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Rethinking money laundering: Offender adaptation, crime scripts and a functional model of financial crime

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Rethinking money laundering: Offender adaptation, crime scripts and a functional model of financial crime

Money laundering (ML) is conceptualised as a successive process involving the placement, layering, and integration of illicit proceeds. Despite the popularity of this framework, little empirical evidence, underpinned by case data, exists showing how laundering is typically structured. Drawing on an exhaustive ML sample of law enforcement case data (N = 68) from Australia (1999–2021), this study examines how laundering is perpetrated, how laundering practices evolve over time, and how offenders structure their laundering activities. Using crime script analysis, we develop protoscripts for resolved and unresolved ML cases and identify the entities, techniques, and transaction pathways exploited by launderers. Our findings demonstrate that while banks remain central channels of ML, professional facilitators, business entities, remittance services, and high-value asset markets also play vital roles. Our results challenge the conventional placement–layering–integration framework. Many cases consisted of a single or a small number of linked transactions, with multiple laundering functions occurring simultaneously rather than sequentially. We argue that ML is better understood as a flexible, transaction-based, and adaptive crime commission process rather than a fixed sequence of stages. The findings contribute to understandings of offender adaptation and financial crime, while also identifying implications for anti-money laundering regulation and reform.

Keywords: anti-money laundering; crime script analysis; financial crime; money laundering; offender adaptation; routine activity theory; situational crime prevention

Introduction and context

Money laundering (ML) is typically thought of as a sequential process involving the placement, layering, and integration of illicit funds. This framework has shaped regulation, practitioner training, and scholarly debate on how proceeds of crime are converted into ostensibly legitimate assets (AUSTRAC, 2011). The framework assumes that offenders introduce illicit funds into the financial system, obscure their origins through a series of transactions, and then reintegrate the funds into the legitimate economy. Despite its influence, relatively little empirical evidence exists confirming whether or not ML activities actually conform to this sequence – particularly given that laundering techniques vary considerably across offenders, sectors, and regulatory environments (Cassella, 2018; Soudijn, 2019).

Much of the ML literature examines regulatory responses rather than offender behaviour. This is particularly noticeable in the anti-money laundering (AML) literature, which predominantly evaluates compliance frameworks, suspicious transaction reporting systems, enforcement outcomes, and international regulatory standards (Levi et al., 2018, Pol, 2020). While this literature has generated important insights into the operation of AML regimes, more attention should be directed towards understanding how offenders structure laundering activities, adapt to regulatory pressure, and exploit opportunities across different institutional settings. The understanding of such behavioural processes will enrich criminological explanations of ML.

This theoretical contribution is important because ML is not merely a financial transaction but a crime commission process. Offenders must make decisions regarding how their illicit proceeds will be moved, concealed, stored, transferred, or legitimised while managing the risk of detection, asset confiscation, and prosecution (Levi and Reuter, 2006, Manning et al., 2020, Riccardi and Reuter, 2024). Decisions of this nature occur within environments characterised by varying levels of guardianship, regulatory oversight, and

institutional vulnerability. Thus, understanding how offenders navigate these environments is necessary for both criminological theory and crime prevention.

Crime Script Analysis (CSA) offers a useful framework for examining these processes. CSA conceptualises offending as a sequence of actions, decisions, and adaptations undertaken in pursuit of criminal objectives (Borrion, 2013; D.B. Cornish, 1994a, 1994b). Rather than treating crime as a discrete event, CSA sees offending as a process that occurs through identifiable stages and decision points. Existing script-based studies in this area suggest that ML may be more adaptive and heterogeneous than traditional accounts imply (Gilmour, 2014; 2016; 2017; Morgenthaler, et al., 2026) – yet the empirical evidence remains limited.

We selected Australia to explore the issue as its AML regime broadly aligned with international standards established by the Financial Action Task Force (FATF), primarily through the AML and Counter-Terrorism Financing Act 2006 and associated Rules (Australian Government, 2006). The AML measures adopted in this country impose customer due diligence, transaction monitoring, record keeping, and suspicious matter reporting obligations on regulated entities, with oversight provided by the Australian Transaction Reports and Analysis Centre (AUSTRAC). Despite this regulatory framework (defined as Tranche One), Australia has frequently been identified as vulnerable to ML through sectors including banking, gambling, real estate, and professional services (Transparency International, 2021). The coexistence of extensive AML controls and persistent laundering activity provides an opportunity for us to examine how offenders structure their ML activities, adapt to changing forms of guardianship, and respond to evolving opportunity structures. Australia is also integrated within the global financial system, located near major regional illicit markets, and has stable legal institutions and an attractive property sector which are features that facilitate both domestic and transnational laundering (Ordekian,

Becker, & Vasek, 2023). Yet despite these characteristics, empirical studies examining how ML is perpetrated remain relatively limited both in Australia and internationally (Chadderton & Norton, 2019; Graycar & Grabosky, 1996; Langdale, 2022; Pol, 2018; Smith & Walker, 2010; Stamp & Walker, 2004; Walker, 1995; Walters, Smith, Davis, Choo, & Chadwick, 2012).

In this study we analyse Australian ML cases recorded between 1998 and 2021. Using CSA, we develop protoscripts that identify common laundering pathways, entities, and decision points across both resolved and unresolved cases. Beyond providing new evidence concerning laundering practices, the study contributes to criminological understandings of this financial crime by questioning the assumption that laundering proceeds through a fixed sequence of placement, layering, and integration. Drawing on empirical case data, we argue that ML is more accurately understood as a flexible, adaptive, and transaction-based process in which multiple laundering functions may be compressed into a small number of financial movements. The findings contribute not only to debates concerning AML regulation and enforcement, but also to broader criminological discussions regarding offender adaptation, opportunity structures, and the organisation of complex financial crime.

The paper contributes to two areas of criminological scholarship. First, it extends our understanding of offender adaptation within regulated environments. Second, it develops a ***functional model of ML*** that challenges the dominant three stage-based conceptualisations of ML and advances a functional perspective that conceptualises ML as an adaptive crime commission process.

Research aims and questions

The study has three aims. First, it seeks to advance our understanding of how ML is structured and perpetrated by identifying the entities, techniques, and decision points that comprise laundering scripts. Second, it examines how offenders adapt their activities in

response to changing opportunity structures, institutional guardianship, and regulatory environments. Third, it explores the implications of these behavioural patterns for AML intervention and prevention, particularly in light of Australia's 2026 AML "Tranche Two" reforms.

To address these aims, we examine how ML is perpetrated and how laundering scripts vary across institutional contexts. Guided by CSA, Rational Choice Perspectives (RCP), Routine Activity Theory (RAT), Situational Crime Prevention (SCP), and theories of offender adaptation, the following research questions direct our analysis:

RQ1: How is ML structured and perpetrated?

RQ2: How do offenders adapt laundering scripts across different opportunity structures and forms of control (handling, guardianship, and place management)?

RQ3: What do laundering scripts reveal about the relationship between offender adaptation, institutional opportunity structures, and AML intervention?

Collectively, these questions enable examination of ML as an adaptive crime commission process, while also assessing how regulatory controls interact with offender decision-making and behavioural adaptation.

Understanding ML as an adaptive crime commission process

Leveraging Gilmour's earlier work on ML (N Gilmour, 2016a, 2016b; Gilmour, 2017), we examine how offenders select entities, techniques, intermediaries, and transaction pathways while responding to situational opportunities and constraints. What this may reveal is that ML is an adaptive crime commission process rather than a static successive process.

Emerging evidence suggests that ML activities are often more heterogeneous than this process implies (Cassella, 2018, Pol, 2018, Soudijn, 2019). Rather, some ML schemes involve multiple transactions and intermediaries, while others are completed through a single financial movement. Consequently, laundering functions commonly associated with

placement, layering, and integration do not always occur as distinct or sequential stages. Recent developments illustrate this complexity. For example, transaction laundering enables illicit payments to be processed through legitimate merchant facilities, combining the movement and concealment of illicit proceeds within a single transaction (Akartuna, 2023). Similarly, case studies undertaken by AUSTRAC, Australia's financial intelligence agency and AML/CTF regulator, demonstrate that criminal proceeds may be converted directly into high-value assets without multiple intermediary transactions (AUSTRAC, 2014). Such examples suggest that the launderer often pursues laundering objectives through flexible and adaptive pathways.

These observations have broader implications for understanding offender behaviour and regulatory intervention. If ML activities are organised around the achievement of functional objectives rather than progression through predetermined stages, then launderers may adapt laundering scripts in response to changing opportunity structures, different regulatory environments, and forms of guardianship. Regulatory reforms may, therefore, alter the attractiveness of particular laundering pathways without necessarily eliminating laundering opportunities altogether. As such, understanding how offenders structure and adapt laundering scripts is consequently critical for both criminological theory and the design of effective AML interventions.

Theoretical framework

This study draws upon CSA, RCP, RAT, SCP, and theories of offender adaptation to develop an integrated framework for understanding how ML is perpetrated in practice. These perspectives conceptualise offending as a dynamic process shaped by decision-making, opportunity structures, institutional control, and behavioural adaptation. This theoretical framework is particularly suited to ML because laundering activities are procedural, often involve multiple actors and settings, and are undertaken within environments characterised by

evolving regulatory and enforcement arrangements that constrain offenders, protect legitimate systems and manage laundering settings.

A central premise underpinning this theoretical framework is that offenders do not operate within static environments. On the contrary, offenders operate in environments in which risks, opportunities, and guardianship change (Clarke, 1997; D. Cornish & R. Clarke, 2008). Therefore, understanding ML requires not only identifying how ML occurs, but also explaining how offenders modify their scripts in response to institutional constraints and opportunities. This perspective directly informs the research questions by guiding analysis of laundering practices, vulnerabilities within institutional environments, and changes observed alongside AML controls.

Crime script analysis

CSA originates from cognitive psychology, where scripts were developed to describe structured mental representations of routine sequences of action (Abelson, 1976, 1981). Building on this, Cornish (1994a; 1994b) adapted script theory for criminological analysis by conceptualising crime as a process composed of identifiable stages, actions, decisions, and situational requirements. Rather than treating offending as a discrete event, CSA examines how offenders progress through a sequence of actions in pursuit of their criminal objectives.

CSA operates at different levels of abstraction according to the specificity of the crime type and level of detail being sought: tracks, scripts, protoscripts and metascripts (Borrion, 2013; D.B. Cornish, 1994a, 1994b). *Tracks* present the detailed events of a single iteration of crime. *Scripts* generalise the events undertaken across multiple iterations of the crime whilst still concerning key features (e.g., sexual assault against females on college campus) (Borrion, 2013). Tracks are commonly used in SCP because they capture micro-level variation in offender pathways and can, therefore, inform targeted intervention design (D.B. Cornish, 1994a, 1994b). *Protoscripts* generalise the crime events even further to

present steps undertaken to commit the crime in general (e.g., sexual assault against females). Finally, *metascripts* depict the most general perpetration of the crime (e.g., sexual assault).

In addition to levels of abstraction, script frameworks often rely on generic scene structures that cover core functions such as preparation, entry, initiation, execution, and exit (Dehghanniri & Borrion, 2021). Some approaches adopt more detailed scene structures, while others collapse overlapping elements and emphasise the requirements and facilitators operating within each phase. Although highly detailed universal structures can be difficult to operationalise empirically, there is broad agreement that CSA requires a balance between generalisation and specificity. Scripts must be general enough to support comparison across cases, yet specific enough to capture meaningful variation in offender behaviour and the situational conditions that enable it.

