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# Modeling the money launderer: Microtheoretical arguments on anti-money laundering policy

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ABSTRACT

The existing literature treats the criminal – who generates criminal proceeds – and the launderer – who converts the 'dirty' dollars into 'clean' ones – as one and the same. And with good reason: it is clear from the evidence that such 'standard' vertically integrated launderers exists. Because professionals and institutions are also routinely prosecuted for money laundering transgressions, however, it appears that the market for money laundering is also supplied by third party, 'professional' launderers, whose core business lies outside the criminal sector, but who chooses to spend time supplying the market for money laundering.

In this paper we introduce the professional launder to the literature, and consider the process by which the launderer and the criminal bargain, to agree on a price for the money laundering service. We then consider the effects of three anti-crime, or anti-money laundering measures – namely, (1) increasing the probability that the criminal is caught, (2) increasing the probability that the launderer is caught, and (3) increasing the probability that the bargaining process itself is detected – on the way in which the negotiation is concluded. Of the various combinations available to the policy maker, we conclude that more resources should be spend on specialized police-units to tackle money laundering and, when the budget is fixed, less should be spent on financial scrutiny. Current approaches, we find, do not deter money launderers from supplying the market, but simply increase the profitability of money laundering and decrease the profitability of legitimate business.



## 1. Introduction

Money laundering is the process by which criminals attempt to "conceal or disguise the nature, location, source, ownership or control" of their ill-gotten gains.[1]

Innocuous as it sounds, money laundering is said to have the potential to "shake the very foundations of society"[2] for at least two reasons. First, and by design, money laundering attempts to subvert the 'crime-stopping efforts' of governments, and enables crime to remain profitable (Gnutzmann et al., 2010). Crime must be tackled, however, not only because it is "wrong", "deviant", and "injurious" (Ormerod, 2005), but because the proceeds it creates typically benefit the individual less than they damage society; estimates from the US place the net cost of crime in the region of $1 trillion per annum (Reuter and Truman, 2004). Research suggests that as much as 80% of criminal proceeds are laundered (Unger, 2007), and hence without money laundering, crime would be dramatically less profitable, and the supply of crime would suffer an

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[1] See Stages of the Money Laundering Process, A Report to Congress in Accordance with §356(c) of the USA PATRIOT Act, December 2002. Within the European legal framework the: (1) conversion or transfer of property; (2) the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to property; or (3) the acquisition, possession or use of property, knowing that such property is derived from criminal activity, are all activities which, when committed intentionally, are considered to be acts of money laundering. See Council Directive 91/308/EEC of 10 June 1991 on prevention of the use of the financial system for the purpose of money laundering.

[2] Directive 2005/60/EC of the European Parliament and of the Council, of 26 October 2005 on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing.

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adverse shock. Second, and as a significant but unintended consequence, money laundering damages the economy, and undermines the stability of the state. Money laundering is not only said to multiply crime, but to increase corruption, bribery and terrorism, to distort prices, consumption, saving and investment rates, to impact the demand for money, interest and exchange rates, as well as the availability of credit, to damage the solvability and liquidity, as well as the reputation and profitability of the financial sector, and to endanger the continuance of foreign direct investment (Unger, 2007).

So who supplies the market for money laundering? The 'standard' scenario, upon which the literature has been built, suggests that the criminal – who generates the criminal revenue – and the launderer – who converts the 'dirty' dollars into 'clean' ones – are one and the same individual. And with good reason: money launderers are criminals and criminals often launder money. The term 'money launderers', in fact, was originally used to describe those criminals – the Mafia – who, in the 1920s, bought laundromats and other outwardly legitimate businesses to hid the source of their illegitimate incomes (Unger, 2007). And indeed the mafia today is known to remain heavily invested in the market for money laundering.[3]

But clearly, this is not the full story. 'Standard' launderers exist, but the evidence is that third party professionals, whose core business lies outside the criminal sector, also choose to spend time supplying the market for money laundering. As we will see in later sections, recent US investigations have not only seen organized criminals charged with money laundering , but also dozens of professional bankers, lawyers, executives, and directors, three rabbis and even one US congressmen. If the 'standard' scenario is of a vertically integrated criminal launderer, the 'professional' scenario that we aim to introduce in the first part of this paper is of a third party agent, to whom criminal outsource their money laundering needs.

