appear to be consequences for pursuing confiscation. Offenders do appear to consider the effect on their lives from losing their assets. More effort is put into hiding the assets from enforcement and from the institutions that report suspicions of money laundering. Already seen from the comments of the respondents, in this research criminals are becoming more proficient at hiding assets, making it more difficult for law enforcement to track them. Use of borders and multiple bank accounts in multiple jurisdictions adds to those difficulties. In addition self-laundering prosecutions may not be possible in some jurisdictions due to difficulties with predicate offence definitions (Unger, 2013). Self-laundering can be prosecuted in the UK and still (according to this study) prosecutors are looking for predicate offences to prosecute which further exasperates the relationship between them and law enforcement.

Preventative measures through regulation and reporting suspicions of money laundering are part of the effort to reduce money laundering crime. Despite the results indicating significant items in the 2nd component (that refer to the banking system doing a good job and that it was effective in preventing money laundering) many of the comments suggest underlying issues that affect that performance. Regulators use strong arm tactics to make banks compliant to the extent that they would report a lot less if it wasn't for the regulators. Reporting of SARs increases after bank staff receive training in money laundering awareness, and then drops back to normal reporting levels. The fear of fines and sanctions appear to gather

more weight, rather than the reporting institutions reputation, to ensure banks are compliant and that reporting is maintained. This view is in line with the view of Harvey and Lau (2009) and Chong and Lopez (2007) in their own research in this area.

Through enhancement of regulations the costs to banks are certain and immediate. Regulation is a non-profit area of business and it is this line that perhaps impacts on the resources and efforts put into managing this business. Participants from the banking group did not see any benefit to be able to conclude that what they did was making a difference. They received little feedback from law enforcement on reports that they do make, and this situation frustrates them even more. It was the banking group that first suggested participating in a joint initiative to plan policy around AML. Braithwaite et al (2007) also agrees with this approach:

> *"An integral part of a responsive regulatory approach is to provide opportunities for dialogue on these matters. A well-executed responsive regulatory intervention should allow disaffected actors within the regulatory community to express their views, work through reservations and grievances and move to a position where they are on a better footing for dealing with regulatory authority in the future"*

(Braithwaite, 2007:153)

Drawing from the ideas of Masciandaro and Filotto (2001) the costs and benefits of regulatory practice around AML need to be addressed. Regulators influence policy through their control of the sector. Benefits to institutions include unquantifiable assets such as reputation and integrity but costs can be much greater as the latest banking fines have shown. These civil remedies form the preventative feature for breaches in reporting by financial institutions. That may

well be why the results of this study suggest that reporting/compliance is effective and significant. However, the call for assistance in compliance goes on. One of the responses to this call could come from the government's incentivisation scheme. Currently, law enforcement, prosecution service and government receive a percentage of confiscated assets to use for community projects and crime fighting initiatives. One of the respondents to comments at question 13 of the questionnaire suggests: *"Why not pay for our own compliance regime using the assets confiscated from offenders? We know that the alternatives are the status quo".*

The final component identified from the analysis was criminal knowledge. This component featured two items that generally referred to criminal knowledge around law enforcement tactics and AML policy. It is accepted that access to knowledge around AML policy is readily available on line or in libraries. As referred to previously, many criminals discuss their cases and criminality in prison (Bosworth-Davies, 2007). Police methods of collecting evidence and detaining offenders are written in case files and are portrayed on an almost daily basis in film and media. As such, the response to the problem will not be contained by employing less advertising of those enforcement tactics. Discussions around this area also suggested that offenders didn't look up law books before going out to commit an offence, as the following quote suggests:

> *"You know in the old days you had the, what was termed the ordinary decent criminal, the burglars and people like that, getting caught and jail was part of their life…they knew it was down the road there somewhere…I think they understand there is a chance and they plan accordingly"*

Quote from ex-offender

The discussions suggested offenders be divided into two categories of AML offenders: low level criminals that spend money as they get it and high level criminals that operate as organised crime gangs and/or are involved in crime that reaps substantial criminal funds. In the latter case there is a need for professional money launderers. Both categories also use different types of offences to suit their purposes: low level street crime, such as drug dealing, burglary and theft that provides small funds versus high level crime, such as drug trafficking, cigarette smuggling and fraud that gains substantial funds.

By considering rational choice theory, it may be possible to provide a more simplistic view of this position. Human actions are based on rational decisions. This suggests an offender will make a rational choice which is informed by the probable consequences of that action (Akers, 1990). Offenders in the second category are likely to use the cost/benefit decision making process as they would have more to lose if prosecuted and their assets seized. Their behaviour changes to a more organised offender who employs professional people to hide their assets. Professional money launderers require knowledge of AML processes, in order to carry out sophisticated money laundering enterprise. Comments in the research from all the groups reflect that view.

Changes in AML policy and reducing the visibility of police tactics are both options to consider. Tightening up the gaps and making the choices harder for the criminal to commit crime are key priorities. Knowledge is more than just about police tactics and AML policy; it is about the whole package which encompasses all the processes such as: SARs, asset recovery, restraint, confiscation,

regulation, training, spending activity, investigation and prosecution. It is possible to change the current direction in both policy and practice. The three areas identified in this study are significant areas for change and an appropriate starting point. The next section draws from the results the implications for the future in AML.

5.4 Implications

The issues examined in this study and the findings have wide implications for AML policy and practice and will be addressed accordingly.

This study relates to the UK context; however as a global phenomenon, money laundering is a growth industry that has led to legislative and regulatory changes, rules and policies of best practice in order to, and how best deal with money laundering. Each country has its own priorities and how they implement their own policy fits with those priorities. Despite the international consensus on the most effective way to deal with money laundering, Unger (2006) suggests: *"It has also contributed to jurisdictional arbitrage whereby money launderers can take advantage of multiple rules and conflicting agreements"* (Unger, 2006:6).

The results of this study can effect changes in the UK but because of the above view can have implications for other jurisdictions as well. Looking at the 'bigger picture' all of the activities within the AML environment are important features to prevent, detect and prosecute money laundering. Three areas emerged as the most significant in determining the effectiveness of AML policy in the UK. These where: sentencing/deterrent; reporting/compliance and criminal knowledge.

It is possible to use the data that surrounds these results to determine a model of behavior that can be used as a template to enhance current policy and practice in AML. Although it is not possible to pinpoint exactly what changes should occur or what additional efforts can be applied to AML, however the following key findings emerged from the research and are presented below

:

- Prosecution and confiscation is currently and should remain a joint approach in AML deterrence (as represented in phase 3 questionnaire analysis)

- Asset recovery is a stronger deterrent than prosecution due to the offenders' perceptions of prison and fear of loss of assets (Lower sentencing and higher confiscation as discussed by the participants reflect this view) (as represented in phase 2 focus groups; phase 3 questionnaire analysis and confirmed in phase 4)

- Emphasis is more on confiscation as opposed to sentencing by offender, defense barrister, prosecution, judiciary and police (as represented in phase 2 focus groups; phase 3 questionnaire analysis and phase 4 verification)

- Two tier offenders operate differently: low level spend and high level money launderer (as represented in phase 2 focus groups)

- Offenders consider capture of assets in advance of crime offending at the high level category (as represented in phase 2 focus group interviews; phase 3 questionnaire analysis)

- Use of professionals with knowledge to evade asset recovery (as represented in phase 2 focus groups; phase 3 questionnaire analysis and phase 4 verification)

- Use of multiple companies/bank accounts/jurisdictions to complicate the audit trail (as represented in phase 2 focus groups; phase 3 questionnaire analysis)

- SAR process is sufficient and doing its job albeit the cost of doing so and the regulatory influence upsets the practitioners (as represented in phase 2 focus groups; phase 3 questionnaire analysis and phase 4 verification).

- Regulators in the UK appear to be creating the ethic within banks that compliance procedures must be adhered to (as represented in phase 2 focus groups; phase 3 questionnaire analysis and phase 4 verification)

- Knowledge around financial reporting as suggested is reasonably high. This would appear to offer some deterrent to making suspicious transactions (as represented in phase 3 questionnaire analysis)

- The logistics of SAR administration is a mess/this may be more to do with management than policy (as represented in phase

- There will always be resource issues around SAR analysis due to the multiple reports and time taken to investigate them (as represented in phase 2 focus groups; phase 3 questionnaire analysis)

- The feedback complaint from banks is a lame excuse as any new typologies can be provided during training, however this does not mean the relationship and co-operation should not be extended within all AML agencies as represented in phase 2 focus groups)

- There appears to be some confusion over the role of SOCA/NCA and the level of targeting of offender assets (some suggestion of the easy target offender as opposed to the 'Mr Bigs' as the legislation intended) (as represented in phase 2 focus groups; phase 3 questionnaire analysis)

- As policing evolves so does the criminal (an example is the increased number of cannabis houses producing cannabis, cigarette smuggling, tax evasion and human trafficking) law enforcement need to lead on typologies and direct intelligence sources and resource allocation (as represented in phase 2 focus groups; phase 3 questionnaire analysis)

- Predicate crime for money laundering is too cumbersome and sometimes difficult to prove ('Mr Bigs' distance themselves from the predicate crime but will not be too far away from the assets) (as represented in phase 2 focus group interviews; phase 3 questionnaire analysis)

- Stand-alone money laundering cases without predicate crime attached are not favored by prosecutors (as represented in phase 2 focus groups)

- There is a view that asset recovery is commercially driven, to get the money in quickly (this may be due to the incentivisation scheme were a percentage of recovered funds go back to the recovering agency) (as represented in phase 2 focus groups; phase 3 questionnaire analysis)

- If the above is true then that may account for the targeting of easy pickings by SOCA/NCA (as represented in phase 2 focus groups)

- Simplifying the legislation may help speed up the judicial process which is seen as torturously long (if a case is too long; from arrest to court proceedings then the defendant gets a sentencing consideration due to abuse of process (as represented in phase 2 focus group interviews)

In summary the common denominator in all of the above features is 'assets'. The above features help recognise that asset recovery is an important dimension in the whole of the AML environment. The effect of asset recovery has repercussions prior to and post the criminal offence. This is apparent in the behavior of the offender: their knowledge of the AML system, and how they manage the processes of that system. The criminal objective to obtain and retain criminal funds, puts into play a host of activities to ensure that objective is met. Activities such as:

- A cover story to account for criminal funds (which may be in his own name or a family member or friends name)

- Business, company, bank account

- Professional accountant, solicitor, financial advisor, bank official, high value dealer

- When funds arrive they may be dispersed in to the business and filtered through bank accounts and other assets purchased

- Foreign jurisdictions may be used to transfer funds for further criminal activity, property or asset purchase and/or assist the laundering process

All of the above activities make asset tracing difficult. However trigger points based on the study findings around sentencing deterrent, reporting/compliance and criminal knowledge may provide suitable solutions to these problems.

Undertaking this study has fulfilled a long term ambition to achieve meaningful research. The study has provided this author with personal development in many areas and enhanced knowledge academically and in the subject area. Extending knowledge in this area will provide a solid base which to impart that knowledge to others and advise in policy and best practice to many agencies in the AML environment.

There is already a huge interest in this study and this author has already received requests to publish the findings when the thesis has been completed.

5.5 Contributions

This study contributes to theory, methodology and professional practice by answering the research question and meeting the objectives set in chapter one. This research was driven by the desire to extend AML knowledge. As reviewed in chapter two the concept of money laundering has been an area fraught with difficulties, particularly in relation to theory and methodology. Criticisms have been levelled at previous research in this area as lacking in theoretical foundations and the use of methods that use assumptions, estimations and guess work to arrive at results, particularly in research estimations of the cost of money laundering (Unger, 2007; Masciandaro et al, 2007; Levi and Reuter, 2006; Van Duyne, 2006 and Reuter, 1985). Some researchers have based their theoretical foundations on 'economic crime theory' following Becker (1968). As discussed

and developed in section 1.3.3 in chapter one, this assumes the economist's analysis of rational choice whereby a person commits an offence if the expected utility gained from committing the offence (for example financial reward) exceeds the disutility associated with the action from being caught. This theory suggests it is the government's responsibility to ensure the cost of committing an offence exceeds the benefit obtained thereby deterring the offender from committing crime (Ferwerda, 2009; Fleming, 2005; Masciandaro, 2004). Many authors such as Ferwerda (2009), Walker and Unger (2009), Schneider (2006), Masciandaro (2004), Walker (1999) of whom (apart from Fleming who provides a comprehensive study on the asset recovery process that draws data from many areas using quantitative and qualitative methods of enquiry) developed theoretical models of the estimates of money laundering based on econometrics and observed data.

In terms of the practical contributions of previous research and in light of the gap identified in the literature that highlighted problems gaining access to key actors in the AML arena and as a consequence, access to the data that they held (Harvey and Lau, 2009; Verhage, 2008; Van Duyne, 2006; Masciandaro et al, 2004, 2001), this author suggests there has been more use of quantitative methods employed in previous research. This can be explained by the extensive use of statistics in previous research drawn from official government and law enforcement records and much less emphasis on data from experienced, knowledgeable stakeholders from the AML arena. Van Duyne (2006) in his research in Serbia informed us that appointments with enforcement and regulatory agencies were not kept, or cancelled at the last minute, records were unavailable and that records that were presented were incomplete.

Based on previous criticisms and approaches in the AML arena, this research took a different approach. Extending the theoretical views held by deterrence theory and rational choice theory as explained in section 1.3.3 chapter one, this research included economic regulation theory that discussed the use of regulatory control to ensure compliance, and indirectly providing preventative AML measures as a part of the explanatory framework. The outcomes of the research demonstrates the combination of these theories is compatible. Deterrence theory suggests the punishment fitting the crime; rational choice theory suggests criminals will determine the cost of committing the crime against the benefit from the crime; regulation theory suggests the extent to which governments will exert influence through regulation or rules to achieve their own objective as demonstrated in section 1.3.1, 1.3.2, 1.3.3 and 1.3.4 of chapter one.

The combination of theories provided a bigger picture than that previously portrayed in the AML arena. Assumptions are made of underpinning theory in the effects of money laundering and the cost and scale of money laundering; Schneider (2007), Unger (2007), Reuter and Truman (2004), Thomas (1999), Walker (1999a, 1995), IMF (1998). This research tested those assumptions by applying a rigorous flow of mixed methods from qualitative and quantitative disciplines bringing into play key stakeholders from the AML environment and triangulating the results (chapter three provides a full description of the methods used). In doing so the results suggest that rational choice theory is extended due to the emphasis placed on thoughts around deterrence through sentencing and asset recovery; regulation deterrence through fines for non-compliance and offender behavior and decisions to commit crime. Rational choice follows from the effects of money laundering and the cost and scale of money laundering as

both play key roles in understanding the deterrent effect of AML policy. Evaluation of the efficiency and effectiveness of AML policy is driven by the results of statistical data on crime figures, asset recovery and prosecutions. Policy is also designed to protect the financial sector from operational and reputational risks (Harvey, 2007). Likewise, estimations of the scale of money laundering is important as suggested by Biagioli (2008), because it gives a measure of the phenomenon and its impact on the legal economy (global economic instability through drug trafficking was also behind the development of FATF recommendations in 1991). The results of measurement may also influence risk assessment within the financial sector and the evaluation of counter measures/preventative measures needed to be put in place. The success of AML policy should therefore be a combination of the results of both effectiveness of AML policy and estimations of the cost and scale of money laundering.

As discussed in section 1.3.1 Chapter one, Keel (2009) suggests the only deterrence to crime is if the punishment fitted the crime. Ferwerda (2009) goes further to suggest that legislation should ensure the costs of committing the crime (measured in terms of penalties) are higher than the benefits obtained from committing the crime. The findings from this research contribute to theory by extending the existing literature and showing that rather than criminals being influenced by the length of detention upon conviction or the value of their confiscation order it is conjointly the combination of sentencing and civil recovery (confiscation) that is a more effective deterrent. However, when viewing the results from the focus group discussions with key stakeholders a different view is presented. The suggestion being that civil recovery on its own is a stronger deterrent than incarceration.

By following Keel's view that *"The swiftness, severity and certainty of punishment are key elements in understanding the law's ability to control human behaviour"* (Keel, 2005:1) would suggest, rightly, that the law relating to AML in the UK was designed to deter money laundering. Based on the premise that in order for crime to be deterred, laws and enforcement are used to raise an individual's awareness that criminal behaviour will result in punishment. However this author does not believe that legislators would have expected that civil recovery/confiscation would be a greater deterrent than sentencing, moreover the choice by individuals to commit money laundering offences is not bound by the deterrent effect of going to prison but by losing the very lifestyle that their criminal activity has funded. Evidence presented in this thesis in section 4.5.1 chapter four demonstrates that this view changes the behavior of criminals and encourages them to put in place mechanisms to hide their assets from enforcement authorities. The following comments echo those views:

> *"We're finding a lot more hidden assets, where assets are hidden in third party type thing".*

> *"Just in the last 18 months to two years instead of getting a straightforward case where you get an individual or a company, you now get companies and they're chains and there are groups of them. And it seems, I'm not sure if it's deterring the crime as opposed to making them more determined not to get caught. Or not determined, more determined to have a limited company take the fall for it where they can't be hit".*

<div align="right">Comments from prosecutors</div>

In addition a number of activities presented in the thesis suggest a two tier spending regime by criminals as opposed to the model currently being used by

law enforcement, the National Intelligence Model (NIM)[52]. The NIM is a model for policing that provides strategic direction and tactical resourcing decisions from the management of information and intelligence that is received. The model works at three levels: level 1 deals with crime at a local or command level; level 2 deals with crime at a regional level and level 3 deals with serious and organised crime that is usually national or international.

Two tier criminals as outlined above suggests a lower level criminal who spends his ill-gotten gains as he receives them and a higher level criminal who uses professional money laundering facilities. The results from the phase 3 statistical analysis did not specifically identify *'spend'* as a significant component, however the theme 'spending activities' term does link to component 2 reporting/compliance and component 3 AML knowledge. Component 2 suggests the banking system does a good job in preventing the use of accounts to launder criminal money and in addition is sufficient to dissuade professionals from being involved in money laundering. Component 3 suggest that criminals as well as needing to be aware of law enforcement tactics also need to have knowledge of AML policy. Discussions with participants in the focus group interviews corroborate these views. The comments below provide a picture of the changing face of money laundering that incorporates the use of tactics by criminals based on knowledge of AML and law enforcement procedures. A full list of comments is provided at Appendix 3.4 which extends the breadth of knowledge and changing methods used by criminals to spend their ill-gotten gains. Comments such as:

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[52] For a full description of National Intelligence Model (NIM) see: www.acpo.police.uk

"But they're learning as the years have gone on from the Proceeds of Crime Act because initially the people would have put a wad of money in a child's savings account…Or in his mother's…Yeah that we could have got very quickly. Now they're having to think so much more smart, smarter that they have to take the money away from themselves and their families completely".

"Once it goes cross border it grinds to a halt because the natural jurisdictions don't want to work together. See your biggest issue for us in the level of crime that we're dealing with is, a lot of it is so slow for us to investigate because it is outside the immediate jurisdiction".

Comments from law enforcement

"I would say there are professional money launderers at the top end, there has to be, whether it's laundering cash or just laundering cheques or money that's come across a computer screen that's just bouncing around different accounts. I mean there has to be. Someone who launders money, big sums, it's going to be pretty much a full time job, and they're going to take their cut for that".

Comment from Accountants

"I would presume if people knew about it, it would be the ultimate deterrent, because if I'm earning 20 grand a year and I go and make a lodgement of ten grand, knowing that that'll kick start some sort of investigation, there's no way in a million years if I know that I'm going to go in with ten grand".

Comment from Ex-Offenders

Courts are inclined to balance sentencing and confiscation, criminals and defense barristers are aware of this and use the system to their advantage. As suggested by a number of the participants in the focus groups in phase 2, difficulties arise in getting prosecutions through the court for money laundering cases. As a result a civil recovery appears to be preferred to a costly time and

resource intensive investigation. The following comments relate to those concerns:

> *"So that's a question for prosecution services, CPS, PPS. Why are you unwilling to prosecute when we have evidence to prove, especially in line with standalone money laundering".*

<div align="right">Comment from Law Enforcement</div>

> *"We haven't got the information we need to take the prosecution decision and we end up withdrawing the charges in those cases. I think that's just the nature of criminality now that there are quite a lot of cases where we do that".*

<div align="right">Comment from Prosecutors</div>

> *"I would distinguish between the two, the actual sentence in terms of custody in money laundering cases in my experience is not of huge deterrent value because the sentences tend to be quite low. But it's the confiscation which I think is a huge deterrent that really hits them where it hurts, in their pocket".*

<div align="right">Comment from Prosecutors</div>

> *"because if there's more emphasis on the civil side why is there emphasis on the civil side, is it because it's an easier system, an easier way of getting money off people for the government".*

<div align="right">Comment from ex-offenders</div>

Criminal benefit becomes a feature of lifestyle as crime is seen to pay; this is in contrast to the government policy initiative in 2002 that 'crime does not pay' and the introduction of the Proceeds of Crime Act. Evidence from this study (chapter 4, section 4.3.1, 4.3.2, 4.4.7 and provided at table 4.16) suggests from both the

quantitative results and the qualitative results that criminals do not fear going to prison when sentenced for money laundering crime but do fear losing their assets from the confiscation that follows. The combination of component one; sentencing/deterrent and component two; regulatory compliance, the implications of which suggest regulatory control was having the right effect and banks were generally compliant. A model of behavior could be profiled that concentrates on AML activity and preventative mechanisms. The implications for future policy could be directed around deterrence using the results of this study. Criminal thinking prior to and post criminal offences centers around their assets. Potential loss of those assets appears to be a greater deterrent than a prison sentence. Current sentencing for money laundering offences appears to be too lenient. Courts, judiciary and prosecutors appear to play off prison time against confiscation. The third component criminal knowledge compliments component two (which suggests the regulatory regime is effective) and rather than take the risk of losing cash in the banking system criminal will retain their cash. Further evidence from the key stakeholders suggest cash being trafficked across borders or being retained and spent. Directing thoughts around policy following the rational choice theory in the context above can provide a different direction that the current policy suggests. Rational choice is extended from each of the three theories provided in this research with deterrence being the common thread that is drawn from each and that from which preventative measures can be designed. Using data drawn from the key stakeholders in this research filled the gap missing in previous research and added a unique contribution in this area. Table 5.1 provides a summary of the research gaps.

Table 5.1 Summary of the research gaps

Research gaps	Relevant authors
Theory • Based on lack of underpinning theory • Based on extension of deterrence and rational choice theory and economic regulation theory **Results** Deterrence became a common thread from each of the above theories that complimented each of the significant components: Sentencing/deterrent Regulation/reporting Criminal knowledge	Schneider (2010) Harvey (2009) Verhage (2009) Reuter (2007) Unger (2007) Van Duyne (2006) Levi (2005)
Knowledge • Based on lack of data available previously • Based on use of key stakeholder groups • Based on robust methodology strategy • Based on inclusion of ex-offenders data **Results** Mixed methods employed the use of qualitative and quantitative disciplines. Key stakeholders from law enforcement, accountants, prosecutors, financial institutions, ex-offenders provided a unique mix of knowledge for this research. Combined with statistical analysis of questionnaire survey and validated focus groups this research filled the gap of data missing in previous research.	Harvey (2009) Verhage (2009) Ferwarder (2009) Van Duyne (2006) Fleming (2005)

The methodology in this research employed a mixed methods approach that combined both quantitative and qualitative data capturing the strengths of both disciplines to produce reliable and valid results. Triangulation of the methods within the qualitative and quantitative disciplines provided rigor to the process.

New insights on AML was gained through the use of mixed methods, particularly from using the qualitative data from the expert focus groups, the responses to question 13 in the questionnaire and the data from the verification process at phase 4. This data added substance to the quantitative results bringing together a wealth of knowledge previously missed in other research in this area. One of the key contributions from using this methodology was that it provided data unavailable in other studies of its kind that opened the door and expand the gaze to key elements never elucidated or previously considered. In particular the quantitative results concerning 'reporting/compliance' suggests the SAR process is effective. Generally the expert groups agree with this result, however the caveat is that the financial institutions would report less if the regulators were not so determined to enforce the regulations through auditing and surveillance and the threat of fines. Secondly by linking the third component from the quantitative results, 'criminal knowledge' the suggestion from ex-offenders is that criminals would not use financial institutions in a way that would cause the bank to make reports on suspicions of money laundering. This therefore acknowledges the result of the third significant component from the quantitative analysis, sentencing/deterrence whereby prevention of money laundering is an effective deterrent through regulation. As shown in Figure 5.7 access to key groups included: accountants, law enforcement, prosecutors, bankers, and ex-offenders.

The combination of experts offered a substantial insight into experiences, opinions, motivations, problems and knowledge in the AML environment. The data was such a valuable commodity for this study as the experience and knowledge of key experts in AML environment (from a qualitative perspective) provided the meat to the bones of the quantitative statistical analysis. Triangulation incorporated the results of phase 2 focus group interviews with the results of the phase 3 survey questionnaires and the verification responses to the statistical results in phase 4. As suggested by Bryman and Bell (2007) a broader level of interpretation adds value to the validation process. Figure 5.1 provides a reminder of the triangulation contribution.