A primary strength of CSA is its ability to identify decision points where offenders encounter or perceive constraints, make choices, and adapt their behaviour (Borrion, 2013). Crime scripts, therefore, provide a mechanism for examining both the organisation of offending and variation under changing situational conditions. This feature is particularly relevant to ML, where offenders frequently modify techniques, intermediaries, and transaction pathways in response to heightened or otherwise weak regulatory scrutiny, enforcement pressure, or changes in market conditions.

In this study we employ a protoscript approach to identify recurring laundering processes across multiple cases. This level of abstraction is well suited to addressing the first research question concerning how ML is structured in practice and enables examination of recurring decision points, facilitators, and opportunities across laundering events.

Rational choice perspective and ML

RCP conceptualises offenders as purposive actors who make decisions based on perceived risks, rewards, and effort (D. B. Cornish & Clarke, 2016). In the context of ML, offenders

must determine how their illicit proceeds will be moved, concealed, stored, transferred, or legitimised while minimising the risks of detection, asset confiscation, and prosecution (Levi & Reuter, 2006). Laundering, therefore, involves a series of strategic decisions concerning the selection of channels, intermediaries, transaction forms, and institutional environments.

Importantly, RCP does not assume perfect rationality. Decisions are made under conditions of bounded rationality and are shaped by incomplete information, prior experience, cognitive shortcuts, social relationships, and situational pressures (D. B. Cornish & R. V. Clarke, 2008; Matthew Manning, 2017). Offenders, therefore, seek satisficing rather than optimal outcomes and frequently rely upon familiar techniques and trusted intermediaries.

This perspective provides the foundation for understanding offender adaptation. Changes in regulatory coverage, enforcement activity, reporting obligations, or market conditions alter the offenders' perceived cost-benefit calculus associated with particular laundering strategies (Riccardi and Reuter, 2024, Manning et al., 2020). Rather than eliminating offending opportunities, changes in the calculus may encourage offenders to modify existing scripts, substitute their laundering channels, or exploit alternative institutional environments. Adaptation, therefore, represents a central mechanism through which ML activities persist despite regulatory intervention.

Routine activity theory

RAT complements RCP by emphasising the situational conditions under which offending occurs (Cohen & Felson, 1979). Crime becomes more likely when motivated offenders converge with suitable targets in the absence of effective guardianship. In the context of ML, motivated offenders may include individuals or criminal networks seeking to store, conceal, transfer, or legitimise proceeds of crime or finance further crimes. Suitable targets or, more accurately in this context, suitable financial opportunities, include financial institutions,

professional services, business entities, gambling venues, property markets, cryptocurrencies, and other mechanisms through which illicit funds can be moved, converted, concealed, or integrated into the legitimate economy.

The problem analysis triangle, also known as the crime triangle, extends RAT by organising the conditions surrounding a crime problem into three interacting elements: the offender, the target, and the place (Clarke and Eck, 2005). Although originally developed to analyse conventional crimes occurring at physical locations, the framework can be adapted to ML by treating "place" as the institutional, professional, or technological environment in which laundering occurs. Such places may include banks, legal and accounting practices, real-estate transactions, casinos, cryptocurrency exchanges, digital platforms, and corporate structures. The triangle therefore directs attention beyond the characteristics and motivations of offenders to the particular assets, transactions, and institutional environments that make ML possible.

The extended problem analysis triangle also identifies a controller associated with each element: handlers who can influence offenders, guardians who protect targets, and managers who regulate places. In the context of ML, handlers may include law-enforcement agencies and other authorities capable of identifying, investigating, monitoring, or disrupting offenders and their criminal networks. Guardians may include financial regulators, financial-intelligence units, banks, compliance officers, and other actors responsible for protecting financial institutions and legitimate assets from criminal exploitation. Place managers include banks, remittance service providers, professional intermediaries, cryptocurrency exchanges, platform operators, and other entities that control access to and utilisation of the systems and services through which funds are transferred or legitimised. Where these entities operate without adequate oversight or fail to exercise effective control, they may provide attractive environments for laundering.

The same AML measure may support more than one controller, but the roles should not be treated as interchangeable. Handling, guardianship, and place management are exercised through AML controls, including customer due diligence, beneficial-ownership verification, transaction monitoring, reporting obligations, professional supervision, regulatory oversight, investigation, and enforcement activity (Levi, Halliday, & Reuter, 2014). From this perspective, AML regulation strengthens each form of control: it helps authorities constrain offenders, enables institutions to identify and protect vulnerable targets, and requires service providers to manage access to potentially exploitable financial environments. These measures increase transaction visibility, reduce anonymity, restrict access to laundering opportunities, and increase the risks and effort associated with ML.

What is important to note is that guardianship is unevenly distributed across institutional environments. Differences in transparency, reporting obligations, professional discretion, and regulatory oversight create variations in opportunity structures that offenders may exploit. The historical exclusion of designated non-financial businesses and professions (DNFBPs) from Australia's AML regime represents not just a regulatory gap but a variation in guardianship that may alter the attractiveness of particular laundering pathways (Goldbarsht & Benson, 2023). This perspective directly informs the second research question by providing a framework for understanding how offenders select and exploit institutional opportunities and how strengthened handlers, guardians, and place managers could disrupt those opportunities.

Situational crime prevention and analytical implications

SCP extends these insights by focusing on how crime opportunities may be reduced through interventions that increase effort, increase perceived risks, reduce rewards, reduce provocations, or remove excuses (Clarke, 1997). While SCP has traditionally been applied to

predatory and organised crime, its emphasis on opportunity reduction is equally relevant to financial crimes such as ML.

Together, CSA, RCP, RAT, SCP, and adaptation perspectives generate three analytical propositions that guide this study. First, ML can be understood as a structured but flexible crime commission process involving identifiable stages, decisions and facilitators. Second, offenders actively adapt laundering scripts in response to changing risks, opportunities, and various forms of guardianship. Third, the effectiveness of AML interventions depends not only on the presence of regulatory controls but also on how those controls reshape offender decision-making and opportunity structures. The integrated framework, therefore, enables examination of ML as an adaptive crime commission process rather than simply as a regulatory compliance problem.

Data and Methodology

Data source and sampling

This study draws on confidential Australian law-enforcement case data concerning ML activity. The data repository concerned contains intelligence compiled through Australian state and federal policing and incorporates information derived from multiple law-enforcement and financial-intelligence sources. The case files summarise known information concerning suspected offenders, associated criminal activity, financial transactions, and investigative outcomes. The repository primarily contains medium- to high-priority criminal and organised crime targets and, therefore, captures comparatively serious forms of ML rather than the full population of laundering activity occurring in Australia.

A non-probability, purposive criteria-based sampling strategy was employed. It is important to note that the repository contains a substantially larger number of cases concerning predicate offences in which ML is not explicitly identified or described.

Candidate case files were identified through systematic searches of document metadata and content. Searches were restricted to records created after the criminalisation of ML in Australia and used combinations of document-title terms, including taskforce, operation, and summary, together with the keyword ‘money laundering’. Searches were further restricted to Word and PDF documents likely to contain substantive case information. This process initially identified several hundred potentially relevant records.

Each candidate record was then subsequently reviewed individually to determine eligibility. To be eligible for inclusion case files were required to: (1) fall within the medium- to high-priority parameters of the repository; (2) contain substantive evidence describing ML activity rather than merely referring to ML; (3) relate to a closed investigation; (4) contain an identifiable enforcement outcome; and (5) involve laundering activity occurring within Australia or through Australian markets or institutions, including cases containing offshore or transnational elements. No predetermined temporal restriction was imposed. Application of these criteria, together with the removal of duplicate or overlapping records, produced a final analytical dataset of 68 cases spanning 1999–2021.

The sampling strategy has important implications for the interpretation of our findings. The 68 cases represent the complete set of cases identified within the accessible repository that satisfied the study's criteria rather than a probability sample of Australian ML offending. Lower-priority offending and laundering that remained undetected, unrecorded, or insufficiently documented are consequently outside the sampling frame. The findings should, therefore, be interpreted as evidence concerning the structure of ML within the observed law-enforcement cases, rather than estimates of the prevalence or distribution of ML within the wider Australian offending population.

Data extraction and unit of analysis

The raw records could not be removed from the secure law-enforcement environment as the original case files contained confidential law-enforcement intelligence. Each eligible file was examined on site and information relevant to ML activity was extracted into a de-identified case document and assigned a generic identifier. At this stage, identifying information concerning offenders, institutions, and other third parties was removed or pseudonymised. Each extracted case document was reviewed against the source material a minimum of three times to maximise completeness and ensure that identifying information had been removed properly. Where multiple source documents related to the same laundering case, information was consolidated to provide a more complete account while retaining the case as a single analytical unit.

The case, rather than the individual offender or broader law-enforcement operation, was selected as the unit of analysis. This is important as it avoided attributing laundering activities undertaken by one group to other offenders investigated within the same operation and accommodated the substantial variation in the number of individuals involved in individual ML cases.

Crime script analysis and coding

Crime Script Analysis (CSA) was undertaken using ATLAS.ti. The de-identified case narratives were examined individually to identify the actions, entities, transaction techniques, facilitators, and other events comprising each laundering process (see Table 1). Coding combined deductive and inductive approaches. Existing knowledge of established laundering activities informed the initial identification of potentially relevant actions and entities, while additional codes were generated and refined in response to activities observed within the case narratives.

Table 1 about here

Coding was conducted by the lead author. As a second independent coder was not available due to secure access requirements (Australian Government security clearance), inter-coder reliability statistics were not calculated. All coded material was subjected to a minimum of two coding passes, with categories and groupings subsequently reviewed and refined where necessary. This procedure was intended to improve consistency in the application of codes across cases while retaining sensitivity to activities that did not conform readily to predetermined categories.

Each case was initially treated as an individual crime-script track. Activities and events occurring within tracks were coded and subsequently aggregated across the full dataset to identify recurrent script components. Frequencies were then examined for the complete dataset and separately according to case outcome. These recurring components formed the basis for the construction of protoscripts representing generalised patterns of ML activity across cases.

To preserve interpretability of the protoscripts, activities occurring in fewer than approximately one in ten cases were excluded from the visual protoscripts. A threshold of 9% was, therefore, applied. The threshold was intended to distinguish recurrent script components from comparatively idiosyncratic actions and to avoid producing exhaustive diagrams that obscured the principal pathways evident across cases. Activities below this threshold remained part of the underlying case analysis and were not treated as evidence that such practices were unimportant or absent from ML more generally. Ambiguous activities were coded conservatively according to the substantive conduct described in the case narrative; such activities occurred infrequently and generally fell below the protoscript inclusion threshold.

Case outcomes

Cases were classified according to the enforcement outcome recorded within the source material. A case was classified as resolved where the available record identified an enforcement outcome involving confiscation, criminal charges, or conviction. Cases in which no such proceeding or enforcement outcome was recorded were classified as unresolved.

These classifications are used descriptively to compare the composition of observed laundering scripts across different recorded enforcement outcomes. Importantly, they are not treated as direct measures of AML effectiveness or failure. An unresolved outcome may arise for multiple reasons, including evidential limitations, investigative priorities, incomplete visibility of laundering activity, or decisions to pursue predicate rather than ML offences. Similarly, a resolved case does not establish that an AML control itself caused detection or resolution. Comparisons between resolved and unresolved cases are, therefore, interpreted as associations between observed script characteristics and recorded enforcement outcomes rather than causal effects of AML interventions.

