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# Organized Crime, Illicit Drugs and Money Laundering: the United States and Mexico

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## Introduction

Organized crime permeates the life of every single country in the 21st century: its global revenues are well above a trillion dollars a year and illicit drugs are a major component of this.<sup>1</sup> Drug prohibition, in effect for almost a century, has not been the deterrent to consumption it was intended to be, and the illicit drug trade has become the most profitable source of revenue for criminal organizations in many countries.

This paper reviews the US-Mexican illicit drug landscape and documents the importance of this criminal activity in both countries. The United States is the primary market for illicit drugs in the world and, because of their shared 2,000-mile border, Mexico has become the number one provider of illicit drugs. More than 40 years after a 'war on drugs' was declared by President Richard Nixon in 1971, the flow of drugs into the United States has not been eliminated or even reduced. The law of supply-and-demand has prevailed, as should have been expected.

The illicit proceeds from drug trafficking in the United States and Mexico, as with those from any criminal activity, must be laundered by criminal organizations so that their assets cannot be traced back to their origins. In recent times anti-money laundering (AML) initiatives have been at the core of the fight against organized crime around the world. Back in the 1980s it was not unusual for a drug trafficker in the United States to walk into a bank with a suitcase full of cash and have it immediately deposited into an account. At that point the money would start a journey from bank to bank and country to country, and tracing its origins became very difficult – the money was effectively laundered. During the past two decades the international financial system has been tightened and today it is much more difficult to launder money through it. However, dirty money continues to be laundered through other channels. The current controls and best practices implemented within the financial system are a necessary condition to combat money laundering; nevertheless, they are not sufficient to curtail it effectively. It is crucial that the authorities look beyond the financial system and into enterprises that accept cash as tender if AML initiatives are to be successful in depriving organized crime of the fruits of its crimes.

For at least three decades the laundering of drugs-trade proceeds in Mexico has been transferring economic and political power into the hands of individuals and groups with questionable credentials; billions of dollars have been laundered in the country by drug traffickers and their business partners. This phenomenon poses a potentially serious threat to public and national security in Mexico and the United States; the newly acquired economic strength of these criminal groups positions them to influence the political landscape and acquire significant ownership positions in strategic industries. This paper illustrates how it happens and highlights some of the options available to the authorities to address the challenge.

## The need for an effective drug policy

Drug prohibition in the United States started a century ago.<sup>2</sup> It has been enforced internationally through various United Nations conventions<sup>3</sup> and intensified since the declaration of the war on drugs by President Nixon in 1971. The essential argument behind prohibition was and continues to be that the prohibited drugs are bad for human health and for society. Hence, over the past century drug use has been combated by the authorities with varying degrees of intensity. In the United States alone more than half a million people are serving jail sentences for drug-related crimes, which represents approximately 25 per cent of the prison population. This and other data suggests that there is room for a more effective drug policy.

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<sup>1</sup> Moisés Naím, *Illicit: How smugglers, traffickers, and copycats are hijacking the global economy*, (Doubleday, 2005), p.16.

<sup>2</sup> The Harrison Narcotics Tax Act regulating and taxing the production, importation and distribution of opiates was approved by the US Congress in 1914.

<sup>3</sup> The Single Convention on Narcotic Drugs, 1954; the Convention on Psychotropic Substances, 1971; and the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

A look at the levels of production and consumption of illicit drugs today suggests that the policy has failed. In fact, prohibition has led to a different problem – that of international trafficking. The monetary value of the worldwide illicit drug business is currently estimated by the United Nations at \$320 billion per year. Organized crime runs the business and this drives serious public safety issues in many countries, besides threatening the national security of several countries.

Critics of prohibition argue that attempting to thwart drug consumption and trafficking by reducing the supply through policing strategies has proven totally ineffective. They claim that the law of supply and demand prevails, and that nobody has been able to repeal it. Hence the need to search for a different policy that takes into account the laws of economics as well as human behaviour.

Over the past century prohibition has created in trafficking a far bigger problem than the one it was intended to solve. Paraphrasing Paul Watzlawick,<sup>4</sup> by erroneously defining the problem – drug use as a criminal issue not a health one – and implementing policies to address the wrong problem, a greater one came into being, namely an illicit business worth billions of dollars run by organized crime.

There have been many calls in recent years for an open dialogue to reach a new drug policy. However, this continues to face strong opposition in many circles of society that fear that any relaxation of the prohibitionist policy will be an invitation to openly promote drug use. Yet nothing is farther from the truth. There is an urgent need to explore policy options. Though many of them have much in common, careful analysis suggests two fundamental paths.<sup>5</sup> One path would search for a new policy within the framework of prohibition, and the other would end prohibition and introduce the necessary elements to address new issues that may arise. These two paths can be visualized as ‘staying inside the box’ or ‘getting out of the box’. As Watzlawick points out, staying inside the box would only lead to ‘first order’ change, essentially tweaking an existing situation to produce marginal change. On the other hand, by going outside of the box the game is radically changed, new rules come into play, opening the way to ‘second order’ change; in this scenario root causes can be properly and effectively addressed.

Table 1 illustrates four possible drug policy options besides the current prohibition policy and suggests how nine different key performance indicators (KPIs) would behave under each one of the policies, relative to their behaviour under the current prohibition policy. A horizontal arrow means there is no significant change from the current policy; an arrow pointing upward means that particular indicator will increase and if it points downward it means the indicator will decrease. Yellow means there is no significant improvement or deterioration from the present situation, red means the indicator deteriorates and green means the indicator improves.

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<sup>4</sup> Paul Watzlawick et al, *Change: Principles of problem formation and problem resolution*, (Norton & Company, 1974).

<sup>5</sup> Sergio Ferragut, *A silent nightmare: The bottom line and the challenge of illicit drugs*, (lulu.com, 2007), chapter 7.

**Table 1. Key Performance Indicators (KPIs) in the Policy Options Spectrum**

Policy option \ KPI	Zero tolerance	Current prohibition	Consumption tolerance	Legalisation & regulation	Laissez faire legalisation
HIV/AIDS Hepatitis C	↓	→	↓	↓	↓
Drug use & addiction	↓	→	→	↓	↑
Prison population	↑	→	↓	↓	↓
Law enforcement expenses	↑	→	↓	↓	↓
Civil liberties protection	↓	→	↑	↑	↑
Illicit drug revenue	↓	→	→	↓	↓
Easy access to drugs by minors	↓	→	→	↓	↑
Power of Mexican cartels	↓	→	→	↓	↓
Drug money laundering	↓	→	→	↓	↓
Policy scenarios:	Inside the box			Outside the box	

The policy options can be briefly described as follows:

- **Zero tolerance** calls for the intensification of the prohibition policy, strict prosecution of traffickers with severe penalties and forced treatment of drug addicts. This was implemented by Mao Tse-tung in China in the late 1940s and early 1950s. Traffickers were sentenced to death and 15 million opium addicts were sent to forced rehabilitation.
- **Consumption tolerance** encompasses many of the harm-reduction approaches implemented in various countries in recent years: clean syringes in Switzerland, cannabis cafés in the Netherlands and decriminalization of the use of all drugs in Portugal, among others. The objective of this approach is to minimize the health and social damage inflicted by prohibition but still staying away from legalization. Drug trafficking continues in the hands of organized crime.
- **Legalization and regulation** make it legal to produce, distribute and consume drugs within an established set of rules and regulations. Different rules and regulations would be implemented for the different drugs. The production and commercialization of drugs would be regulated by the state, perhaps following the general guidelines implemented when alcohol prohibition was lifted in the United States in 1933. Organized crime would cease to benefit from the huge profits obtained under the current prohibition environment; the pipeline of illicit drug cash will dry up. This option also shows the best possible world for the KPIs shown in Table 1.
- **Laissez-faire legalization** will let the free market determine how drugs are produced, distributed and consumed, and the authorities will not intervene. This policy, though it will also take the business away from organized crime, is very likely to introduce significant issues around the subject of increased consumption and addiction and make minors more vulnerable to drugs. It presents huge risks similar to those existent

in the late 1800s and early 1900s when opium consumption was promoted by the colonial powers.<sup>6</sup>

The first two options presented fall, together with current policy, in the 'inside the box' category; they remain within the comfort zone of drug prohibition. The last two options can be considered 'outside the box'; they entail the end of drug prohibition. There are many potential policy-related actions that will cut across different options. One such action might be the implementation of a well-designed education and communications strategy to discourage the use of drugs. Such action could conceivably play within the current prohibition environment as well as in the zero tolerance, consumption tolerance and legalization and control policy options; however, the net impact may vary significantly in the different options and this is a subject that merits profound analysis.