In the second part of this paper, we develop a bargaining model, to analyze the way in which the criminal and the professional money launderer interact. We then use this model to examine how different policy options impact the willingness of the 'professional' launderer to launder. We consider measures to: (1) increase the probability that the criminal is caught, that is, increasing the investment in traditional crime fighting; (2) increase the probability that the launderer is caught, that is, increasing the investment in anti-money laundering police units; and to (3) increase the probability that the bargaining process between the criminal and the launderer is detected, that is, increasing the level of scrutiny required of the banks and other financial players. Of the various policy combinations available to the regulator, we conclude that more resources should be spend on specialist police-units – which directly tackle money laundering – and, when the budget is fixed, fewer resources should be spent on financial scrutiny. In Germany where the costs of financial scrutiny to the banking sector come to € 775 million per year (IW Consult, 2006), the suggestion from our model is that those funds would better be spent on traditional policing efforts, aimed at catching and punishing professional money launderers. This suggestion is contrary to current policy, but in line with Takáts (2009) who – using a very different approach – also calls for a reduction on the burden of the banking sector.

In doing so, this paper makes a number of contributions. First, and by introducing the 'professional' launderer, we create a more realistic and more complete picture of the market for money laundering. Second, we show the limitations of current approaches to tackling money laundering. And finally, and most importantly, by distinguishing between the 'standard' and 'professional' launderers, we invite further research on measures that might allow for a more targeted and more efficient approach to tackling money laundering.

The paper proceeds as follows. In the next section we consider the existing literature on money laundering, and present the evidence that 'professional', third-party money laundering account for a non-negligible share of the market. In Section 3 we then analyze the ways in which the criminal might interaction with such a money launderers, using a bargaining model. We start by briefly introducing Rubinstein (1982) and Muthoo (1999)'s work on bargaining models, and then apply it to money laundering in mathematical terms. Before we conclude, we discuss the results, and the implications from a policy perspective in Section 4, and give an outlook to future research on this topic. Related literature is discussed in the respective sections.

## 2. 'Standard' and 'professional' money launderers

### 2.1. The market for money laundering

Crime is inevitable (Gnutzmann et al., 2010): it is the consequence of human ambition, and the flip-side of an entrepreneurial spirit (Baumol, 1990).

In observing that some crime is rational and profit motivated, the level of crime, however, can be reduced. Rational individuals choose to spend time earning an income in the legitimate or criminal sectors. They choose to invest in crime when the costs and benefits of investing in the criminal sector is found to be the more profitable. In the legitimate sector the costs include taxes and charges, while in the criminal sector the costs traditionally include fines, damages and physical detention. Rational individuals can therefore be deterred from investing in crime by, for example, increasing the probability of capture, or the duration and the severity of the punishment (Ehrlich, 1973; Blumstein and Nagin, 1977; Wolpin, 1978; Cornwell and Trumbull, 1994). This is the central suggestion of the literature that builds upon Becker's 1968 contribution.

Distinguishing between 'clean' money – earned legitimately – and 'dirty' money – generated in the criminal sector – is another way in which regulators can reduce the profitability of crime (Masciandaro, 2005; Unger, 2007). 'Clean' money can be consumed, converted and invested, while 'dirty' money can only be consumed. Dirty money, thus, has fewer uses, and it is therefore worth less. And so, by distinguishing between clean and dirty money, regulators can encourage legitimate activity over criminal activity.

As an unintended consequence, however, distinguishing between 'clean' and 'dirty' money creates a new market – the market for money laundering – and a new criminal: the money launderer. Money launderers are those individuals that help criminals to "conceal or disguise the nature, location, source, ownership or control" of their ill-gotten gains",[4] and as such the money launderer is the life-line that permits crime to remain profitable. Estimates suggest that as much 80% of criminal proceeds – a figure estimated by the UN to be in the range of US$1600 billion UNODC (2011) worldwide – are thought to pass the money launderers desks on a annual basis (see Fig. 1). Identifying and understanding the money launderer, therefore, is central to tackling crime.

[3] A 2013 report by Europol noted that the Italian Mafia was, however, 'going green', and turning to wind-farms and EU subsidies to launder their money.

[4] See Stages of the Money Laundering Process, A Report to Congress in Accordance with §356(c) of the USA PATRIOT Act, December 2002.