Temporal analysis and recording practices

The dataset permits examination of observed laundering patterns across the 22-year study period (1999 to 2021). To reduce dependence on changes in administrative classifications during this period, coding was undertaken from the substantive case narratives rather than relying solely upon predefined law-enforcement categories. A common coding framework was applied retrospectively across the dataset, with laundering activities classified according to the actions, entities, and techniques described within each case.

Nevertheless, changes in investigative priorities, intelligence capabilities, detection practices, and law-enforcement recording procedures cannot be fully disentangled from changes in offender behaviour. Temporal differences are, therefore, interpreted as changes in laundering patterns observed within the case data, rather than definitive evidence of changes

in the underlying prevalence of particular laundering practices. Where longitudinal changes are interpreted through RCP, guardianship, or offender adaptation, these interpretations are treated as theoretically informed explanations consistent with the observed patterns rather than direct evidence that regulatory changes caused offenders to modify their behaviour.

Results

Prevalence of ML

Our results reveal that ML is structurally diverse. Table 2 reports the prevalence of each coded variable for resolved cases (n = 20), unresolved cases (n = 48), and the full sample (n = 68).

Table 2 about here

Banking institutions constitute the most frequently exploited channel for laundering activity, appearing in a majority of cases. This reflects their centrality to the financial system, the high volume of legitimate transactions they process, and the relative ease with which illicit funds can be concealed among lawful financial flows. Common banking-related laundering activities include cash deposits, electronic funds transfers, use of multiple domestic accounts, and transfers to offshore jurisdictions.

However, focusing solely on banks obscures the broader laundering ecosystem evident in the data. Business entities and DNFBPs feature prominently across cases, often in conjunction with banking channels rather than as substitutes. DNFBP involvement is, however, concentrated: accountants appear in 11 cases (16.2 per cent), lawyers in five (7.4 per cent) and real estate agents in two (2.9 per cent). Where legal practitioners were involved, the case narratives describe the management of trust accounts, advice on transaction structuring, and the facilitation of property purchases. In the real estate cases, illicit funds

were used to acquire residential and commercial property either directly or through corporate vehicles.

High-value goods, particularly real estate and luxury items, function as key stores of value and mechanisms of integration. These assets allow offenders to convert liquid criminal proceeds into ostensibly legitimate holdings that can later be sold or leveraged. Remittance services and offshore jurisdictions appear less frequently in absolute terms, but may be disproportionately associated with more complex laundering schemes involving organised crime groups.

Drug trafficking, fraud, and organised crime were the principal predicate offences, consistent with national threat assessments (Australian Criminal Intelligence Commission, 2020). Importantly, many cases involve multiple predicate offences and multiple laundering techniques, highlighting that laundering is rarely a single transaction or linear process. Instead, offenders combine channels strategically, selecting entities and techniques that minimise detection while achieving desired financial outcomes (e.g. to move, conceal, or store proceeds).

Money laundering activities over time

Examination of laundering activity across the period 1999–2021 reveals both continuity and temporal variation in observed laundering pathways (See Fig 1). Banking channels remain consistently central throughout the period, indicating that core financial infrastructure continues to provide opportunities for laundering despite successive regulatory reforms.

Fig 1 about here

Simultaneously, the data indicate diversification in laundering techniques over time. Earlier cases are more likely to involve straightforward banking transactions and cash-based activity. Bank involvement falls in relative terms across the period, from ten of the twelve cases recorded between 1999 and 2001 to seventeen of the thirty-four cases recorded from

2013 onwards, while offshore jurisdictions appear in a rising share of cases over the same period. This observed shift is consistent with the possibility of displacement towards alternative opportunity structures, although the case data do not by themselves establish that regulatory change caused the shift.

The prominence of DNFBPs over time is particularly notable (Fig 1). Over a period in which regulatory and enforcement scrutiny of traditional financial channels intensified, the cases involved sectors often characterised by weaker oversight and lower reporting obligations. Combining both offshore jurisdictions and the DNFBPs may reveal that partial regulation may channel criminal activity towards less regulated spaces, but it should not be interpreted as direct evidence of offender motivation or a causal response to regulation.

Protoscripts for ML

Protoscript for all ML cases

The protoscript for all ML cases is presented in Fig 2 and illustrates the movement of illicit funds across entities as well as the relative prevalence of each channel. To highlight the most significant patterns and minimise analytical noise, only entities appearing in at least 9 percent of cases are included.

Fig 2 about here

ML typically involved transferring proceeds from predicate offences into one of six entities: banks, alternative remitters, business entities, remittance service providers (RSPs), cash storage, or casino and gambling channels. Banks were the most common initial destination, accounting for 29 percent of primary fund movements. Alternative remitters, business entities, and casino or gambling channels were each used in 18 percent of cases. RSPs were selected as the primary channel in 10 percent of cases, while in 9 percent of cases funds were retained as stored cash without passing through a formal entity.

Secondary fund movements occurred primarily when the initial transfer involved banks, alternative remitters, business entities, or remittance service providers. In contrast, where funds were directed first to cash storage or casino and gambling channels, subsequent movements were rare, appearing in fewer than 9 percent of our cases. This suggests that these latter channels may function as consolidation or endpoint stages, rather than transitional nodes within the ML sequence.

When banks were used as the primary destination, funds most frequently moved offshore – occurring in 25 percent of cases – indicating a common layering strategy designed to shift jurisdictional control and regulatory oversight. Transfers from banks to business entities or high-value goods purchases – each observed in 18 percent of cases – further reflect attempts to embed illicit proceeds within ostensibly legitimate commercial activity.

Following the use of alternative remitters or remittance service providers, offshore transfers occurred in 10 percent of cases, reinforcing the role of cross-border movement as a core mechanism of obfuscation. Where business entities were engaged at the primary stage, subsequent transfers to banks – observed in 16 percent of cases – suggest reintegration into formal financial systems after initial processing through commercial fronts.

Protoscript for resolved cases

The protoscript for resolved ML cases, defined as successful prosecution and/or asset confiscation, is presented in Fig 3. In these cases, laundering involved transferring proceeds from predicate offences into one of eight entities: banks, alternative remitters, business entities, RSPs, professional enablers, casino and gambling channels, high-value goods, or cash storage.

Fig 3 about here

Banks were the most frequent primary destination – appearing in 25 percent of cases. Business entities and cash storage followed at 20 percent. Casino and gambling venues,

alternative remitters, and RSPs were each used in 15 percent of cases, while high-value goods and professional enablers appeared in 10 percent.

No secondary movement was identified where funds were initially directed to casino and gambling channels, high-value goods, or cash storage, suggesting these often functioned as terminal or consolidation stages. Where banks were used first, secondary transfers most commonly involved high-value goods or offshore locations, each occurring in 25 percent of cases, indicating patterns consistent with layering and asset conversion. Transfers from banks to business entities were observed in 15 percent of cases.

Following the use of alternative remitters or remittance service providers, offshore transfers were the only secondary movement exceeding 9 percent prevalence, reinforcing the role of cross-border displacement in concealment strategies. Where business entities or professional enablers were engaged initially, funds subsequently moved to banks in at least 10 percent of cases, suggesting reintegration into the formal financial system. Offshore transfers followed business entity engagement in 10 percent of cases, while investment schemes appeared in 10 percent of cases where funds were first introduced through professional enablers.

Protoscript of ML unresolved cases

The protoscript for unresolved ML cases, defined as the absence of successful prosecution and/or asset confiscation, is presented in Fig 4. In these cases, laundering involved transferring proceeds from predicate offences into one of four entities: banks, alternative remitters, business entities, or casino and gambling channels.

Fig 4 about here

Banks were the dominant primary destination, appearing in 31 percent of cases, followed by alternative remitters and casino or gambling entities at 19 percent. Business

entities were used in 17 percent of cases. Compared with resolved cases and the overall sample, reliance on banks at the primary stage was more pronounced in unresolved matters.

Secondary fund movements were observed only where banks or business entities were initially engaged. When banks were used first, funds most frequently moved offshore, occurring in 25 percent of cases, followed by transfers to business entities (19 %), and high-value goods (15 %). Where business entities were the primary channel, funds subsequently moved to banks in 17 percent of cases. Overall, unresolved cases displayed fewer observed secondary movements than resolved cases. This pattern may reflect genuinely simpler laundering pathways, but it may also reflect reduced investigative visibility in unresolved matters; the present data cannot distinguish conclusively between these explanations.

Discussion

What the protoscripts reveal about ML opportunity structures

The protoscripts reveal considerable flexibility in how laundering objectives were pursued. Rather than revealing a single dominant pathway, the cases involved a diverse range of channels, intermediaries, and transaction types, including banks, business entities, professional facilitators, gambling venues, remittance services, and asset markets. This heterogeneity is consistent with an adaptive crime commission process in which multiple pathways are available within different institutional and regulatory environments.

From a rational choice perspective, these observed patterns can be interpreted as consistent with offenders balancing perceived risks, rewards, effort, and accessibility when selecting laundering mechanisms. The repeated use of professional facilitators, business entities, and real estate markets identifies environments that can provide concealment, anonymity, legitimacy, or reduced scrutiny. The data demonstrate diversity in the pathways used to achieve laundering objectives.

The findings also provide a basis for examining adaptation. Across the study period, the cases show continuing use of sectors with different levels of guardianship and transparency, alongside changes in the mix of pathways observed over time. Changes in regulatory oversight, reporting obligations, enforcement, or market conditions may alter the costs and risks associated with particular laundering pathways and may encourage offenders to modify scripts, substitute techniques, or exploit alternative environments. Consistent with adaptation perspectives and rational choice perspective (Clarke, 1997, Cornish and Clarke, 2008a, Manning et al., 2020), the observed variation is compatible with offender adaptation to changing constraints, while recognising that the present design cannot establish a direct causal mechanism.

Considered collectively, the protoscripts direct our attention beyond the understanding of specific laundering techniques to the broader opportunity structures within which those techniques are observed. Interpreting changes in those patterns through adaptation and guardianship provides a theoretically informed explanation that can be tested more directly in future longitudinal and comparative research.

The adaptive and heterogeneous nature of the protoscripts raises a question about whether conventional conceptualisations of ML adequately capture contemporary ML behaviour. If offenders do indeed pursue laundering objectives through multiple pathways that vary according to opportunity structures and forms of guardianship, then models that assume a fixed sequence of stages may have limited explanatory value. We explore this issue further in the following section.

Towards a functional model of ML

Our findings suggest that the conventional placement–layering–integration framework does not sufficiently explain the laundering activities observed in our sample. While this framework has undoubtedly shaped AML policy, regulation, and research for several

decades, scholars and practitioners have increasingly noted the diversity and adaptability of laundering techniques across different criminal contexts (Levi and Reuter, 2006, Cassella, 2018, Pol, 2018, Soudijn, 2019). Consistent with these observations, our protoscripts indicate that laundering behaviour frequently departs from the assumption that illicit funds progress through a series of discrete and sequential stages. Offenders instead appear to pursue a set of functional objectives that are achieved through varying combinations of transactions, entities, and techniques.

From this perspective, ML may be more usefully conceptualised as a process through which offenders seek to achieve one or more interconnected objectives – introducing illicit proceeds into financial systems, concealing the origins of those proceeds, transferring value across entities or jurisdictions, storing wealth, and legitimising criminal assets. This interpretation is consistent with broader criminological perspectives that view offending as a purposive and adaptive process shaped by opportunities, constraints, and offender decision-making (Borrion, 2013; D.B. Cornish, 1994a, 1994b). Importantly and theoretically relevant, our protoscripts suggest that these objectives do not necessarily occur in a predetermined sequence. Rather, they may be achieved through one transaction, a few linked transactions, or more complex laundering arrangements.