Table 1 also suggests that drug money laundering will disappear in the zero tolerance option (no traffickers left alive with money to launder) and within the two legalization options. However, as long as the drug business continues in the hands of organized crime there will be drug money to launder. The end of prohibition will substantially reduce the revenue of organized crime; this certainly will be true for the Mexican drug trafficking organizations (DTOs). Until prohibition is ended, drug money laundering will legitimize organized crime profits and deserves special attention. An effective anti-money laundering (AML) strategy can go a long way to minimize the negative impact of DTOs in society; Mexico, Colombia and Central America are of special interest because of the extreme violence these countries have experienced in recent years. Implementing a viable and effective drug policy will take a while. An open international dialogue is required on the subject and, meanwhile, DTOs can be substantially weakened if an effective AML strategy is executed until global society settles on a new, more effective drug policy.

A proven AML strategy will also go a long way to prevent the laundering of illicit proceeds from other criminal activities as well; hence, the AML model presented in this paper will strengthen the struggle against organized crime in all its illicit activities. The subject is developed here with a special focus on Mexico and the United States. However, a comprehensive AML strategy is bound to realize its great potential for the fight against organized crime in many countries.

## Seizing illicit drug revenue in the United States and Mexico

The major source of revenue of organized crime in Mexico comes from trafficking illicit drugs to the United States. It is widely recognized by the authorities of both countries that drug demand in the United States is the main business driver of Mexican drug cartels. Much has been said about the size of the US illicit drug market and the participation of Mexican cartels in it. Eric Olson has estimated that illegal drug exports from Mexico to the United States in 2011 at approximately \$6.2 billion.<sup>7</sup> Celina B. Realuyo notes that 'drug trafficking organizations send between \$19 and \$29 billion annually to Mexico from the United States', as estimated by the US National Drug Intelligence Center in their 2009 National Drug Threat Assessment.<sup>8</sup> This wide range reflects the inaccuracy of the available data, which is to be expected of any illicit business. However, in order to effectively address any problem, it is fundamental that it is well understood and defined. It is vital to understand the size of the drug money laundering issue facing the United States and Mexico and how it may impact the power structure, public safety and national security in both countries. It is rational to argue that the bigger the business, the bigger the threat.

Table 2 illustrates a range of estimates for the illicit US drug revenue and the share received by Mexican criminal organizations. Because of the limitations of the data sources, certain premises have been set in order to arrive at some rational figures. Overall, these estimates rely on data released by the United Nations in 2010 and, in their absence, on data published by some US

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6 See Alfred P. McCoy, 'Opium History Up to 1858 A.D.', University of Wisconsin. <http://www.opioids.com/opium/history/>

7 Eric Olson, 'Considering New Strategies for Confronting Organized Crime in Mexico,' Wilson Center, March 2012, p.4. <http://www.wilsoncenter.org/publication/considering-new-strategies-for-confronting-organized-crime-mexico>.

8 Celina B. Realuyo, 'It's All about the Money: Advancing Anti-Money Laundering Efforts in the U.S. and Mexico to Combat Transnational Organized Crime,' Wilson Center, May 2012. p.6. <http://www.wilsoncenter.org/publication/its-all-about-the-money-advancing-anti-money-laundering-efforts-the-us-and-mexico-to-combat-transnational-organized-crime>

institutions. Appendix I describes the different sources of data used and the premises underlying each of the scenarios presented in Table 2.

During the last two decades US officials have claimed that the size of the country's illicit drug market is in the order of \$64 billion. This figure is quite distant from the \$95.2 to \$142.9 billion range shown in Table 2 in scenarios A and B. Both scenarios include 20 metric tonnes (MT) of pure heroin and 165 MT of pure cocaine. Scenario A presumes 3,345 MT of marijuana and 29.5 MT of methamphetamine, while scenario B presumes 6,140 MT of marijuana and 60 MT of methamphetamine. (Additional details on prices and country of origin of the drugs in these scenarios is provided in Appendix I.) Given the nature of the wholesale-retail distribution chain, there is no way Mexican cartels could receive \$19-29 billion from a \$64 billion market; the actual illicit US drug business must be in the range illustrated in Table 2 or else the Mexican cartels are only receiving the smaller \$6.2 billion revenue pointed out by Olson. There are no good estimates for the Mexican domestic illicit drug market; however, even though drug use in Mexico has increased significantly over the past ten years, the revenue generated is much lower than the revenue provided to Mexican cartels by the US market.

One point of contention between Mexican and US authorities is how much revenue Mexican cartels derive from the retail distribution chain in the United States. Americans contend that Mexican cartels control the retail distribution chain of the drugs provided by them, while Mexicans claim there is no evidence to support that argument; therein the difference among scenarios '1' (no participation of Mexican cartels in the retail distribution chain), '2' (10 per cent participation of Mexican cartels on the value added in the retail distribution chain) and '3' (20 per cent participation of Mexican cartels on the value added in the retail distribution). These three scenarios provide a conservative and realistic range of what the real situation is.

**Table 2. Revenue to the United States and Mexico from the US Drug Business – Scenarios**

	Scenarios					
	A1	A2	A3	B1	B2	B3
<b>Drug/Source</b>	<b>\$Million</b>	<b>\$Million</b>	<b>\$Million</b>	<b>\$Million</b>	<b>\$Million</b>	<b>\$Million</b>
<b>Heroin:</b>						
Colombia	1,388.5	1,619.2	1,850.0	1,388.5	1,619.2	1,850.0
Mexico	1,115.4	1,287.8	1,460.2	1,115.4	1,287.8	1,460.2
Total heroin	2,503.9	2,907.0	3,310.2	2,503.9	2,907.0	3,310.2
% heroin	25.7	20.0	17.1	16.9	13.1	11.2
<b>Cocaine:</b>						
Via Mexico	3,578.9	6,036.5	8,494.2	3,578.9	6,036.5	8,494.2
% cocaine	36.8	41.6	44.0	24.2	27.2	28.7
<b>Marijuana:</b>						
Mexico	3,077.4	4,870.3	6,663.2	7,061.0	11,174.8	15,288.6
% marijuana	31.6	33.5	34.5	47.7	50.4	51.7
<b>Methamphetamine:</b>						
Mexico	572.2	713.6	854.9	1,647.0	2,053.8	2,460.6
% methamphetamine:	5.9	4.9	4.4	11.1	9.3	8.3
<b>Drugs to US via Mexico</b>	<b>9,732.4</b>	<b>14,527.4</b>	<b>19,322.5</b>	<b>14,790.8</b>	<b>22,172.1</b>	<b>29,553.6</b>
Sum of partial %	100.0	100.0	100.0	100.0	100.0	100.0
<b>TOTAL DRUGS US</b>	<b>95,223.0</b>	<b>95,223.0</b>	<b>95,223.0</b>	<b>142,978.0</b>	<b>142,978.0</b>	<b>142,978.0</b>
% US revenue to Mexico	10.2	15.3	20.3	10.3	15.5	20.7

The range of estimated revenues returning to Mexican drug cartels from the US business presented in Table 2 looks rational. The \$9.7 billion is a conservative figure but large enough to account for one per cent of Mexican GDP; \$29.5 billion is huge but at the same time conceivable. Either figure poses a threat to Mexican and US national security, as they strengthen the cartels' capabilities to disrupt public safety, and also their ability and that of their stealth partners in the business world to threaten national security in both countries, as they successfully transfer economic and political power to their domains with the help of inexpensive and abundant drug money.

### Money laundering of drug proceeds

Billions of dollars of dirty drug money are of little use to drug traffickers, except for whatever portion is used to cover their clandestine operating expenses. The remainder, to be useful, needs to go through a laundering process capable of delivering to them financial and other assets free of any suspicion by the authorities. Celina B. Realuyo presents, in great detail, how money laundering is done within the financial sector; and she also adds some potential new ways in which money might be laundered in the future through new technologies.<sup>9</sup> The three stages of money laundering –

<sup>9</sup> Realuyo, 'It's All about the Money', p.7.

placement, layering and integration – are accurately described for financial enterprises. Realuyo refers to the different laws and institutions in place in the United States and Mexico to combat money laundering. She also illustrates that knowledge, laws and institutions have done very little to thwart money laundering; American and Mexican authorities can barely claim the interception of one per cent of the proceeds from the illicit drug business in either country.