Figure 5.1 Results of the triangulation of methods

Phase 2 Focus Groups

| **Themes** |
| Policy |
| Crime |
| SARs |
| Spend |
| Agency influence |
| Other activities |

Phase 3 Factor Analysis

| **Results** |
| Sentencing/deterrent |
| Regulation/compliance |
| Criminal knowledge |

Phase 4
Verification of results from
Individual participants

"Confirmed"

Sentencing/deterrent

Regulation/compliance

Criminal knowledge

Phase 1 Identification of themes from Literature

| **Theme identification** |
| Legislation |
| Criminality |
| SAR process |
| Spend |
| Influence |
| Other activities |

From the professional practice contributions, this study will benefit enforcement practitioners in key areas of policy to target ML crime. The outcomes from the research in this area indicated at chapter 4, section 4.3.2 (summarised below) have shown that asset recovery/confiscation features as a major deterrent to ML crime as opposed to prosecution: namely that sentencing is not a deterrent particularly as suggested by prosecutors in the focus group interviews that sentencing for money laundering tends to be low; that offenders fear losing their

assets more than prison; that courts are inclined to balance confiscation and sentencing of an offender; that prosecutors prefer civil recovery a opposed to prosecuting cases and as suggested by the law enforcement group, deals are carried out between the judiciary and offenders defense barristers without law enforcement consent. Finally, law enforcement need to be aware that criminals, in trying to circumvent the system, will look for weaknesses in the system in which to take advantage. An example of this was described by a number of the focus group participants at chapter 4, section 4.3.2, such as: leaving complex trails of companies in multiple jurisdictions to thwart the investigative capabilities of law enforcement; moving cash rather than enter the financial system to transfer funds; or that individuals have knowledge of law enforcement tactics and money laundering legislation. From this perspective money transfers move across the globe within seconds whereas law enforcement can take months or even years to track them.

Regulation and compliance is a significant feature in the AML process and the results of this research confirm and corroborate that view. Comments from key stakeholders involved in the AML process suggest that control by regulators is a key feature in making financial institutions compliant in making suspicious activity reports. The comments further suggest that the fear of fines and sanctions on the financial institution as a result of regulatory control increase the pressure to make reports and that reputation and integrity of the financial Institution could be affected through bad publicity. The following comment puts into perspective the power and influence of regulatory control: *"if it wasn't regulatory we would do it at a minimalistic level"* (focus group comment from bankers in reference to a

discussion around making reports of suspicions of money laundering/terrorist financing).

The outcomes of the study also suggest that within the criminal knowledge framework, that low level criminals spend their cash as they get it, and as such are more likely to have cash around them for seizure (but only for a short time). High level criminals on the other hand (organised crime and international level criminals) are also likely to have large sums of cash, but will use complex international companies and financial institutions to launder their cash (as indicated by financial institutions, chapter 4, sections 4.3.1 and 4.3.2. Knowledge of the above outcomes can provide law enforcement the opportunity to draw up new policy based on this model of behaviour. Table 5.2 provides a summary of the areas of contribution for this study.

Table 5.2 Summary of the areas of Contribution

Area of contribution	Contribution
Theoretical contribution	- In this thesis Rational Choice Theory is extended as illustrated below - Provides an improved understanding of deterrence in the AML field of activity that directs theory toward sentencing and penalties for money laundering - Implies that asset recovery through confiscation provides a stronger deterrent than sentencing and that the behaviour of criminal activity could be profiled based on those results. Enabling policy changes from enhanced theory. - Understanding of the role of regulatory agencies and the

Continued	threat of sanctions and/or fines for non-compliance
	• Contributions to the understanding of offenders behavior and their decision to commit crime
Methodological contribution	• Provided a sequential flow of methods to determine the drivers of influence in AML implementation in the UK
	• Use of key stakeholders groups including ex-offenders to provide experience, knowledge and opinion in AML processes
	• Combined quantitative and qualitative contributes to achieve a valid and reliable conclusion to the study
Professional practice contribution	Provides practical information about the processes practitioners within the stakeholder groups see as significant aspects of AML:
	• Asset recovery as a key (deterrent) component in AML
	• Change money laundering prosecutions by reducing the requirements for predicate crime
	• Change perceptions of what money laundering is by focusing on the spending activities of criminals at two levels (local and international)
	• Identification of a model of behavior that will have practical implications for enforcement – to focus on recovery rather than prosecution

5.6 Limitations and Further Research

This study reviewed a large volume of literature around the area of money laundering and was subject to many data tools of data collection and analysis. Acknowledgement is however made that the study is not without its short comings and is open to further avenues of research.

The study examined AML viewed through the eyes of key stakeholders in the AML process. Literature in the subject area provided the themes to bring to the expert focus groups for validation. As the themes are an important starting point for this research a more focused approach may have been to draw the themes from the focus groups initially and then develop them through a survey questionnaire.

The study had intentionally focused on five key stakeholder groups to validate the themes identified from literature. As there are further interest groups that could have participated in the study future studies may wish to consider extending to those groups. Other groups include estate agents, high value dealers, financial advisors, casinos and solicitors. Considerations of saturation of data and the aims of the research are important aspect in that respect. However, a larger group area of key experts may have given the research a broader perspective of which to draw opinions, knowledge and experience.

Another element within AML area which has drawn attention is the public perspective on AML and regulatory compliance. The public perception and reaction to financial institutions and recent fines and sanctions relating to money laundering is worth considering. The results of this study related significant influence from reporting/compliance component and it would be useful to add the public dimension to this study.

Another issue worth considering is the confirmation of the model from the factor analysis. This study verified the components using a qualitative method

provided by representatives of the original focus groups. Future studies may wish to continue with the statistical analysis and confirm the components using confirmatory factor analysis or other statistical method.

The context of the current study concentrated in the UK, AML environment. Further studies could extend globally as the AML environment is a global environment and the consequences of behavior globally refers also locally and vis-vis. Future studies could carry out a comparative study in another country or several countries and generalising the results from a global perspective.

As this study adopted a pragmatic approach as its research philosophy, future studies could consider a purely objective or subjective stance. Methods employed could come from a purely quantitative or qualitative perspective.

Finally, there are many tools and techniques that could be used to conduct similar research in this area. The approach taken attempted to provide a solid theoretical base of which to bed the research; a robust, data collection and analytical process to answer the research question and the use of the objectives to help drive the research and provide direction. This study is just one of many areas within the AML environment suitable for investigation. The results of this study are significant and in response to the research question the factors that influence the effectiveness of AML policy implementation in the UK are: sentencing/deterrence; regulation/compliance and criminal knowledge.

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Walker and Bridget Unger, Andreas Buehn and Frederick Schneider, Raymond W Baker, Thomas Pietschmann, Michele Bagella, Francesco Busato and Amadeo Argentiero, Peter Reuter, Petrus C van Duyne, John S Zdanowicz, Joras Ferwerda and Bridget Unger, Victor van Kommer, Lotte Trump, Iris van Rossum, Andreas Buehn and Victor van Kommer, John Biggins, Michael Levi, Paolo Consanzo, Melissa van den Broek and Henk Addink, John Vervaele, Bridget Unger and Frans van Waarden, Maaike Stouten and Andre Tilleman, Jan van Koningsveld, Burkhard Muhl, Ioana Deleanu, Barbara Vettori. Edward Elgar Publishing, Cheltenham. UK.

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Appendices

Appendix 3.1 Northumbria University ethics committee approval

From: Lisa Brackenbury [lisa.brackenbury@northumbria.ac.uk]
Sent: 16 January 2012 13:36
To: samuel.sittlington
Cc: Jackie Harvey
Subject: Ethical Approval

Dear Sam,

I am pleased to advise that your project amendment has now been approved by the Chair of the School Research Ethics Committee.

If you have any queries, please let me know.

Many thanks,
Lisa
Lisa Brackenbury
Administrator - Research

Newcastle Business School
Northumbria University
City Campus East 1
Newcastle Upon Tyne
NE1 8ST
Tel: 0191 227 3683
Email: lisa.brackenbury@northumbria.ac.uk

Newcastle Business School – ranked in the Top 10 for Graduate Level

Employability, 'The Sunday Times Good University Guide 2012'

Appendix 3.2 Copy of Informed consent form for focus groups

![northumbria UNIVERSITY logo]

great learning great experience great future

Newcastle Business School
Informed Consent Form for research participants

Title of Study	"An exploration of Anti-money laundering Legislation and how it influences the activities of criminals in the UK?"
Person(s) conducting the research	Samuel Sittlington
Programme of study	PhD research
Address of the researcher for correspondence	Sam Sittlington PRRT, 100 Holywood Rd, Belfast, Co Down, Northern Ireland, BT
Telephone	07795152451
E-mail	sam@sittlington.com
Description of the broad nature of the research	The purpose of this doctoral research is to explore the success or failure of current anti-money laundering policy by understanding the relationship between criminal activity and policy making. To establish the direction of determination between anti-money laundering legislation and criminal activity and establish how accurately current policy reflects money laundering crime.
Description of the involvement expected of participants including the broad nature of questions to be answered or events to be observed or activities to be undertaken, and the expected time commitment	This phase of the research is to use focus groups to assist in identifying the themes and potential questions that will help develop a questionnaire for a larger pool of professionals and criminals. The focus groups will consist of representatives from various organisations who are involved in the subject background. The details of those group dynamics are contained within the introductory letter sent to you prior to this exercise. It is expected the process will take no longer than 90 minutes. Participants will be facilitated with a number of prompts that have come from previous empirical

	research in this area and asked to discuss thinking around these areas. You will have also been provided with a list of those themes.

Information obtained in this study, including this consent form, will be kept strictly confidential (i.e. will not be passed to others) and anonymous (i.e. individuals and organisations will not be identified *unless this is expressly excluded in the details given above*).

Data obtained through this research may be reproduced and published in a variety of forms and for a variety of audiences related to the broad nature of the research detailed above. It will not be used for purposes other than those outlined above without your permission.

Participation is entirely voluntary and participants may withdraw at any time.

By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this study on the basis of the above information.

Participant's Signature…………………………………..Date……………

Student's signature…………………………………………Date……………

Please keep one copy of this form for your own records

Appendix 3.3 Question prompts to facilitate focus group interviews

- Introductions

- Relationship between Policy and Crime

- Direction of determination

- Themes from Literature – list – what is important?

- Is preventive process effective

- Views on sentencing and confiscation as a deterrent?

- Views on incentivisation-money making exercise or deterrent?

- What is your view on hierarchy of crime i.e. organised crime?

- Are there levels of money launderers?

- Are there professional money launderers?

- What would you change in the Proceeds of Crime arena?

- Is Policy effective – what is important in making policy?

- Is law enforcement effective- resources-expertise- crime recording?

- Views on crime – types-greater/lesser evil

- What questions would you like to ask other agencies/stakeholders?

- What questions should be asked and around what areas?

Appendix 3.4 Sample of quotations from focus group transcript analysis

Focus group quotes – Groups A – B – C – D – E

Group A Law Enforcement

"Without anything, any predicate offence to bolt onto that. Now that has changed a little bit but we're still having major problems getting restraints on both, in what is retrained and the length of time it has taken the PPS to do that. They have problems in England that I'm aware of with their CPS over there, but they are nothing in comparison to the problems that we have with our PPS".

"The MSB regulations facilitate money laundering. In fact you have to ask the question why they exist in the first place".

"So that's a question for prosecution services, CPS, PPS. Why are you unwilling to prosecute when we have evidence to prove, especially in line with standalone money laundering".

"Either one of those things should end up with a jail sentence of some sort as a deterrent…Well if they're convicted that's deterrent. But if they can't even get them into the court in the first place".

"The public, there's a message. There's a perception of acceptance within the community around crimes against Government, tax evasion".

"I mean you'll see murder cases that are prosecuted in the Crown Court in less than a year in England, cos they can fast track them. Over here you know what it's like, PPS, we've a number of files in at the minute and they've been in a year and there are no directions yet".

"There's absolutely no doubt about that, there's absolutely no doubt that the reporting institutions know stuff that we don't know. There's no doubt. Whether we utilise that or whether we exploit that is a completely different question".

Group B Accountants

"I think some of our exposure to cases and, cases in which money laundering and legislation is, is the governing legislation. I think we have had, not concern but we have commented certainly in the past that money laundering legislation seems to be used against those low level drug dealer type criminals, the street dealer type and we haven't seen it as effective against the, the upper end of the drugs chain".

"But I would say that professionally as a forensic accountant, as I have worked with police forces, one of the things that you know I am very aware of is kind of financial constraints that the police operate under, and it seemed to me that unless the offence was very large and very lucrative, there simply wasn't the resource to bother investigating it. Now this could be completely wrong, but there would have been a time when I would have had the feeling that unless there was at least a million pounds involved and you, it was relatively simple to investigate and get a conviction, there was kind of very little stomach to pursue the criminals".

"I see that from a government's point of view it's strategically potentially very effective, because I rather suspect that the Mr Bigs behind the drugs, racketeering, whatever, probably distance themselves from the predicate offences, so I rather have the impression that it's hard".

"And that's where the legislation seems to be used and you know we would love to see the legislation, from a professional point of view and from a decent member of side point of view as well, let's see it hitting the big boys".

"I would say there are professional money launderers at the top end, there has to be, whether it's laundering cash or just laundering cheques or money that's come across a computer screen that's just bouncing around different accounts. I mean there has to be. Someone who launders money, big sums, it's going to be pretty much a full time job, and they're going to take their cut for that".

"Does fuel smuggling hurt society, I mean if there was no fuel smuggling would we all be paying less tax, no we wouldn't that's just a myth the Government plug. So I mean it wouldn't happen at all so, is fuel smuggling, if people just make money from it and go and buy houses and cars, the money's in the system, it's back in there, they're paying VAT and everything else, does that really hurt society, as long as you know they're not doing people trafficking or anything like that sort of stuff, then I think it does depend on the original offence".

"Well for a crime you need motivation, you need opportunity, the third thing you need is the ability to rationalise it to yourself that you haven't done anything wrong".

Group C Prosecutors

"Criminals will establish very quickly where the weak links in particular banks are and will hone in on that".

"We haven't got the information we need to take the prosecution decision and we end up withdrawing the charges in those cases. I think that's just the nature of criminality now that there are quite a lot of cases where we do that".

"We've even had instances where the judges are starting to equate, they're starting to trade off a criminal sentence with a confiscation order".

"Well that's, I mean all the articles that you read talk about it being a Draconian piece of legislation, but it is Draconian because it's there to punish, it's there to punish and to get back the proceeds of crime. And I think that that is where a lot of practitioners perhaps on the defence side, and you know possibly the judiciary on occasion find that difficult".

"And I think that's been our only successful case without a predicate offence and that was under the new legislation. And that was an extremely effective way of targeting a terrorist and, but I am quite surprised that we haven't been getting a lot more of those cases".

"I would distinguish between the two, the actual sentence in terms of custody in money laundering cases in my experience is not of huge deterrent value because the sentences tend to be quite low. But it's the confiscation which I think is a huge deterrent that really hits them where it hurts, in their pocket".

"Just in the last 18 months to two years instead of getting a straightforward case where you get an individual or a company, you now get companies and they're chains and there are groups of them. And it seems, I'm not sure if it's deterring the crime as opposed to making them more determined not to get caught. Or not determined, more determined to have a limited company take the fall for it where they can't be hit".

"We're finding a lot more hidden assets, where assets are hidden in third party type thing".

"I think, when it comes to banks and you know estate agencies and places like that, I think as regards their SARS obligations you know I'd say they're fairly much compliant with it, and I don't think there'd be a difficulty there but, the likes of car dealerships and places like that, it's a different kettle of fish there, where they're much more localised".

"So that's an area where possibly some people who previously might have been acting illegally may have cottoned on to moving into that, I don't know….Immorally".

Group D MLRO's

"Well it's seen as something we have to do and I suppose there are negative aspects to it in that, we don't really see any positive outcomes from the SAR process. Whilst it's recognised that it's important, but I think it is generally deemed to be an exercise because there's not a lot of feedback as to how useful it actually is".

"If the penalties weren't a factor and it wasn't regulatory they would do it at a minimalistic level".

"Well we have an obligation to follow essentially the money laundering guidance notes".

"I mean if I was a criminal the first people I would employ would be, I would employ a good accountant to go through the JMLSG guidance notes to see were the loopholes are. Or I would put someone inside a bank to understand were the bank is weaker, you know, is maybe potentially paying lip service".

"Yeah there's SARs you can categorise you know as being tax evasion, benefit fraud, then the other ones that you have no idea what's behind them but".

"The other flip side is sometimes when we would do training staff is, to try and manage their expectation. They need to be careful, you know I don't know what other banks would do, but I would be quite careful to make sure our guys realise they're not police officers".

"I don't know what you're like, but business managers are not as quick to send in SARs as the retail staffs are, the branch staff, they are very clued in".

"Where the anomalies to that are because then I again go back to the regional managers and (inaudible) those three or four branches are doing SARs but there, you know, they're not quality".

"It would be nice to see, it would be nice to see the levels of SARs drop in a sense because publicly people (inaudible) benefit fraud, people would know they're going to get caught, people would know it's not worth doing in some sense. I don't see any level, I don't see any visible representation that the legislation is catching more people".

"And the likes of the FSA who are well financed can regulate with fear I suppose, where the banks are taking the cost of the resources out of the profits".

"My perception is that they still go to very immediate and to high level, but they probably, I would imagine that the legislation's the same whether I'm putting, doing six grand a year of homers or doing 60 grand a year. But is there any scope then to make that a quicker process, that you know in terms of returning time that they get more

hits with the smaller guy because the process is more straightforward…Because the smaller, below a certain threshold it doesn't seem to get touched at all".

Group E Ex-Offenders

"Aye it's a wee bit like, you know, white collar crime, you know what I mean, that sometimes people let it go. For all different reasons like. For legitimate reasons as well, in terms of getting the banks and other things bad names, you know…And he got his pension as well".

"Well it's, I'm not saying legitimate, but it seems like you know if the law is to tap into the higher echelons of it they maybe feel that if you take that out you, in some indirect way do away with the lower stuff".

"But see if you go back to the point you were making, you see about the guys supposedly it's a front, you know, for me someone who gets in at a certain lower level of criminality, who then maybe gets a couple of schillings and tries to go legitimate, you know, is that a crime, is it the fruit of the poison tree, that everything follows on from that initial crime is illegal".

"if somebody actually started doing fag runs and they were making money and they decided it's not worth doing any more, and they go and buy a taxi with the money and start to work legit…And then you take it all off, you know if you take the taxi off him and take his livelihood away, what does he go back till".

"There may also be a bit of credibility about, around maybe serving a prison sentence as well in certain circumstances".

"because if there's more emphasis on the civil side why is there emphasis on the civil side, is it because it's an easier system, an easier way of getting money off people for the government".

"Well we have applied through a community initiative, I just heard that recently, because of the nature of the work we do, conflict transformation, so it seems it had some added value by somehow ironic that the proceeds of, you know - criminality is put back into…to support other people to move them away from it".

"I mean Belfast is sort of founded on a black economy, it has been for many years, you know and people would rather say, buy their fuel cheap, their cigarettes cheap, get dodgy DVDs, they get CDs they get fake clothes, and that has to, there has to be a level up here for that stuff… no it's not effective".

"I would presume if people knew about it it would be the ultimate deterrent, because if I'm earning 20 grand a year and I go and make a lodgement of ten grand, knowing that that'll kick start some sort of investigation, there's no way in a million years if I know that I'm going to go in with ten grand".

"- it's all, there's the emotion, there's the bravado, there's the legitimacy supposedly of what you're fighting for or against … all that comes, and the risk, you know, I know people who knew that if, the

very first second they stepped out on the street they're putting their life on the line, but they didn't really think it was going to be taken from them, you know….And it wasn't a rational sort of weighing up pros and cons".

Appendix 3.5   Questionnaire pages 1-10

Relationship between AML Crime and AML Policy

Dear Respondent

Thank you for taking the time to complete this short survey. It should take about 15 minutes to complete.

PURPOSE
The overall purpose of this questionnaire is to explore through various stakeholder groups the direction of determination between anti-money laundering policy and criminal activity with the objective of identifying the most important factors in these areas.

CONSENT AND CONFIDENTIALITY
By completing this questionnaire you agree that your answers will be quantifiably analysed and appear in summary form only as part of the generic research results. Your individual responses will remain anonymous and confidential. The data collected will form part of the research thesis on the relationship between Anti-Money Laundering (AML) Crime and AML Policy. All information is collected in accordance with Northumbria University's Code of Research Ethics and in compliance with the UK Data Protection Act.

You should answer all questions in the survey, however if there is a question you feel you cannot answer then do not feel obliged to do so. By completing this survey you have provided your informed consent and you may withdraw at any time.

INSTRUCTIONS
In order to progress through this survey, please use the following navigation links:
-Click the Next >> button to continue to the next page.
-Click the Previous >> button to return to the previous page.
-Click the Exit the Survey >> button if you need to exit the survey.
-Click the Submit or Done >> button to submit your survey.

Your assistance is most appreciated.
PhD Student
Newcastle Business School

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Relationship between AML Crime and AML Policy

Section 1 - AML Policy

Please answer the following questions in relation to AML policy. All information will be treated confidentially and anonymous.

1. Can you indicate from which group of respondents you belong?

◯ Accountant

◯ Law Enforcement investigator

◯ Prosecutors

◯ Financial Institution

◯ Community Group

Other (please specify)

[   ]

2. Please indicate your gender

☐ Male   ☐ Female

3. Please indicate your age range from the following:

☐ 18 - 27   ☐ 28 - 38   ☐ 39 - 49   ☐ 50 - 60   ☐ 61+

Relationship between AML Crime and AML Policy

4. Thinking from your own perspective, please indicate the extent that you agree or disagree with the following statement.

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
The legislation on Anti money laundering is widely known.	◯	◯	◯	◯	◯
I am aware of the UK AML regulations.	◯	◯	◯	◯	◯
Confiscating criminal assets is more of a deterrent to committing crime than a prison sentence.	◯	◯	◯	◯	◯
Money laundering prosecutions deter criminal activity.	◯	◯	◯	◯	◯
AML controls are a key component in fighting organised crime.	◯	◯	◯	◯	◯
AML policy in the UK appears to be effective.	◯	◯	◯	◯	◯
A prison sentence is more of a deterrent to crime than confiscating criminal assets.	◯	◯	◯	◯	◯
Law Enforcement is successful in seizing proceeds of crime.	◯	◯	◯	◯	◯
Confiscation Orders are not generally enforced.	◯	◯	◯	◯	◯
The public are not interested in money laundering crime.	◯	◯	◯	◯	◯
The Government strategy on proceeds of crime is just a money making exercise.	◯	◯	◯	◯	◯
Tax evasion is viewed in some communities as non criminal offence.	◯	◯	◯	◯	◯
Cigarette smuggling is viewed in some communities as non criminal offence.	◯	◯	◯	◯	◯
Fraud is viewed as a non criminal offence.	◯	◯	◯	◯	◯
Financial crime appears to be treated more leniently in court than other crimes.	◯	◯	◯	◯	◯

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Section 2 AML - CRIME

5. Please indicate the importance you attach to each of the following as a method of laundering money:

	Very Important	Important	Neither important or unimportant	Unimportant	Very Unimportant
Smuggling cash across borders.	○	○	○	○	○
Purchase of property.	○	○	○	○	○
Investment in stocks and shares.	○	○	○	○	○
Money laundering through legitimate business.	○	○	○	○	○
Betting/casinos.	○	○	○	○	○
Cash business.	○	○	○	○	○
Jewellery and Precious metals.	○	○	○	○	○

Please include any additional methods not recorded above.

6. Please indicate your views on a scale of 1 - 8 which of the following crimes you consider provide the most funds for money laundering?

	Drug Trafficking
	Fraud
	Robbery
	Tax Evasion
	Corruption
	People Trafficking
	Counterfeit Goods
	Cigarette Smuggling

7. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Criminals rationally choose to commit an offence without considering the risks.	○	○	○	○	○
Criminals are more aware of AML policy now than when it was introduced in 2003.	○	○	○	○	○
Criminals do not consider AML policy before deciding to commit an offence.	○	○	○	○	○
Criminals weigh up the cost and benefits of committing an offence prior to committing it.	○	○	○	○	○
Criminals use professional people such as accountants and lawyers to help them launder their money.	○	○	○	○	○
Money made from crime is spent immediately.	○	○	○	○	○
Money laundering controls are a key component in winning the war against organised crime.	○	○	○	○	○
Money made from crime is used to fund further crime.	○	○	○	○	○

8. Please indicate your views on a scale of 1 - 8 the extent that the following following professions are likely to be used for money laundering?