Three results support our interpretation. First, many laundering events involved only one or two major financial movements. Consistent with Australian criminal law, a single dealing with the proceeds or instruments of crime may constitute a completed ML offence (Cassella, 2018). Consequently, multiple stages of placement, layering, and integration were often neither legally necessary nor empirically observable. In many cases, offenders undertook a limited number of transactions that were sufficient to conceal, transfer, or store criminal proceeds. These findings support arguments that laundering activities are often

considerably less elaborate than the conventional model implies (Levi & Reuter, 2006; Pol, 2020).

Second, our findings indicate that multiple laundering functions may be achieved simultaneously. This pattern was particularly apparent in cases involving the acquisition of high-value assets such as real estate, businesses, luxury vehicles, and artwork. These transactions, especially when facilitated by business entities and DNFBPs, can introduce illicit funds into the legitimate economy, distance those funds from their illicit origins, and convert them into lawful assets at the same time. The results, therefore, suggest that laundering functions may be transactionally compressed rather than sequentially ordered. This interpretation is consistent with recent research showing the attractiveness of real estate and other high-value assets as mechanisms for concealing and legitimising illicit wealth (Sclafani, 2024).

Third, our protoscripts demonstrate that laundering does not necessarily extend beyond the initial movement or possession of illicit proceeds. Secondary transfers were comparatively uncommon in cases involving gambling, cash-intensive businesses, or cash storage. In several instances, offenders retained the illicit proceeds without engaging in additional transactions. Such observations, therefore, challenge prevailing assumptions that laundering necessarily requires the continued circulation or transformation of funds, and suggest that laundering objectives may be achieved through possession, concealment, or storage alone. These findings are consistent with the broad scope of contemporary ML offences and observations of laundering activities that diverge from idealised process models (Cassella, 2018, Pol, 2020).

Hence, our results suggest that ML is more accurately understood as a flexible and adaptive crime commission process than as a fixed sequence of stages. Offenders appear to select laundering techniques according to the opportunities and constraints presented by

particular environments, regulatory frameworks, and prevailing market conditions. This interpretation aligns with crime script theory, which emphasises offender decision-making and adaptation (Cornish, 1994a, Cornish, 1994b, Borrion, 2013). Further, our findings extend previous script-based analyses of ML (Gilmour, 2014; 2016a; 2016b; 2017) by demonstrating that ML may be achieved through multiple script configurations rather than a single dominant sequence. We call this the functional ML model, in which laundering is understood as the pursuit of interconnected objectives that may be achieved through multiple, reordered, omitted, or transactionally compressed activities.

The functional model we introduce does not suggest that placement, layering, and integration never occur. Rather, it suggests that these activities represent possible laundering functions that may be combined, omitted, reordered, or compressed depending upon offender goals and situational opportunities. Consequently, the analytical focus of ML should shift from identifying where offenders sit within a presumed sequence of stages to understanding how they pursue laundering objectives across different opportunity structures. This perspective may provide a more useful framework for understanding contemporary ML behaviour. This, in turn, allows for the refinement of interventions and regulations that target the functions offenders seek to achieve rather than the stages they are assumed to follow.

ML scripts, control and intervention

Structural limitations of the existing AML framework

While many countries, including Australia, have long maintained formal alignment with the FATF Recommendations, their alignment has historically been uneven in practice. Most notably in Australia, the prolonged exclusion of DNFBPs from AML obligations created persistent regulatory blind spots that offenders likely exploited. DNFBPs have often been selected by launderers for their ability to confer legitimacy, manage complexity, and distance

themselves from direct interaction with financial institutions or regulatory oversight mechanisms. From an RCP, professional facilitators reduce perceived risk by acting as buffers between offenders and formal guardianship mechanisms.

Prior to the passage of the AML/CTF Amendment Act 2024 (Tranche Two), lawyers, real estate agents, and certain high-value goods dealers were not required to conduct customer due diligence (CDD), maintain AML programs, or submit suspicious matter reports to AUSTRAC. Our findings demonstrate that these entities were not marginal to laundering activity, but were routinely incorporated into laundering scripts as facilitators of asset acquisition, transaction structuring, and legitimacy generation. The absence of mandatory reporting obligations, under Tranche One, in these sectors likely reduced the likelihood that laundering activity would generate actionable financial intelligence.

Our findings also identify persistent compliance failures among regulated entities – what we consider a major structural limitation. High-profile enforcement actions against major banks and casinos illustrate that formal regulation does not guarantee effective guardianship or place management. Deficiencies in transaction monitoring systems, inadequate resourcing of compliance functions, and poor risk assessment practices created vulnerabilities that can be repeatedly exploited by offenders. These failures are particularly significant in high-volume institutions, where even minor systemic weaknesses may translate into substantial laundering capacity.

Aligning AML controls with laundering scripts

The script mapping exercise undertaken in our study reveals specific intervention points where regulatory and enforcement action could disrupt laundering activity. For example, strengthening CDD at the initiation stage, enhancing transaction monitoring during execution, and systematically pursuing asset confiscation at the outcome stage align directly with offender decision-making processes. Banking controls are relatively well developed, whereas

sectors that historically lacked AML obligations (e.g. DNFBPs in Australia under Tranche One) remained exposed to laundering risks. The newly enacted Tranche Two legislative reforms represent an important step toward addressing these risks, but their effectiveness will depend on implementation, supervision, and enforcement.

The three forms of control vary across laundering scripts and should not be assumed to operate with equal strength at the same points. Guardianship may be relatively stronger during initiation and execution when transactions intersect with regulated financial institutions. In these settings, customer due diligence, transaction monitoring, record-keeping, and mandatory reporting can protect legitimate financial assets and transactions while generating intelligence for investigation. Place management may also be stronger where banks, casinos, and remittance service providers effectively control access to their services and enforce AML requirements. Handler influence operates differently through law-enforcement and supervisory authorities identifying, investigating, and constraining offenders. Their handling capacity depends partly on the intelligence produced by guardians and place managers. By contrast, overall control may be weaker during preparatory and outcome activities involving professional facilitators, asset acquisition, and offshore structures. These settings may combine limited or fragmented guardianship, ineffective place management, and reduced visibility to authorities capable of handling offenders. Such weaknesses can create opportunities for offenders to enter, continue, or complete laundering scripts with a lower perceived risk of detection.

This uneven distribution of guardianship has direct consequences for law enforcement outcomes. The direction of this relationship in our data is not straightforward. Banks, the most heavily regulated entity in the sample, account for a larger share of primary fund movements in unresolved cases (31 per cent) than in resolved ones (25 per cent), while professional enablers and high-value goods appear as primary destinations only in the

resolved protoscript. Resolved cases also display more secondary movements. Rather than showing that regulated settings generate resolution, this may indicate that cases reaching an enforcement outcome are those in which investigators were able to reconstruct a longer transaction chain.

This finding reframes the question of AML effectiveness where: regulation does not necessarily prevent ML from occurring, but it can affect whether ML becomes visible to authorities.

Offender adaptation and opportunity structures

An important implication of our findings is that the effectiveness of AML interventions cannot be evaluated solely in terms of regulatory coverage or compliance obligations. AML measures seek to increase transparency, reduce anonymity, and strengthen institutional guardianship, while the cases analysed here show that laundering activity continues across multiple opportunity structures. We interpret this persistence and variation as consistent with a dynamic relationship between AML controls and offender behaviour, rather than as direct evidence that particular interventions caused particular adaptations.

The findings suggest that regulatory interventions may alter the attractiveness of particular laundering pathways without eliminating all laundering opportunities. From an adaptation perspective, increased guardianship in one sector may encourage offenders to modify transaction patterns, rely on different intermediaries, exploit alternative institutional environments, or compress laundering functions into fewer transactions. The observed variation in our cases is consistent with this possibility and with broader criminological research showing that offenders may respond to changes in perceived risks, effort, and rewards by adjusting behavioural strategies (Clarke, 1997, Cornish and Clarke, 2008a). The case data, however, do not permit a direct causal test of whether particular regulatory changes produced particular script changes.

These patterns are also consistent with the possibility of functional displacement, whereby laundering channels, intermediaries, or transaction techniques are substituted as guardianship changes within particular sectors. Rather than demonstrating displacement directly, the observed diversification of pathways indicates a pattern that displacement theory would predict (Clarke, 1997). Criminological research also suggests that interventions may generate diffusion of benefits, whereby preventative effects extend beyond the immediate target of an intervention and influence offending more broadly (Clarke and Weisburd, 1994). Distinguishing empirically between adaptation, displacement, diffusion, and unrelated temporal change therefore remains important when assessing the long-term effects of AML interventions.

This interpretation is particularly relevant to the extension of AML obligations to designated non-financial businesses and professions through the Australian Tranche Two reforms. From a routine activity and problem analysis triangle perspective, such reforms represent a redistribution of guardianship and place management across previously under-regulated environments. Customer due diligence, transaction monitoring, record-keeping, and reporting obligations enhance guardianship by increasing the visibility of suspicious transactions and protecting legitimate assets and services from criminal exploitation. At the same time, the reforms impose greater place-management responsibilities on DNFBPs that control access to professional and transactional environments, including legal, accounting, real-estate, and high-value goods services. The present findings cannot predict how offenders will respond to these strengthened controls, but the diversity of existing laundering pathways suggests that substitution or script reconfiguration is plausible. Future research should therefore examine whether offenders shift towards alternative pathways capable of achieving similar laundering objectives, including concealment, transfer, storage, or legitimisation of criminal proceeds.

These observations highlight an important distinction between detection and prevention. Regulatory interventions may improve the visibility of laundering activities and increase opportunities for intelligence collection and enforcement action. Reductions in observed use of particular techniques, however, would not necessarily establish reductions in laundering activity overall if activity shifts towards less visible methods. Consequently, evaluating AML effectiveness requires simultaneous consideration of regulatory outcomes, detection processes, and possible offender adaptation. The findings support treating AML regimes as part of an ongoing interaction between institutional guardianship and offender behaviour, while recognising that the direction and causal mechanisms of that interaction require more direct testing.

From this perspective, ML prevention is unlikely to depend on the elimination of individual techniques or sectors. Rather, it requires continual attention to how laundering pathways change as opportunity structures and forms of regulation change. This reinforces the value of crime script analysis as a tool for identifying emerging pathways and generating testable hypotheses about how laundering scripts may evolve in response to regulatory and enforcement interventions.

Policy implications for Tranche Two and beyond

The extension of AML/CTF obligations to DNFBPs through the Australian 2026 Tranche Two reforms represents a significant alteration in the distribution of guardianship across ML opportunity structures. From a CSA perspective, these reforms introduce new forms of oversight at key points or stages where offenders have historically relied upon professional intermediaries, property transactions, and corporate structures to facilitate laundering activities. Our findings show that these pathways have been present in the observed cases; they do not establish how offenders will respond to the new reforms. Recent findings by Chai et al. (2026) indicate that: (i) wealthy economies tend to attract higher volumes of illicit

financial flows (IFF); (ii) robust regulatory frameworks tend to act as a deterrent against both destination selection and large-scale laundering; (iii) reported IFFs are frequently linked to countries experiencing higher levels of conflict and public corruption; and (iv) geographic proximity, shared culture, and established bilateral trade volumes are correlated with the likelihood and size of IFF transfers. The authors also report evidence consistent with displacement. Taken together, this literature and our observed diversity of laundering pathways suggest that monitoring offender responses to changing opportunity structures may be as important as evaluating the regulatory reforms themselves.