This issue is not limited to the United States and Mexico; it is a worldwide issue, as has been reported over the years by the United Nations Office on Drugs and Crime (UNODC). The issue has prevailed for decades and there seems to be no light at the end of the tunnel. Under the leadership of the Financial Crimes Enforcement Network (FinCEN), an agency of the US Department of the Treasury, many foreign governments and financial institutions all over the world have passed laws and set up regulations and institutions to prevent money laundering in the financial sectors of their economies. Even if these efforts and the objectives of those laws, institutions and regulations are not perfect, the fact is that today it is a lot more difficult to launder money through financial institutions. The HSBC case, reported by the US Senate in July 2012 notwithstanding, the international financial system is highly shielded against money laundering.<sup>10</sup> Regardless of this regulatory environment, Mexico alone could have laundered anywhere between \$300 and \$900 billion during the past three decades;<sup>11</sup> perhaps half as much if it is assumed that 50 per cent of the illicit drug proceeds received from the United States have been used to cover operating expenses by the cartels.

The ‘follow the money’ battle cry is not delivering on its promise; one per cent of the criminals’ revenue is a meagre return for the billions of dollars spent combating drug trafficking and money laundering every year. More than one sting operation has been devised by US authorities to follow the money. The 1998 Casablanca operation illustrates the limited contribution of sting operations to anti-money laundering.<sup>12</sup> Another more recent sting operation reported in the *New York Times* in 2011 raised significant questions about their effectiveness and legitimacy.<sup>13</sup> In summary, following the dirty money from its origin has not led to meaningful results. This has steered some analysts, including this author, to question the sufficiency of current AML methods and instead focus on where the money is finally finding a home. In other words, find the home of the money being laundered and trace it back to the criminal organizations. The hypothesis put forward is that dirty money is being laundered within the formal economy in businesses that accept cash as tender, not in financial institutions. When the money arrives at the financial institution, it has already been laundered. This is a different game, it happens under the nose of the authorities but, up to now, beyond their reach.

## Current AML initiatives and the struggle against organized crime in Mexico

In his fifth Annual Report to the nation in September 2011, President Felipe Calderón reported the forfeiture of around \$26 million through AML actions during the prior year. The figure is a tiny fraction of the billions of dollars received by Mexican DTOs from the illicit US drug business – less than one per cent. Regardless of the AML laws and the institutions presumably focusing on money laundering in Mexico, the results to date are very poor.<sup>14</sup> For one reason or another Mexican AML initiatives are out of focus; this could be due to ineptitude or involve collusion and corruption. The

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10 US Senate Permanent Subcommittee on Investigations, ‘U.S. Vulnerabilities to Money Laundering, Drugs, and Terrorist Financing: HSBC Case History’, 17 July 2012. <http://www.hsgac.senate.gov/subcommittees/investigations/hearings/us-vulnerabilities-to-money-laundering-drugs-and-terrorist-financing-hsbc-case-history>. The HSBC case reflects a serious lack of adherence to widely accepted best practices within financial institutions.

11 These are the author’s estimates taking the low end revenue of \$9.7 billion from scenario A1 and the high end revenue of \$29.5 billion from scenario B3 in Table 2 and assuming that the levels of illicit revenue have been roughly similar for the past 30 years.

12 This 1998 operation run by the United States Custom Service only demonstrated that it was possible to induce middle managers from Mexican financial institutions to launder drug money for a fee; it did not get anywhere close to any substantial money laundering channel. See Ferragut, *A Silent Nightmare*, chapter 4.

13 Ginger Thompson, ‘US Agents Launder Mexican Profits of Drug Cartels’, *The New York Times*, 3 December 2011. <http://www.nytimes.com/2011/12/04/world/americas/us-drug-agents-launder-profits-of-mexican-cartels.html?pagewanted=all>

14 It should be remembered that these results are not any better in the United States.

billions of dollars laundered in Mexico annually provide for rich individuals and organizations to influence the course of any initiative that might attempt to make AML a serious endeavour.

Mexico needs to confront organized crime head on. Calderón has done it since taking office in 2006 by sending the armed forces to fight the drug cartels. Mexico's different police bodies – federal, state and municipal – were too ill trained, infiltrated and/or corrupt to address the challenge of the criminal organizations effectively. However, troops are not enough; the development of democratic institutions to strengthen security and the judicial system has to work alongside the 'street' fight against organized crime. Unfortunately, the much-touted initiatives to strengthen the Federal Police and the Attorney General Office (PGR) leave a lot to be desired.<sup>15</sup> This failure could be the result of sheer incompetence or perhaps too much laundered money has already taken its toll on Mexican law-enforcement institutions and rendered them ineffective.

Mexican Federal Police investigators, public prosecutors from the PGR and the analysts from financial intelligence unit of the Mexican Department of the Treasury have not been able to put together any meaningful AML case. They have a tendency to focus on drug lords already in custody from whom they hope to extract some information leading towards the interception of illicit revenues, regardless of the limited amount.

### Laundering money in the non-financial sector of the formal economy

There are sectors of the business world that have become an effective source of legitimization of dirty money and they are much less scrutinized than the financial sector, if at all. Dirty money flows naturally, mingling with money from legitimate activities, as an integral part of these operations. Indeed, in these sectors of the formal economy the steady flow of money and the trading of goods and services is a constant activity; therefore, large amounts of money may go unnoticed as part of day-to-day operations and finally dirty money, once legitimized, is free to be shared between criminals and their 'legitimate' business partners providing the laundering infrastructure.

The analytical model presented in this paper is based on the formulation of hypotheses developed from the analysis of data reflecting the economic behaviour of companies in the formal economy. The analysis leads to the generation of intelligence that points to companies that might be involved in money laundering activities. Once the hypotheses are generated they can be confirmed or discarded by further information analysis. If the hypothesis were confirmed, a formal criminal investigation would follow and eventually lead to the forfeiture of assets that are the product or object of a criminal offense.

One of the major differences between laundering in these sectors, as described below, and the traditional focus on the financial world is that money laundering through a financial institution can happen without the knowledge of the owners and/or the top management of the institution involved. On the other hand, laundering in the non-financial sectors of the economy involves a very tight relationship between the drug trafficker and the owners and/or the top management of the legitimate company being used to launder money.

In the Laundering Model presented below there are a number of relevant players; some are willing participants and others are innocent bystanders. For the purpose of illustration they are grouped as follows:

- **The drug trafficking organization (DTO)**<sup>16</sup> that generates large amounts of money requiring cleansing to facilitate its use.
- The legitimate enterprise outfitted to launder money or **laundering** company (LC) that runs a legitimate business but at the same time receives dirty money from the DTO in exchange for the return of a percentage in clean money downstream.

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<sup>15</sup> Both *Plataforma Mexico*, the flagship modernization programme of the Federal Police, and *Justicia Efectiva para Todos*, the cornerstone initiative of the intended transformation of the PGR, have fallen short of their intended objectives.