☐	Bank Staff
☐	Solicitors
☐	High value dealers
☐	Accountants
☐	Businessmen
☐	Estate agents
☐	Pawnbrokers
☐	Financial Advisors

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Relationship between AML Crime and AML Policy

Section 3 AML - Suspicious Activity Reports

9. The following question relates to the reporting of suspicious activity. These reports are made by banks and other regulated institutions if they suspect a customer is attempting to launder money through their institution. Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Members of the public are aware of the reason for identity checks when conducting business that involves cash payments.	◯	◯	◯	◯	◯
The regulators are an effective force to ensure reporting institutions comply with regulations.	◯	◯	◯	◯	◯
The financial sector should be allowed to self regulate.	◯	◯	◯	◯	◯
AML compliance procedures reassure the public and enhance reputation of the regulated sector.	◯	◯	◯	◯	◯
The SAR process is a deterrent to money launderers using financial institutions.	◯	◯	◯	◯	◯
More attention should be paid to other reporting institutions other than banks in terms of suspicious activity reporting.	◯	◯	◯	◯	◯
The SAR process is a non profit making area of business that should be funded by Government.	◯	◯	◯	◯	◯
The SAR process is an effective way of identifying money laundering and the methods used.	◯	◯	◯	◯	◯
The banking system in the UK does a good job in preventing the use of accounts to launder criminal money.	◯	◯	◯	◯	◯
There is sufficient training in AML for stakeholders in the sectors who make suspicious activity reports.	◯	◯	◯	◯	◯
AML compliance activity is too focussed on customer identification.	◯	◯	◯	◯	◯
It is possible reporting institutions lose genuine new business because of their compliance procedures.	◯	◯	◯	◯	◯
Some institutions who are supposed to make Suspicious Activity Reports don't see it as a priority.	◯	◯	◯	◯	◯
Other reporting institutions compared to the banking industry appear to have less rigorous AML procedures.	◯	◯	◯	◯	◯
It is more difficult to identify suspicious rather than unusual activity.	◯	◯	◯	◯	◯
The way to encourage new business is to have good AML controls in place.	◯	◯	◯	◯	◯
Feedback from law enforcement is necessary in order to determine AML policy development.	◯	◯	◯	◯	◯
AML compliance costs are reasonable given the overriding importance of integrity of the financial system.	◯	◯	◯	◯	◯

10. Please indicate the extent to which you agree or disagree with the following statements: Any reference to professionals relates to person employed as bankers, accountants, solicitors, etc.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Stongly Disagree
Professional people are employed to assist to launder criminal money.	○	○	○	○	○
To circumvent the legislation money launderers are becoming more creative in how they hide their crime cash.	○	○	○	○	○
Money laundering is not as sophisticated as people think it is.	○	○	○	○	○
Local small time criminals such as drug dealers tend not to use banks.	○	○	○	○	○
It is possible to identify criminals by the lifestyle they lead.	○	○	○	○	○
It is possible to identify money launderers by the lifestyle they lead.	○	○	○	○	○
Money launderers have to have knowledge of AML policy.	○	○	○	○	○
Money launderers have to be aware of law enforcement tactics.	○	○	○	○	○
Local small time criminals such as drug dealers spend cash as they get it.	○	○	○	○	○
Only organised crime gangs making big money from crime need professionals to launder money.	○	○	○	○	○
Professional people are inadvertently used to assist criminals to launder criminal money.	○	○	○	○	○
The current regulatory AML framework is sufficient to dissuade professional from being involved in money laundering.	○	○	○	○	○
Organised crime gangs use sophisticated methods to launder their cash due to their high levels of criminal activity.	○	○	○	○	○
Because of the money laundering controls criminals are reluctant to use banks to keep their crime money.	○	○	○	○	○
Professional money launderers are using more sophisticated methods of laundering criminal money.	○	○	○	○	○
The current economic climate will encourage some professionals to be involved in money laundering for criminals.	○	○	○	○	○

11. Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Money laundering is not a priority for Law Enforcement investigation.	◯	◯	◯	◯	◯
The incentivisation scheme whereby government agencies receive a percentage of seized assets from convicted criminals is a money making exercise.	◯	◯	◯	◯	◯
By setting targets for asset recovery the government influences the targeting of law enforcement on "easy prey" rather than the "crime lords".	◯	◯	◯	◯	◯
Money laundering investigation is too costly for law enforcement to investigate.	◯	◯	◯	◯	◯
Law enforcement are good at identifying assets but not at seizeing them.	◯	◯	◯	◯	◯
Regulatory enforcement of the financial system is necessary.	◯	◯	◯	◯	◯
The International debate on money laundering tends to be closely controlled by Governments and the law enforcement lobby.	◯	◯	◯	◯	◯
Law enforcement prefers to investigate simple, cost effective money laundering cases rather long drawn out expensive cases.	◯	◯	◯	◯	◯
There should be greater consultation with the business sector over the future direction of money laundering.	◯	◯	◯	◯	◯
Given the significance of the financial sector to the UK it is vital to have a strong regulatory framework.	◯	◯	◯	◯	◯
The regulators are more concerned with breaches of regulatory procedures than with possible money laundering.	◯	◯	◯	◯	◯
Regulated institutions are more concerned with regulatory failures than AML compliance failures.	◯	◯	◯	◯	◯
As a business overhead it is essential that the AML compliance function demonstrates value for money.	◯	◯	◯	◯	◯
The regulated institutions involved in AML compliance feel like they are being choked with regulation.	◯	◯	◯	◯	◯
Money laundering investigation is too complicated for law enforcement investigation.	◯	◯	◯	◯	◯
More regulation to tighten up AML controls is necessary.	◯	◯	◯	◯	◯

Section – 6 OTHER areas of AML Process

12. Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Laundering the proceeds of crime affects the national economy.	◯	◯	◯	◯	◯
Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court in sentencing.	◯	◯	◯	◯	◯
It is likely that money from crime in the UK is laundered outside the UK.	◯	◯	◯	◯	◯
The use of businesses to Launder criminal money has a direct affect on the integrity of all business.	◯	◯	◯	◯	◯
The UK law enforcement is sufficiently resourced to fight money laundering.	◯	◯	◯	◯	◯
Financial crime which includes money laundering is more of a problem than any other crime.	◯	◯	◯	◯	◯
The UK law enforcement has sufficient knowledge on financial matters to tackle money laundering.	◯	◯	◯	◯	◯
The legal system makes it too difficult to prosecute money laundering offences.	◯	◯	◯	◯	◯
Judiciary, Prosecutors and stakeholders in AML process need more training to ensure successful prosecutions.	◯	◯	◯	◯	◯
A person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his drug money.	◯	◯	◯	◯	◯
The penalties for money laundering crime are too lenient.	◯	◯	◯	◯	◯
Professionals are treated differently in court sentencing for money laundering.	◯	◯	◯	◯	◯
Financial crime which includes money laundering is not seen as a serious problem.	◯	◯	◯	◯	◯
The disparity in sentencing for money laundering in the UK is too wide.	◯	◯	◯	◯	◯
It is likely that money from crime in the UK is laundered within the UK.	◯	◯	◯	◯	◯
The unregulated sector such as Hawala banking is as significant as the regulated sector for laundering money.	◯	◯	◯	◯	◯

13. Please provide your comments as to what you would like to change in the AML system.

"Thank you for your participation"

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Appendix 3.6 Feedback from pilot test of questionnaire

1. Hi Sam

I have had a look at this and I think it is really good.
A couple of things I noticed:

Firstly, there is a spelling mistake on your covering letter in the Consent and Confidentiality section Completing has an extra 'e' in it. Also I wondered if you need to spell out the AML as Anti Money Laundering first and use the abbreviations from then on?

Regarding Question 8, I was wondering why you opted for drop down selection rather than for a Likert using the button options as per the other questions?

Regarding Question 9 is the question meant to read as follows: The following questions relate to the reporting of suspicions (SAR process) these reports are made by etc. etc.? I was just wondering if it should perhaps read as *The following questions relate to the reporting of suspicious activity these reports are made by etc. etc.*?

Finally, did you consider putting a 'Thank you for your participation' at the end of the questionnaire? I know you mention it in your covering page but I think it is nice at the end as well as a sort of double thanks!

You are certainly going to be gathering a lot of information as a result of the questionnaire, how many participants do you plan to invite to complete it?

Has it been to the Ethics Committee yet? That is always a challenge!

On the whole Sam I think the questionnaire layout etc. is good and it reads well, the problems that occur with Survey Monkey electronic questionnaires are usually to do with people having problems completing them on line but hopefully your pilot will sort out any of those types of issues.

Good luck and feel free to ignore any of my suggestions if you think they are not appropriate.

2. Hi Sam
 See attached pilot questionnaire. I have copied and pasted the document. It may be slightly askew but it is readable. Hope its ok.
 A couple of points, - isn't cigarette smuggling tax evasion?

 When you use the word criminal -You might want to distinguish between low level criminality / more serious crime and organised crime.

In Q8 you might want to say when classifying professionals 1-6 starting with one as the most serious.

Q11 Police good at identifying assets but not seizing them.

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3. Hi Sam

That is a very good survey questionnaire with good structure. The questions are very clear. I listed some suggestions about the questionnaire based on my personal perspective. Thanks.

Feedback for survey questionnaire

1. The title about AML (abbreviation). What is the full name about AML?
2. Question (1). You can provide an "others" option.
3. I think you need to use the full stop mark "." after each statement.
4. Could you please double check the order for 5-point Likert scales from "strongly agree" to "strongly disagree"? You need reference to support why you order like this way. Just my personal opinion.
5. Could you please ask someone to answer this survey questionnaire? I think it will take 15-20 mins to finish it.

Good Luck for your research!

4. Sam

I understand all the questions ok however they may apply more to someone more knowledgeable to the legislation etc., therefore I would be more likely to guess at some of the answers, not sure if this is helpful for you

5. Sam

In truth, I think it would be problematic for the ordinary eight by four prisoner. You would need to sit with them to complete it rather than send them in and expect them to be completed properly.

6. Sam – I completed your survey and can send it to you. It took me 16 minutes, I understood all the questions and they were fine. I think you might need a column for "don't know" which I would have ticked for some of the questions – for those answers I just ticked the middle column.

Best wishes

7. Re your survey;-

Q1 include Investigator and Other
Q5 Include Jewellery + precious metals
Q6 Include Counterfeit goods
Q8 Include Businessmen + pawnbrokers

I think there should be some mention about four other ways of laundering, through unregulated banking systems, Hawala, Chop etc. Money transfers through western Union, etc. Transfer through pre purchased debit cards. Transfer funds by phone. Transfer through virtual reality i.e. second Life. Transfer through over/under invoicing. All of which are pretty much unregulated. Clearly there is too much emphasis on the regulated sector a fact acknowledged by FAFT.

Generally; readable, understandable and maybe just a bit too long.

Appendix 3.7   Descriptive statistics

VAR	N	Range	Min	Max	Mean	Std. Dev	Variance	Skew- ness	Kurto- sis
ML1	164	4	1	5	2.98	1.04	1.09	-0.11	-1.29
ML2	164	4	1	5	1.86	0.93	0.87	1.30	1.45
ML3	164	4	1	5	2.27	1.02	1.04	0.52	-0.52
ML4	164	4	1	5	2.53	1.00	1.00	0.53	-0.51
ML5	164	3	1	4	1.63	0.60	0.36	0.52	0.38
ML6	164	4	1	5	2.80	0.83	0.69	0.45	-0.24
ML7	164	4	1	5	3.40	1.01	1.03	-0.50	-0.32
ML8	164	4	1	5	3.10	0.96	0.92	0.13	-0.95
ML9	164	3	1	4	2.94	0.76	0.59	-0.15	-0.69
ML10	164	4	1	5	2.98	1.04	1.09	-0.23	-1.21
ML11	164	4	1	5	3.44	0.97	0.95	-0.53	-0.10
ML12	164	4	1	5	1.96	0.74	0.54	1.09	2.45
ML13	164	4	1	5	2.01	0.83	0.69	1.22	2.10
ML14	164	4	1	5	3.26	1.12	1.26	-0.34	-0.90
ML15	164	4	1	5	2.12	0.99	0.97	0.85	0.27
ML16	164	4	1	5	2.77	1.02	1.05	0.17	-1.14
ML17	164	4	1	5	2.73	0.98	0.96	0.22	-0.89
ML18	164	4	1	5	4.20	0.96	0.92	-1.46	2.06
ML19	164	4	1	5	2.66	0.97	0.94	0.45	-0.48
ML20	164	4	1	5	2.71	0.93	0.86	0.38	-0.93
ML21	164	3	1	4	1.93	0.70	0.49	0.76	1.31
ML22	164	4	1	5	2.66	1.04	1.08	0.58	-0.20
ML23	164	3	1	4	2.27	0.87	0.76	0.57	-0.25
ML24	164	4	1	5	3.18	0.91	0.83	-0.02	-0.52
ML25	164	4	1	5	3.23	0.92	0.85	0.11	-0.77
ML26	164	4	1	5	2.70	0.86	0.74	0.38	-0.58
ML27	164	4	1	5	2.82	0.93	0.87	0.36	-0.96
ML28	164	4	1	5	2.01	0.73	0.54	0.73	1.44
ML29	164	4	1	5	2.10	0.74	0.56	0.83	1.52
ML30	164	4	1	5	2.37	0.89	0.79	0.74	0.16
ML31	164	4	1	5	2.53	0.94	0.89	0.62	0.39
ML32	164	3	1	4	1.73	0.62	0.38	0.73	1.79
ML33	164	4	1	5	2.30	0.94	0.88	0.81	0.68
ML34	164	4	1	5	1.92	0.97	0.93	1.28	1.53
ML35	164	3	1	4	1.57	0.57	0.32	0.53	0.56
ML36	164	4	1	5	2.88	1.14	1.29	0.13	-1.16
ML37	164	4	1	5	2.51	1.00	1.00	0.56	-0.45
ML38	164	4	1	5	2.26	0.87	0.76	0.87	0.63
ML39	164	4	1	5	2.63	1.02	1.03	0.36	-0.49
ML40	164	4	1	5	2.38	1.01	1.01	0.45	-0.60
ML41	164	3	1	4	2.14	0.84	0.71	0.60	-0.02
ML42	164	3	1	4	2.58	0.81	0.66	0.16	-0.56

ML43	164	4	1	5	3.24	1.08	1.16	-0.55	-0.69
ML44	164	3	1	4	2.10	0.80	0.63	0.63	0.27
ML45	164	4	1	5	3.37	0.97	0.93	-0.44	-0.73
ML46	164	3	1	4	1.99	0.77	0.59	0.85	0.96
ML47	164	4	1	5	2.96	0.98	0.96	0.01	-0.99
ML48	164	3	1	4	1.77	0.66	0.44	0.68	1.01
ML49	164	2	1	3	1.87	0.59	0.35	0.03	-0.18
ML50	164	4	1	5	2.76	1.14	1.30	0.34	-0.95
ML51	164	4	1	5	2.96	1.05	1.10	-0.14	-1.06
ML52	164	4	1	5	2.32	0.93	0.86	0.53	-0.12
ML53	164	4	1	5	2.76	1.06	1.12	0.21	-0.67
ML54	164	4	1	5	2.68	0.85	0.72	0.11	-0.52
ML55	164	3	1	4	1.71	0.63	0.39	0.61	0.93
ML56	164	4	1	5	2.39	0.85	0.72	0.44	0.20
ML57	164	4	1	5	2.23	0.96	0.93	0.52	-0.44
ML58	163	4	1	5	2.04	0.84	0.70	0.95	1.36
ML59	164	2	1	3	1.55	0.58	0.33	0.46	-0.71
ML60	163	4	1	5	2.31	0.88	0.77	0.50	-0.12
ML61	164	4	1	5	2.37	0.85	0.73	0.35	-0.15
ML62	164	4	1	5	2.59	0.96	0.92	0.49	-0.23
ML63	164	3	1	4	2.58	0.76	0.58	-0.06	-0.32
ML64	164	4	1	5	3.15	1.15	1.32	-0.23	-0.97
ML65	164	4	1	5	2.54	1.00	1.00	0.33	-0.49
ML66	164	3	1	4	1.62	0.60	0.36	0.58	0.38
ML67	164	3	1	4	1.94	0.72	0.52	0.78	1.11
ML68	163	3	1	4	2.07	0.86	0.74	0.51	-0.32
ML69	164	4	1	5	2.13	0.88	0.78	0.78	0.38
ML70	164	4	1	5	3.82	0.92	0.85	-0.48	-0.31
ML71	164	4	1	5	2.99	0.93	0.86	-0.16	-0.62
ML72	164	4	1	5	3.24	1.00	0.99	-0.12	-0.95
ML73	164	4	1	5	2.71	0.98	0.97	0.23	-0.71
ML74	164	4	1	5	1.99	0.73	0.54	0.68	1.27
ML75	164	3	1	4	2.02	0.78	0.61	0.50	-0.01
ML76	164	3	1	4	2.16	0.87	0.75	0.42	-0.42
ML77	164	4	1	5	2.21	0.85	0.72	0.55	0.16
ML78	164	4	1	5	2.51	1.03	1.06	0.50	-0.60
ML79	164	3	1	4	2.26	0.74	0.55	-0.01	-0.46
ML80	163	4	1	5	2.52	0.95	0.91	0.35	-0.38
ML81	163	3	1	4	2.09	0.91	0.83	0.47	-0.57
ML82	164	4	1	5	3.16	1.05	1.11	-0.34	-0.91
ML83	164	4	1	5	1.96	0.70	0.50	1.13	3.04
ML84	164	4	1	5	2.77	1.02	1.04	-0.03	-1.06
ML85	163	4	1	5	2.51	1.05	1.10	0.45	-0.57
ML86	164	3	1	4	1.73	0.74	0.54	1.03	1.38
ML87	163	4	1	5	3.65	0.84	0.70	-0.81	0.92
ML88	164	3	1	4	1.77	0.66	0.43	0.67	1.03

| ML89 | 164 | 4 | 1 | 5 | 1.71 | 0.77 | 0.59 | 1.45 | 3.64 |

Appendix 3.8 Correlation matrix for all variables

VAR	ML1	ML2	ML3	ML4	ML5	ML6	ML7	ML8
ML1	1.00	0.26	0.14	0.15	0.24	0.33	0.14	0.06
ML2	0.26	1.00	0.10	-0.03	0.05	0.14	-0.06	-0.09
ML3	0.14	0.10	1.00	0.22	0.11	0.19	-0.50	0.10
ML4	0.15	-0.03	0.22	1.00	0.32	0.11	0.06	0.16
ML5	0.24	0.05	0.11	0.32	1.00	0.30	0.01	0.00
ML6	0.33	0.14	0.19	0.11	0.30	1.00	-0.06	0.33
ML7	0.14	-0.06	-0.50	0.06	0.01	-0.06	1.00	0.04
ML8	0.06	-0.09	0.10	0.16	0.00	0.33	0.04	1.00
ML9	-0.03	-0.02	-0.03	-0.03	0.07	-0.18	0.08	-0.20
ML10	0.02	0.05	0.00	-0.23	-0.12	-0.09	0.05	-0.05
ML11	-0.18	-0.26	-0.20	-0.06	-0.16	-0.25	0.15	-0.02
ML12	-0.12	0.09	0.13	0.04	0.05	-0.11	-0.09	-0.04
ML13	-0.16	0.11	-0.04	0.05	-0.04	-0.18	0.02	0.02
ML14	-0.25	-0.09	0.06	-0.05	-0.13	-0.07	-0.08	0.16
ML15	-0.09	0.18	0.08	-0.12	0.04	-0.03	-0.12	-0.05
ML16	0.29	0.05	0.18	0.24	0.02	0.20	0.11	0.09
ML17	0.12	-0.06	0.18	0.07	0.12	0.21	0.03	0.11
ML18	0.08	0.07	0.16	0.08	-0.01	0.20	0.04	0.14
ML19	0.17	0.04	0.19	0.31	0.23	0.28	0.00	0.20
ML20	0.08	0.04	0.14	0.31	0.18	0.13	0.03	0.12
ML21	-0.06	-0.11	-0.12	0.03	0.13	0.00	0.16	-0.04
ML22	-0.01	0.06	0.07	0.09	-0.10	-0.07	-0.01	0.07
ML23	0.11	0.06	0.20	0.24	0.24	0.13	0.04	0.18
ML24	0.27	0.10	0.17	0.18	0.21	0.44	-0.07	0.29
ML25	0.25	0.13	0.10	0.04	0.02	0.23	-0.09	0.05
ML26	-0.02	0.07	-0.14	0.02	-0.06	-0.10	0.06	-0.18
ML27	0.11	-0.09	0.06	0.01	-0.04	0.11	0.04	0.16
ML28	0.01	0.09	-0.03	0.06	0.03	-0.07	-0.03	0.03
ML29	0.05	0.09	-0.07	-0.01	0.02	-0.06	0.12	0.01
ML30	-0.01	0.04	-0.06	-0.08	-0.12	-0.05	-0.07	-0.17
ML31	0.03	0.01	0.23	0.08	0.02	0.19	-0.10	0.15
ML32	0.07	0.14	-0.05	0.06	0.03	0.08	0.02	0.02
ML33	-0.06	-0.03	0.01	0.13	0.09	0.05	-0.02	0.03
ML34	-0.03	0.02	0.01	-0.01	0.03	-0.08	-0.03	-0.06
ML35	0.00	-0.03	0.05	0.01	0.08	-0.02	0.00	-0.11
ML36	-0.01	0.07	-0.01	0.05	0.07	-0.04	0.05	-0.03
ML37	0.05	-0.10	-0.09	0.06	0.03	0.03	0.00	0.06
ML38	0.04	0.10	0.02	0.02	0.04	0.09	-0.06	0.03
ML39	0.09	0.06	0.04	0.11	-0.01	0.13	-0.01	0.02
ML40	0.08	-0.01	0.16	0.07	0.20	-0.01	-0.11	-0.15
ML41	0.06	-0.08	0.05	-0.02	0.18	0.03	0.06	-0.08
ML42	0.14	0.00	0.00	0.17	0.20	-0.05	0.05	-0.06
ML43	0.09	-0.06	-0.03	-0.02	-0.01	0.02	0.10	-0.02

ML44	-0.03	0.05	0.00	0.10	0.11	0.02	-0.04	-0.10
ML45	0.25	0.00	0.23	0.11	0.09	0.39	-0.03	0.20
ML46	0.06	0.01	-0.02	0.12	0.04	0.01	0.09	0.03
ML47	0.01	-0.13	0.05	0.18	0.18	0.24	0.06	0.23
ML48	0.05	0.12	0.11	0.15	0.15	0.05	0.04	-0.02
ML49	0.04	0.05	0.02	0.03	0.03	-0.03	0.00	0.01
ML50	-0.12	0.12	-0.09	-0.15	-0.12	-0.17	0.05	-0.10
ML51	-0.03	-0.07	-0.03	0.00	-0.15	-0.14	0.14	0.04
ML52	-0.05	0.11	0.00	-0.07	-0.19	-0.10	-0.03	-0.21
ML53	-0.07	0.00	-0.03	-0.09	-0.23	-0.18	0.06	-0.19
ML54	0.02	-0.03	-0.01	-0.02	0.00	-0.08	0.03	-0.23
ML55	0.00	0.01	-0.05	0.14	0.16	-0.13	0.12	-0.18
ML56	0.07	0.05	-0.14	-0.18	-0.10	-0.03	0.18	-0.14
ML57	-0.10	0.14	-0.04	0.01	-0.01	-0.22	-0.09	-0.24
ML58	0.02	-0.07	-0.04	-0.04	-0.04	0.04	0.03	-0.02
ML59	-0.10	0.21	0.02	-0.12	0.11	-0.03	0.02	-0.09
ML60	-0.06	0.08	0.01	-0.01	-0.04	-0.13	0.00	-0.23
ML61	-0.07	0.04	0.04	-0.02	-0.11	-0.13	0.05	-0.21
ML62	0.01	0.04	0.10	-0.12	-0.12	0.06	0.01	0.10
ML63	0.05	0.01	-0.02	-0.06	-0.13	-0.12	0.10	-0.25
ML64	0.05	-0.02	-0.04	-0.11	-0.08	0.07	0.04	-0.10
ML65	-0.19	-0.16	-0.12	0.04	0.06	0.05	0.19	0.18
ML66	0.21	0.15	0.12	0.09	0.13	0.08	-0.11	-0.03
ML67	-0.05	-0.07	0.06	-0.06	-0.13	-0.06	0.04	-0.04
ML68	-0.13	-0.06	0.03	-0.08	0.08	-0.13	-0.06	-0.12
ML69	-0.07	-0.10	-0.05	0.05	0.14	0.06	0.04	0.07
ML70	0.09	-0.30	-0.03	-0.04	0.00	0.16	0.13	0.20
ML71	0.11	-0.07	0.07	-0.05	0.09	0.16	0.02	0.06
ML72	0.22	0.01	0.10	-0.01	0.09	0.37	0.07	0.31
ML73	-0.10	-0.23	0.02	0.00	0.08	-0.11	0.01	-0.03
ML74	-0.18	-0.14	0.00	0.09	-0.01	-0.12	-0.04	-0.08
ML75	-0.10	0.05	-0.02	-0.07	-0.02	-0.09	0.02	-0.11
ML76	-0.15	-0.07	-0.02	-0.16	-0.07	-0.11	-0.04	0.01
ML77	-0.16	-0.05	-0.06	-0.11	-0.05	-0.11	0.01	0.01
ML78	-0.20	0.04	0.02	-0.07	-0.11	-0.13	-0.01	-0.08
ML79	-0.17	0.12	-0.02	-0.08	-0.16	-0.04	0.00	-0.06
ML80	0.06	-0.02	0.03	0.13	0.11	-0.03	0.06	0.05
ML81	0.08	0.07	-0.04	-0.02	0.03	-0.03	0.02	0.01
ML82	-0.10	-0.10	0.07	0.13	-0.03	-0.02	0.00	0.02
ML83	0.28	0.07	0.17	0.13	0.22	0.23	0.05	-0.04
ML84	0.00	0.10	-0.15	-0.06	-0.07	-0.25	0.06	-0.16
ML85	0.05	0.00	0.04	-0.06	0.05	0.11	0.08	-0.02
ML86	-0.11	-0.05	-0.09	-0.07	0.04	-0.02	0.12	-0.12
ML87	0.10	-0.09	-0.02	0.10	0.11	-0.05	0.10	0.05
ML88	0.15	0.17	0.08	0.11	0.48	0.22	-0.01	-0.03
ML89	-0.08	-0.06	-0.15	-0.05	0.02	-0.14	0.02	0.05