Our findings relating to legal practitioners illustrate this challenge. Earlier research has documented the use of legal trust accounts and legal services to facilitate the movement, concealment, and legitimisation of illicit funds through ostensibly legitimate conveyancing, corporate, and commercial transactions (Financial Action Task Force, 2013). Consistent with this, the cases we analysed suggest that professional services may provide offenders with access to trusted institutional environments capable of enhancing the perceived legitimacy of their financial transactions. From an offender decision-making perspective, legal services offer not only technical expertise but also opportunities to obscure ownership, reduce transparency, and distance criminal proceeds from their true origin. Consequently, the effectiveness of regulatory reforms may depend on both compliance obligations as well as the extent to which professional environments reduce opportunities for offenders to exploit these services within their laundering scripts.

Similarly, our findings relating to the real estate sector highlight the importance of opportunity structures in shaping offender behaviour. Property markets provide both a store of value and a mechanism through which criminal proceeds may be embedded within legitimate economic activity. The protoscripts identify shell companies in eight cases and real estate in fifteen, alongside corporate ownership structures and settlement arrangements that

reduced transaction transparency and obscured beneficial ownership. Such mechanisms appear attractive because they simultaneously facilitate concealment, transfer, storage, and legitimisation of illicit wealth. Rather than viewing these vulnerabilities solely as regulatory gaps, we may also understand them as situational opportunities that offenders exploit. Measures that increase transparency and reduce anonymity within property transactions may, therefore, alter the attractiveness of these environments as potential laundering opportunities (Skorich & Manning, 2025).

Beyond DNFBPs, our findings have implications for understanding possible offender adaptation within traditionally regulated sectors. Banks, casinos, and other reporting entities continued to appear in the observed laundering scripts despite formal regulatory oversight. This demonstrates persistence of laundering activity within regulated settings, but it does not by itself establish why offenders continued to use those settings. One theoretically plausible interpretation is that offenders adjust methods in response to perceived risks, costs, and constraints (Manning, 2016), consistent with crime script and rational choice perspectives that emphasise adaptive behaviour under changing forms of guardianship (Cornish, 1994a, Cornish, 1994b, Borrion, 2013). This interpretation should be treated as a hypothesis supported by the observed pattern rather than as a directly observed causal mechanism.

Our findings indicate that ML prevention can thus be conceptualised as a dynamic interaction between regulatory controls and offender behaviour. The introduction of new forms of guardianship, management and handling may alter the costs and risks associated with particular laundering pathways, while the observed diversity of scripts indicates considerable scope for alternative pathways. Whether offenders actually reconfigure scripts in response to particular interventions is an empirical question that should be tested directly. Consequently, efforts to disrupt laundering activity should consider both the opportunities

that enable laundering and the possibility that interventions may change the distribution of observed pathways over time.

In short, and importantly, the continued dominance of the placement–layering–integration model may reflect its value as a regulatory heuristic rather than its accuracy as a behavioural theory of ML.

Offender adaptation, detection and prevention

From a rational choice perspective, AML controls are expected to increase the effort, risk, and uncertainty associated with laundering pathways, but they do not necessarily eliminate laundering opportunities (Cornish and Clarke, 2008a, Cornish and Clarke, 2016). The protoscripts show that laundering objectives are achieved through multiple pathways, intermediaries, and institutional environments. This flexibility is consistent with the theoretical expectation that offenders may substitute pathways when existing options require greater effort or become riskier, although the present cases do not directly observe the decision processes through which such substitutions occur.

This perspective helps explain why the effectiveness of AML interventions is difficult to assess using traditional measures such as confiscation rates, prosecution outcomes, or estimates of total criminal wealth recovered. Such measures may not distinguish reduced offending from changes in visibility or pathway selection. If offenders adapt to changing forms of guardianship, reductions in particular observed techniques may reflect shifts towards alternative pathways; this possibility is consistent with broader evidence that individuals adjust behaviour in response to changing risks (Wong et al., 2025). AML effectiveness may therefore be assessed not only through aggregate outcomes but also through changes in detection probability, script disruption, asset recovery, and the distribution of laundering pathways. Direct evidence linking specific interventions to specific behavioural adaptations remains an important objective for future research.

The findings also highlight the importance of considering displacement and diffusion when evaluating AML interventions. Increased scrutiny within one sector may encourage substitution towards alternative laundering channels, intermediaries, or transaction techniques, while enhanced guardianship may also generate broader preventative benefits beyond the immediate target of intervention (Clarke and Weisburd, 1994). Our data identify patterns compatible with these possibilities but do not discriminate causally between them. Understanding the balance between adaptation, displacement, diffusion, and changes in detection is therefore critical to assessing the long-term impact of AML reforms.

These observations suggest that AML policy should place greater emphasis on script disruption rather than relying exclusively on compliance expansion. The findings indicate that offenders repeatedly exploit identifiable decision points, facilitators, and institutional vulnerabilities. Consequently, interventions that target key script components may generate greater preventative effects than measures designed to increase compliance obligations across all sectors equally. From a crime script perspective, prevention is most effective when it disrupts the mechanisms through which offenders achieve laundering objectives rather than focusing solely on the entities through which laundering occurs.

This reframing has important implications for regulatory design and resource allocation. While extended AML obligations may improve transparency and strengthen institutional guardianship, our findings suggest that the effectiveness of such reforms will depend heavily upon intelligence capabilities – including their potential return on investment against competing alternatives (see [Removed for anonymous peer review]), inter-agency cooperation, investigative resources, and the ability of enforcement agencies to identify emerging forms of offender adaptation. Consistent with broader research on criminal justice interventions, investment decisions should be informed by evidence concerning the marginal returns associated with different forms of prevention and enforcement

([Removed for anonymous peer review]). Resources directed towards analytical capacity, financial intelligence, asset tracing, and cross-agency information sharing may, in some circumstances, produce greater preventative benefits than the continued expansion of compliance requirements alone. These, of course, can be tested and substantiated, practically and economically through individual empirical studies and meta-analyses.

Ultimately, the findings suggest that ML prevention should be viewed as an ongoing interaction between offenders and institutions. The observed diversity and temporal variation in laundering scripts are consistent with the possibility that offenders modify pathways as guardianship/management/handling changes, but direct causal evidence of such responses requires further study. Effective AML regimes, therefore, require not only robust compliance frameworks but also the capacity to identify changing patterns of offender behaviour and to test whether those changes represent adaptation, displacement, or altered detection.

Theoretical implications: Towards a functional model of ML

The findings have broader implications for criminological understandings of ML and financial crime. Historically, both policy and academic discussions have largely conceptualised ML through the placement–layering–integration framework. While this model has provided a useful heuristic for certain forms of laundering activity, the protoscripts derived from this study suggest that its explanatory value may be limited when applied to contemporary laundering practices. Rather than consistently progressing through a predetermined sequence of stages, the observed cases show that laundering can involve a range of functional objectives, including concealment, transfer, storage, conversion, and legitimisation of criminal proceeds.

These functions were observed in different combinations: some cases involved multiple transactions, others compressed several functions into a single transaction, and still others did not display all of the functions associated with the traditional three-stage account.

The findings, therefore, support what we term a Functional Money Laundering Model (FML Model). Within this model, laundering is conceptualised not as movement through a fixed sequence of stages, but as the pursuit of interconnected functional objectives within specific opportunity structures. The pathways through which these objectives are achieved may vary according to available resources, institutional environments, and forms of guardianship. The model generates four propositions that can be examined in future research.

Proposition 1 – Functional substitutability. A stable laundering objective can be achieved through different entities, techniques, or institutional pathways. The same function, such as concealment or legitimisation, should therefore be observable across multiple script configurations rather than being tied to a single stage or channel.

Proposition 2 – Functional compression. Multiple laundering functions can be achieved within a single transaction or a small number of linked transactions. The number of observed transactions should therefore not be assumed to correspond to the number of laundering functions performed.

Proposition 3 – Functional reconfiguration. When opportunity structures or forms of guardianship change, laundering scripts may be reconfigured through substitution, reordering, omission, or recombination of functions. The present study observes variation consistent with this proposition; direct tests should examine whether specified changes in guardianship precede and predict specified changes in scripts.

Proposition 4 – Distributed control and visibility. Because laundering unfolds across multiple institutional and transaction settings, its detection and disruption depend on where a script intersects with effective handlers, guardians, and place managers. Variation in the presence and effectiveness of these controllers may influence offenders' selection of laundering pathways and the likelihood that particular activities become visible to authorities. Observed

case patterns may therefore reflect the interaction between offending behaviour, the distribution of control, and institutional detection processes.

The FML Model also provides a basis for theorising offender adaptation. Consistent with RCP, changes in risks, rewards, and opportunities may lead offenders to alter how laundering functions are achieved. The present data show variation in pathways and institutional settings, but they do not directly observe the decision process linking particular regulatory changes to particular adaptations. The theoretical contribution is therefore to specify script reconfiguration as a testable mechanism: future studies can examine whether changes in guardianship systematically precede substitution, compression, reordering, or omission within laundering scripts.

The model similarly extends insights derived from RAT and SCP. Traditional applications of these perspectives often focus on the convergence of offenders, targets, and guardians within relatively discrete offending events. In contrast, the cases analysed here show laundering unfolding through linked decisions across multiple institutional settings and time periods. Control is therefore distributed across a network of actors, organisations, and regulatory systems, with different actors performing handler, guardian, or place-manager functions at different points in a laundering script. This distributed structure implies that observed laundering patterns reflect both the opportunities available to offenders and the institutional processes that make particular pathways visible to authorities.

More broadly, the FML Model raises the possibility that functional substitutability, compression, reconfiguration, and distributed guardianship may characterise other complex crimes in which offenders pursue relatively stable objectives through interchangeable institutional pathways. Similar dynamics have been discussed in organised crime, cybercrime, transnational fraud, and other forms of financially motivated offending (Skorich and Manning, 2025). The present study does not establish that the model generalises to those

offences; rather, it generates comparative propositions that can be tested across crime types and jurisdictions.

Criminological analyses of financial crime may therefore benefit from shifting attention away from static classifications of offending behaviour and towards the functional objectives offenders seek to achieve. The FML Model connects offender decision-making, opportunity structures, distributed regulation, and possible adaptation at the centre of analysis while separating what is directly observed in case data from the mechanisms inferred to explain those patterns. Its contribution is not simply to relabel the placement–layering–integration stages, but to specify an empirically testable set of propositions about substitutability, compression, reconfiguration, and visibility.

Conclusion

The main theoretical contribution of this study is the development of a Functional Money Laundering Model that conceptualises laundering as the pursuit of interconnected objectives rather than progression through predetermined stages. The model specifies four testable propositions concerning functional substitutability, functional compression, functional reconfiguration, and distributed guardianship and visibility. Drawing on Australian law enforcement case data, the study identifies empirical patterns consistent with these propositions across a diverse range of institutional environments and opportunity structures.

Our findings challenge conventional understandings of ML as a sequential process involving placement, layering, and integration. The protoscripts show that laundering functions can be combined, omitted, reordered, or compressed across a single transaction, a small number of linked transactions, or more complex arrangements. These observed patterns support a functional account of laundering and suggest that the explanatory value of traditional stage-based models may be limited in contemporary laundering contexts.