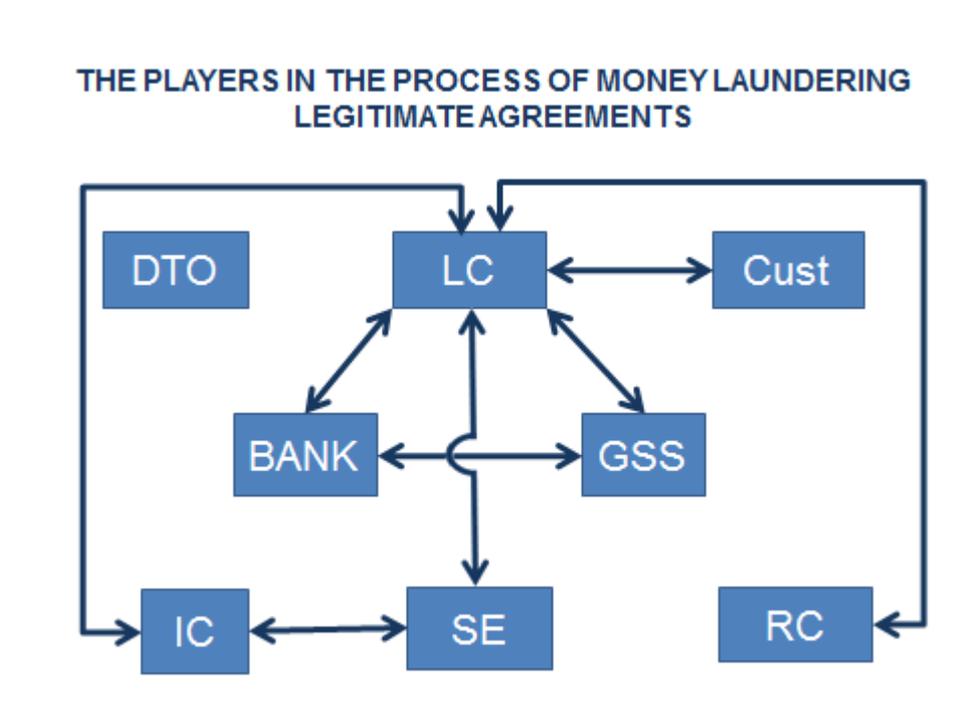
<sup>16</sup> Or any other type of organized crime organization.

- **The legitimate customers (Cust)** of the laundering company that openly buy the goods and services sold by the laundering company through its legitimate business operation.
- **The global security services company (GSS)** providing secure transportation and logistics solutions to the laundering company to transfer cash and other valuables from its legitimate operating units to the bank.
- **The banks (BANK)** with whom the laundering/legitimate company carries on its legitimate business.
- **The investment company (IC)** that buys and sells stock of the laundering/legitimate company through private and/or public transactions. This company is controlled through the necessary layers of separation by the DTO.
- The services companies that provide a variety of legitimate but fictitious services to the laundering/legitimate company. These services could be accounting, legal, marketing, public relations and similar ones for which the laundering/legitimate company is billed even if no services are truly rendered; all that is needed is a contract and the invoices justifying the payments. This operates as a **return company (RC)** through which the DTO receives clean money. This company is also controlled through the necessary layers of separation by the DTO.
- **The stock exchange (SE)** where the stock of the laundering/legitimate company is or will be listed during the life of the laundering operation.

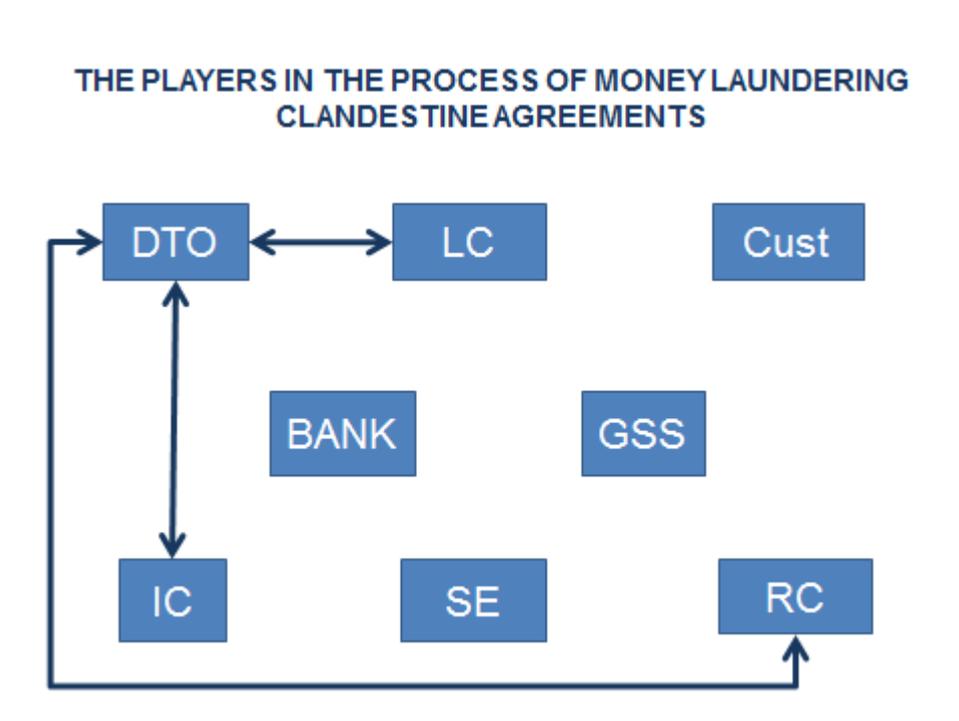
Figures 1, 2 and 3 illustrate how these players interact with each other in the legitimate business world and clandestine environment, and how legitimate cash gets mixed with dirty money being laundered.

Figure 1 shows a situation in which there is no legitimate interaction between the DTO and any of the other players; in other words, there is no evidence of the DTO being involved with any of these players. It is in Figure 2 where the relationships of the DTO are highlighted; it shows the connection between the DTO, the laundering company (LC), the investment company (IC) and the return company (RC). It is through the return company and the investment company, via the stock market, that the DTO receives in sparkling clean money a percentage of the dirty money it delivered to the laundering company to begin with. The three stages of money laundering (placement, layering and integration) are executed under the nose of the authorities but, up to now, beyond their reach. This is illustrated in greater detail in Appendix II, where some of the questions are raised regarding the flow of money and its legitimacy.

**Figure 1. Legitimate operating environment.**



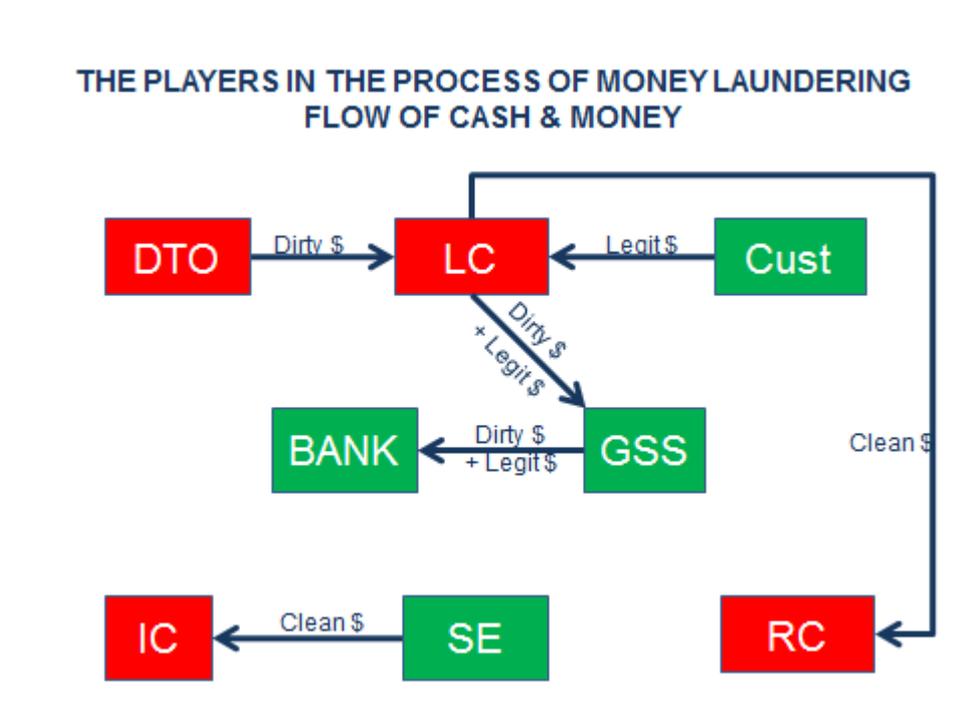
**Figure 2. Clandestine operating environment.**



From the time legitimate and dirty money enter the laundering company it is not possible to differentiate between them or identify their source, as the dirty money has already been laundered. In Figure 3, the red blocks indicate the willing participants in the money laundering process and the green blocks are the bystanders who are not even aware that money laundering is taking place. The global security services company (GSS) collects the money from the operating units of the laundering company (LC) and deposits it in the bank account of the laundering company. At this point, it only remains to figure out how the agreed upon percentage of clean money is returned to the DTO. There are two different but complementary paths to return their share of the laundered

money to the DTO. In both instances the money (Clean \$) does not return directly to the DTO but to companies controlled by the drug trafficker. A well-structured laundering operation very likely uses both routes.