ML9	ML10	ML11	ML12	ML13	ML14	ML15	ML16	ML17
-0.03	0.02	-0.18	-0.12	-0.16	-0.25	-0.09	0.29	0.12
-0.02	0.05	-0.26	0.09	0.11	-0.09	0.18	0.05	-0.06
-0.03	0.00	-0.20	0.13	-0.04	0.06	0.08	0.18	0.18
-0.03	-0.23	-0.06	0.04	0.05	-0.05	-0.12	0.24	0.07
0.07	-0.12	-0.16	0.05	-0.04	-0.13	0.04	0.02	0.12
-0.18	-0.09	-0.25	-0.11	-0.18	-0.07	-0.03	0.20	0.21
0.08	0.05	0.15	-0.09	0.02	-0.08	-0.12	0.11	0.03
-0.20	-0.05	-0.02	-0.04	0.02	0.16	-0.05	0.09	0.11
1.00	0.17	0.25	0.15	0.20	0.13	0.24	-0.01	-0.05
0.17	1.00	0.17	0.11	0.06	0.14	0.09	-0.12	0.00
0.25	0.17	1.00	0.16	0.17	0.33	0.07	-0.08	-0.24
0.15	0.11	0.16	1.00	0.63	0.28	0.20	-0.01	-0.13
0.20	0.06	0.17	0.63	1.00	0.35	0.09	-0.05	-0.11
0.13	0.14	0.33	0.28	0.35	1.00	0.24	-0.14	-0.13
0.24	0.09	0.07	0.20	0.09	0.24	1.00	-0.16	-0.06
-0.01	-0.12	-0.08	-0.01	-0.05	-0.14	-0.16	1.00	0.24
-0.05	0.00	-0.24	-0.13	-0.11	-0.13	-0.06	0.24	1.00
-0.01	-0.11	-0.05	-0.06	-0.02	0.05	-0.12	0.14	0.21
-0.04	-0.26	-0.13	-0.11	-0.07	-0.09	-0.05	0.37	0.33
-0.10	-0.22	-0.07	-0.04	-0.04	-0.16	-0.05	0.25	0.17
0.11	0.09	0.15	0.10	0.08	-0.03	0.11	-0.12	-0.06
-0.07	0.21	0.03	0.17	0.23	0.19	0.02	0.00	0.10
0.02	-0.11	-0.13	-0.01	0.02	-0.09	-0.10	0.11	0.33
-0.11	-0.16	-0.14	-0.10	-0.17	-0.15	-0.09	0.26	0.29
-0.08	0.01	-0.14	-0.12	-0.03	-0.12	-0.05	0.23	0.12
0.19	0.11	0.01	-0.05	0.06	-0.01	0.07	0.05	0.06
0.11	0.04	0.12	-0.12	0.01	-0.01	-0.14	0.13	0.14
0.18	0.08	0.08	0.23	0.13	0.03	0.19	-0.05	-0.13
0.15	0.06	0.13	0.17	0.15	-0.01	0.20	-0.06	0.00
0.07	0.02	-0.03	0.09	0.07	-0.13	0.03	0.07	0.08
0.12	-0.13	-0.12	0.01	0.06	0.02	0.06	0.06	0.12
0.07	-0.02	-0.05	0.16	0.00	-0.06	0.03	0.05	0.00
0.01	-0.20	0.01	0.09	-0.03	0.03	0.20	0.02	0.16
0.08	0.07	0.11	0.15	0.01	0.05	-0.04	-0.16	-0.15
0.06	-0.07	0.13	0.17	0.12	0.04	0.08	0.04	-0.01
0.03	-0.08	0.08	0.02	0.08	0.00	0.11	-0.07	-0.09
0.16	0.02	0.22	-0.05	-0.03	0.24	0.09	0.05	0.08
-0.10	-0.17	-0.02	0.05	0.13	-0.03	0.19	0.04	-0.04
-0.09	-0.23	-0.05	0.01	0.06	-0.12	0.12	0.08	0.06
0.09	-0.04	0.05	0.00	-0.12	-0.04	0.02	0.00	-0.03
0.01	-0.06	-0.02	0.11	0.08	-0.10	0.07	-0.01	0.00
-0.07	0.00	-0.04	0.07	0.07	0.01	0.11	-0.11	0.18
0.12	-0.07	0.05	0.01	-0.04	-0.07	0.03	0.12	0.12

0.08	-0.02	-0.01	0.25	0.21	-0.02	0.07	-0.02	0.07
-0.14	-0.07	-0.15	-0.08	-0.13	-0.13	-0.09	0.31	0.37
-0.08	0.01	-0.06	0.00	-0.04	-0.04	-0.03	0.06	0.29
0.09	-0.06	0.02	-0.12	-0.02	0.06	0.06	0.22	0.23
-0.06	-0.06	-0.12	0.00	-0.05	-0.04	0.03	0.05	0.18
0.06	-0.03	-0.02	0.13	0.09	-0.01	0.10	0.04	-0.04
0.18	0.22	0.24	0.15	0.12	0.20	0.22	-0.16	-0.25
0.15	0.04	0.44	-0.02	0.07	0.09	0.05	0.08	0.00
0.09	0.16	0.21	0.14	0.04	-0.08	0.10	-0.01	-0.11
0.30	0.23	0.15	0.02	0.10	0.10	0.00	0.01	-0.13
0.16	0.19	-0.01	-0.01	-0.04	-0.06	0.09	-0.04	0.02
0.01	-0.05	-0.04	0.12	-0.04	-0.25	0.03	-0.06	-0.05
0.19	0.10	0.01	0.02	-0.06	0.03	0.06	0.01	0.01
0.26	0.13	0.23	0.17	0.10	0.12	0.14	-0.21	-0.22
0.10	0.15	0.03	0.08	0.09	-0.02	0.03	-0.02	-0.08
0.00	0.11	-0.06	0.19	0.05	0.02	0.13	-0.04	-0.07
0.07	0.13	0.10	0.33	0.25	0.15	0.19	-0.07	-0.11
0.11	0.07	0.19	0.28	0.15	0.16	0.22	-0.02	-0.17
0.09	-0.05	0.01	0.14	0.14	0.02	0.06	0.01	0.04
0.18	0.13	0.14	0.15	0.14	0.00	0.10	0.05	-0.14
0.17	0.09	0.06	-0.14	0.02	0.05	-0.01	-0.07	-0.01
0.18	-0.10	0.07	0.09	0.09	0.05	0.12	-0.01	-0.06
0.03	-0.04	-0.01	0.04	0.04	-0.10	-0.05	0.02	0.03
0.05	0.10	0.05	0.08	0.16	0.16	0.22	-0.06	-0.10
0.09	0.01	0.06	0.04	0.11	0.09	0.07	-0.15	-0.04
0.06	-0.12	0.11	0.00	0.12	0.09	0.07	-0.02	0.01
-0.11	0.03	-0.02	-0.23	-0.24	-0.10	-0.18	0.12	0.32
0.13	-0.09	-0.04	-0.08	-0.05	0.10	0.17	0.03	0.07
-0.11	0.00	-0.12	-0.06	-0.08	-0.04	-0.04	0.28	0.41
0.22	0.04	0.25	0.09	0.14	0.23	0.09	-0.01	-0.10
0.11	-0.08	0.08	0.03	0.13	0.00	0.18	-0.05	-0.02
0.12	0.13	0.12	0.16	0.10	0.18	0.46	-0.06	0.03
0.13	0.12	0.20	0.14	0.12	0.31	0.34	-0.04	-0.04
0.25	0.06	0.27	0.07	0.17	0.16	0.26	0.04	-0.15
0.27	0.21	0.30	0.23	0.22	0.38	0.39	0.00	-0.14
0.20	0.05	0.17	0.21	0.27	0.23	0.41	-0.01	-0.14
-0.15	-0.01	-0.11	0.10	0.06	-0.08	-0.01	-0.05	-0.07
-0.01	-0.05	0.02	0.12	0.14	0.07	-0.02	-0.02	-0.06
0.03	0.04	0.13	-0.05	0.05	0.11	-0.11	0.05	0.11
-0.03	-0.16	-0.07	-0.01	-0.19	-0.26	0.12	0.23	0.10
0.09	0.22	0.09	-0.03	0.08	0.05	0.05	-0.11	-0.01
0.04	0.07	-0.06	0.18	0.02	-0.16	0.16	0.10	0.09
0.20	0.08	0.09	0.21	0.15	0.08	0.08	-0.07	-0.07
0.14	0.06	0.04	-0.05	-0.05	0.08	-0.01	0.01	0.18
-0.07	-0.09	-0.22	-0.02	-0.10	-0.11	0.11	-0.05	0.12
0.15	-0.02	0.04	0.04	0.08	0.04	0.04	-0.10	-0.06

ML18	ML19	ML20	ML21	ML22	ML23	ML24	ML25	ML26
0.08	0.17	0.08	-0.06	-0.01	0.11	0.27	0.25	-0.02
0.07	0.04	0.04	-0.11	0.06	0.06	0.10	0.13	0.07
0.16	0.19	0.14	-0.12	0.07	0.20	0.17	0.10	-0.14
0.08	0.31	0.31	0.03	0.09	0.24	0.18	0.04	0.02
-0.01	0.23	0.18	0.13	-0.10	0.24	0.21	0.02	-0.06
0.20	0.28	0.13	0.00	-0.07	0.13	0.44	0.23	-0.10
0.04	0.00	0.03	0.16	-0.01	0.04	-0.07	-0.09	0.06
0.14	0.20	0.12	-0.04	0.07	0.18	0.29	0.05	-0.18
-0.01	-0.04	-0.10	0.11	-0.07	0.02	-0.11	-0.08	0.19
-0.11	-0.26	-0.22	0.09	0.21	-0.11	-0.16	0.01	0.11
-0.05	-0.13	-0.07	0.15	0.03	-0.13	-0.14	-0.14	0.01
-0.06	-0.11	-0.04	0.10	0.17	-0.01	-0.10	-0.12	-0.05
-0.02	-0.07	-0.04	0.08	0.23	0.02	-0.17	-0.03	0.06
0.05	-0.09	-0.16	-0.03	0.19	-0.09	-0.15	-0.12	-0.01
-0.12	-0.05	-0.05	0.11	0.02	-0.10	-0.09	-0.05	0.07
0.14	0.37	0.25	-0.12	0.00	0.11	0.26	0.23	0.05
0.21	0.33	0.17	-0.06	0.10	0.33	0.29	0.12	0.06
1.00	0.06	0.06	-0.08	0.15	0.00	0.06	0.12	0.02
0.06	1.00	0.40	0.09	0.01	0.41	0.31	0.07	-0.05
0.06	0.40	1.00	0.05	-0.08	0.47	0.18	-0.01	-0.05
-0.08	0.09	0.05	1.00	0.05	0.06	-0.02	-0.12	0.07
0.15	0.01	-0.08	0.05	1.00	0.10	-0.05	0.00	0.03
0.00	0.41	0.47	0.06	0.10	1.00	0.30	0.11	-0.27
0.06	0.31	0.18	-0.02	-0.05	0.30	1.00	0.28	-0.06
0.12	0.07	-0.01	-0.12	0.00	0.11	0.28	1.00	-0.10
0.02	-0.05	-0.05	0.07	0.03	-0.27	-0.06	-0.10	1.00
0.12	-0.01	0.01	-0.10	0.09	-0.02	0.09	0.06	0.14
-0.16	-0.03	0.04	0.24	-0.14	0.01	-0.12	-0.25	0.06
-0.05	0.09	-0.05	0.33	0.11	0.11	-0.03	-0.09	0.10
0.00	0.07	-0.06	0.00	0.18	-0.03	0.03	-0.11	0.19
0.11	0.24	0.20	0.17	-0.05	0.23	0.12	0.04	-0.18
0.04	0.11	0.04	0.15	-0.07	0.02	0.04	-0.01	0.13
-0.15	0.16	0.25	0.12	-0.18	0.22	0.23	0.00	-0.04
0.02	-0.09	0.01	0.08	0.05	-0.03	-0.09	-0.14	0.12
-0.06	0.18	0.00	0.19	0.02	-0.01	-0.04	-0.21	0.13
-0.04	-0.06	0.08	0.06	0.00	0.04	-0.01	-0.06	0.08
0.03	0.07	-0.03	0.04	0.09	0.10	0.11	-0.04	0.06
0.04	0.04	0.00	0.00	0.06	0.00	0.03	-0.02	0.05
0.07	0.19	0.16	-0.03	0.06	0.13	0.09	0.01	0.03
0.03	0.06	0.12	0.17	0.01	0.06	0.12	0.07	-0.02
-0.01	0.02	0.05	0.19	0.04	0.02	0.12	-0.01	0.01
0.04	0.09	-0.05	0.06	0.12	0.06	0.07	-0.01	0.04
0.19	0.13	0.07	0.01	-0.02	0.01	0.02	0.00	0.05

-0.01	0.10	0.07	0.10	0.00	0.14	0.02	-0.16	0.12
0.19	0.22	0.17	-0.23	0.06	0.24	0.40	0.23	-0.17
0.13	0.08	0.00	0.14	0.26	0.10	0.10	0.04	0.20
0.28	0.13	0.17	0.07	0.15	0.17	0.32	0.11	0.01
0.12	0.11	0.04	0.05	0.09	0.02	0.04	-0.16	0.17
0.01	0.07	0.01	-0.01	-0.01	0.06	-0.05	-0.14	0.16
-0.09	-0.13	-0.16	0.16	0.00	-0.14	-0.17	-0.21	0.20
0.11	0.04	0.08	-0.06	0.06	-0.02	-0.09	-0.18	-0.10
0.00	0.01	0.03	0.09	-0.12	-0.15	-0.19	-0.16	0.09
0.12	-0.12	-0.20	0.10	0.20	-0.17	-0.20	-0.05	0.21
0.13	-0.04	-0.07	0.18	0.22	-0.12	-0.18	-0.12	0.08
-0.24	-0.04	0.07	0.25	-0.07	0.07	0.02	-0.15	0.12
0.19	-0.19	-0.13	0.01	0.17	-0.12	-0.11	-0.13	0.16
-0.06	-0.07	-0.10	0.06	-0.02	-0.11	-0.14	-0.22	0.21
0.10	-0.09	-0.19	0.08	0.26	-0.17	-0.08	-0.04	0.07
-0.13	0.09	-0.04	0.15	0.03	0.02	-0.02	-0.14	0.19
0.03	-0.13	-0.11	0.09	0.14	-0.14	-0.22	-0.19	0.23
0.17	-0.10	-0.11	0.14	0.10	-0.22	-0.21	-0.22	0.12
0.08	-0.04	-0.12	0.02	0.18	-0.01	0.08	-0.08	0.03
0.12	-0.12	-0.09	0.06	0.03	-0.16	-0.17	-0.17	0.19
0.14	-0.03	-0.22	0.03	0.09	-0.18	-0.06	-0.07	0.24
-0.03	0.10	0.11	0.30	0.04	0.05	-0.01	-0.17	-0.06
-0.01	0.18	0.06	0.16	0.12	0.17	0.01	0.01	0.13
0.06	-0.05	-0.07	0.07	0.17	-0.14	-0.15	-0.08	0.11
-0.08	-0.05	-0.04	0.08	-0.09	0.00	0.00	-0.06	0.02
0.08	0.22	0.09	0.13	0.02	0.11	0.02	-0.11	-0.05
0.11	0.19	0.10	0.00	0.05	0.10	0.17	0.11	-0.20
0.26	0.27	0.15	0.11	-0.07	0.02	0.04	0.02	-0.02
0.20	0.27	0.16	-0.15	0.05	0.31	0.34	0.19	-0.17
0.07	0.05	-0.04	0.13	0.17	0.07	-0.15	0.02	0.05
0.02	0.00	0.05	0.16	0.05	0.05	-0.12	-0.19	0.05
-0.09	0.02	-0.02	0.17	0.06	0.01	0.00	0.01	0.16
0.03	-0.01	-0.01	0.11	0.06	-0.07	-0.13	-0.05	0.18
-0.05	-0.10	-0.04	0.03	-0.01	-0.12	-0.05	-0.09	0.05
-0.05	-0.02	-0.11	0.19	0.12	-0.14	-0.20	-0.18	0.10
0.03	-0.11	-0.06	-0.04	0.05	-0.12	-0.20	-0.16	-0.02
-0.07	0.04	0.07	-0.03	0.06	0.12	0.05	-0.09	-0.07
0.12	0.05	0.13	0.13	0.19	0.16	-0.07	-0.04	0.00
0.07	0.12	0.06	0.05	0.13	0.23	0.12	0.06	0.08
-0.04	0.24	0.18	0.11	-0.11	0.16	0.27	0.15	-0.04
-0.04	-0.14	-0.14	-0.08	0.16	0.10	-0.02	0.09	0.10
0.01	0.12	0.12	0.16	0.01	-0.04	0.00	0.00	0.09
-0.05	0.04	-0.07	0.06	0.03	0.02	-0.15	-0.20	0.09
0.18	0.09	-0.05	0.10	0.07	0.06	0.04	0.10	0.15
-0.08	0.21	0.17	0.14	0.01	0.29	0.21	-0.09	-0.05
-0.07	-0.01	0.04	0.12	0.07	0.06	0.01	-0.08	0.06

ML27	ML28	ML29	ML30	ML31	ML32	ML33	ML34	ML35
0.11	0.01	0.05	-0.01	0.03	0.07	-0.06	-0.03	0.00
-0.09	0.09	0.09	0.04	0.01	0.14	-0.03	0.02	-0.03
0.06	-0.03	-0.07	-0.06	0.23	-0.05	0.01	0.01	0.05
0.01	0.06	-0.01	-0.08	0.08	0.06	0.13	-0.01	0.01
-0.04	0.03	0.02	-0.12	0.02	0.03	0.09	0.03	0.08
0.11	-0.07	-0.06	-0.05	0.19	0.08	0.05	-0.08	-0.02
0.04	-0.03	0.12	-0.07	-0.10	0.02	-0.02	-0.03	0.00
0.16	0.03	0.01	-0.17	0.15	0.02	0.03	-0.06	-0.11
0.11	0.18	0.15	0.07	0.12	0.07	0.01	0.08	0.06
0.04	0.08	0.06	0.02	-0.13	-0.02	-0.20	0.07	-0.07
0.12	0.08	0.13	-0.03	-0.12	-0.05	0.01	0.11	0.13
-0.12	0.23	0.17	0.09	0.01	0.16	0.09	0.15	0.17
0.01	0.13	0.15	0.07	0.06	0.00	-0.03	0.01	0.12
-0.01	0.03	-0.01	-0.13	0.02	-0.06	0.03	0.05	0.04
-0.14	0.19	0.20	0.03	0.06	0.03	0.20	-0.04	0.08
0.13	-0.05	-0.06	0.07	0.06	0.05	0.02	-0.16	0.04
0.14	-0.13	0.00	0.08	0.12	0.00	0.16	-0.15	-0.01
0.12	-0.16	-0.05	0.00	0.11	0.04	-0.15	0.02	-0.06
-0.01	-0.03	0.09	0.07	0.24	0.11	0.16	-0.09	0.18
0.01	0.04	-0.05	-0.06	0.20	0.04	0.25	0.01	0.00
-0.10	0.24	0.33	0.00	0.17	0.15	0.12	0.08	0.19
0.09	-0.14	0.11	0.18	-0.05	-0.07	-0.18	0.05	0.02
-0.02	0.01	0.11	-0.03	0.23	0.02	0.22	-0.03	-0.01
0.09	-0.12	-0.03	0.03	0.12	0.04	0.23	-0.09	-0.04
0.06	-0.25	-0.09	-0.11	0.04	-0.01	0.00	-0.14	-0.21
0.14	0.06	0.10	0.19	-0.18	0.13	-0.04	0.12	0.13
1.00	0.03	-0.06	-0.02	0.01	0.00	-0.18	-0.11	0.09
0.03	1.00	0.50	0.00	0.12	0.35	0.14	0.07	0.22
-0.06	0.50	1.00	0.12	0.08	0.27	0.03	0.16	0.28
-0.02	0.00	0.12	1.00	-0.08	0.04	0.00	0.04	0.17
0.01	0.12	0.08	-0.08	1.00	0.13	0.20	-0.02	0.19
0.00	0.35	0.27	0.04	0.13	1.00	0.12	0.17	0.20
-0.18	0.14	0.03	0.00	0.20	0.12	1.00	0.02	0.02
-0.11	0.07	0.16	0.04	-0.02	0.17	0.02	1.00	0.30
0.09	0.22	0.28	0.17	0.19	0.20	0.02	0.30	1.00
0.01	0.01	0.05	0.02	-0.05	-0.01	0.06	0.12	-0.15
-0.01	-0.04	0.06	-0.03	0.05	0.07	0.20	0.04	0.08
-0.06	0.10	0.10	0.04	-0.08	0.14	0.02	0.06	0.01
0.03	0.08	0.19	0.12	-0.02	0.11	0.05	-0.01	0.00
-0.03	0.00	0.07	0.13	0.07	0.08	0.05	0.13	0.16
-0.04	0.01	0.05	0.13	0.04	0.11	0.06	0.13	0.19
-0.10	-0.04	0.16	0.06	-0.01	0.03	0.10	-0.02	-0.03
0.02	-0.24	-0.11	0.16	0.01	0.04	0.12	-0.03	0.02

-0.04	0.16	0.17	0.15	0.06	0.14	0.08	0.21	0.16
0.17	-0.22	-0.22	0.05	0.03	-0.07	0.07	-0.28	-0.20
0.11	-0.04	0.14	0.05	-0.06	0.21	0.01	0.08	0.15
0.06	-0.08	0.12	-0.13	0.03	-0.05	0.14	-0.14	-0.14
-0.01	0.03	0.03	0.02	0.01	0.17	-0.01	0.17	0.43
-0.12	0.29	0.37	0.06	0.02	0.25	-0.01	0.28	0.27
0.14	0.18	0.25	0.14	-0.16	0.13	-0.02	0.24	0.06
0.14	0.11	0.00	-0.10	-0.01	-0.08	0.02	-0.06	0.03
-0.04	0.21	0.20	0.06	-0.09	0.10	-0.06	0.20	0.09
0.15	0.08	0.10	0.10	-0.16	0.15	-0.20	0.16	0.08
0.11	0.06	0.16	0.13	0.02	0.11	-0.17	0.05	0.03
-0.12	0.17	0.13	0.03	0.02	0.21	0.26	0.15	0.19
-0.01	0.01	0.03	0.04	0.01	0.14	-0.08	0.07	0.02
-0.01	0.21	0.19	0.10	-0.28	0.17	-0.07	0.33	0.07
0.19	0.18	0.17	0.11	0.12	0.24	-0.14	0.10	0.27
-0.12	0.17	0.20	0.04	0.04	0.18	0.11	0.29	0.30
-0.13	0.24	0.13	0.06	-0.13	0.11	0.01	0.12	0.14
-0.14	0.19	0.17	0.15	-0.14	0.05	0.06	0.22	0.14
0.18	0.05	0.11	0.12	-0.03	0.04	0.07	0.05	0.10
0.13	0.06	0.14	0.16	-0.07	0.04	-0.23	0.01	0.14
0.22	-0.06	-0.01	0.23	-0.08	0.09	-0.21	0.05	0.14
-0.04	0.10	0.18	0.07	0.27	0.07	0.12	0.18	0.23
0.07	0.13	0.17	-0.04	0.13	0.24	-0.01	0.22	0.32
0.09	0.10	0.15	0.11	0.00	0.11	-0.13	0.08	0.20
-0.09	0.20	0.20	0.01	0.02	0.04	-0.05	0.10	0.09
-0.01	0.24	0.23	0.07	0.11	0.19	0.06	-0.01	0.08
0.06	-0.32	-0.25	0.02	0.17	-0.13	-0.02	-0.12	-0.24
0.04	0.00	0.05	-0.05	0.39	0.05	0.17	0.05	0.07
0.01	-0.14	-0.14	-0.03	0.18	-0.02	0.07	-0.12	-0.15
0.06	-0.01	0.10	0.01	-0.01	0.05	-0.12	0.00	0.08
-0.10	0.31	0.31	0.06	0.09	0.08	0.14	0.06	0.19
-0.11	0.10	0.26	0.06	0.01	0.22	0.28	0.16	0.16
-0.07	0.13	0.21	0.04	0.09	0.08	0.14	0.11	0.17
0.07	0.14	0.20	0.08	0.01	0.03	0.12	0.16	0.12
-0.10	0.10	0.14	0.10	-0.04	0.06	0.16	0.12	0.03
-0.03	0.11	0.10	-0.03	0.01	0.05	0.02	0.05	0.11
-0.01	0.06	0.12	0.01	-0.05	-0.01	-0.11	-0.09	0.03
0.00	0.11	0.11	-0.04	0.22	0.17	-0.03	0.19	0.20
-0.04	-0.24	-0.08	0.04	0.04	0.04	-0.07	0.05	-0.04
-0.16	0.09	0.06	-0.03	0.09	0.11	0.18	-0.05	0.07
0.04	-0.12	-0.08	0.13	-0.17	-0.05	0.01	0.00	-0.11
-0.05	0.12	0.14	0.10	0.06	0.08	0.05	0.12	0.16
-0.02	0.20	0.16	0.09	0.10	0.28	0.03	0.37	0.36
-0.14	-0.14	0.03	0.09	0.02	0.12	0.12	0.06	-0.11
-0.12	0.12	0.09	0.05	0.13	0.14	0.17	0.11	0.14
0.11	0.09	-0.04	0.11	0.09	0.14	0.04	0.00	0.14