The study also highlights the importance of professional facilitators, asset markets, and institutional opportunity structures in observed laundering scripts. Banks, real estate markets, business entities, legal services, gambling channels, and other intermediaries appear across the cases as pathways through which laundering objectives are achieved. Differences in transparency, guardianship, and discretion provide a theoretically plausible basis for understanding variation in pathway use, although the present design does not directly establish offender motivations or causal responses to regulatory change.

The extension of AML/CTF obligations to designated non-financial businesses and professions through the Australian 2026 Tranche Two reforms represents an important change in the distribution of guardianship and place management across these opportunity structures. However, our findings suggest that regulatory expansion alone is unlikely to eliminate laundering opportunities. Consistent with broader evidence concerning criminal justice and regulatory interventions, the effectiveness of such reforms is likely to depend upon implementation quality, supervisory capacity, enforcement practices, and the efficient allocation of resources ([Removed for anonymous peer review]). Understanding whether reforms alter offender behaviour, rather than simply increase compliance obligations, remains a critical challenge for policymakers and regulators.

More broadly, our study demonstrates the value of CSA for understanding complex financial crimes and for linking empirical evidence with criminological theory. By integrating CSA with RCP, RAT, SCP, and adaptation perspectives, the study distinguishes observed script patterns from theoretically inferred mechanisms and generates propositions that can be tested in future longitudinal and comparative research. This perspective shifts attention from static models of compliance to the dynamic relationship among opportunity structures, institutional guardianship, detection, and possible offender adaptation.

Future research would benefit from examining how laundering scripts evolve following the implementation of the Australian Tranche Two reforms and exploring the extent to which offenders adapt to changing regulatory environments. Comparative studies across jurisdictions may also assist in determining whether the functional and adaptive patterns identified in this study reflect broader characteristics of contemporary ML or are shaped by specific institutional contexts. Such research would contribute not only to the development of more effective AML strategies but also to broader criminological understandings of adaptation, opportunity, and the persistence of complex financial crime.

Limitations

Several limitations should be acknowledged. First, the analysis relies on detected and recorded cases of ML, which represent only a subset of total laundering activity. Thus, the protoscripts developed in this study should not be interpreted as representing the full universe of laundering behaviour. Undetected laundering may involve different entities, techniques, and transaction pathways, particularly in contexts characterised by limited reporting obligations, informal value transfer systems, or offshore secrecy jurisdictions.

Second, because the data are derived from law enforcement investigations, the resulting protoscripts may reflect not only offender behaviour but also the visibility of particular laundering activities to authorities. Activities occurring within highly regulated environments, such as banking institutions, may be more likely to generate intelligence, trigger investigations, and ultimately appear in official case records. Conversely, laundering activities occurring within less transparent environments may be underrepresented. The protoscripts should, therefore, be understood as reflecting the intersection between laundering behaviour and institutional detection processes rather than a complete account of all laundering activity. Future research could usefully compare law enforcement data with

regulatory, intelligence, and private-sector datasets to assess the extent to which different forms of laundering remain systematically under-detected.

Third, the data we use were drawn from a single law enforcement database and may reflect institutional priorities, investigative practices, and recording conventions that evolved over time. While the longitudinal nature of the dataset provides valuable insight into changing laundering patterns, some observed trends may partially reflect shifts in enforcement priorities or intelligence collection practices rather than changes in offender behaviour alone.

Finally, this study focuses on Australia. Although many of the findings are likely to be relevant to other jurisdictions with mature financial systems and AML frameworks, differences in legal regimes, regulatory structures, and market conditions may limit direct transferability. Future comparative research across jurisdictions would assist in determining whether the functional and adaptive patterns identified in this study reflect broader characteristics of contemporary ML or are shaped by specific institutional environments.

Notwithstanding these limitations, our study provides a rare empirical examination of ML using detailed case data spanning more than two decades. Our application of CSA to a large collection of laundering cases reveals recurring features of laundering scripts and contributes new insights into offender adaptation, opportunity structures, and the organisation of ML as a crime commission process.

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Declaration of generative AI use

The authors report generative AI was not used in their research or preparation of this manuscript

Data availability statement

The data supporting the findings of this study are not publicly available due to their sensitive and confidential nature. The dataset was provided by Australian law enforcement authorities for research purposes and is subject to data access and confidentiality restrictions. As such, the authors are not authorised to share or redistribute the data.

Disclosure statement

The authors declare no competing interests.

Table 1. Crime script coding.

Steps	Actions
1. Formulate the crime problem	ML was defined in accordance with the Australian Criminal Code Act 1995. Legislative guidance from the AML/CTF Act 2006 and Financial Transaction Reports Act 1988 informed the identification of relevant ML activities.
2. Establish information requirements	Coding focused on identifying functional entity types, techniques used, instruments deployed, and contextual factors such as offshore jurisdictions and facilitating predicate crimes. Pseudo-identifiers, for example Bank A, were used to distinguish entities where required.
3. Collect data	Data were collected through detailed case-by-case coding and supplementary keyword searches. Each case was reviewed line by line, generating codes for ML activity and contextual information. Keyword searches, approximately 50 variations, were then conducted across all documents to identify omissions. Minor gaps were corrected through recoding.
4. Verify and refine codes	A second full review of each case ensured coding accuracy and completeness. Code labels were revised where necessary to improve conceptual clarity, for example distinguishing between registered remitters and alternative remitters. Following refinement, 171 codes were retained, comprising 58 entities, 31 techniques, and 27 instruments.
5. Test script feasibility	Five cases were piloted to assess whether coding was sufficient to construct scripts. Codes were mapped in Atlas.ti using relational links such as “funds move to” and “technique utilised.” The pilot confirmed adequate detail for script development.

6. Select visualisation model	PowerPoint was used to construct the final protoscripts to allow clearer differentiation between entities and techniques and improved visual presentation.
7. Construct scripts	Codes were sequenced chronologically and linked using defined relationship types, including "funds move to," "technique utilised," and "offshore receive/send." Each script was reviewed twice by the researcher and once by an appointed law enforcement agency reviewer. Three protoscripts, all cases, resolved cases, and unresolved cases, were generated using code and link frequency counts extracted from Atlas.ti. Frequencies were calculated based on case-level incidence, with repeated appearances within a case counted once. Link frequencies were calculated by dividing occurrences by the total number of cases. Protoscripts depict funds movements between entities where control and AML oversight shift; intra-entity transactions were excluded.
8. Interpret and evaluate	Protoscripts were compared to identify common patterns and differences between resolved and unresolved cases and to examine the broader sequencing of ML activity.

Table 2. Descriptive statistical output for money laundering activities.

	Resolved		Unresolved		All	
Activity Variable	***n***	**%**	***n***	**%**	***n***	**%**
Predicate crime (excl. unspecified)						
Child Exploitation Material	0	0.00	1	2.08	1	1.47
Cigarette smuggling	0	0.00	1	2.08	1	1.47
Human trafficking	0	0.00	1	2.08	1	1.47
Drug trafficking	17	85.00	21	43.75	38	55.88
Unspecified	0	0.00	16	33.33	16	23.53
Tax evasion	3	15.00	7	14.58	10	14.71
Defrauding commonwealth	0	0.00	2	4.17	2	2.94
Bank						
Bank A	4	20.00	11	22.92	15	22.06
Bank B	0	0.00	1	2.08	1	1.47
Bank C	3	15.00	7	14.58	10	14.71
Bank D	3	15.00	8	16.67	11	16.18
Bank E	0	0.00	1	2.08	1	1.47
Bank F	2	10.00	6	12.50	8	11.76
Bank G	1	5.00	0	0.00	1	1.47
Bank H	1	5.00	0	0.00	1	1.47
Bank I	1	5.00	0	0.00	1	1.47
Bank J	1	5.00	0	0.00	1	1.47
Bank K	0	0.00	1	2.08	1	1.47
Bank L	0	0.00	1	2.08	1	1.47

	Resolved		Unresolved		All	
Activity Variable	***n***	**%**	***n***	**%**	***n***	**%**
Unknown bank	2	10.00	8	16.67	10	14.71
Bank technique						
High volume deposits	0	0.00	3	6.25	3	4.41
Structuring	6	30.00	11	22.92	17	25.00
Deposits	6	30.00	21	43.75	27	39.71
Withdrawal	4	20.00	10	20.83	14	20.59
Third-party acc users	2	10.00	4	8.33	6	8.82
Multiple accounts	3	15.00	3	6.25	6	8.82
Smurfing	1	5.00	4	8.33	5	7.35
Mortgage repayments	3	15.00	1	2.08	4	5.88
Rapid fund movement	1	5.00	2	4.17	3	4.41
Multiple banking locations	1	5.00	2	4.17	3	4.41
Multiple banks	6	30.00	13	27.08	19	27.94
Multiple branches	1	5.00	2	4.17	3	4.41
High value (threshold) transfer	1	5.00	4	8.33	5	7.35
Cheque cashing	1	5.00	2	4.17	3	4.41
U-turn transaction	0	0.00	1	2.08	1	1.47
Co-mingling	0	0.00	2	4.17	2	2.94
Bank instrument						
Specific account type (i.e., business, trust)	3	15.00	1	2.08	4	5.88
Bank draft	0	0.00	1	2.08	1	1.47

	Resolved		Unresolved		All	
Activity Variable	***n***	**%**	***n***	**%**	***n***	**%**
Internet banking	0	0.00	1	2.08	1	1.47
Money order	1	5.00	0	0.00	1	1.47
Large cash sums	8	40.00	6	12.50	14	20.59
IFTI-outward	6	30.00	15	31.25	22	32.35
IFTI-inward	1	5.00	7	14.58	8	11.76
Cheque	1	5.00	2	4.17	3	4.41
ATM	0	0.00	2	4.17	2	2.94
Casino/gambling entity						
Casino A	0	0.00	1	2.08	1	1.47
Casino B	1	5.00	2	4.17	3	4.41
Casino C	2	10.00	3	6.25	5	7.35
Casino D	4	20.00	4	8.33	8	11.76
Unknown casino/gambling entity	1	5.00	0	0.00	1	1.47
Casino/gambling technique						
Betting	0	0.00	1	2.08	1	1.47
Gambling proceeds	2	10.00	4	8.33	6	8.82
Buying casino chips	2	10.00	3	6.25	5	7.35
Excessive/intentional losses	1	5.00	3	6.25	4	5.88
Cashing in casino chips	2	10.00	2	4.17	4	5.88
Cash out after minimal gaming	0	0.00	2	4.17	2	2.94

Activity Variable	Resolved		Unresolved		All	
	n	%	*n*	%	*n*	%
Casino/gambling instrument						
Slot machines	1	5.00	0	0.00	1	1.47
Casino chips	3	15.00	4	8.33	7	10.29
Business entity						
Alcohol manufacturer (front)	1	5.00	0	0.00	1	1.47
Brothel (front)	1	5.00	0	0.00	1	1.47
Construction (front)	0	0.00	1	2.08	1	1.47
Farm (front)	0	0.00	1	2.08	1	1.47
Fashion/textile (front)	1	5.00	2	4.17	3	4.41
Gym (front)	1	5.00	1	2.08	2	2.94
Restaurant/food (front)	1	5.00	0	0.00	1	1.47
Vehicle transport business (front)	0	0.00	1	2.08	1	1.47
Unknown front business	1	5.00	4	8.33	5	7.35
DNFBPs						
Accountant	6	30.00	5	10.42	11	16.18
Lawyers	1	5.00	4	8.33	5	7.35
Real estate agency	1	5.00	1	2.08	2	2.94
Remittance						
Alternative remitter	2	10.00	10	20.83	12	17.65
Domestic Remittance Service Provider	3	15.00	10	20.83	13	19.12