**Figure 3. The flow of cash: legitimate, dirty and clean.**



In the first route, the laundering company (LC) pays to the return company (RC), based on a legitimate service agreement, a portion of the dirty money received from the DTO. As mentioned before, this agreement may involve a variety of services such as public relations, marketing and tax advice. The key point is that there is a lawful agreement to back up the invoice to be issued by the return company to the laundering company to justify the payment of those funds. This is clearly a legitimate operation that does not raise any suspicion by the authorities.

The second route is somewhat more elaborate and involves transactions through the stock exchange. The process has two stages. In the first stage the investment company (IC) acquires (through a private or public transaction) shares or options to purchase shares of the laundering company (LC) at market prices. The dirty money introduced into the laundering company as fictitious sales, having no associated product or service cost, increases the profitability of the laundering company, hence increasing the market value of the laundering company shares. In a second stage, the investment company sells shares of the laundering company or exercises the options and generates a capital gain from the purchase and sale of the stock and/or options.

Careful analysis would suggest that the combination of both routes is able to return to the DTO at least 50 per cent of the dirty money that it delivers to the laundering company (LC). At the same time the laundering company benefits with increased profits and by selling its own higher price shares in the stock exchange. This laundering operation brings substantial benefits to both the drug traffickers and the owners of the laundering company. Additionally, the nature of the operation keeps the unsuspecting authorities away. Appendix III illustrates how laundering 23.2 per cent above the legitimate sales of a retail business operating as a laundering company plays out for the DTO, through the return company (RC), and how the profitability of the laundering company (LC) increases opening the way to sell its stock in the stock exchange at a significant premium for the benefit of the LC and the investment company (IC) controlled by the drug trafficker.

### Identifying laundering companies in the non-financial sector of the formal economy

As illustrated in Appendix III the profitability of a laundering company very likely will increase as a result of the laundering operation. If this premise is correct, then one way to identify potential money launderers is to research the profitability of similar companies within a given industry and look for extraordinary performers. An unusually high profitability is no proof of money laundering activity; however, it is an indication that money laundering might be taking place. In the AML world this may be used as a starting point for an intelligence-gathering initiative. Table 3 below shows the behaviour of a group of companies within the same industry; it shows real data from a public source for a group of Mexican companies.<sup>17</sup> The names of the companies have been replaced by letters, the sales and profit figures are shown in millions of dollars and the profitability column reflects the percentage of net profits over sales.

**Table 3. Research on companies in the non-financial sector of the formal economy**

#### ANALYSIS OF PROFITABILITY AND MONEY LAUNDERING POTENTIAL IN LEGITIMATE ENTERPRISES

COMPANY	SALES US\$ Million	PROFIT US\$ Million	PROFIT ABILITY	10% SALES*	20% SALES*
A	3,677	298	8.1%	368	735
B	3,216	338	10.5%	322	644
C	2,573	257	10.0%	257	515
D	1,600	0	0.0%	160	320
E	1,200	8	0.7%	120	240
F	1,142	53	4.6%	114	228
G	704	0	0.0%	70	140
H	240	3	1.3%	24	48
*US\$ Million					

In the industry depicted in Table 3 profitability between four and five per cent is associated with a highly profitable operation, a top performer. Company F is within that range and is widely recognized in Mexico as a well-run enterprise. Companies A, B and C stand out as extremely profitable and under an AML initiative they would warrant additional research to corroborate or discard the possibility of money laundering. The columns '10 per cent SALES' and '20 per cent SALES' show a reasonable range of what this author believes is the potential for money laundering of these three companies, also in millions of dollars. The data shows that these three companies with combined annual sales of \$9.5 billion could be laundering in the order of \$1.9 billion per year. This is a hefty figure concentrated in just three firms. A rough analysis of the 500 top companies in Mexico yields over 50 companies with profitability way above that of their peers. These companies account for combined revenue of over \$60 billion and applying the analytical model presented in this paper would suggest a laundering potential between \$6 and \$12 billion dollars per year.

<sup>17</sup> From public sources

There is an ongoing initiative in Colombia that investigates links between drug traffickers and non-financial sector businesses laundering drug money.<sup>18</sup> However, there is a huge difference between the AML Model presented in this document and the Colombian initiative. While the AML Model presented here searches for the destination of the drug money and, once this is identified, looks for the links with the criminal organizations, the Colombian model focuses on known or suspected drug traffickers who create or acquire businesses through which they plan to launder the money. The investigations so far under the Colombian model have not yielded more than a few million dollars in forfeiture assets. The magnitude of these illicit money-laundering operations suggests they may be the work of medium- or low-level drug traffickers, not the work of top 'capos'. The latter are more likely to have arrangements, like the one described in this paper, with businessmen whose legitimacy is not being questioned by the authorities.

Data published in the business media is not a reliable source for any serious AML investigation; it is used here only to illustrate a point. However, if the model is applied using official data, such as that available through tax records and other government and private sources, a solid investigation approach can be implemented for effective AML actions. The AML Model proposed in this paper shows the potential of delving into areas up to now ignored by the authorities; it may prove to be an effective AML tool to combat organized crime in any present or future drug policy scenario as well as in other non-drug related criminal activities.

### **Transfer of economic and political power through money laundering**

It was mentioned earlier that Mexico could have laundered up to \$900 billion in the last three decades, an amount large enough to allow those participating in the money-laundering business to acquire significant power in the legitimate economy and the political system. A model can be built to illustrate how the laundering of \$2 billion per year over 20 years could yield \$32 billion to the money laundered, \$38.6 billion to the drug lord and \$14.5 billion in tax revenue to the state.<sup>19</sup> The model incorporates a number of premises such as the reinvestment of the laundered proceeds and stock market operations where new unsuspecting investors in the legitimate company doing the laundering end up contributing a significant share of the net proceeds.

Much has been published in the Mexican press about the influence of drug cartels in the July 2012 presidential elections and it has been denied by everyone involved with the electoral process. Many claim that there is no evidence of drug money influencing the presidential contest. However, a thorough understanding of the money-laundering model presented in this paper would lead to conclude that there is no need for drug money to directly enter the presidential race. It is sufficient for the 'legitimate' and stealth business partner of the drug lords to channel the funds to the candidate of choice. That money is already clean and loyalties can be bought without any trace of it leading back to the drug cartels.

### **A further refinement of the money laundering model**

One of the objectives of any serious AML investigation should be to identify how the drug money is delivered to the laundering company. To launder drug proceeds from the US illicit drug market in Mexico, the money must cross the border in order to be delivered to the laundering company. No authority, Mexican or American, can say for sure how the illicit money is delivered to the laundering companies in Mexico. Americans believe it is transferred in bulk across the border, but the analytical model presented here suggests some data elements generated by the laundering process (see Figure 3) that may lead to a better understanding of where and how the money is delivered. On the other hand, it is possible to introduce an additional refinement into the model. This refinement will place the laundering company in the United States and some or all of the other players in the laundering operation in Mexico or in other countries. That is, the US-based

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<sup>18</sup> Obtained from conversations of the author with Colombian law-enforcement officials.

<sup>19</sup> Ferragut, *A Silent Nightmare*, Appendix B.

laundering company receives the drug proceeds and the dirty money need not cross the border to Mexico. Instead, when the need arises the US-based company is listed in the Mexican Stock Exchange (Bolsa Mexicana de Valores – BMV), out of sight from the US Securities and Exchange Commission. The BMV provides a more relaxed environment than the one posed by the SEC and there is no legal restriction on this kind of set up.

In this refined model, the return company (RC) and the investment company (IC) can be anywhere in the world: Mexico, the United States or any other country. In a global economy, investments and services can be contracted for anywhere in the world and obtained from anywhere as well.

## Conclusion

Organized crime commands global illicit revenues in excess of a trillion dollars every year. Less than one per cent of these revenues are intercepted by the authorities. Illicit drug trafficking, probably the most significant and profitable of all their illicit activities, accounts for \$320 billion according to the United Nations. Drug prohibition – the criminalization of the production, commercialization and consumption of certain types of drugs – has been the law, one way or another, for almost a century and it was intensified since 1971 after President Nixon declared the war on drugs. A policy meant to deter drug consumption has not achieved its goal and instead has become the primary business driver of the illicit drug trade. The laws of economics, came into play and demand for illicit drugs keeps the business of supplying them flourishing.