ML36	ML37	ML38	ML39	ML40	ML41	ML42	ML43	ML44
-0.01	0.05	0.04	0.09	0.08	0.06	0.14	0.09	-0.03
0.07	-0.10	0.10	0.06	-0.01	-0.08	0.00	-0.06	0.05
-0.01	-0.09	0.02	0.04	0.16	0.05	0.00	-0.03	0.00
0.05	0.06	0.02	0.11	0.07	-0.02	0.17	-0.02	0.10
0.07	0.03	0.04	-0.01	0.20	0.18	0.20	-0.01	0.11
-0.04	0.03	0.09	0.13	-0.01	0.03	-0.05	0.02	0.02
0.05	0.00	-0.06	-0.01	-0.11	0.06	0.05	0.10	-0.04
-0.03	0.06	0.03	0.02	-0.15	-0.08	-0.06	-0.02	-0.10
0.03	0.16	-0.10	-0.09	0.09	0.01	-0.07	0.12	0.08
-0.08	0.02	-0.17	-0.23	-0.04	-0.06	0.00	-0.07	-0.02
0.08	0.22	-0.02	-0.05	0.05	-0.02	-0.04	0.05	-0.01
0.02	-0.05	0.05	0.01	0.00	0.11	0.07	0.01	0.25
0.08	-0.03	0.13	0.06	-0.12	0.08	0.07	-0.04	0.21
0.00	0.24	-0.03	-0.12	-0.04	-0.10	0.01	-0.07	-0.02
0.11	0.09	0.19	0.12	0.02	0.07	0.11	0.03	0.07
-0.07	0.05	0.04	0.08	0.00	-0.01	-0.11	0.12	-0.02
-0.09	0.08	-0.04	0.06	-0.03	0.00	0.18	0.12	0.07
-0.04	0.03	0.04	0.07	0.03	-0.01	0.04	0.19	-0.01
-0.06	0.07	0.04	0.19	0.06	0.02	0.09	0.13	0.10
0.08	-0.03	0.00	0.16	0.12	0.05	-0.05	0.07	0.07
0.06	0.04	0.00	-0.03	0.17	0.19	0.06	0.01	0.10
0.00	0.09	0.06	0.06	0.01	0.04	0.12	-0.02	0.00
0.04	0.10	0.00	0.13	0.06	0.02	0.06	0.01	0.14
-0.01	0.11	0.03	0.09	0.12	0.12	0.07	0.02	0.02
-0.06	-0.04	-0.02	0.01	0.07	-0.01	-0.01	0.00	-0.16
0.08	0.06	0.05	0.03	-0.02	0.01	0.04	0.05	0.12
0.01	-0.01	-0.06	0.03	-0.03	-0.04	-0.10	0.02	-0.04
0.01	-0.04	0.10	0.08	0.00	0.01	-0.04	-0.24	0.16
0.05	0.06	0.10	0.19	0.07	0.05	0.16	-0.11	0.17
0.02	-0.03	0.04	0.12	0.13	0.13	0.06	0.16	0.15
-0.05	0.05	-0.08	-0.02	0.07	0.04	-0.01	0.01	0.06
-0.01	0.07	0.14	0.11	0.08	0.11	0.03	0.04	0.14
0.06	0.20	0.02	0.05	0.05	0.06	0.10	0.12	0.08
0.12	0.04	0.06	-0.01	0.13	0.13	-0.02	-0.03	0.21
-0.15	0.08	0.01	0.00	0.16	0.19	-0.03	0.02	0.16
1.00	0.06	0.19	0.24	-0.04	-0.01	0.09	0.22	0.02
0.06	1.00	0.17	0.06	0.03	0.02	0.34	0.16	0.02
0.19	0.17	1.00	0.62	0.05	0.21	0.15	0.05	0.01
0.24	0.06	0.62	1.00	-0.08	0.02	0.19	0.06	0.00
-0.04	0.03	0.05	-0.08	1.00	0.67	-0.03	0.02	0.02
-0.01	0.02	0.21	0.02	0.67	1.00	0.02	0.03	0.10
0.09	0.34	0.15	0.19	-0.03	0.02	1.00	0.22	0.10
0.22	0.16	0.05	0.06	0.02	0.03	0.22	1.00	-0.03

0.02	0.02	0.01	0.00	0.02	0.10	0.10	-0.03	1.00
0.03	0.05	0.06	0.13	-0.05	-0.02	0.10	0.15	-0.02
-0.20	0.21	-0.06	-0.08	0.15	0.14	0.22	0.03	0.14
0.11	0.35	0.13	0.13	-0.06	-0.07	0.14	0.09	-0.05
-0.28	0.12	-0.06	-0.15	0.19	0.11	0.10	-0.01	0.16
-0.07	0.03	0.12	0.13	0.04	0.10	0.05	-0.04	0.29
0.22	0.16	0.13	0.05	0.07	0.07	0.04	0.11	-0.01
0.08	0.29	0.01	0.00	-0.09	-0.13	-0.01	0.03	-0.18
0.14	-0.09	0.07	0.04	0.09	0.07	-0.08	-0.05	0.05
0.04	0.14	0.07	0.09	-0.03	0.00	0.02	0.13	-0.02
0.07	0.02	0.11	0.05	0.13	0.11	0.11	0.08	-0.05
-0.09	0.07	0.02	0.00	0.14	0.20	0.09	-0.07	-0.02
-0.01	0.26	0.06	0.13	-0.02	0.10	0.04	0.09	0.04
0.26	0.07	0.14	0.12	0.10	0.00	0.19	0.17	0.16
-0.08	0.07	0.15	0.10	0.12	0.21	0.09	-0.03	0.07
-0.02	0.14	0.15	0.10	0.07	0.21	0.05	-0.15	0.20
0.14	0.16	0.16	0.15	-0.01	0.10	0.24	0.14	0.10
0.12	0.17	0.17	0.12	0.01	0.09	0.06	0.11	0.08
-0.01	0.07	0.04	0.09	0.05	0.16	-0.03	0.07	0.09
0.05	0.01	0.01	0.11	-0.11	0.07	0.08	0.04	0.16
0.03	0.19	0.10	0.10	0.06	0.06	0.02	0.19	0.01
0.13	0.06	0.06	0.08	0.05	0.15	-0.10	0.01	-0.01
0.07	0.06	0.03	0.13	0.17	0.14	0.00	-0.06	0.12
0.05	-0.05	0.06	0.03	0.04	0.14	0.04	0.15	-0.05
0.05	0.06	0.06	-0.05	0.16	0.12	0.06	-0.14	0.11
-0.06	0.03	0.10	0.08	0.16	0.20	-0.01	-0.07	0.09
0.04	0.01	-0.07	0.07	-0.07	-0.03	0.02	0.19	-0.17
0.08	0.12	0.08	0.06	0.12	0.17	0.05	0.20	0.04
-0.03	0.04	0.03	0.09	-0.03	0.03	0.13	0.11	-0.07
-0.03	0.09	0.10	-0.01	0.04	0.06	0.05	0.13	-0.02
0.09	0.06	0.18	0.17	0.09	0.15	0.14	-0.04	0.16
0.10	0.23	0.10	0.14	0.12	0.18	0.17	0.13	0.09
0.02	0.15	0.07	0.19	0.01	-0.02	0.14	0.03	-0.04
0.09	0.05	0.06	0.08	0.04	0.10	0.00	0.02	-0.09
0.21	0.23	0.16	0.12	-0.07	-0.05	0.04	0.17	-0.01
0.06	0.14	0.17	0.15	-0.07	-0.01	0.03	0.04	-0.04
0.13	-0.07	-0.04	0.12	-0.02	0.04	0.10	-0.14	0.01
0.08	0.12	0.13	0.22	-0.06	-0.06	0.01	-0.06	0.04
0.24	0.19	0.06	0.22	-0.12	-0.12	0.19	0.12	0.02
0.11	0.04	0.14	0.16	0.29	0.29	0.05	0.07	0.02
0.12	0.01	0.00	0.06	-0.24	-0.22	0.17	0.02	0.04
-0.01	-0.05	-0.01	0.02	0.31	0.32	-0.11	0.07	0.08
-0.14	-0.05	0.05	-0.03	0.05	0.16	0.00	-0.07	0.13
0.20	0.25	-0.04	0.03	-0.02	-0.06	0.33	0.37	-0.06
0.00	0.08	0.04	0.02	0.10	0.19	0.09	-0.11	0.21
-0.18	0.17	-0.07	-0.03	0.05	0.14	0.08	-0.08	0.13

ML45	ML46	ML47	ML48	ML49	ML50	ML51	ML52	ML53
0.25	0.06	0.01	0.05	0.04	-0.12	-0.03	-0.05	-0.07
0.00	0.01	-0.13	0.12	0.05	0.12	-0.07	0.11	0.00
0.23	-0.02	0.05	0.11	0.02	-0.09	-0.03	0.00	-0.03
0.11	0.12	0.18	0.15	0.03	-0.15	0.00	-0.07	-0.09
0.09	0.04	0.18	0.15	0.03	-0.12	-0.15	-0.19	-0.23
0.39	0.01	0.24	0.05	-0.03	-0.17	-0.14	-0.10	-0.18
-0.03	0.09	0.06	0.04	0.00	0.05	0.14	-0.03	0.06
0.20	0.03	0.23	-0.02	0.01	-0.10	0.04	-0.21	-0.19
-0.14	-0.08	0.09	-0.06	0.06	0.18	0.15	0.09	0.30
-0.07	0.01	-0.06	-0.06	-0.03	0.22	0.04	0.16	0.23
-0.15	-0.06	0.02	-0.12	-0.02	0.24	0.44	0.21	0.15
-0.08	0.00	-0.12	0.00	0.13	0.15	-0.02	0.14	0.02
-0.13	-0.04	-0.02	-0.05	0.09	0.12	0.07	0.04	0.10
-0.13	-0.04	0.06	-0.04	-0.01	0.20	0.09	-0.08	0.10
-0.09	-0.03	0.06	0.03	0.10	0.22	0.05	0.10	0.00
0.31	0.06	0.22	0.05	0.04	-0.16	0.08	-0.01	0.01
0.37	0.29	0.23	0.18	-0.04	-0.25	0.00	-0.11	-0.13
0.19	0.13	0.28	0.12	0.01	-0.09	0.11	0.00	0.12
0.22	0.08	0.13	0.11	0.07	-0.13	0.04	0.01	-0.12
0.17	0.00	0.17	0.04	0.01	-0.16	0.08	0.03	-0.20
-0.23	0.14	0.07	0.05	-0.01	0.16	-0.06	0.09	0.10
0.06	0.26	0.15	0.09	-0.01	0.00	0.06	-0.12	0.20
0.24	0.10	0.17	0.02	0.06	-0.14	-0.02	-0.15	-0.17
0.40	0.10	0.32	0.04	-0.05	-0.17	-0.09	-0.19	-0.20
0.23	0.04	0.11	-0.16	-0.14	-0.21	-0.18	-0.16	-0.05
-0.17	0.20	0.01	0.17	0.16	0.20	-0.10	0.09	0.21
0.17	0.11	0.06	-0.01	-0.12	0.14	0.14	-0.04	0.15
-0.22	-0.04	-0.08	0.03	0.29	0.18	0.11	0.21	0.08
-0.22	0.14	0.12	0.03	0.37	0.25	0.00	0.20	0.10
0.05	0.05	-0.13	0.02	0.06	0.14	-0.10	0.06	0.10
0.03	-0.06	0.03	0.01	0.02	-0.16	-0.01	-0.09	-0.16
-0.07	0.21	-0.05	0.17	0.25	0.13	-0.08	0.10	0.15
0.07	0.01	0.14	-0.01	-0.01	-0.02	0.02	-0.06	-0.20
-0.28	0.08	-0.14	0.17	0.28	0.24	-0.06	0.20	0.16
-0.20	0.15	-0.14	0.43	0.27	0.06	0.03	0.09	0.08
0.03	-0.20	0.11	-0.28	-0.07	0.22	0.08	0.14	0.04
0.05	0.21	0.35	0.12	0.03	0.16	0.29	-0.09	0.14
0.06	-0.06	0.13	-0.06	0.12	0.13	0.01	0.07	0.07
0.13	-0.08	0.13	-0.15	0.13	0.05	0.00	0.04	0.09
-0.05	0.15	-0.06	0.19	0.04	0.07	-0.09	0.09	-0.03
-0.02	0.14	-0.07	0.11	0.10	0.07	-0.13	0.07	0.00
0.10	0.22	0.14	0.10	0.05	0.04	-0.01	-0.08	0.02
0.15	0.03	0.09	-0.01	-0.04	0.11	0.03	-0.05	0.13

-0.02	0.14	-0.05	0.16	0.29	-0.01	-0.18	0.05	-0.02
1.00	0.00	0.29	-0.07	-0.05	-0.20	0.09	-0.15	-0.19
0.00	1.00	0.18	0.57	0.16	0.01	-0.02	-0.09	0.11
0.29	0.18	1.00	0.08	0.04	-0.01	0.10	-0.25	0.08
-0.07	0.57	0.08	1.00	0.31	0.00	-0.04	-0.04	0.04
-0.05	0.16	0.04	0.31	1.00	0.07	-0.06	0.04	-0.03
-0.20	0.01	-0.01	0.00	0.07	1.00	0.12	0.28	0.37
0.09	-0.02	0.10	-0.04	-0.06	0.12	1.00	0.30	0.14
-0.15	-0.09	-0.25	-0.04	0.04	0.28	0.30	1.00	0.15
-0.19	0.11	0.08	0.04	-0.03	0.37	0.14	0.15	1.00
-0.06	0.20	0.05	0.05	0.07	0.15	0.07	0.20	0.32
-0.15	0.25	0.03	0.43	0.17	0.13	-0.09	0.08	0.06
0.02	0.12	0.05	0.03	0.03	0.10	0.13	0.07	0.32
-0.15	-0.01	-0.18	-0.01	0.15	0.49	0.12	0.47	0.33
-0.04	0.06	-0.07	0.10	0.04	0.06	0.00	0.12	0.31
-0.16	0.21	-0.07	0.32	0.30	0.24	-0.19	0.11	0.08
-0.09	0.17	-0.04	0.18	0.15	0.27	0.10	0.23	0.22
-0.15	0.12	0.04	0.11	0.13	0.30	0.14	0.21	0.19
-0.02	0.08	0.00	0.07	-0.05	0.14	0.03	-0.07	0.18
-0.01	0.02	-0.16	-0.05	0.05	0.11	0.14	0.30	0.30
0.07	0.16	0.07	0.11	-0.06	0.30	0.13	0.03	0.51
-0.23	0.02	0.12	0.06	0.05	0.15	0.00	-0.01	0.19
-0.09	0.21	-0.08	0.25	0.15	0.06	-0.07	-0.01	0.09
-0.09	0.17	0.00	0.11	0.11	0.25	-0.04	-0.05	0.22
-0.11	-0.05	-0.02	0.09	0.20	0.13	0.08	-0.02	-0.01
-0.04	0.08	0.01	-0.01	0.14	0.01	0.15	0.05	-0.07
0.31	-0.02	0.10	-0.18	-0.23	-0.30	-0.06	-0.11	-0.18
0.01	-0.01	0.05	0.02	0.02	0.04	-0.02	0.08	0.01
0.29	0.09	0.11	0.13	-0.02	-0.29	-0.05	-0.17	-0.25
-0.04	0.05	0.10	-0.04	-0.08	0.20	0.05	-0.11	0.19
-0.16	0.06	0.11	0.08	0.23	0.10	0.02	0.04	0.20
-0.12	0.25	0.14	0.10	0.22	0.33	-0.10	0.06	0.07
-0.23	0.15	0.08	0.03	0.20	0.22	0.00	0.01	0.14
-0.21	0.01	0.16	-0.07	0.15	0.27	0.10	0.15	0.19
-0.17	-0.05	0.09	-0.08	0.10	0.47	0.16	0.22	0.25
-0.11	0.00	0.11	0.07	0.19	0.33	0.16	0.11	0.24
0.16	-0.19	0.01	-0.06	-0.01	0.09	0.07	-0.02	-0.12
-0.18	-0.05	-0.03	0.01	0.07	0.00	-0.03	0.02	0.11
0.15	-0.06	0.23	-0.14	-0.03	0.03	0.03	-0.08	0.13
0.06	0.06	0.13	0.06	0.04	-0.12	0.00	0.05	-0.06
0.11	0.01	-0.04	-0.07	-0.06	-0.01	0.01	-0.02	0.07
0.02	0.12	-0.02	0.19	0.18	0.03	-0.05	0.20	-0.03
-0.27	0.11	-0.21	0.25	0.31	0.19	-0.07	0.14	0.11
0.09	0.07	0.20	-0.08	0.01	0.05	0.07	0.02	-0.01
0.09	0.22	0.06	0.25	0.07	-0.01	-0.15	-0.07	-0.16
0.06	0.15	-0.02	0.03	0.03	-0.02	0.07	-0.09	0.03

ML54	ML55	ML56	ML57	ML58	ML59	ML60	ML61	ML62
0.02	0.00	0.07	-0.10	0.02	-0.10	-0.06	-0.07	0.01
-0.03	0.01	0.05	0.14	-0.07	0.21	0.08	0.04	0.04
-0.01	-0.05	-0.14	-0.04	-0.04	0.02	0.01	0.04	0.10
-0.02	0.14	-0.18	0.01	-0.04	-0.12	-0.01	-0.02	-0.12
0.00	0.16	-0.10	-0.01	-0.04	0.11	-0.04	-0.11	-0.12
-0.08	-0.13	-0.03	-0.22	0.04	-0.03	-0.13	-0.13	0.06
0.03	0.12	0.18	-0.09	0.03	0.02	0.00	0.05	0.01
-0.23	-0.18	-0.14	-0.24	-0.02	-0.09	-0.23	-0.21	0.10
0.16	0.01	0.19	0.26	0.10	0.00	0.07	0.11	0.09
0.19	-0.05	0.10	0.13	0.15	0.11	0.13	0.07	-0.05
-0.01	-0.04	0.01	0.23	0.03	-0.06	0.10	0.19	0.01
-0.01	0.12	0.02	0.17	0.08	0.19	0.33	0.28	0.14
-0.04	-0.04	-0.06	0.10	0.09	0.05	0.25	0.15	0.14
-0.06	-0.25	0.03	0.12	-0.02	0.02	0.15	0.16	0.02
0.09	0.03	0.06	0.14	0.03	0.13	0.19	0.22	0.06
-0.04	-0.06	0.01	-0.21	-0.02	-0.04	-0.07	-0.02	0.01
0.02	-0.05	0.01	-0.22	-0.08	-0.07	-0.11	-0.17	0.04
0.13	-0.24	0.19	-0.06	0.10	-0.13	0.03	0.17	0.08
-0.04	-0.04	-0.19	-0.07	-0.09	0.09	-0.13	-0.10	-0.04
-0.07	0.07	-0.13	-0.10	-0.19	-0.04	-0.11	-0.11	-0.12
0.18	0.25	0.01	0.06	0.08	0.15	0.09	0.14	0.02
0.22	-0.07	0.17	-0.02	0.26	0.03	0.14	0.10	0.18
-0.12	0.07	-0.12	-0.11	-0.17	0.02	-0.14	-0.22	-0.01
-0.18	0.02	-0.11	-0.14	-0.08	-0.02	-0.22	-0.21	0.08
-0.12	-0.15	-0.13	-0.22	-0.04	-0.14	-0.19	-0.22	-0.08
0.08	0.12	0.16	0.21	0.07	0.19	0.23	0.12	0.03
0.11	-0.12	-0.01	-0.01	0.19	-0.12	-0.13	-0.14	0.18
0.06	0.17	0.01	0.21	0.18	0.17	0.24	0.19	0.05
0.16	0.13	0.03	0.19	0.17	0.20	0.13	0.17	0.11
0.13	0.03	0.04	0.10	0.11	0.04	0.06	0.15	0.12
0.02	0.02	0.01	-0.28	0.12	0.04	-0.13	-0.14	-0.03
0.11	0.21	0.14	0.17	0.24	0.18	0.11	0.05	0.04
-0.17	0.26	-0.08	-0.07	-0.14	0.11	0.01	0.06	0.07
0.05	0.15	0.07	0.33	0.10	0.29	0.12	0.22	0.05
0.03	0.19	0.02	0.07	0.27	0.30	0.14	0.14	0.10
0.07	-0.09	-0.01	0.26	-0.08	-0.02	0.14	0.12	-0.01
0.02	0.07	0.26	0.07	0.07	0.14	0.16	0.17	0.07
0.11	0.02	0.06	0.14	0.15	0.15	0.16	0.17	0.04
0.05	0.00	0.13	0.12	0.10	0.10	0.15	0.12	0.09
0.13	0.14	-0.02	0.10	0.12	0.07	-0.01	0.01	0.05
0.11	0.20	0.10	0.00	0.21	0.21	0.10	0.09	0.16
0.11	0.09	0.04	0.19	0.09	0.05	0.24	0.06	-0.03
0.08	-0.07	0.09	0.17	-0.03	-0.15	0.14	0.11	0.07

-0.05	-0.02	0.04	0.16	0.07	0.20	0.10	0.08	0.09
-0.06	-0.15	0.02	-0.15	-0.04	-0.16	-0.09	-0.15	-0.02
0.20	0.25	0.12	-0.01	0.06	0.21	0.17	0.12	0.08
0.05	0.03	0.05	-0.18	-0.07	-0.07	-0.04	0.04	0.00
0.05	0.43	0.03	-0.01	0.10	0.32	0.18	0.11	0.07
0.07	0.17	0.03	0.15	0.04	0.30	0.15	0.13	-0.05
0.15	0.13	0.10	0.49	0.06	0.24	0.27	0.30	0.14
0.07	-0.09	0.13	0.12	0.00	-0.19	0.10	0.14	0.03
0.20	0.08	0.07	0.47	0.12	0.11	0.23	0.21	-0.07
0.32	0.06	0.32	0.33	0.31	0.08	0.22	0.19	0.18
1.00	0.06	0.28	0.17	0.16	0.00	0.15	0.19	-0.04
0.06	1.00	0.07	0.12	0.05	0.39	0.24	0.19	0.08
0.28	0.07	1.00	0.11	0.25	0.14	0.25	0.29	0.15
0.17	0.12	0.11	1.00	0.06	0.17	0.28	0.20	0.03
0.16	0.05	0.25	0.06	1.00	0.15	0.09	0.07	0.21
0.00	0.39	0.14	0.17	0.15	1.00	0.33	0.23	0.04
0.15	0.24	0.25	0.28	0.09	0.33	1.00	0.65	0.07
0.19	0.19	0.29	0.20	0.07	0.23	0.65	1.00	0.20
-0.04	0.08	0.15	0.03	0.21	0.04	0.07	0.20	1.00
0.15	-0.03	0.25	0.26	0.26	0.08	0.28	0.26	0.18
0.32	-0.07	0.19	0.23	0.25	0.02	0.17	0.07	0.09
0.18	0.18	0.04	-0.07	0.14	0.15	-0.01	0.11	0.18
0.10	0.21	0.07	0.01	0.23	0.28	0.06	0.03	0.08
0.21	-0.01	0.19	0.08	0.25	0.13	0.31	0.32	0.21
0.05	0.14	0.00	0.14	0.01	0.11	0.22	0.05	0.07
0.09	-0.04	0.06	0.00	0.15	0.08	0.07	0.09	0.13
0.02	-0.18	0.05	-0.30	-0.06	-0.25	-0.12	-0.10	-0.08
0.12	0.00	0.11	-0.03	0.22	0.11	0.01	0.10	0.10
-0.13	-0.14	-0.08	-0.38	-0.07	-0.11	-0.06	-0.12	0.06
0.23	-0.06	0.11	0.08	0.19	-0.04	0.24	0.26	0.04
0.12	0.19	-0.04	0.12	0.24	0.14	0.18	0.23	0.13
0.04	0.24	0.23	0.31	0.00	0.36	0.27	0.30	0.11
0.10	-0.02	0.20	0.21	0.05	0.20	0.20	0.21	0.16
0.11	0.06	0.05	0.18	0.02	0.10	0.14	0.23	0.18
0.17	0.03	0.11	0.38	0.04	0.22	0.25	0.40	0.17
0.11	-0.01	0.20	0.27	0.09	0.20	0.20	0.29	0.19
-0.02	0.06	0.01	-0.01	0.07	0.06	0.07	0.00	-0.10
0.09	0.13	0.30	0.05	0.15	0.17	0.14	0.08	0.11
0.05	-0.11	0.06	0.13	-0.03	-0.01	-0.13	-0.10	-0.07
-0.02	0.20	-0.03	-0.06	-0.04	0.08	0.07	-0.02	0.10
0.01	-0.05	0.08	0.08	0.06	-0.03	0.00	-0.04	-0.08
-0.11	0.18	0.02	-0.02	0.05	0.25	0.18	0.17	0.06
0.13	0.31	0.03	0.17	0.26	0.36	0.21	0.08	0.11
0.11	0.01	0.16	0.26	-0.01	-0.07	0.11	0.08	-0.08
0.04	0.28	0.02	-0.02	-0.05	0.25	0.06	-0.04	0.03
-0.01	0.18	0.13	0.05	0.07	0.12	0.09	0.03	0.07