	Resolved		Unresolved		All	
Activity Variable	***n***	**%**	***n***	**%**	***n***	**%**
Offshore remittance service	0	0.00	2	4.17	2	2.94
Other entities						
Professional Money launderer	1	5.00	4	8.33	5	7.35
Trading (TBML)	0	0.00	4	8.33	4	5.88
Financial service entity	4	20.00	2	4.17	6	8.82
Foreign Exchange	0	0.00	1	2.08	1	1.47
NPO	0	0.00	1	2.08	1	1.47
Shell company	3	15.00	5	10.42	8	11.76
Money Mules	3	15.00	3	6.25	6	8.82
Cash courier	1	5.00	2	4.17	3	4.41
Other techniques/instruments						
Loans (i.e., loan sharking)	4	20.00	0	0.00	4	5.88
Forged ID	3	15.00	5	10.42	8	11.76
Fraud	1	5.00	6	12.50	7	10.29
Stored value card	0	0.00	2	4.17	2	2.94
High-value goods						
Antiques	0	0.00	1	2.08	1	1.47
Real estate	8	40.00	7	14.58	15	22.06
Vehicle	2	10.00	4	8.33	6	8.82
Jewellery	1	5.00	1	2.08	2	2.94
Horse	0	0.00	2	4.17	2	2.94
Diamonds	0	0.00	2	4.17	2	2.94

Activity Variable	Resolved		Unresolved		All	
	n	%	*n*	%	*n*	%
Collectibles	1	5.00	0	0.00	1	1.47
Designer goods	1	5.00	0	0.00	1	1.47
Offshore jurisdiction						
Brazil	0	0.00	1	2.08	1	1.47
British Virgin Islands	0	0.00	1	2.08	1	1.47
China	0	0.00	5	10.42	5	7.35
Cyprus	1	5.00	0	0.00	1	1.47
Dubai	0	0.00	2	4.17	2	2.94
Hong Kong	4	20.00	10	20.83	14	20.59
India	0	0.00	1	2.08	1	1.47
Indonesia	0	0.00	2	4.17	2	2.94
Israel	1	5.00	0	0.00	1	1.47
Lebanon	0	0.00	1	2.08	1	1.47
Malaysia	0	0.00	1	2.08	1	1.47
New Zealand	0	0.00	1	2.08	1	1.47
Papua New Guinea	0	0.00	1	2.08	1	1.47
Republic of Panama	0	0.00	1	2.08	1	1.47
Romania	0	0.00	1	2.08	1	1.47
Singapore	0	0.00	2	4.17	2	2.94
South America*	0	0.00	1	2.08	1	1.47
Southeast Asia*	1	5.00	0	0.00	1	1.47
Thailand	0	0.00	1	2.08	1	1.47
United Arab Emirates	0	0.00	1	2.08	1	1.47

Activity Variable	Resolved		Unresolved		All	
	n	**%**	***n***	**%**	***n***	**%**
United Kingdom	0	0.00	3	6.25	3	4.41
United States	1	5.00	2	4.17	3	4.41
Vietnam	4	20.00	1	2.08	5	7.35

Note. *Jurisdiction was located within this region but unable to be named due to data sensitivities. Variables are not mutually exclusive and may appear in the same cases. For definitions of each variable, see Appendix 1.

Fig 1. Distribution of ML activity during sample period, 1999-2021.

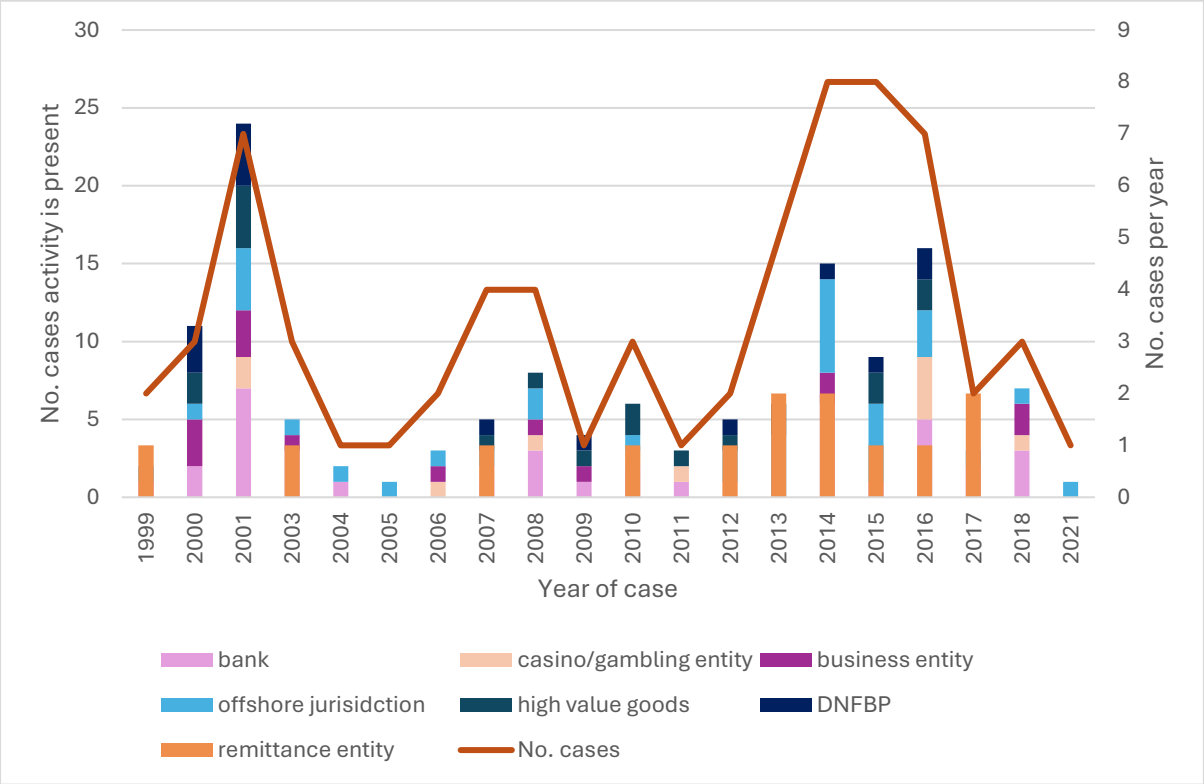
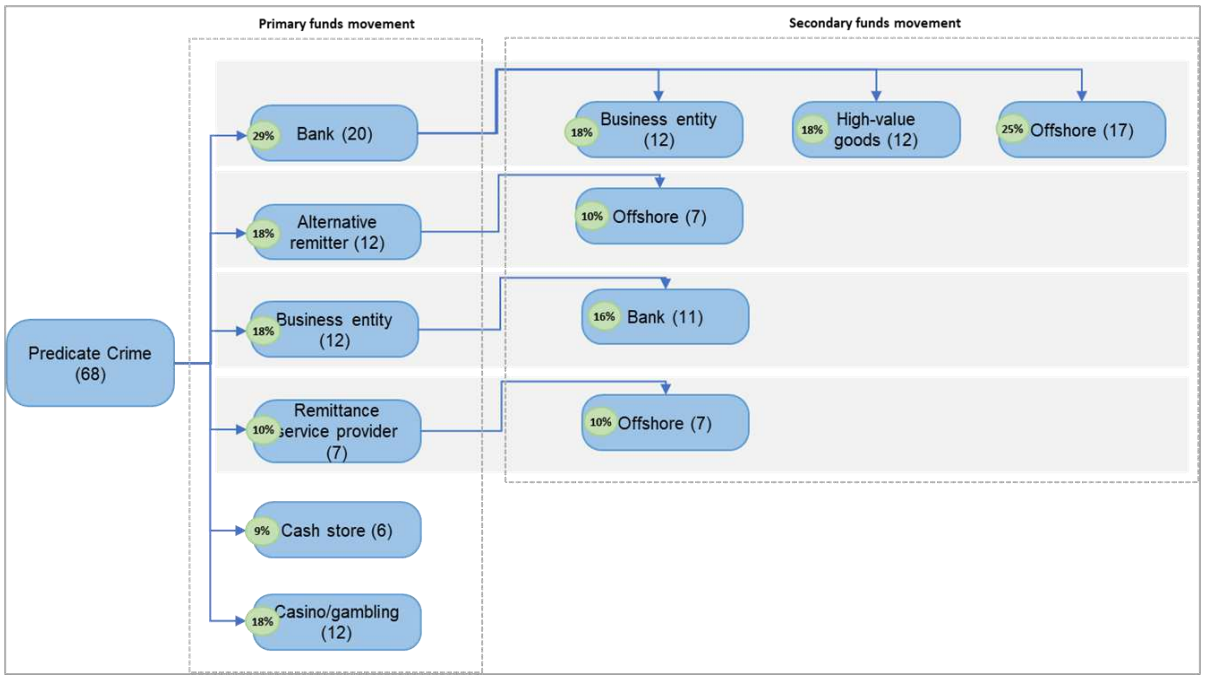
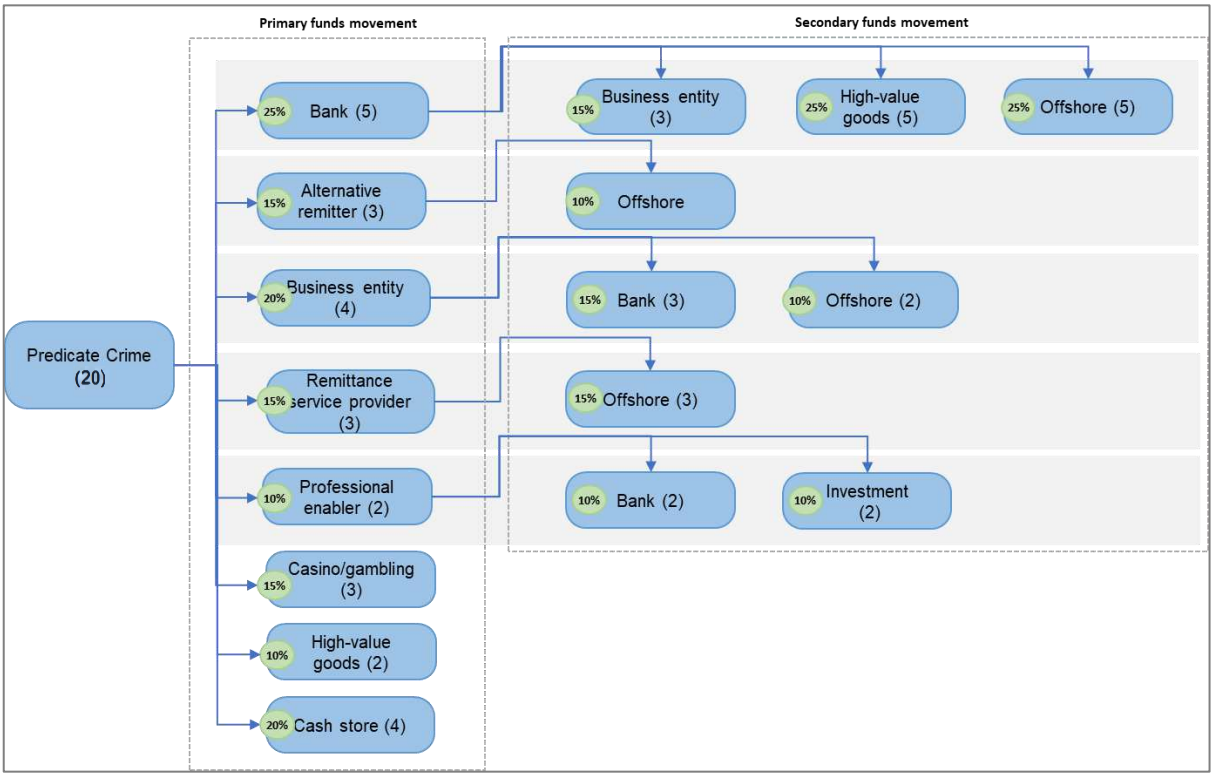


Fig 2. Protoscript for ML.