Illicit drugs are a significant element in US-Mexican relations. The United States is by far the number one illicit drug consumer country in the world; its market has an estimated retail value as high as \$143 billion. Mexico, because it shares a 2,000 mile border with the United States has become the number one provider in the world. It is estimated that Mexican drug trafficking organizations (DTOs) generate as much as \$29 billion in revenues from the US market, equivalent to three per cent of Mexico's GDP. Neither the United States nor Mexico has been able to intercept more than one per cent of the illicit revenue in their respective countries.

Money-laundering has been a top priority for Mexican DTOs, as for any organized crime entity, as it transforms their illicit proceeds into clean financial instruments and assets. Much has been done during the past two decades to thwart money-laundering within the financial system; under the guidelines of FinCEN strict controls and procedures have been implemented all over the world. These actions are a necessary component of any effective AML initiative; however, they have proven to be insufficient. As shown above, money-laundering is taking place within the formal economy outside the financial system – in businesses that accept cash as tender. This paper has proposed a new and complementary approach to effectively combat money-laundering by identifying within the formal economy those legitimate businesses that, in consort with the DTOs, are laundering their dirty money for the benefit of both.

Drug prohibition is at the root of a significant portion of the illicit proceeds of organized crime. Proponents of drug legalization contend that, essentially, the \$320 billion generated by the illicit drug trade will disappear overnight under a controlled legal drug environment. However, such a radical change in drug policy is not in sight as there is much opposition from quarters that believe that drug legalization is equivalent to an active promotion of drug use. Even if this view is far from the truth, it will take a while before there is a proper understanding in society of all the variables involved and politicians dare to risk taking strong positions in favour of a substantial change in drug policy. In the meantime, illicit money in the hands of individuals and groups with questionable credentials is changing the power equation – economic and political – in many countries. Mexico and other Latin American countries are among the victims of this power transfer process and their public safety and national security are at risk. Also, the national security of the United States may become vulnerable as powerful business groups fuelled by laundered drug money may find their way into strategic sectors of the US economy. An effective AML strategy, as the one presented in this document, will go a long way to undermine the power of DTOs and other organized crime entities under any drug policy scenario.

## Appendix I. Sources of data and premises used to estimate illicit drug revenue in the United States and Mexico

This appendix explains how the scenarios presented in Table 2 were developed. It pinpoints the sources of the data used and the premises applied to address inconsistencies and/or deficiencies in the data.

For all the scenarios presented in Table 2, the following was taken into consideration:

### *Price and revenue*

Prices per kilogramme of pure drug, retail and wholesale, in the United States are listed in Table I below and were obtained from the following sources:

- Heroin, cocaine and methamphetamine: *UN World Drug Report 2010, Additional statistical information: Prices.*
- Marijuana: not clear in the more recent UN reports and thus taken from the average 2007 price published in Institute for Defence Analyses for the White House Office of National Drug Control Policy (ONDCP), 'The price and purity of Illicit Drugs: 1981-2007', based on field data collected by law-enforcement authorities in the United States.

Mexican cartels receive 100 per cent of the wholesale revenue in the United States for the drugs they export to that country. This concurs with the National Drug Threat Assessment 2010. In the case of heroin and cocaine purchased in Colombia, Mexican cartels pay the local wholesale price at \$10,000 per kilo of heroin and \$2,400 per kilo of cocaine.<sup>20</sup>

The relative importance of the Mexican cartels within the United States and how much they share in the revenue of the US retail business is a controversial issue. American authorities maintain that Mexican cartels are increasing their influence there, while the Mexicans contend that there is no evidence to support that argument. To address this controversy different scenarios are presented; they vary according to the percentage that Mexican cartels get of the value-added at the retail level from the drugs they introduce to the US market.

### *Consumption*

Table II shows the total consumption of heroin and cocaine in the United States; it is estimated to be the same for all scenarios. It is assumed that 90 per cent of the Colombian heroin and cocaine in the United States is introduced by Mexican cartels.

- The total US consumption of heroin was taken at 20 metric tonnes (MT) of pure heroin. This is a conservative figure but it is what comes out of the analysis of US consumer behaviour. It should be noted that the 2005 UN report estimated an amount of 70 MT and that both in the National Drug Threat Assessment 2010 and in the 2010 *UN World Drug Report* it is estimated that Mexican heroin production alone could reach 40 MT.
- The total consumption of cocaine was considered as 165 MT of pure cocaine.

For scenarios 'A' (A1, A2 and A3) the following was considered and included in Table III:

- Total consumption of 3,345 MT of marijuana in the United States, of which 40 per cent or 1,338 MT was supplied by Mexican cartels.<sup>21</sup>

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<sup>20</sup> UN, *World Drug Report 2010*, 'Further statistical information: Retail and wholesale prices and purity levels: breakdown by drug, region and country or territory'.

<sup>21</sup> The consumption estimates of marijuana and methamphetamine are the ones that show the greatest variations in the reports. Here they were calculated from the RAND Corporation model, 'Estimating the size of global drug market, a

- Consumption of 29.5 MT of methamphetamine in the United States, of which 53 per cent or 15.6 MT was supplied by Mexican cartels.

For scenarios 'B' (B1, B2 and B3) the following was considered and included in Table III:

- Consumption of 6,140 MT of marijuana in the United States, of which 50 per cent or 3,070 MT was supplied by Mexican cartels.
- Consumption of 60 MT of methamphetamine in the U.S., of which 75 per cent or 45 MT was supplied by Mexican cartels.

### Scenarios

In scenarios '1' (A1 and B1), Mexican cartels do not receive any portion of the revenue from the US retail business.

In scenarios '2' (A2 and B2), Mexican cartels receive a share of 10 per cent of the value added in the retail segment to the revenue from drugs supplied by them to the retail distribution chain.

In scenarios '3' (A3 and B3), Mexican cartels receive a share of 20 per cent of the value added in the retail segment to the revenue from drugs supplied by them to the retail distribution chain.

**Table I. Price per kilogramme of drug in the US wholesale and retail market**

Drug/ Source	Price per kilogramme	
	\$/Kg at Retail	\$/Kg at Wholesale
<b>Heroin:</b>		
Colombia	364,000	143,000
Mexico	364,000	143,000
Asia	364,000	143,000
<b>Cocaine:</b>		
Through Mexico	192,000	26,500
Other route	192,000	26,500
<b>Marijuana:</b>		
US	15,700	2,300
Mexico	15,700	2,300
Other	15,700	2,300
<b>Methamphetamine:</b>		
US	127,000	36,600
Mexico	127,000	36,600
Other	127,000	36,600

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demand-size approach' (2009), updated with prevalence data from the National Survey on Drug Use and Health (2010), Substance Abuse and Mental Health Services Administration. It is worth mentioning that these are conservative estimates, the National Drug Intelligence Center, U.S. Department of Justice in its report 'Domestic Cannabis Cultivation Assessment 2009' estimated a potential production of 15,800 tonnes of marijuana in Mexico in 2007, while the UN quotes the Department of Justice figures reaching 21,500 tonnes in 2008.

**Table II. Metric tonnes of heroin and cocaine consumed in the United States**

<b>Volume of consumption in the United States</b>	
<b>DRUG/ Source</b>	<b>Metric Tonnes (MTs)</b>
<b>Heroin:</b>	
Colombia (other than Mexico route)	1.2
Colombia (through Mexico)	10.4
Mexico	7.8
Asia	0.6
Total heroin	20.0
<b>Cocaine:</b>	
Through Mexico	148.5
Other route	16.5
Total cocaine	165.0

**Table III. Metric tonnes of marijuana and methamphetamine consumed in the United States**

<b>Estimated medium and high levels of consumption in the United States (RAND/SAHMSA MODEL)</b>				
	Medium level		High level	
DRUG/Source	% distribution	Metric Tonnes	% distribution	Metric Tonnes
<b>Marijuana:</b>				
US	50	1,672.5	40	2,456.0
Mexico	40	1,338.0	50	3,070.0
Other	10	334.5	10	614.0
Total marijuana	100	3,345.0	100	6,140.0
<b>Methamphetamine:</b>				
US	37	10.9	20	12.0
Mexico	53	15.6	75	45.0
Others	10	3.0	5	3.0
Total methamphetamine	100	29.5	100	60.0

Tables IV through IX illustrate the flow of money from the US illicit drug business to different destination countries that results from the model used to estimate the market size using the aforementioned premises and data. While Mexico receives between 10.2 per cent and 20.7 per cent of the revenue depending on the scenario, the United States retains between 77.6 per cent and 87.8 per cent equivalent to a range of \$73.8 and \$125.5 billion. All the money retained in the United States is laundered there; a significant portion of it is most likely being laundered in the formal consumer economy by the lower echelons of the retail distribution network operating in the country.