ML63	ML64	ML65	ML66	ML67	ML68	ML69	ML70	ML71
0.05	0.05	-0.19	0.21	-0.05	-0.13	-0.07	0.09	0.11
0.01	-0.02	-0.16	0.15	-0.07	-0.06	-0.10	-0.30	-0.07
-0.02	-0.04	-0.12	0.12	0.06	0.03	-0.05	-0.03	0.07
-0.06	-0.11	0.04	0.09	-0.06	-0.08	0.05	-0.04	-0.05
-0.13	-0.08	0.06	0.13	-0.13	0.08	0.14	0.00	0.09
-0.12	0.07	0.05	0.08	-0.06	-0.13	0.06	0.16	0.16
0.10	0.04	0.19	-0.11	0.04	-0.06	0.04	0.13	0.02
-0.25	-0.10	0.18	-0.03	-0.04	-0.12	0.07	0.20	0.06
0.18	0.17	0.18	0.03	0.05	0.09	0.06	-0.11	0.13
0.13	0.09	-0.10	-0.04	0.10	0.01	-0.12	0.03	-0.09
0.14	0.06	0.07	-0.01	0.05	0.06	0.11	-0.02	-0.04
0.15	-0.14	0.09	0.04	0.08	0.04	0.00	-0.23	-0.08
0.14	0.02	0.09	0.04	0.16	0.11	0.12	-0.24	-0.05
0.00	0.05	0.05	-0.10	0.16	0.09	0.09	-0.10	0.10
0.10	-0.01	0.12	-0.05	0.22	0.07	0.07	-0.18	0.17
0.05	-0.07	-0.01	0.02	-0.06	-0.15	-0.02	0.12	0.03
-0.14	-0.01	-0.06	0.03	-0.10	-0.04	0.01	0.32	0.07
0.12	0.14	-0.03	-0.01	0.06	-0.08	0.08	0.11	0.26
-0.12	-0.03	0.10	0.18	-0.05	-0.05	0.22	0.19	0.27
-0.09	-0.22	0.11	0.06	-0.07	-0.04	0.09	0.10	0.15
0.06	0.03	0.30	0.16	0.07	0.08	0.13	0.00	0.11
0.03	0.09	0.04	0.12	0.17	-0.09	0.02	0.05	-0.07
-0.16	-0.18	0.05	0.17	-0.14	0.00	0.11	0.10	0.02
-0.17	-0.06	-0.01	0.01	-0.15	0.00	0.02	0.17	0.04
-0.17	-0.07	-0.17	0.01	-0.08	-0.06	-0.11	0.11	0.02
0.19	0.24	-0.06	0.13	0.11	0.02	-0.05	-0.20	-0.02
0.13	0.22	-0.04	0.07	0.09	-0.09	-0.01	0.06	0.04
0.06	-0.06	0.10	0.13	0.10	0.20	0.24	-0.32	0.00
0.14	-0.01	0.18	0.17	0.15	0.20	0.23	-0.25	0.05
0.16	0.23	0.07	-0.04	0.11	0.01	0.07	0.02	-0.05
-0.07	-0.08	0.27	0.13	0.00	0.02	0.11	0.17	0.39
0.04	0.09	0.07	0.24	0.11	0.04	0.19	-0.13	0.05
-0.23	-0.21	0.12	-0.01	-0.13	-0.05	0.06	-0.02	0.17
0.01	0.05	0.18	0.22	0.08	0.10	-0.01	-0.12	0.05
0.14	0.14	0.23	0.32	0.20	0.09	0.08	-0.24	0.07
0.05	0.03	0.13	0.07	0.05	0.05	-0.06	0.04	0.08
0.01	0.19	0.06	0.06	-0.05	0.06	0.03	0.01	0.12
0.01	0.10	0.06	0.03	0.06	0.06	0.10	-0.07	0.08
0.11	0.10	0.08	0.13	0.03	-0.05	0.08	0.07	0.06
-0.11	0.06	0.05	0.17	0.04	0.16	0.16	-0.07	0.12
0.07	0.06	0.15	0.14	0.14	0.12	0.20	-0.03	0.17
0.08	0.02	-0.10	0.00	0.04	0.06	-0.01	0.02	0.05
0.04	0.19	0.01	-0.06	0.15	-0.14	-0.07	0.19	0.20

0.16	0.01	-0.01	0.12	-0.05	0.11	0.09	-0.17	0.04
-0.01	0.07	-0.23	-0.09	-0.09	-0.11	-0.04	0.31	0.01
0.02	0.16	0.02	0.21	0.17	-0.05	0.08	-0.02	-0.01
-0.16	0.07	0.12	-0.08	0.00	-0.02	0.01	0.10	0.05
-0.05	0.11	0.06	0.25	0.11	0.09	-0.01	-0.18	0.02
0.05	-0.06	0.05	0.15	0.11	0.20	0.14	-0.23	0.02
0.11	0.30	0.15	0.06	0.25	0.13	0.01	-0.30	0.04
0.14	0.13	0.00	-0.07	-0.04	0.08	0.15	-0.06	-0.02
0.30	0.03	-0.01	-0.01	-0.05	-0.02	0.05	-0.11	0.08
0.30	0.51	0.19	0.09	0.22	-0.01	-0.07	-0.18	0.01
0.15	0.32	0.18	0.10	0.21	0.05	0.09	0.02	0.12
-0.03	-0.07	0.18	0.21	-0.01	0.14	-0.04	-0.18	0.00
0.25	0.19	0.04	0.07	0.19	0.00	0.06	0.05	0.11
0.26	0.23	-0.07	0.01	0.08	0.14	0.00	-0.30	-0.03
0.26	0.25	0.14	0.23	0.25	0.01	0.15	-0.06	0.22
0.08	0.02	0.15	0.28	0.13	0.11	0.08	-0.25	0.11
0.28	0.17	-0.01	0.06	0.31	0.22	0.07	-0.12	0.01
0.26	0.07	0.11	0.03	0.32	0.05	0.09	-0.10	0.10
0.18	0.09	0.18	0.08	0.21	0.07	0.13	-0.08	0.10
1.00	0.19	-0.04	-0.05	0.25	-0.05	0.05	-0.05	0.11
0.19	1.00	0.07	0.07	0.23	0.01	0.07	0.02	0.05
-0.04	0.07	1.00	0.21	0.18	0.16	0.23	0.06	0.30
-0.05	0.07	0.21	1.00	0.17	0.11	0.20	-0.18	0.23
0.25	0.23	0.18	0.17	1.00	0.14	0.19	-0.04	0.21
-0.05	0.01	0.16	0.11	0.14	1.00	0.29	-0.13	0.03
0.05	0.07	0.23	0.20	0.19	0.29	1.00	0.03	0.26
-0.05	0.02	0.06	-0.18	-0.04	-0.13	0.03	1.00	0.20
0.11	0.05	0.30	0.23	0.21	0.03	0.26	0.20	1.00
-0.14	-0.20	0.01	0.04	-0.02	-0.05	0.05	0.38	0.19
0.13	0.37	0.10	0.06	0.28	0.15	0.25	-0.02	0.13
0.16	0.09	0.34	0.10	0.31	0.24	0.23	-0.19	0.25
0.12	0.10	0.10	0.00	0.34	0.11	0.06	-0.17	0.10
0.22	0.08	0.21	0.04	0.46	0.13	0.16	-0.13	0.23
0.10	0.08	0.27	0.08	0.34	0.19	0.27	-0.08	0.07
0.17	0.18	0.18	0.00	0.32	0.01	0.16	-0.09	0.18
0.23	0.13	0.12	-0.02	0.37	0.05	0.13	-0.29	0.09
0.05	-0.02	-0.11	0.05	-0.05	0.06	-0.03	-0.09	-0.14
0.11	-0.01	0.20	0.39	0.18	0.05	0.16	-0.02	0.28
0.01	0.14	0.05	0.09	-0.02	0.02	-0.07	0.08	-0.05
-0.06	-0.06	0.10	0.08	-0.09	0.04	0.07	-0.02	0.10
0.05	0.07	-0.23	-0.09	-0.07	-0.03	-0.15	0.07	-0.05
0.06	-0.05	0.11	0.07	0.00	-0.03	0.12	-0.10	0.12
0.08	0.07	0.21	0.24	0.17	0.11	0.13	-0.17	0.14
0.05	0.09	0.01	0.04	0.01	0.09	-0.03	0.23	0.18
0.01	0.04	0.15	0.16	-0.07	0.18	0.16	-0.04	0.17
0.17	0.00	0.15	-0.01	-0.07	0.15	0.10	-0.03	-0.06

ML72	ML73	ML74	ML75	ML76	ML77	ML78	ML79	ML80
0.22	-0.10	-0.18	-0.10	-0.15	-0.16	-0.20	-0.17	0.06
0.01	-0.23	-0.14	0.05	-0.07	-0.05	0.04	0.12	-0.02
0.10	0.02	0.00	-0.02	-0.02	-0.06	0.02	-0.02	0.03
-0.01	0.00	0.09	-0.07	-0.16	-0.11	-0.07	-0.08	0.13
0.09	0.08	-0.01	-0.02	-0.07	-0.05	-0.11	-0.16	0.11
0.37	-0.11	-0.12	-0.09	-0.11	-0.11	-0.13	-0.04	-0.03
0.07	0.01	-0.04	0.02	-0.04	0.01	-0.01	0.00	0.06
0.31	-0.03	-0.08	-0.11	0.01	0.01	-0.08	-0.06	0.05
-0.11	0.22	0.11	0.12	0.13	0.25	0.27	0.20	-0.15
0.00	0.04	-0.08	0.13	0.12	0.06	0.21	0.05	-0.01
-0.12	0.25	0.08	0.12	0.20	0.27	0.30	0.17	-0.11
-0.06	0.09	0.03	0.16	0.14	0.07	0.23	0.21	0.10
-0.08	0.14	0.13	0.10	0.12	0.17	0.22	0.27	0.06
-0.04	0.23	0.00	0.18	0.31	0.16	0.38	0.23	-0.08
-0.04	0.09	0.18	0.46	0.34	0.26	0.39	0.41	-0.01
0.28	-0.01	-0.05	-0.06	-0.04	0.04	0.00	-0.01	-0.05
0.41	-0.10	-0.02	0.03	-0.04	-0.15	-0.14	-0.14	-0.07
0.20	0.07	0.02	-0.09	0.03	-0.05	-0.05	0.03	-0.07
0.27	0.05	0.00	0.02	-0.01	-0.10	-0.02	-0.11	0.04
0.16	-0.04	0.05	-0.02	-0.01	-0.04	-0.11	-0.06	0.07
-0.15	0.13	0.16	0.17	0.11	0.03	0.19	-0.04	-0.03
0.05	0.17	0.05	0.06	0.06	-0.01	0.12	0.05	0.06
0.31	0.07	0.05	0.01	-0.07	-0.12	-0.14	-0.12	0.12
0.34	-0.15	-0.12	0.00	-0.13	-0.05	-0.20	-0.20	0.05
0.19	0.02	-0.19	0.01	-0.05	-0.09	-0.18	-0.16	-0.09
-0.17	0.05	0.05	0.16	0.18	0.05	0.10	-0.02	-0.07
0.01	0.06	-0.10	-0.11	-0.07	0.07	-0.10	-0.03	-0.01
-0.14	-0.01	0.31	0.10	0.13	0.14	0.10	0.11	0.06
-0.14	0.10	0.31	0.26	0.21	0.20	0.14	0.10	0.12
-0.03	0.01	0.06	0.06	0.04	0.08	0.10	-0.03	0.01
0.18	-0.01	0.09	0.01	0.09	0.01	-0.04	0.01	-0.05
-0.02	0.05	0.08	0.22	0.08	0.03	0.06	0.05	-0.01
0.07	-0.12	0.14	0.28	0.14	0.12	0.16	0.02	-0.11
-0.12	0.00	0.06	0.16	0.11	0.16	0.12	0.05	-0.09
-0.15	0.08	0.19	0.16	0.17	0.12	0.03	0.11	0.03
-0.03	-0.03	0.09	0.10	0.02	0.09	0.21	0.06	0.13
0.04	0.09	0.06	0.23	0.15	0.05	0.23	0.14	-0.07
0.03	0.10	0.18	0.10	0.07	0.06	0.16	0.17	-0.04
0.09	-0.01	0.17	0.14	0.19	0.08	0.12	0.15	0.12
-0.03	0.04	0.09	0.12	0.01	0.04	-0.07	-0.07	-0.02
0.03	0.06	0.15	0.18	-0.02	0.10	-0.05	-0.01	0.04
0.13	0.05	0.14	0.17	0.14	0.00	0.04	0.03	0.10
0.11	0.13	-0.04	0.13	0.03	0.02	0.17	0.04	-0.14

-0.07	-0.02	0.16	0.09	-0.04	-0.09	-0.01	-0.04	0.01
0.29	-0.04	-0.16	-0.12	-0.23	-0.21	-0.17	-0.11	0.16
0.09	0.05	0.06	0.25	0.15	0.01	-0.05	0.00	-0.19
0.11	0.10	0.11	0.14	0.08	0.16	0.09	0.11	0.01
0.13	-0.04	0.08	0.10	0.03	-0.07	-0.08	0.07	-0.06
-0.02	-0.08	0.23	0.22	0.20	0.15	0.10	0.19	-0.01
-0.29	0.20	0.10	0.33	0.22	0.27	0.47	0.33	0.09
-0.05	0.05	0.02	-0.10	0.00	0.10	0.16	0.16	0.07
-0.17	-0.11	0.04	0.06	0.01	0.15	0.22	0.11	-0.02
-0.25	0.19	0.20	0.07	0.14	0.19	0.25	0.24	-0.12
-0.13	0.23	0.12	0.04	0.10	0.11	0.17	0.11	-0.02
-0.14	-0.06	0.19	0.24	-0.02	0.06	0.03	-0.01	0.06
-0.08	0.11	-0.04	0.23	0.20	0.05	0.11	0.20	0.01
-0.38	0.08	0.12	0.31	0.21	0.18	0.38	0.27	-0.01
-0.07	0.19	0.24	0.00	0.05	0.02	0.04	0.09	0.07
-0.11	-0.04	0.14	0.36	0.20	0.10	0.22	0.20	0.06
-0.06	0.24	0.18	0.27	0.20	0.14	0.25	0.20	0.07
-0.12	0.26	0.23	0.30	0.21	0.23	0.40	0.29	0.00
0.06	0.04	0.13	0.11	0.16	0.18	0.17	0.19	-0.10
-0.14	0.13	0.16	0.12	0.22	0.10	0.17	0.23	0.05
-0.20	0.37	0.09	0.10	0.08	0.08	0.18	0.13	-0.02
0.01	0.10	0.34	0.10	0.21	0.27	0.18	0.12	-0.11
0.04	0.06	0.10	0.00	0.04	0.08	0.00	-0.02	0.05
-0.02	0.28	0.31	0.34	0.46	0.34	0.32	0.37	-0.05
-0.05	0.15	0.24	0.11	0.13	0.19	0.01	0.05	0.06
0.05	0.25	0.23	0.06	0.16	0.27	0.16	0.13	-0.03
0.38	-0.02	-0.19	-0.17	-0.13	-0.08	-0.09	-0.29	-0.09
0.19	0.13	0.25	0.10	0.23	0.07	0.18	0.09	-0.14
1.00	-0.08	-0.13	-0.09	0.04	-0.04	-0.14	-0.13	-0.03
-0.08	1.00	0.17	0.19	0.24	0.19	0.22	0.20	0.07
-0.13	0.17	1.00	0.32	0.27	0.30	0.20	0.31	-0.05
-0.09	0.19	0.32	1.00	0.58	0.43	0.43	0.46	-0.05
0.04	0.24	0.27	0.58	1.00	0.51	0.42	0.48	-0.15
-0.04	0.19	0.30	0.43	0.51	1.00	0.44	0.50	-0.07
-0.14	0.22	0.20	0.43	0.42	0.44	1.00	0.51	-0.12
-0.13	0.20	0.31	0.46	0.48	0.50	0.51	1.00	-0.03
-0.03	0.07	-0.05	-0.05	-0.15	-0.07	-0.12	-0.03	1.00
0.09	0.08	0.17	0.13	0.28	0.11	0.04	0.17	0.06
0.02	0.13	0.01	0.05	0.05	0.06	0.10	0.06	0.20
0.15	0.02	0.10	0.14	-0.01	-0.09	-0.07	-0.08	-0.08
0.01	0.05	-0.07	0.01	-0.05	0.02	0.06	-0.05	0.06
0.05	-0.06	0.12	0.24	0.07	0.00	0.01	0.10	-0.05
0.04	0.10	0.16	0.16	0.07	0.13	0.12	0.12	-0.06
0.01	0.10	-0.02	0.13	0.13	0.01	0.19	-0.06	0.03
0.08	0.01	0.11	0.12	0.02	-0.08	-0.08	-0.09	-0.11
	0.07	0.01	0.08	0.04	-0.05	-0.10	-0.10	-0.12

ML81	ML82	ML83	ML84	ML85	ML86	ML87	ML88	ML89
0.08	-0.104	0.278	-0.002	0.052	-0.106	0.099	0.145	-0.083
0.07	-0.096	0.065	0.103	0.003	-0.047	-0.092	0.174	-0.063
-0.04	0.065	0.168	-0.145	0.037	-0.089	-0.02	0.081	-0.146
-0.02	0.125	0.128	-0.064	-0.059	-0.065	0.101	0.114	-0.048
0.03	-0.029	0.222	-0.072	0.046	0.041	0.111	0.475	0.02
-0.03	-0.02	0.234	-0.246	0.113	-0.023	-0.049	0.217	-0.141
0.02	-0.002	0.051	0.056	0.079	0.12	0.102	-0.007	0.019
0.01	0.019	-0.036	-0.163	-0.018	-0.119	0.048	-0.032	0.054
-0.01	0.025	-0.031	0.088	0.037	0.204	0.136	-0.071	0.147
-0.05	0.042	-0.161	0.216	0.065	0.078	0.06	-0.089	-0.022
0.02	0.13	-0.074	0.086	-0.055	0.087	0.043	-0.215	0.043
0.12	-0.053	-0.006	-0.033	0.179	0.208	-0.053	-0.015	0.037
0.14	0.052	-0.187	0.083	0.022	0.148	-0.047	-0.095	0.079
0.07	0.109	-0.263	0.053	-0.16	0.079	0.075	-0.114	0.04
-0.02	-0.105	0.119	0.045	0.156	0.084	-0.008	0.105	0.037
-0.02	0.054	0.231	-0.112	0.103	-0.071	0.011	-0.052	-0.099
-0.06	0.114	0.101	-0.011	0.085	-0.072	0.179	0.121	-0.061
0.12	0.067	-0.038	-0.039	0.005	-0.053	0.176	-0.08	-0.065
0.05	0.123	0.244	-0.136	0.117	0.04	0.092	0.213	-0.007
0.13	0.056	0.183	-0.135	0.124	-0.065	-0.046	0.167	0.044
0.13	0.046	0.108	-0.076	0.158	0.056	0.101	0.142	0.122
0.19	0.125	-0.112	0.157	0.008	0.031	0.066	0.014	0.066
0.16	0.226	0.163	0.103	-0.041	0.024	0.055	0.288	0.062
-0.07	0.117	0.268	-0.02	-0.004	-0.147	0.042	0.205	0.008
-0.04	0.061	0.148	0.09	-0.004	-0.203	0.099	-0.09	-0.082
-0.00	0.08	-0.04	0.097	0.091	0.092	0.147	-0.048	0.064
-0.00	-0.036	-0.162	0.041	-0.045	-0.023	-0.138	-0.123	0.108
0.11	-0.235	0.087	-0.12	0.116	0.204	-0.138	0.121	0.09
0.11	-0.081	0.059	-0.084	0.14	0.157	0.031	0.085	-0.039
-0.04	0.036	-0.028	0.131	0.098	0.085	0.085	0.048	0.11
0.22	0.044	0.087	-0.165	0.061	0.104	0.019	0.127	0.093
0.17	0.043	0.109	-0.049	0.076	0.283	0.118	0.136	0.142
-0.03	-0.066	0.181	0.011	0.052	0.028	0.122	0.169	0.037
0.19	0.046	-0.047	-0.002	0.117	0.365	0.064	0.106	0.002
0.205	-0.043	0.067	-0.112	0.161	0.361	-0.108	0.138	0.139
0.08	0.237	0.113	0.116	-0.006	-0.142	0.199	0.004	-0.176
0.12	0.193	0.042	0.014	-0.046	-0.051	0.249	0.077	0.165
0.13	0.056	0.142	-0.002	-0.009	0.046	-0.044	0.035	-0.068
0.22	0.222	0.155	0.064	0.015	-0.03	0.028	0.016	-0.031
-0.06	-0.118	0.286	-0.239	0.311	0.054	-0.02	0.096	0.045
-0.06	-0.115	0.289	-0.224	0.315	0.163	-0.058	0.193	0.143
0.01	0.194	0.05	0.165	-0.112	0.004	0.331	0.086	0.082

-0.058	0.122	0.071	0.019	0.072	-0.074	0.367	-0.113	-0.075
0.04	0.015	0.022	0.042	0.083	0.131	-0.057	0.209	0.133
-0.176	0.148	0.063	0.11	0.015	-0.272	0.087	0.09	0.058
-0.046	-0.056	0.06	0.007	0.117	0.113	0.069	0.218	0.149
-0.033	0.227	0.129	-0.039	-0.021	-0.212	0.203	0.059	-0.021
0.006	-0.144	0.055	-0.074	0.191	0.25	-0.075	0.25	0.025
0.07	-0.033	0.044	-0.064	0.177	0.313	0.005	0.071	0.028
-0.002	0.028	-0.122	-0.009	0.031	0.185	0.051	-0.008	-0.024
-0.026	0.026	-0.001	0.01	-0.052	-0.072	0.07	-0.146	0.066
0.023	-0.084	0.048	-0.016	0.2	0.141	0.018	-0.071	-0.092
0.112	0.126	-0.063	0.073	-0.028	0.106	-0.006	-0.161	0.027
0.088	0.054	-0.02	0.014	-0.113	0.127	0.105	0.037	-0.008
0.129	-0.109	0.195	-0.046	0.179	0.314	0.007	0.283	0.184
0.302	0.058	-0.026	0.079	0.016	0.034	0.161	0.02	0.131
0.046	0.132	-0.064	0.076	-0.017	0.173	0.262	-0.021	0.053
0.145	-0.03	-0.04	0.061	0.049	0.258	-0.009	-0.053	0.066
0.165	-0.008	0.079	-0.034	0.254	0.357	-0.068	0.246	0.115
0.139	-0.127	0.07	-0.002	0.18	0.209	0.105	0.058	0.086
0.078	-0.099	-0.019	-0.04	0.165	0.077	0.079	-0.042	0.028
0.11	-0.074	0.097	-0.079	0.055	0.11	-0.076	0.028	0.065
0.105	0.007	-0.058	0.051	0.057	0.082	0.047	0.014	0.168
-0.007	0.139	-0.062	0.074	-0.05	0.072	0.09	0.036	-0.003
0.2	0.048	0.098	-0.234	0.107	0.214	0.007	0.154	0.148
0.391	0.086	0.084	-0.085	0.072	0.24	0.042	0.161	-0.012
0.181	-0.022	-0.087	-0.068	-0.002	0.165	0.008	-0.07	-0.068
0.05	0.023	0.037	-0.03	-0.033	0.107	0.089	0.182	0.148
0.163	-0.068	0.074	-0.153	0.119	0.127	-0.034	0.163	0.1
-0.02	0.081	-0.015	0.074	-0.103	-0.17	0.227	-0.044	-0.025
0.277	-0.046	0.097	-0.054	0.116	0.14	0.183	0.167	-0.061
0.093	0.017	0.147	0.011	0.05	0.035	0.012	0.077	-0.136
0.075	0.126	0.021	0.053	-0.062	0.099	0.097	0.008	0.073
0.165	0.012	0.098	-0.072	0.116	0.161	-0.018	0.114	0.005
0.133	0.052	0.141	0.011	0.24	0.164	0.126	0.119	0.08
0.279	0.051	-0.006	-0.05	0.07	0.073	0.127	0.021	0.042
0.11	0.061	-0.09	0.023	-0.004	0.133	0.008	-0.082	-0.05
0.042	0.098	-0.073	0.057	0.006	0.123	0.191	-0.075	-0.101
0.172	0.063	-0.083	-0.051	0.104	0.122	-0.064	-0.09	-0.103
0.06	0.195	-0.079	0.064	-0.051	-0.063	0.027	-0.108	-0.123
1	0.109	-0.042	-0.007	-0.065	0.197	0.034	0.038	0.04
0.109	1	-0.126	0.322	-0.314	-0.155	0.338	-0.085	0.007
-0.042	-0.126	1	-0.304	0.37	0.131	0.079	0.237	0.051
-0.007	0.322	-0.304	1	-0.361	-0.159	0.188	0.015	-0.061
-0.065	-0.314	0.37	-0.361	1	0.25	-0.037	0.104	0.034
0.197	-0.155	0.131	-0.159	0.25	1	0.084	0.057	0.037
0.034	0.338	0.079	0.188	-0.037	0.084	1	-0.026	0.015
0.038	-0.085	0.237	0.015	0.104	0.057	-0.026	1	0.214

| 0.04 | 0.007 | 0.051 | -0.061 | 0.034 | 0.037 | 0.015 | 0.214 | 1 |

Determinant = 6.807E -024

Appendix 3.9: Email to participants in phase 4

Results of Research: "What are the factors that influence the effectiveness of AML policy implementation in the UK?"

Introduction
Your first introduction to this research was your participation in focus group interviews. The purpose of discussion within those focus group interviews was to identify the themes around AML that would assist in developing a questionnaire. A useful addition to this research was the valuable material that came from that discussion which adds substance to the final results.
Focus groups consisted of five groups that are described as stakeholders to the AML process.

A questionnaire was developed and circulated to a larger group of AML stakeholders. The results from those questionnaires were analysed using multivariate analysis tool (factor analysis) and are described below.
I have chosen one participant from each of the five original focus groups to comment on the findings.

Factor analysis is used to simplify large amounts of data by reducing it to a smaller number of underlying dimensions or components (factors). It is mainly used in questionnaire analysis were large amounts of data has been caught. The data reduction method is used to reduce the large number of related variables (statements used in the questionnaire under the construct headings) into a smaller number of factors which may be highly correlated. The findings below relate to three factors that have been identified using this method. The items relating to each factor follow the factor label.

As a final validation of the research results I would appreciate your comments on the findings below by considering the following questions:

"In light of the statements underlying each factor how do you see them informing policy in AML arena?