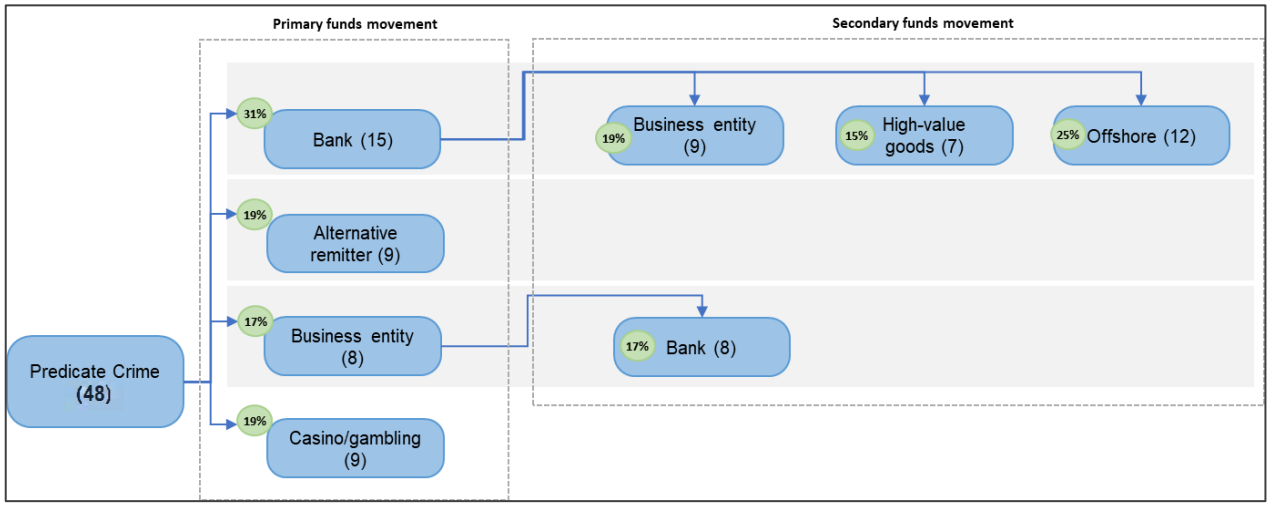
Note. Brackets include N count of use across cases. Included codes occur in >=9% of cases.

Fig 3. Protoscript for Resolved ML cases.



Note. Brackets include *N* count of use across cases. Included codes occur in >=9% of cases.

Fig 4. Protoscript for unresolved ML cases.



Note. Brackets include *N* count of use across cases. Included codes occur in >=9% of cases.

Appendix 1. Definitions of variables identified in CSA.

Variable name	**Definition/description**
Predicate crime	Any criminalized act that necessitates or facilitates the act of ML to occur.
Child Exploitation Material	Also known as Child Abuse Content, refers to nude or sexual imagery of children under 16 years of age (Australian definition).
Cigarette smuggling	The production, import, export, purchase, sale, or possession of tobacco goods which fail to comply with legislation.
Human trafficking	The unlawful act of transporting or coercing people in order to benefit from their work or service, typically in the form of forced labour or sexual exploitation.
Drug trafficking	The global illicit trade involving the cultivation, manufacture, distribution and sale of substances which are subject to drug prohibition laws.
Unspecified crime	The predicate crime was not yet known or only suspected by law enforcement, and the suspicion may not yet have been substantiated.
Tax evasion	The deliberate evasion of actual or true tax liability by an individual or entity, often by misrepresentation of information or dishonest reporting.

Variable name	Definition/description
Defrauding commonwealth	The primary action in this research was fraudulent receipt of government benefits.
Bank (applies to pseudonyms A through L and unknown)	A financial entity offering products and services dealing with cash and wealth, identified as providing designated services under the AML/CTF legislation.
Bank technique	Regards how money was processed or transacted in the bank.
High volume deposits	Many deposits were conducted, not always of a high value individually.
Structuring	The deliberate splitting of cash transactions to avoid one single transaction being reported under the mandatory threshold transaction report.
Deposits	The act of paying a sum of money into the entity.
Withdrawal	The act where a sum of money is taken out of the entity.
Third-party account users	Use of an account by individuals not registered as customers of that account.
Multiple accounts	More than one account is involved in the processing of the money.

Variable name	Definition/description
Smurfing	The use of a third-party individual, sometimes unwitting, to transport cash. It can also involve the use of their bank account(s).
Mortgage repayments	A payment of money, usually monthly for a fixed period of time (i.e., 30 years), made to an entity to pay back the capital amount borrowed for purchase of a property.
Rapid fund movement	When funds are quickly moved out of an account within a short time of being introduced, usually within a 24 or 48 hour window.
Multiple banking locations	The same bank is being interacted with across a range of locations, often vast in nature.
Multiple banks	Various brands of bank are being interacted with.
Multiple branches	The same bank is being interacted with across a range of branches (not always at a great distance from one another).
High value (threshold) transfer	The transfer (receipt or payment) of cash valued at AUD $10,000 (AML/CTF Act).
Cheque cashing	When a cheque product is cashed in at a bank.
U-turn transaction	The transfer of funds into and out of an Australian account within a short time frame.

Variable name	Definition/description
Co-mingling	When illicit money is transacted alongside legitimate money, usually bank accounts held by businesses.
Bank instrument	Regards what was used to process or transact money in the bank.
Specific account type (i.e., business, trust)	The type of account or variation of product in the bank.
Bank draft	A payment instrument guaranteeing issue of funds from the named entity.
Internet banking	Transactions conducted online through customer accounts, without visiting a branch.
Money order	A payment instrument for a specific sum of money issued by a Post Office.
Large cash sums	Bundles of physical cash in excess of AUD $10,000 value.
IFTI-outward	An instruction that is accepted in another country for money or property to be made available in Australia.
IFTI-inward	An instruction that is accepted in Australia for money or property to be made available in another country.
Cheque	An order to a bank to pay a stated sum from the drawer's account.

Variable name	Definition/description
ATM	Automated Teller Machine (may also include Intelligent Deposit Machines)
Casino/gambling entity (applies to pseudonyms A through D and unknown)	An entity which offers gambling and/or betting through a range of products/games, recognised as designated services under AML/CTF legislation.
Casino/gambling technique	Regards how money was processed or transacted through the Casino/gambling entity.
Betting	The placement of wagers on an outcome, usually of sporting events.
Gambling proceeds	The placement of wagers on games or products based on chances of winning (e.g., slot machines, casino tables).
Buying casino chips	Purchase of tokens offered by the casino entity for the purpose of "playing" at tables.
Excessive/intentional losses	When an individual incurs significant losses compared to the sum they first possessed. Usually little or no regard for the loss is considered to exacerbate the suspicion.
Cashing in casino chips	Returning of tokens issued by the casino entity for a cash equivalent to be paid out.
Cash out after minimal gaming	When casino chips or funds used for gambling are cashed out after little or no meaningful gameplay.

Variable name	Definition/description
Casino/gambling instrument	Regards what was used to process or transact money through the Casino/gambling entity.
Slot machines	A gambling machine which accepts cash or token payments for the chance to win a large payout.
Casino chips	Tokens or discs which represent monetary value based on colour and/or denominations, belonging to the gambling entity and able to be transacted there to play tables and receive the cash value in return.
Business entity	An entity whose apparent operation is service or product delivery but also acts as a conduit for illicit money to be integrated.
Alcohol manufacturer (front)	Distillery and workshop producing alcohol.
Brothel (front)	An entity offering sexual services for payment.
Construction (front)	A company providing building and concreting services.
Farm (front)	An agricultural business selling produce.
Fashion/textile (front)	Workshop/factory producing and retailing fashion items.
Gym (front)	A gymnasium for which customers pay a subscription to access.
Restaurant/food (front)	Business providing food/beverage services.

Variable name	Definition/description
Vehicle transport business (front)	Towing company.
Designated non-financial business professions (DNFBPs)	A non-financial entity which may be susceptible to money laundering due to its involvement with finances and transactions.
Accountant	An individual who conducts financial work including bookkeeping or analytics for a fee in service of another individual or entity.
Lawyers	An individual who practices law and/or provides legal advice for a fee in service of another individual or entity.
Real estate agency	An entity that facilitates the purchase, retail and/or lease of property for a fee in service of another individual or entity.
Alternative remitter	An entity that operates outside of regulation to transfer a designated value of money to the recipient under the instruction of the sender.
Domestic Remittance Service Provider	An entity that operates legally or is registered to transfer a designated value of money to the recipient under the instruction of the sender.
Offshore remittance service	An equivalent entity of the domestic remittance service provider, located in another jurisdiction.

Variable name	Definition/description
Professional Money launderer	An individual who will conduct transactions intended to process illicit money on behalf of another individual or entity for a fee.
Trading (TBML)	Movement of funds through trade transactions or the use of trade systems to move goods associated with illicit wealth.
Financial service entity	An entity providing financial services, such as audit or accounting, but is distinct from an accounting firm. This may include professional service firms as an example.
Foreign Exchange	Where currencies from different countries are exchanged.
NPO	A non-profit organisation which typically operates for the purpose of social or public benefit, not profit or personal gain.
Shell company	A company that does not itself operate in a meaningful capacity and primarily serves as a conduit for transactions or stores of wealth distinct from the beneficial owner.
Money Mules	When an individual receives a commission for their witting participation in the movement of illicit money, usually physical cash.

Variable name	Definition/description
Cash courier	A service provided for a fee where cash is transported securely between premises.
Loans (i.e., loan sharking)	The lending of money to a party that is borrowing with the expectation the principal amount is repaid (usually with interest).
Forged ID	When personal identification, including identity documents, is fabricated and not genuine.
Fraud	Obtaining a benefit and/or causing loss through dishonest practice such as deception.
Stored value card	A card on which a monetary value itself is placed and not attached to an institution (e.g., a gift card).
High-value goods	Items, such as products or goods, which are of significant monetary value.
Antiques	Artworks and antique items such as crockery, especially historic items or museum pieces.
Real estate	Property, including houses, land, or commercial developments.
Vehicle	Automobiles (usually of luxury brands), marine transport such as speed boats and yachts, and air transport such as helicopters or privately owned planes.

Variable name	Definition/description
Jewellery	Fine jewellery, usually of expensive brands or imbued with gemstones and/or precious metal(s).
Horse	An equine which is of high value due to its involvement with horse racing or competition, either through direct participation or breeding.
Diamonds	A precious stone which is clear and colourless in nature, usually of extremely high market value.
Collectibles	Specific items which are sometimes released as part of series or sets which have a significant market value, usually dictated by their limited availability/rarity or another unique quality.
Designer goods	Clothes and accessories produced by and belonging to luxury brands, commonly Louis Vuitton, Gucci and alike market competitors.
Offshore jurisdiction	A jurisdiction beyond Australia.