**Table IV. Scenario A1: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,563.6	1,388.5	270.3		4,222.4
Mexico	1,723.8	1,115.4			2,839.2
Asia	132.6			85.8	218.4
Total heroin	4,420.0	2,503.9	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	24,576.8	3,578.9	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	27,307.5	3,578.9	793.7	-	31,680.0
<b>Marijuana:</b>					
US	26,258.3				26,258.3
Mexico	17,929.2	3,077.4			21,006.6
Other	4,482.3			769.4	5,251.7
Total marijuana	48,669.8	3,077.4	-	769.4	52,516.5
<b>Methamphetamine:</b>					
US	1,386.2				1,386.2
Mexico	1,413.4	572.2			1,985.6
Other	266.7			108.0	374.7
Total methamphetamine	3,066.3	572.2	-	-	3,746.5
<b>TOTAL DRUGS</b>					
Percentage	87.7%	10.2%	1.1%	0.9%	100.0%

**Table V. Scenario A2: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,332.9	1,619.2	270.3		4,222.4
Mexico	1,551.4	1,287.8			2,839.2
Asia	132.6			85.8	218.4
Total heroin	4,016.9	2,907.0	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	22,119.1	6,036.5	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	24,849.8	6,036.5	793.7	-	31,680.0
<b>Marijuana:</b>					
US	26,258.3				26,258.3
Mexico	16,136.3	4,870.3			21,006.6
Other	4,482.3			769.4	5,251.7
Total marijuana	46,876.8	4,870.3	-	769.4	52,516.5
<b>Methamphetamine:</b>					
US	1,386.2				1,386.2
Mexico	1,272.1	713.6			1,985.6
Other	266.7			108.0	374.7
Total methamphetamine	2,924.9	713.6	-	-	3,746.5
<b>TOTAL DRUGS</b>	<b>78,668.5</b>	<b>14,527.5</b>	<b>1,063.9</b>	<b>855.2</b>	<b>95,223.0</b>
Percentage	82.6%	15.3%	1.1%	0.9%	100.0%

**Table VI. Scenario A3: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,102.2	1,850.0	270.3		4,222.4
Mexico	1,379.0	1,460.2			2,839.2
Asia	132.6			85.8	218.4
Total heroin	3,613.8	3,310.1	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	19,661.4	8,494.2	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	22,392.2	8,494.2	793.7	-	31,680.0
<b>Marijuana:</b>					
US	26,258.3				26,258.3
Mexico	14,343.4	6,663.2			21,006.6
Other	4,482.3			769.4	5,251.7
Total marijuana	45,083.9	6,663.2	-	769.4	52,516.5
<b>Methamphetamine:</b>					
US	1,386.2				1,386.2
Mexico	1,130.7	854.9			1,985.6
Other	266.7			108.0	374.7
Total methamphetamine	2,783.6	854.9	-	-	3,746.5
<b>TOTAL DRUGS</b>	<b>73,873.5</b>	<b>19,322.5</b>	<b>1,063.9</b>	<b>855.2</b>	<b>95,223.0</b>
Percentage	77.6%	20.3%	1.1%	0.9%	100.0%

**Table VII. Scenario B1: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,563.6	1,388.5	270.3		4,222.4
Mexico	1,723.8	1,115.4			2,839.2
Asia	132.6			85.8	218.4
Total heroin	4,420.0	2,503.9	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	24,576.8	3,578.9	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	27,307.5	3,578.9	793.7	-	31,680.0
<b>Marijuana:</b>					
US	38,559.2				38,559.2
Mexico	41,138.0	7,061.0			48,199.0
Other	8,227.6			1,412.2	9,639.8
Total marijuana	87,924.8	7,061.0	-	1,412.2	96,398.0
<b>Methamphetamine:</b>					
US	1,524.0				1,524.0
Mexico	4,068.0	1,647.0			5,715.0
Other	271.2			109.8	381.0
Total methamphetamine	5,863.2	1,647.0	-	-	7,620.0
<b>TOTAL DRUGS</b>	125,515.5	14,790.8	1,063.9	1,498.0	142,978.0
Percentage	87.8%	10.3%	0.7%	1.0%	100.0%

**Table VIII. Scenario B2: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,332.9	1,619.2	270.3		4,222.4
Mexico	1,551.4	1,287.8			2,839.2
Asia	132.6			85.8	218.4
Total heroin	4,016.9	2,907.0	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	22,119.1	6,036.5	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	24,849.8	6,036.5	793.7	-	31,680.0
<b>Marijuana:</b>					
US	38,559.2				38,559.2
Mexico	37,024.2	11,174.8			48,199.0
Other	8,227.6			1,412.2	9,639.8
Total marijuana	83,811.0	11,174.8	-	1,412.2	96,398.0
<b>Methamphetamine:</b>					
US	1,524.0				1,524.0
Mexico	3,661.2	2,053.8			5,715.0
Other	271.2			109.8	381.0
Total methamphetamine	5,456.4	2,053.8	-	-	7,620.0
<b>TOTAL DRUGS</b>	<b>118,134.1</b>	<b>22,172.1</b>	<b>1,063.9</b>	<b>1,498.0</b>	<b>142,978.0</b>
Percentage	82.6%	15.5%	0.7%	1.0%	100.0%

**Table IX. Scenario B3: market calculation and destination of drug revenue**

DRUG/Source	Country of Drug Revenue Destination - US\$ Million				
	US	Mexico	Colombia	Other	Total
<b>Heroin:</b>					
Colombia	2,102.2	1,850.0	270.3		4,222.4
Mexico	1,379.0	1,460.2			2,839.2
Asia	132.6			85.8	218.4
Total heroin	3,613.8	3,310.1	270.3	85.8	7,280.0
<b>Cocaine:</b>					
Via Mexico	19,661.4	8,494.2	356.4		28,512.0
Another route	2,730.8		437.3		3,168.0
Total cocaine	22,392.2	8,494.2	793.7	-	31,680.0
<b>Marijuana:</b>					
US	38,559.2				38,559.2
Mexico	32,910.4	15,288.6			48,199.0
Other	8,227.6			1,412.2	9,639.8
Total marijuana	79,697.2	15,288.6	-	1,412.2	96,398.0
<b>Methamphetamine:</b>					
US	1,524.0				1,524.0
Mexico	3,254.4	2,460.6			5,715.0
Other	271.2			109.8	381.0
Total methamphetamine	5,049.6	2,460.6	-	-	7,620.0
<b>TOTAL DRUGS</b>	<b>110,752.7</b>	<b>29,553.5</b>	<b>1,063.9</b>	<b>1,498.0</b>	<b>142,978.0</b>
Percentage	77.5%	20.7%	0.7%	1.0%	100.0%

## Appendix II. Money laundering in the non-financial sector of the formal economy

This appendix includes four figures (A through D) illustrating the placement, layering and integration of the illicit money delivered to a laundering company (LC), otherwise engaged in a legitimate business. These figures highlight the objectives of the laundering process in each of the stages of the process, some of the elements taken into consideration for the model to work, and some of the research and analysis to be done during an intelligence gathering investigation. The figures refer to a hypothetical US-Mexican operation; however, it is valid in other environments.