"Do the statements suggest that current approaches are effective?

"How do you see the interpretation of these results in light of the research question?

Factor 1 Deterrence/Sentencing

Factor 1 refers to variables that influence the effectiveness of the POCA as a deterrent through sentencing, namely:

- The penalties for money laundering crime are too lenient.

- The disparity in sentencing for money laundering in the UK is too wide.

- A person convicted of drug trafficking is likely to receive a more sever sentence than the person who laundered his money.

- Professionals are treated differently in court in sentencing for money laundering.

- Financial crime which includes money laundering is not seen as a serious problem.

- Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court sentencing.

- Financial crime appears to be treated more leniently in court than other crimes.

Factor 2 Reporting/Compliance

Factor 2 refers to variables that influence the effectiveness of the POCA through the reporting and compliance regulations namely:

- The banking system in the UK does a good job in preventing the use of accounts to launder criminal money.

- The current AML framework is sufficient to dissuade professionals from being involved in money laundering.

- AML Policy in the UK appears to be effective.

- The regulators are an effective force to ensure reporting institutions comply with regulators.

Factor 3 AML Knowledge

Factor 3 refers to variables that influence the effectiveness of the POCA through the Criminal knowledge of AML, namely:

- Money launderers have to be aware of law enforcement tactics.

- Money launderers have to have knowledge of AML policy.

Your participation once again is very much appreciated.

Sam Sittlington PHD Candidate

Appendix 4.1 Example of agreement and disagreement between groups

Provided below are quotations that represent examples from transcript analysis were agreement and disagreement appeared in the focus group interviews. Each theme is presented along with a number of associated concepts or processes that also emerged from the transcript analysis. The quotations are based around the following themes:

Legislation – Criminality – SAR Process - Spend - Influence - Other activities

Theme 1	Process
Legislation	Punishment/deterrent Enforcement/Prosecution Restraint and Confiscation

Agreement from groups on Punishment/Deterrent

Group A

"Either one of those things should end up with a jail sentence or some sort of a deterrent…Well if they're convicted that's deterrent. But if they can't even get them into the court in the first place".

Group B

"I think in the foreword of POCA was it Tony Blair said first, we want to be, it has to be an effective deterrent to take money off criminals and secondly we have to do it within the framework of the law, and the second part seems to really strangle the first part".

Group E

"You know in the old days you had the, what was termed the ordinary decent criminal, the burglars and people like that that, getting caught and jail was a part of their life…they knew it was down the road there somewhere. .Now I'm not too sure whether I would agree 100% with…..said with regards they don't think they're going to get caught….I think they understand there's a chance and they plan accordingly".

Disagreement

Group C

"Well that's, I mean all the articles that you read talk about it being a Draconian piece of legislation, but it is Draconian because it's there to punish, it's there to punish and to get back the proceeds of crime. And I think that that is where a lot of practitioners perhaps on the defence side, and you know possibly the judiciary on occasion find that difficult".

Agreement from groups on Enforcement/Prosecution

Group A

"Once it goes cross border it grinds to a halt because the natural jurisdictions don't want to work together. See your biggest issue for us in the level of crime that we're dealing with is, a lot of it is so slow for us to investigate because it is outside the immediate jurisdiction".

Group B

"If you're really going to tackle big style money laundering, there needs to be much more co-operation across countries otherwise I think it's, it's really difficult".

Group C

"Where we were looking for lots of banking information for companies operating in Europe and in USA, you know there's a lot of, so clearly there probably, there is a trend I think in using companies more".

Group D

"Criminals will establish very quickly where the weak links in particular banks are and will home in on that".

Group E

"see the business person ….., he's not stupid, you know he's an intelligent man, went to ….., has third level education, got involved in his own business and then has now used his skills to do that for the ….., and still did it to this day".

Agreement from groups on Restraint and Confiscation

Group A

"Civil recoveries, we're making good use of that now, case in point…individual in… currently the subject of a SOCA investigation…getting taunts in the street that his properties are going to be taken from him. SOCA's going to take you house, take you pubs…become a figure of ridicule"

Group B

"the whole issue is to get the money in quickly…and its very commercially driven…SOCA that's the mind-set they need to bring…how can I make a profit in this".

Group C

"I think there are quite a few cases where a felon would be happy enough to plead guilty to whatever charges are before the court because they know they're not looking at substantial jail time whatever, but when it comes to taking their assets off them…that's when the real fight comes"

Theme 2	Process
Criminality	Crime levels Perception of Crime

Agreement from groups on Crime Levels

Group A

"punitive sentencing…Makes money laundering an attractive crime if you have the wherewithal to provide that service for other individuals, for the risk is relatively low but the pay back is high….Ask any criminal will he take a suspended sentence".

Group B

"I think some of our exposure to cases and, cases in which money laundering and legislation is, is the governing legislation. I think we have had, not concern but we have commented certainly in the past that money laundering legislation seems to be used against those low level drug dealer type criminals, the street dealer type and we haven't seen it as effective against the, the upper end of the drugs chain".

Group C

"They basically used to say we can do what we like, because they'll never get to us. The view they had was that SOCA had about, say for example 20 people fielding thousands of calls and queries and they just said look, it'll get lost somewhere. And they only ever go after the very big fish, they'll never be caught, they'll never be bothered with small and medium crime. And they say medium crime is where the money's made".

Disagreement

Group D

"What, what power would they need. What power would a law enforcement agency need to be able to prosecute more people? My perception is that they still go to very immediate and to high level, but they probably, I would imagine that the legislation's the same whether I'm putting, doing six grand a year of homers or doing 60 grand a year. But is there any scope then to make that a quicker process, that you know in terms of returning time that they get more hits with the smaller guy because the process is more straightforward…Because the smaller, below a certain threshold it doesn't seem to get touched at all".

Group E

"what I do know is, there's so many layers of money laundering and we're saying from the guy in the street that sells you a £2 DVD, cos they're coming from somewhere, coming from somewhere to, to the higher echelons of money laundering, I don't, I can't see how it can be effectively policed or controlled or managed".

Agreement from groups on Perception of Crime

Group A

"The public, there's a message. There's a perception of acceptance within the community around crimes against Government, tax evasion".

Group B

"There are professional money launderers at the top end, there has to be, whether it's laundering cash or just laundering cheques or money that's come across a computer screen that's just bouncing around different accounts. I mean there has to be. Someone who launders money, big sums, it's going to be pretty much a full time job, and they're going to take their cut for that".

Group D

"And then you have individuals, and that's sometimes staff would struggle with the idea that the guy who's doing the homers, who's maybe doing 20, £30,000 a year homers, he's not a criminal, he's not a money launderer. In their eyes and it's more educating them to the point that that is still tax evasion".

Group E

"Now our difficulty is here, if we know that people are doing that and they get away with it we usually suspect that they're police touts, or they're working for the police".

Theme 3	Process
SAR Process	SAR Quality/feedback Compliance Resources

Agreement from groups on SAR Quality/Feedback

Group A

"So I think you need to look wider than the financial institutions yes there's a volume of transactions goes through them, but they're not necessarily the best people to give you those key starting points".

Group C

"I think, when it comes to banks and you know estate agencies and places like that, I think as regards their SARS obligations you know I'd say they're fairly much compliant with it, and I don't think there'd be a difficulty there but, the likes of car dealerships and places like that, it's a different kettle of fish there, where they're much more localised".

Agreement from groups on Compliance

Group A

"The MSB regulations facilitate money laundering. In fact you have to ask the question why they exist in the first place."

Group C

"I was at a meeting hosted by HM Treasury of MLRO's from various accountancy firms… what struck me an academic guy from the treasury, the whole approach was quite theoretical I thought and very much driven by how much time do you spend per month as an MLRO in a firm. It's very compliance driven and to me there's little connection between what you do as an MLRO and what you would see as a very worthy fight against crime, it's purely trying to observe the rules".

Group D

"Well we have an obligation to follow essentially the money laundering guidance notes".

Agreement from groups on Resources

Group A

"It's a resource issue. If you could spend four or five hours on every SAR, well then you're going to pick up more criminality. Whereas if you have 20 minutes to spend on it, or ten, you know boils down to".

Group C

"You should have centralised unit's data mining information, you know from private industry. You have the large utility providers. You know if you turned round and had a series of search fields, you could take out cannabis houses across the UK".

Group D

"These thousands and thousands of disclosures that are running around and the questions are, is law enforcement able to manage it and what are they able to do with the information?"

Theme 4	Process
Spending Activities	Audit trail/Law enforcement tactics Crime Spend

Agreement from groups on Enforcement Tactics

Group A

"You know, that's the same, not just for financial crime, that's the same for any crime. You know, the criminal will learn from the police techniques. You know the criminal will learn oh my mate was caught and here's how the police caught him, so you know that goes through the prison anyway".

Group C

"I know from speaking to some of our investigators we deal with and what they would actually say is that crime is actually spiralling out of control but they just can't do anything about it".

Group E

"But see if you go back to the point you were making, you see about the guys supposedly it's a front, you know, for me someone who gets in at a certain lower level of criminality, who then maybe gets a couple of schillings and tries to go legitimate, you know, is that a crime, is it the fruit of the poison tree, that everything follows on from that initial crime is illegal".

Agreement from groups on Criminal Spend

Group C

"Even the SFO can't take on cases because they haven't got the staff…the medium stuff that's where the monies made, because nobody is going to come after you. The guys at the top know that people are going to be coming after them…they knew that they were being watched, whereas the rest thought we can do what we like. There's a huge shadow economy at that level".

Group D

"I mean I really don't see in this day and age how a lot of these places exist (Money Service Bureau). One of them that were raided there about a year, 18 months ago, didn't even have a bank account. Didn't even have a business bank account and yet there was hundreds of thousands of pounds according to surveillance, being exchanged on a daily basis here… they are supposed to be regulated and inspected by HMRC but I know from experience they just go in, how's it going alright bye. Books weren't looked at. They are supposed to look at the audits and see what's happening".

Group E

"and they were having this sort of like war between themselves, and that's what was happening, because one was doing it very well and they were, they were

spending it as quick as they got it. So they were going out, spending it on women and all that sort of stuff".

Theme 5	Process
Agency Influence	Regulation Training

Agreement from groups on Regulators

Group B

"They SOCA was not a body designed to make convictions, cos they weren't in a criminal court, they were a revenue generating body and I think they should have been able to process the people and eventually get a conveyor belt of people coming through the courts with confiscation orders and giving the money up".

Group C

"there's a lot of occasions I think why aren't going civilly against this person as opposed to launching a criminal investigation…we pulled a case we spent a lot of money on Counsel's fees to the point of not going through the court and SOCA could go for the guy civilly because he had the money still…we don't get anything from…any confiscated funds".

Group D

"If the penalties weren't a factor and it wasn't regulatory they would do it at a minimalistic level".

Group E

"Because of the nature of work we do…it seems it had some added value by somehow ironic that the proceeds you know…criminality is put back into support other people to move away from it...and I am trying to sus out does it become more important than actually the criminal investigation side of things".

Training

Training was not an issue that was important for groups other than Group D

(MLROs) but was an issue that affected how banks operated in light of regulation.

Group D

"The other flip side is sometimes when we would do training staff is, to try and manage their expectation. They need to be careful, you know I don't know what other banks would do, but I would be quite careful to make sure our guys realise they're not police officers".

Group D

"So we do find it beneficial and you know one of the things that we have to do is demonstrate competency so if the regulator, if the FSA are coming in, as they have done and asked to see what type of training we provide and how do you measure competency, yes there's a bank of questions that the person has to answer".

Group D

"an external provider we use instructs the course for us…its extremely good at keeping records that it will give us how long it took the person to take the course, how many times they were in it, how many attempts they did…it's important we demonstrate that we have delivered that training".

Theme 6	Process
Other activities	Crime motive
	Victimless crime
	Criminal Behaviour
	Asset Recovery
	Effectiveness

Other activities became a mix of issues that although important were not substantial enough on their own merits to warrant individual constructs. The five themes have been combined to form other activities construct 6.

Group E

"There may also be a bit of credibility about, around maybe serving a prison sentence as well in certain circumstances".

Group E

"- it's all, there's the emotion, there's the bravado, there's the legitimacy supposedly of what you're fighting for or against … all that comes, and the risk, you know, I know people who knew that if, the very first second they stepped out on the street they're putting their life on the line, but they didn't really think it was going to be taken from them, you know….And it wasn't a rational sort of weighing up pros and cons".

Group E

"They'll feel that they don't want to let other people down by opting out of something and that, that's human nature no matter what age you are"

Agreement from groups on victimless crime

Group E commented:

"You know it's a duty thing. They're not paying the duty, it's the cigarettes, it's the fuel, and they're robbing the state of money rather than the individuals".

Agreement from groups on criminal behaviour

Group B

"I see that from a government's point of view it's strategically potentially very effective, because I rather suspect that the Mr Bigs behind the drugs, racketeering, whatever, probably distance themselves from the predicate offences, so I rather have the impression that it's hard".

Agreement from groups on Asset Recovery

Group B

"As somebody mentioned as well, in a recent case which we can't mention but you and I know, we had to present it to SOCA and the same thing happened that happened all the way through, it was actually so simple and so big nobody could believe it….They were looking for something more complicated and smaller".

Group C

"We're finding a lot more hidden assets, where assets are hidden in third party type thing".

Group E

"So you lose your money but, know what, sure -You're still knocking about".

Agreement from groups on Effectiveness of AML policy

Group A

"No matter what legislation they introduce the crime will evolve to get round that legislation until they produce something to stop it".

Group B

"Well for a crime you need motivation, you need opportunity, the third thing you need is the ability to rationalise it to yourself that you haven't done anything wrong"

Group C

"I think there's a big issue about the orthodox approach or culture of the Criminal Justice System, which doesn't react quickly to things, processes take a long time….So that the, because, because money can be moved very quickly, the fact that restraint can be put on quickly is important, but the criminal process then is playing catch up all the time with that, and you mentioned about bank practices, bank practices are very important in controlling the money laundering and being a means of combating it".

Group E

"Outsider looking in doesn't look particularly effective to me, hear about the high profile ones but we all know what's going around us on day and daily, so how effective is it?"

Group E

"I mean…. is sort of founded on a black economy, it has been for many years, you know and people would rather say, buy their fuel cheap, their cigarettes cheap, get dodgy DVDs, they get CDs they get fake clothes, and that has to, there has to be a level up here for that stuff… no it's not effective".

Appendix 4.2   Variable summary missing cases

Variable Summary[a,b]	Missing		Valid N	Mean	Std. Dev.
	N	Per-cent			
The unregulated sector such as Hawala bank-ing is as significant as the regulated sector for laundering money.	64	23.5%	208	2.0577	.88822
The disparity in sen-tencing for money laundering in the UK is too wide.	64	23.5%	208	2.3125	.76987
It is likely that money from crime in the UK is laundered within the UK.	63	23.2%	209	2.5550	.92408
Financial crime which includes money laun-dering is not seen as a serious problem.	63	23.2%	209	2.5120	1.01957
Judiciary, Prosecutors and stakeholders in AML process need more training to ensure successful prosecu-tions.	62	22.8%	210	2.0190	.76378
The UK law enforce-ment has sufficient knowledge on financial matters to tackle money laundering.	62	22.8%	210	3.1667	.98595
The UK law enforce-ment is sufficiently re-sourced to fight money laundering.	62	22.8%	210	3.7619	.96368
It is likely that money from crime in the UK is laundered outside the UK.	62	22.8%	210	2.0667	.85579

Professionals are treated differently in court sentencing for money laundering.	61	22.4%	211	2.1801	.83710
The penalties for money laundering crime are too lenient.	61	22.4%	211	2.1943	.88111
A person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his drug money.	61	22.4%	211	2.0569	.79677
The legal system makes it too difficult to prosecute money laundering offences.	61	22.4%	211	2.6872	.99368
Financial crime which includes money laundering is more of a problem than any other crime.	61	22.4%	211	2.9052	.94643
The use of businesses to Launder criminal money has a direct effect on the integrity of all business.	61	22.4%	211	2.1090	.85215
Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court in sentencing.	61	22.4%	211	1.9858	.76519
Laundering the proceeds of crime affects the national economy.	61	22.4%	211	1.6209	.58419
The regulators are more concerned with breaches of regulatory procedures than with possible money laundering.	60	22.1%	212	2.3302	.89466

Regulatory enforcement of the financial system is necessary.	59	21.7%	213	1.7653	.67385
The regulated institutions involved in AML compliance feel like they are being choked with regulation.	58	21.3%	214	2.5607	.75902
As a business overhead it is essential that the AML compliance function demonstrates value for money.	58	21.3%	214	2.5935	.96325
There should be greater consultation with the business sector over the future direction of money laundering.	58	21.3%	214	2.0561	.82601
Money laundering is not a priority for Law Enforcement investigation.	58	21.3%	214	2.8178	1.15448
More regulation to tighten up AML controls is necessary.	57	21.0%	215	2.5721	.96343
Money laundering investigation is too complicated for law enforcement investigation.	57	21.0%	215	3.1721	1.13696
Regulated institutions are more concerned with regulatory failures than AML compliance failures.	57	21.0%	215	2.3953	.85761
Given the significance of the financial sector to the UK it is vital to have a strong regulatory framework.	57	21.0%	215	1.5860	.58867
Law enforcement prefers to investigate simple, cost effective	57	21.0%	215	2.2279	.95171

money laundering cases rather long drawn out expensive cases.					
The International debate on money laundering tends to be closely controlled by Governments and the law enforcement lobby.	57	21.0%	215	2.3674	.83154
Law enforcement are good at identifying assets but not at seizing them.	57	21.0%	215	2.6837	.84966
Money laundering investigation is too costly for law enforcement to investigate.	57	21.0%	215	2.8465	1.05444
By setting targets for asset recovery the government influences the targeting of law enforcement on "easy prey" rather than the "crime lords".	57	21.0%	215	2.3302	.93117
The incentivisation scheme whereby government agencies receive a percentage of seized assets from convicted criminals is a money making exercise.	57	21.0%	215	2.9023	1.03885
The current economic climate will encourage some professionals to be involved in money laundering for criminals.	44	16.2%	228	1.9211	.62467
Because of the money laundering controls criminals are reluctant to use banks to keep their crime money.	44	16.2%	228	2.9518	.97201

Local small time criminals such as drug dealers spend cash as they get it.	44	16.2%	228	2.6096	.84023
It is possible to identify money launderers by the lifestyle they lead.	44	16.2%	228	2.6228	1.01868
Professional people are inadvertently used to assist criminals to launder criminal money.	43	15.8%	229	2.1354	.79141
Only organised crime gangs making big money from crime need professionals to launder money.	43	15.8%	229	3.2402	1.06744
Money launderers have to be aware of law enforcement tactics.	43	15.8%	229	2.1703	.84904
Money launderers have to have knowledge of AML policy.	43	15.8%	229	2.4279	1.00451
Local small time criminals such as drug dealers tend not to use banks.	43	15.8%	229	2.5153	.99824
Money laundering is not as sophisticated as people think it is.	43	15.8%	229	2.8559	1.13215
To circumvent the legislation money launderers are becoming more creative in how they hide their crime cash.	43	15.8%	229	1.5721	.57758
Professional people are employed to assist to launder criminal money.	43	15.8%	229	1.9782	.98873
Professional money launderers are using more sophisticated	42	15.4%	230	1.7522	.65041

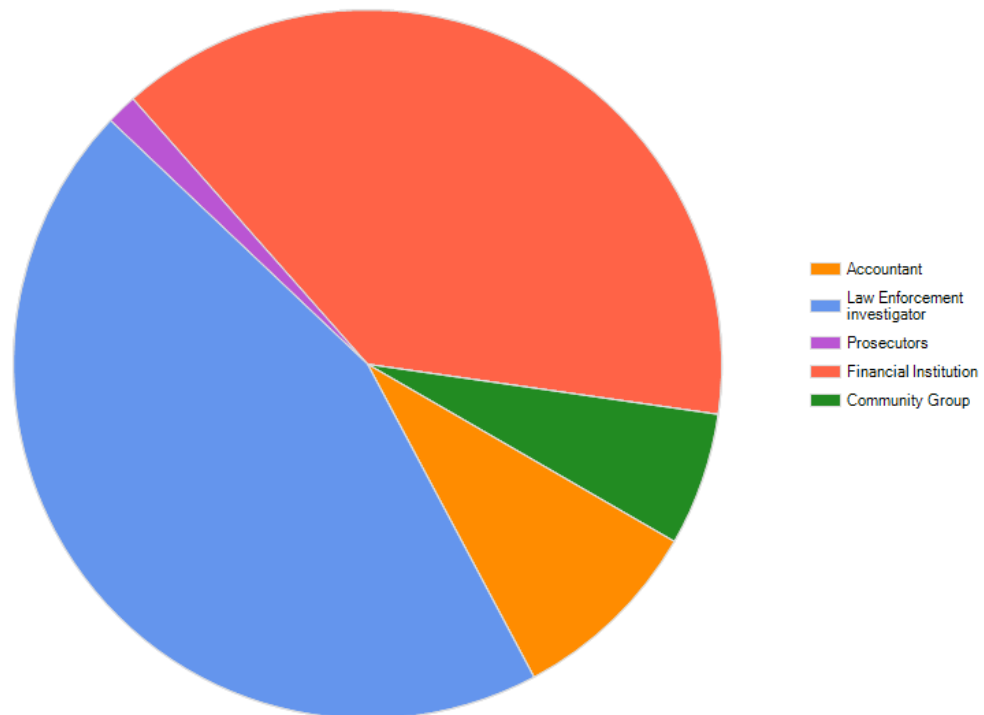|					
methods of laundering criminal money.					
Organised crime gangs use sophisticated methods to launder their cash due to their high levels of criminal activity.	42	15.4%	230	1.9957	.75053
The current regulatory AML framework is sufficient to dissuade professional from being involved in money laundering.	42	15.4%	230	3.3783	.96237
It is possible to identify criminals by the lifestyle they lead.	42	15.4%	230	2.2739	.89086
The way to encourage new business is to have good AML controls in place.	40	14.7%	232	2.4914	.88269
The SAR process is an effective way of identifying money laundering and the methods used.	40	14.7%	232	2.2974	.87406
AML compliance costs are reasonable given the overriding importance of integrity of the financial system.	39	14.3%	233	2.3262	.91729
It is more difficult to identify suspicious rather than unusual activity.	39	14.3%	233	2.3948	.92306
Other reporting institutions compared to the banking industry appear to have less rigorous AML procedures.	39	14.3%	233	2.1159	.77089
It is possible reporting institutions lose genuine new business because of their compliance procedures.	39	14.3%	233	2.7811	.93273

AML compliance activity is too focussed on customer identification.	39	14.3%	233	2.6609	.87152
The SAR process is a non-profit making area of business that should be funded by Government.	39	14.3%	233	2.6953	1.06545
AML compliance procedures reassure the public and enhance reputation of the regulated sector.	39	14.3%	233	2.6781	.96682
The financial sector should be allowed to self-regulate.	39	14.3%	233	4.1545	.96588
Some institutions who are supposed to make Suspicious Activity Reports don't see it as a priority.	38	14.0%	234	2.0342	.72279
There is sufficient training in AML for stakeholders in the sectors who make suspicious activity reports.	38	14.0%	234	3.1709	.89145
The banking system in the UK does a good job in preventing the use of accounts to launder criminal money.	38	14.0%	234	3.1496	.92129
More attention should be paid to other reporting institutions other than banks in terms of suspicious activity reporting.	38	14.0%	234	1.9188	.69163
The SAR process is a deterrent to money launderers using financial institutions.	38	14.0%	234	2.7436	.93711

The regulators are an effective force to ensure reporting institutions comply with regulations.	38	14.0%	234	2.7521	.98404
Members of the public are aware of the reason for identity checks when conducting business that involves cash payments.	38	14.0%	234	2.8034	1.02114
Feedback from law enforcement is necessary in order to determine AML policy development.	37	13.6%	235	1.7787	.68092
Money made from crime is spent immediately.	32	11.8%	240	3.6542	.84412
Criminals weigh up the cost and benefits of committing an offence prior to committing it.	32	11.8%	240	2.5375	1.03427
Money made from crime is used to fund further crime.	30	11.0%	242	1.7149	.74935
Criminals use professional people such as accountants and lawyers to help them launder their money.	30	11.0%	242	1.7355	.74309
Financial Advisors	29	10.7%	243	4.0494	1.99110
Solicitors	29	10.7%	243	4.1029	2.33588
Accountants	29	10.7%	243	3.7160	2.30110
Money laundering controls are a key component in winning the war against organised crime.	29	10.7%	243	1.7901	.73377
Criminals do not consider AML policy before deciding to commit an offence.	29	10.7%	243	2.8560	1.03245

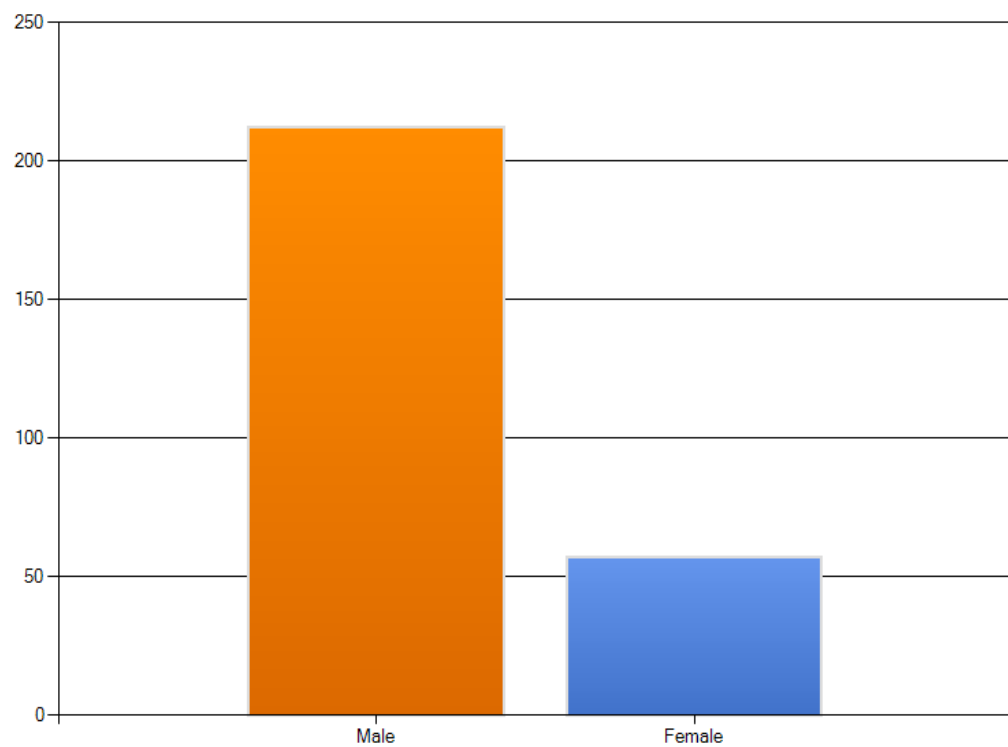|					
Criminals are more aware of AML policy now than when it was introduced in 2003.	29	10.7% 398	243	2.0247	.76561
Criminals rationally choose to commit an offence without considering the risks.	29	10.7%	243	3.0947	1.05788
a. Maximum number of variables shown: 77					
b. Minimum percentage of missing values for variable to be included: 0.0%					

Appendix 4.3: Results of demographic responses

Can you indicate from which group of respondents you belong?

Legend:
- Accountant
- Law Enforcement investigator
- Prosecutors
- Financial Institution
- Community Group

Please indicate your gender

Please indicate your age range from the following:

400
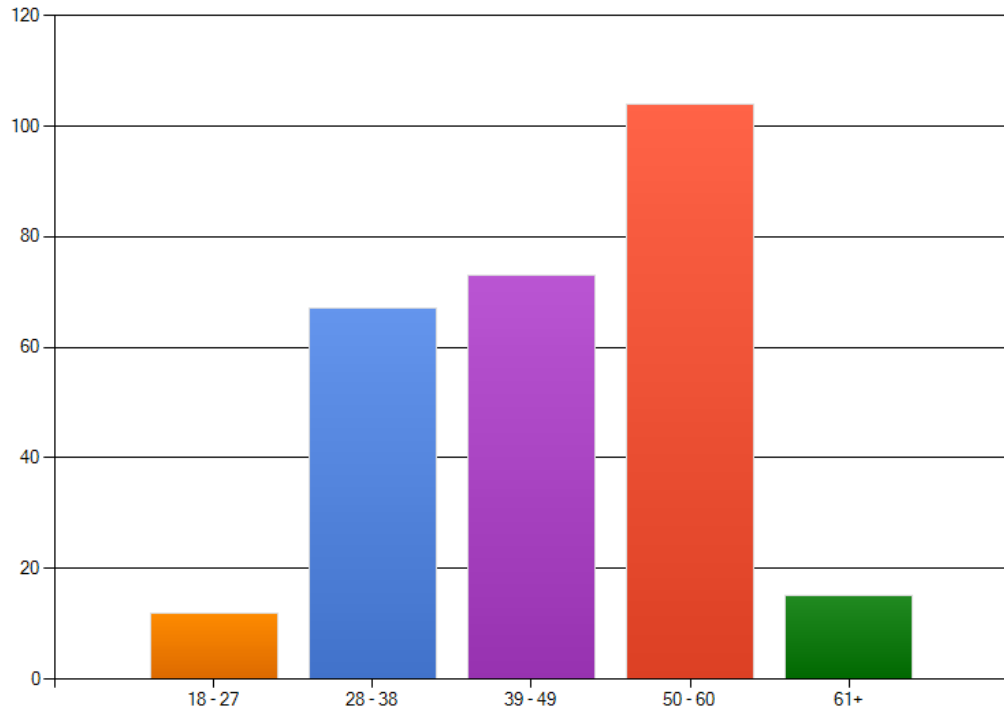
Appendix 4.4 : Factor results

Rotated factor matrix for AML variables				h²
Variables	**Factors**			
	1	2	3	
The penalties for money laundering crime are too lenient.	**0.78**			0.62
The disparity in sentencing for money laundering in the UK is too wide.	**0.78**			0.62
A person convicted of drug trafficking is likely to receive a more severe sentence than the person who laundered his drug money.	**0.74**		0.12	0.57
Professionals are treated differently in court sentencing for money laundering.	**0.71**	-0.12		0.52
Financial crime which includes money laundering is not seen as a serious problem.	**0.66**	-0.18	-0.20	0.50
Money laundering is a consequence of another crime such as drug trafficking but is treated differently in court in sentencing.	**0.65**			0.43
Financial crime appears to be treated more leniently in court than other crimes.	**0.60**			0.37
The banking system in the UK does a good job in preventing the use of accounts to launder criminal money.		**0.79**	0.10	0.63
AML policy in the UK appears to be effective.		**0.75**		0.56
The current regulatory AML framework is sufficient to dissuade professional from being involved in money laundering.	-0.16	**0.72**	-0.13	0.57
The regulators are an effective force to ensure reporting institutions comply with regulations.		**0.69**		0.47
Money launderers have to be aware of law enforcement tactics.			**0.91**	0.82
Money launderers have to have knowledge of AML policy.			**0.90**	0.83
	3.73	**2.04**	**1.74**	
Eigenvalues	**28.68**	**15.69**	**13.42**	
Variance				
Cumulative variance	**28.68**	**44.37**	**58.00**	

Note: h² refers to communality

Appendix 4.5: ANOVA Test Results

ANOVA		Sum of squares	df	Mean square	F	Sig.
REGR factor score 1 for analysis 1	Between Groups	3.351	3	1.12	1.14	0.33
	Within Groups	151.45	155	0.98		
	Total	154.81	158			
REGR factor score 2 for analysis 1	Between Groups	11.76	3	3.92	4.21	0.01
	Within Groups	144.30	155	0.93		
	Total	156.06	158			
REGR factor score 3 for analysis 1	Between Groups	2.76	3	0.92	0.97	0.41
	Within Groups	146.76	155	0.95		
	Total	149.52	158			

Appendix 4.6: Multiple Comparisons Table

Multiple Comparisons (* Mean difference significant at the 0.05 level)						
REGR Factor score 1 for Analysis 1						
(I) Newgroup	(J) Newgroup	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Accountant	Enforcement	0.28	0.29	0.76	-0.46	1.03
	Financial Inst.	-0.02	0.30	1.00	-0.78	0.75
	Community Grp	0.27	0.39	0.90	-0.74	1.28
Enforcement	Accountant	-0.28	0.29	0.76	-1.03	0.46
	Financial Inst.	-0.30	0.14	0.32	-0.75	0.16
	Community Grp	-0.01	0.31	1.00	-0.80	0.79
Financial Inst.	Accountant	0.02	0.30	1.00	-0.75	0.78
	Enforcement	0.30	0.17	0.32	-0.16	0.75
	Community Grp	0.29	0.32	0.79	-0.53	1.11
Community Group	Accountant	-0.27	0.39	0.90	-1.28	0.74
	Enforcement	0.01	0.31	1.00	-0.79	0.80
	Financial Inst.	-0.29	0.32	0.79	-1.11	0.53
REGR Factor score 2 for Analysis 1						
Accountant	Enforcement	-0.85	0.28	0.02	-1.57	-0.12
	Financial Inst.	-0.65	0.29	0.12	-1.40	0.10
	Community Grp	-1.22	0.30	0.01	-2.21	-0.23
Enforcement	Accountant	0.85	0.28	0.02	0.12	1.57
	Financial Inst.	0.20	0.17	0.65	-0.24	0.64
	Community Grp	-0.38	0.30	0.60	-1.15	0.40
Financial Inst.	Accountant	0.65	0.29	0.12	-0.10	1.40
	Enforcement	-0.20	0.17	0.65	-0.64	0.24
	Community Grp	-0.57	0.31	0.25	-1.37	0.23
Community Group	Accountant	1.22	0.38	0.01	0.23	2.21
	Enforcement	0.38	0.30	0.60	-0.40	1.15
	Financial Inst.	0.57	0.31	0.25	-0.23	1.37
REGR Factor score 3 for Analysis 1						
Accountant	Enforcement	-0.40	0.28	0.50	-1.13	0.34
	Financial Inst.	-0.35	0.29	0.62	-1.11	0.40
	Community Grp	-0.06	0.38	0.99	-1.06	0.93
Enforcement	Accountant	0.40	0.28	0.50	-0.34	1.13
	Financial Inst.	0.04	0.17	0.99	-0.40	0.49
	Community Grp	0.34	0.30	0.68	-0.45	1.12
Financial Inst.	Accountant	0.35	0.29	0.62	-0.40	1.11
	Enforcement	-0.04	0.17	0.99	-0.49	0.40
	Community Grp	0.29	0.31	0.78	-0.51	1.10
Community Group	Accountant	0.06	0.38	0.99	-0.93	1.06
	Enforcement	-0.34	0.30	0.68	-1.12	0.45
	Financial Inst.	-0.29	0.31	0.78	-1.10	0.51

Appendix 4.7: Question 13 Responses

1. *"There has to be a realisation that law enforcement need to invest adequate resources into the investigation and prosecution process to succeed. This can only be achieved if there is a desire and will from both Government and ACPO to do so. Probably little chance in the present economic climate".*

2. *"More effective enforcement of the existing regulations and laws. More accountability within the non-financial regulated sector. A regulator I can believe in".*

3. *"A more robust public prosecution service when financial crime is involved".*

4. *"A return of a national asset recovery agency".*

5. *"The current AML legislation has too many loop holes by which accountants and solicitors can avoid making SARs; the public are not aware of the linkages between the various predicate offenses and money laundering; law enforcement find AML cases difficult and therefore seem to shy away from them".*

6. *"Law enforcement agencies need to make more use of forensic accountants who have the experience and ability in such matters. However, government is reluctant to fund such a measure".*

7. *"Raise more awareness across all financial sector".*

8. *"More resources for Law Enforcement to fit ML/TF. For the government to stop 'messing' around with changing SOCA to become the new ECA. For Government to stop reinventing the wheel every five years and have a Police based FIU and a Police base Economic Crime Agency*

that is self-funding and attractive for quality people to join and which is let to do its job without political interference".

9. *"There is too much focus on regulatory expectation rather than effectiveness of the system itself ie. Focus on demonstrating to the FSA we have met their idea of what is required (not always in line with what legislation requires) rather than how effective the organization is in detecting ml. If we look at how much cash is seized vs how much is spent on compliance, the current regime appears very inefficient".*

10. *"Train more people to detect it in financial institutions".*

11. *"Financial institutions should apply automated controls to detect and report AML. A government agency, other than the regulator, should monitor the cases that were reported and not followed up. Convictions and harsh penalties are needed, to demonstrate action and end impunity".*

12. *"To actually get responses to SAR reports made".*

13. *"The current laws and regulations in the UK relating to money laundering and the seizing of criminal property are adequate. What needs to be changed is their enforcement. In particular, there needs to be greater use of money laundering confiscation measures against corporations (including, but not confined to, banks) involved in financial crime. For example, companies found to have engaged in corruption in order to win commercial contracts should face charges of money laundering as well as bribery, much more severe sentences and more significant confiscation orders".*

14. *"1. Better funding, staffing & amp; training for law enforcement in the UK. 2. Better stakeholder engagement. 3. Tougher penalties for breaching AML, failing to implement AML, and assisting AML. 4. Better incentives for businesses to co-operate in fighting AML & amp; CTF (corporate qi tam?)"*

15. *"In my opinion, there is no need of more regulation but more action and consequences for those who practise money laundering. In money laundering crimes, the message that crime does not compensate has not reached the public".*

16. *"Remove the threat to MLROs under POCA. Regulators should be more collaborative i.e. engage in constructive discussions with firms. Proportionality e.g. having regard to most firms outside of banking, the sanctions regime is hugely expensive for very little benefit".*

17. *"The setting up and operation of companies is to lax, small limited liability company vehicles are the most commonly used vehicle for money laundering".*

18. *"Better supervision of MSBs. Better quality asset recovery. More practical guidance on key subjects; simplification of difficult standards that are unworkable (i.e. monitoring proliferation is rather impossible)".*

19. *"Penalties for institutions that do not comply with AML regulations are not sufficient to properly incentivize them. Regulators are more concerned with getting a future job with the institutions they are supposed to supervise than in doing meaningful oversight".*

20. *"More focused regulation".*

21. *"Recovery of assets is sometimes hindered by excessive estimates of the amount of assets available for seizure".*

22. *"Have the Regulators actually regulate. (E.g. HMRC actually police High Value Goods Dealers and MSBs). Training is little more than a few words and a video every 12 months, whatever the sector. Breaches of MLR should remain in the criminal courts. More prosecutions. (i.e. more than virtually none at present) for breaches, especially in tandem with substantive criminal matters such as money laundering".*

23. *"Given the enormous cost to the regulated sector of the AML regime they are entitled to see greater resourcing & prioritisation of investigation of AML by law enforcement. Law enforcement cannot cope with the level of SARS currently submitted".*

24. *"AML/CFT should be taken more seriously... It should have higher budgets for recruiting qualified people, buy high tech systems and fund investigations".*

25. *"Greater use of the existing AML legal provisions (the ones we have are good enough and don't need changing, but they do need to be used more). 2. Tougher penalties actually imposed on banks and other institutions found to be involved in money laundering. 3. Greater use of confiscation and civil recovery provisions. 4. Greater enforcement of confiscation orders actually made".*

26. *"There needs to be a transformation of attitude across the AML system, in particular to address the following views:-   Professionals within the regulated sector generally view AML as a costly burden, and investment is limited to that which will be sufficient to avoid enforcement action or reputational damage.   Law enforcement agencies have failed to grasp the opportunities to disrupt criminals by using money laundering legislation. Investigators view money laundering offences as a type of fraud and associate it with lengthy, tedious investigations. Senior management limit their enthusiasm to areas such as confiscation and cash seizure, viewing it purely as an opportunity to provide an income. AML policy has done little to influence these views and is often ignored or circumvented by agencies. The level of prosecutions and asset recovery, whilst improved under the POCA regime, still falls woefully short of some other jurisdictions, providing an irony when lauded by Government. A transformation of attitude will be a difficult and lengthy process, one which needs to be driven by an AML policy that is more effectively implemented".*

27. *"A culture change in the ethical standards of senior bankers (and others) who must understand that AML laws are in place because money laundering is 'wrong' not because the regulators/law enforcement are over-controlling! The technical details are less important than winning hearts and minds. There is much too much*

emphasis on straightforward compliance with process rather than AML prevention/detection/control".

28. *"All cash transaction over a threshold amount should generate a SAR, no matter what the industry. It should not be limited to banking and financial institutions. All financial crime needs to be treated more seriously, including fraud by TBTF banks".*

29. *"Just for once, it would be good for the governing bodies would sit down with the investigators & Counter Fraud departments to actually listen to how they stop us from doing a thorough investigation. Times that Regulators are a hindrance more than a help".*

30. *"I would like to see more focus on seizures of Properties being wide spread, confiscation, more focus on gatekeepers in financial transaction and business, more attention on regulating shell Banks especially in offshore jurisdictions, FATCA being a wide spread approached to all country of the world so that everyone have a fair share in tax revenues, more focus on country to take a more serious approached to tax evasions and trade base financing, more focus on Human trafficking in poor nations of the world and worldwide, more focus on financing and training personnel in poor countries of the world and a more serious approached for Banks to look at elderly abuse within the system".*

31. *"Better responses from SOCA. Feedback regarding typologies from law enforcement. Wider publicity. Knowing that the majority of SARs do not get looked it is not a good incentive!"*

32. *"Use private sector to pursue monies through insolvency and civil recovery far more effective than prosecution and POCA and costs effective".*

33. *"Were professionals are involved in ML they should be sentenced more harshly (they are not). When regulated entities are discovered to be ignoring the AML regulations they should be fined and SHUT DOWN, not just fined and allowed to carry on trading. For example: Coutts Bank, Wachovia etc. Investigating bodies should concentrate more on*

ML investigations as they see cases where (say) drug trafficking is concerned it's easier to go for the commodity. ML cases are NOT complicated but there is wholesale ignorance at senior crime managers level about the ingredients needed to successfully prosecute ML cases".

34. *"More fairness and transparency of checks within Financial Sector, e.g. Insurance V Banking".*

35. *"Stricter sentencing for serious crime".*

36. *"The SAR process is now so computerised, there is too much intelligence in the system. this needs to be filtered and profiled in a way that would highlight useful areas of investigation. The 43 forces in the UK do not necessarily have a unified approach to the investigation of SAR, money laundering or POCA matters, despite efforts to stress the importance of POCA. I would like to see money laundering cases managed as a target ops proceeds, a syndicate strength using all human and technical resources available, including surveillance and interception. It is time the facilitators, accountants and solicitors were taken out of the loop".*

37. *"More communication with law enforcement agencies. In theory, they should write the rule for businesses as they are the ones with the knowledge. Change is far too slow if you want to try and keep up with recent typologies".*

38. *"Aligning AML with Fraud".*

39. *"Use of evidence gathered in AML investigations used in criminal investigations - vs. - the two are one!"*

40. *"Currently there appears to be a consultation on regulators ideas as to direction of future AML regulations. Perhaps there could be more consultation around direction itself i.e., ""one-step back consultation".*

41. *"More responsibility put on banking and financial sector. More regulation of accountants and solicitors".*

42. *"Clarity as to what happens to the confiscated proceeds. Sharing success stories of convicted Launderers law enforcement and the judiciary should have more powers facilitate ease of money laundering investigations and enforcement".*

43. *"More training and education of the legislation and methodology to professionals and the police".*

44. *"To quote (I think) Louis J. Freeh, Director of the FBI ""The most efficient means of battling organized crime is to act against money laundering."" With increasingly limited budgets I think law enforcement concentrate on other crimes which attract more public attention and which may be considered key performance indicators. There are a number of specialist financial crime investigators in the UK but I believe they focus on the ""quick wins"" rather than the complex organised groups that require time and resources to investigate fully and this needs to be reviewed. In addition, legislation in the UK needs to be reviewed in relation to people defaulting on confiscation orders and the lack of follow up in liquidating their assets obtained through criminal lifestyle".*

45. *"Ensure confiscation orders are enforced and the money recovered. When appeals are lodged by defendants use their funds to pay for the appeal. Enforce confiscation orders against the defendant's family".*

46. *"A more joined up approach".*

47. *"Please note that I am a retired banker who is a subject matter expert in the Republic of South Africa on AML and have completed this survey from the South African perspective. However, as AML in South Africa is based on the UK model I have taken the liberty of completing the survey".*

48. *"A move away from self-regulation by the professions".*

49. *"I would suggest that there needs to be a more joint agency approach to the problem. This should include regular discussion with financial institutions, regulators and law enforcement personnel. This would assist in identifying varying typologies at an earlier stage".*

50. *"More and more internal controls will help to find out the suspicious activity of the customers and their accounts".*

51. *"Compliance managers must be of a very high senior position in the organization and to have special immunity against being dependant. also provide the compliance function all the needed tools, staff, and the most enhanced tech solutions to tighten the gap between the gangs tricks and those whom combat them".*

52. *"Jurors often cannot understand the evidence - perhaps need to have dip lock style hearings or similar. The processes to obtain information are time consuming - this is where much of the cost to police arises. The audit trail to prove fairness etc. has taken over - reviewing this is absolutely necessary to reducing costs and enabling more investigations to be taken".*

53. *"More input from Law Enforcement, a realisation that the financial sector is a major contributor to UK plc and therefore needs strong regulation to ensure honesty; greater appreciation of lifestyle evidence by law enforcement, and a realisation that criminals spend their money rather than save it; there is rarely a pot of gold to be recovered, except from the launderers (who may of course have indemnity cover to pay, rather than losing their own assets".*

54. *"Jailing of bankers, failed regulators and corrupt police officers, substantial reform of the penal system and law enforcement agencies. NB Illegal arms trade is a significant cash generative business".*

55. *"I would like to see a greater and simpler burden of proof from the suspect when they have a lifestyle greater than their visible incomes - basically a "" prove your wealth"" or the state has it based on a SAR or similar Current processes are too clunky and too burdensome. We all know who the bad guys are.....it's the tools that are required to make the process more simplistic to prove and deal with".*

56. *"More clear direction from the regulator".*

57. *"More resources should be provided by central government to support UK law enforcement involved in fighting financial crimes. Police should be given full support from the public and all the agencies involved".*

58. *"Fraud and money laundering to be a government priority for police".*

59. *"Regulators need more resource to police compliance".*

60. *"The reintroduction of a standalone civil recovery agency that is not restricted by political interference and unrealistic targets. The introduction of ARA in 2003 saw the embryo of a potentially successful system but the politics and vested interests of some politicians and senior law enforcement personnel destroyed the concept. It was cost neutral in 3 years of operations which in itself was an achievement not matched in any other Government based organisation. The business model would have taken 5-10 years to establish itself and could have been promoted worldwide to have a real impact upon money laundering which is truly international crime".*

61. *"Greater international consistency. Greater incentivisation for all parties to do more. More specific requirements for regulated entities in terms of predicate offences such as fraud. A better balance of focus on the criminal, not just hitting the legal entities for poor controls".*

62. *"More time and money needs to be spent in enforcing compliance within the small MSB/SPI businesses".*

63. *Level of accountability on the front-end force needs to be a bit more Make AML laws consistent in 'friendly' countries. Businesses/Firms to be encouraged to put more focus on AML controls. The UK accepts this but education of European countries or European parent companies is required. In Germany there is very much a ""tick-box"" approach, whereas the UK outside of financial regulation take a very different risk based approach treating everyone on a case by case basis.*

64. *Law enforcement mystified money laundering and tried to push the money laundering offence as a 'standalone' charge taking it to extremes were they tried to reverse the burden of proof, 'here is all this money prove that it wasn't obtained by criminal activity' did not work. The CPS advice for prosecuting money laundering, as a standalone charge relies on; Accomplice evidence; Circumstantial evidence and/or other evidence; Forensic evidence (e.g. contamination of cash with drugs) from which inferences can be drawn that money came from drug trafficking; Evidence of complex audit trails, Evidence of the unlikelihood of the property being of legitimate origin, All of which, except the forensic results, not the conclusion drawn, is largely opinion and therefore argumentative and subject to interpretation. ML and its accompanying powers of seizure and confiscation are excellent when applied to existing crime charges, be they single charges or those which indicate criminal lifestyle, but no so much when prosecuted as a standalone. The character, strength and competence of individual prosecutors greatly affects the success of prosecutorial decisions and their resultant progress in courts. The strategy in the UK, the creation of bulky legislation and the creation of new competing agencies should be compared to the strategy adopted in the ROI which, I would suggest, was more practical and an adoption of existing legislation, skills, processes and abilities".*

65. *"I would use more intelligence to prevent money laundering through banks".*

66. *"More severe sentencing. More police resources into Fraud/Money laundering. More training for professionals".*

67. *"A constable should be able to make a POCA 'seizure' of a 'cash' bank balance. Default sentences should not be eligible for parole".*

Appendix 4.8 Results from examination of group responses

One–way analysis of variance (ANOVA) tests if the means across a number of groups are equal. Test statistic "F" represents a standardized ratio of variability in the sample means relative to the variability within the groups. The F ratio is computed from the ANOVA table and the P value is computed from the F ratio. The Sig or P value was calculated on group responses to factors 1, Sentencing/Deterrent; Factor 2, Compliance Reporting and Factor 3, Criminal Knowledge. Any value less than 0.05 is significant and any value greater than 0.05 is not significant. Table 1 below provides the results of the ANOVA test.

Table 1: ANOVA Test on Factors

Factors	Group A Accountant Mean SD	Group B Enforcement Mean SD	Group C Financial Institution Mean SD	Group D Ex-offenders Mean SD	F ratio	Sig.
Sentencing	0.884 1.029	-0.193 1.005	0.104 0.977	-0.185 0.868	1.143	0.334
Compliance	-0.744 0.704	0.100 0.925	-0.097 1.074	0.475 0.931	4.212	0.007
Knowledge	-0.312 0.568	0.083 1.040	0.041 0.911	-0.251 1.143	0.971	0.408

As the p value is less than 0.05 the test ANOVA showed significant differences for factor 2 and not significant for factors 1 and factor 3. The ANOVA table is provided at Appendix 4.5.

Viewing the Multiple Comparisons Table (provided at Appendix 4.6) from the Post Hoc tests (Post Hoc Test shows which of the groups differ from the rest) it is possible to identify which groups differed. Tukey's "honestly significant differences" (HSD) tests showed that: From a statistical point of view Accountants differed in their view with law enforcement in terms of the reporting process in the Compliance factor, $p = 0.0016$. Accountants also differed in their view with ex-offenders in terms of the reporting process in the Compliance factor, $p = 0.009$. By viewing the qualitative results in this research this perspective could be explained by the suggestion Law Enforcement believe Accountants and other professionals are not robust in their efforts to report suspicions of money laundering. Accountants suggest the reporting regime appeared to be effective however much effort was driven toward the banks role in the process and there was no effort to encourage other professional bodies to make reports. Likewise Ex-offenders see the reporting regime as preventative but not effective and suggest that millions must be getting through the system.