Figure A. Objectives of the Money Laundering Model

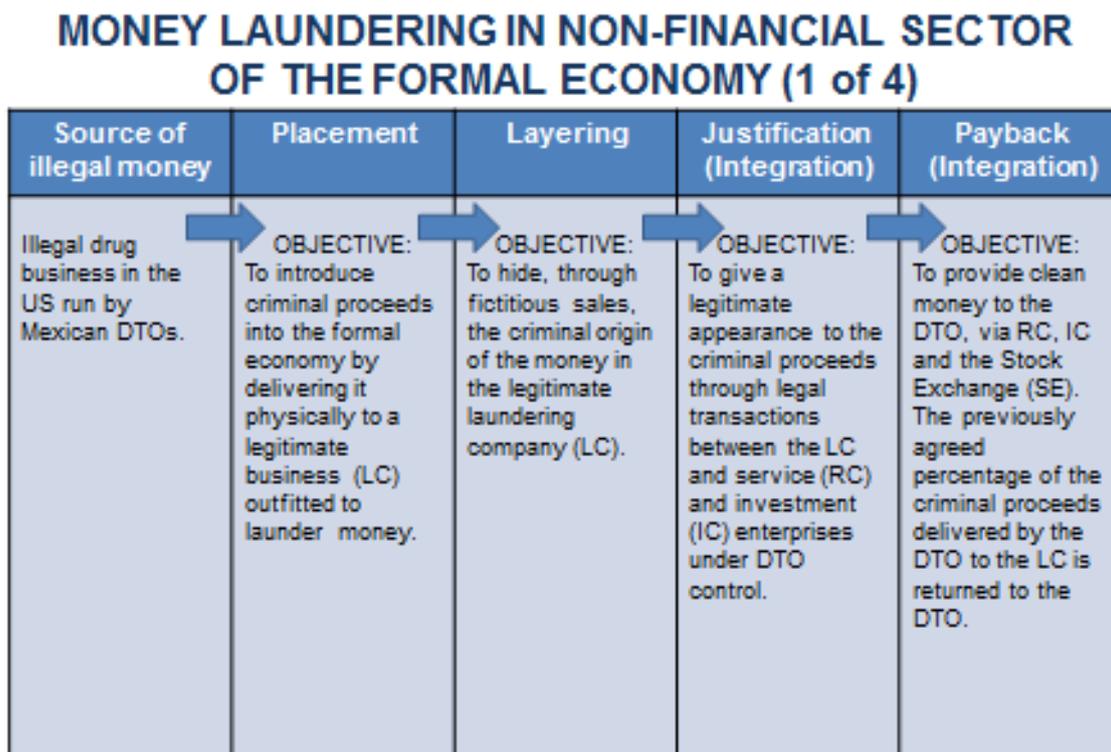


Figure B. Elements to be considered for the Model to Work

**MONEY LAUNDERING IN NON-FINANCIAL SECTOR OF THE FORMAL ECONOMY (2 of 4)**

Source of illegal money	Placement	Layering	Justification (Integration)	Payback (Integration)
Considerations:	Considerations:	Considerations:	Considerations:	Considerations:
<p>Agreement on the return (payback) terms as to the % of the illicit money the LC will return to the DTO.</p> <p>Sale, in a private or public transaction, of a % of the LC shares to a façade investment company (IC) controlled by DTO.</p>	<p>Illicit money is delivered in US\$ or Mx Pesos to the LC.</p> <p>Global security services company (GSS) deposits illicit money together with legitimate money from legitimate business operation into the LC bank accounts.</p>	<p>LC enters a fictitious sales transaction into the accounting books to justify the criminal proceeds.</p>	<p>The LC pays to a façade service company –return company or RC– controlled by DTO, on account of fictitious services, the previously agreed % of the illicit money received by the LC from the DTO.</p> <p>This is a transaction between two legitimate enterprises.</p>	<p>The money returned to the RC is available for unrestricted use by the DTO and/or its associates.</p> <p>Through an IPO or secondary offering of the stock of the LC, the IC obtains a capital gain which is available for unrestricted use by the DTO and/or its associates.</p>

Figure C. Some suggested areas for research and analysis.

**MONEY LAUNDERING IN NON-FINANCIAL SECTOR OF THE FORMAL ECONOMY (3 of 4)**

Source of illegal money	Placement	Layering	Justification (Integration)	Payback (Integration)
Research & analyse:	Research & analyse:	Research & analyse:	Research & analyse:	Research & analyse:
<p>How does the DTO deliver the money to the LC? Each operating unit, regional centres, HQ, other?</p> <p>Explore the nature of private transactions with shares of LC of interest to the investigation.</p>	<p>Is a GSS used to deliver the illicit money? From what pick up points? Does the GSS get involved in currency exchange from US\$ to Mx Pesos? Do GSS bank deposits on behalf of LC match sales accounting records by operating unit?</p>	<p>Are US\$ and Mx Pesos mixed in the LC operation? Verify through the Tax Office records if the company yields are atypical for the corresponding industry.</p>	<p>Identify substantial payments to different kinds of service companies or unusual vendors.</p> <p>Identify owners and executives of companies receiving those payments.</p>	<p>Identify and analyse the stock behaviour of companies under study, including if they have been listed and/or delisted in the Stock Exchange (SE).</p>

Figure D. Some suggested areas for research and analysis (continued)

MONEY LAUNDERING IN NON-FINANCIAL SECTOR OF THE FORMAL ECONOMY (4 of 4)				
Source of illegal money	Placement	Layering	Justification (Integration)	Payback (Integration)
Research & analyse:	Research & analyse:	Research & analyse:	Research & analyse:	Research & analyse:
	Identify GSSs, their relative importance and the client portfolio for each one of them. How to obtain access to the registry of GSSs operations? Bank deposits made on each GSS's client accounts.	Verify if operating units receiving US\$ from customers are authorized to do so.		

### Appendix III. Impact of laundering in a legitimate retail business an amount 23.2 per cent above its legitimate revenues

Table X below illustrates the behaviour of the income statement of an otherwise legitimate retail business before and after it is outfitted to launder money. It is assumed that 232 monetary units (e.g. dollars) are laundered in an operation with a legitimate business of 1,000 monetary units; that is, 23.2 per cent above the legitimate revenue is introduced in the business as dirty money. This generates 200 monetary units in additional revenues generating value-added tax (VAT) of 32 units at a rate of 16 per cent. Three scenarios are presented, they are:

- 50 per cent of the fictitious sales revenue is returned to the DTO through the return company (RC) in payment for fictitious services.
- 70 per cent of the fictitious sales revenue is returned to the DTO through the return company (RC) in payment for fictitious services.
- 85 per cent of the fictitious sales revenue is returned to the DTO through the return company (RC) in payment for fictitious services.

**Table X. Pro-forma income statement of laundering company in retail business**

Concept	Legitimate	SCENARIO "A"		SCENARIO "B"		SCENARIO "C"	
		Laundry "A"	Return "A"	Laundry "B"	Return "B"	Laundry "C"	Return "C"
			43% Return		60% Return		73% Return
SALES							
Legitimate	1000	1000	100	1000	140	1000	170
Fictitious	0	200		200		200	
Total Sales	1000	1200	100	1200	140	1200	170
Product Cost	800	800	0	800	0	800	0
Gross Profit	200	400	100	400	140	400	170
G&A EXPENSES							
Legitimate	160	160	0	160	0	160	0
Return Payment	0	100	0	140	0	170	0
Total G&A Expenses	160	260	0	300	0	330	0
Profit before Tax	40	140	100	100	140	70	170
INCOME TAX (30%)	12	42	30	30	42	21	51
Net Profit	28	98	70	70	98	49	119
Profit/Sales	2.8%	9.8%		7.0%		4.9%	
Real Gross Margin	0.2	0.2		0.2		0.2	

The following results are obtained:

- **Scenario A:** The return company (RC) obtains profits of 70 units after tax and the laundering company increases profits from 28 to 98 units and profitability from 2.8 per cent to 9.8 per cent of sales.
- **Scenario B:** The return company (RC) obtains profits of 98 units after tax and the laundering company increases profits from 28 to 70 units and profitability from 2.8 per cent to 7.0 per cent of sales.

- **Scenario C:** The return company (RC) obtains profits of 119 units after tax and the laundering company increases profits from 28 to 49 units and profitability from 2.8 per cent to 4.9 per cent of sales.

In all three scenarios the profitability of the LC increases significantly (more in A than in B and C), which will drive a higher value for the stock of the LC. This in turn will deliver additional returns for the LC and the investment company (IC); the latter, under the control of the DTO.

Table XI shows what happens with the 32 units VAT generated by the 200 units laundered and the destination of the 232 units delivered by the DTO to the LC for the laundering operation. The percentage distribution among the LC and the RC is shown in the line 'per cent distribution to:' for each scenario. The tax office collects 39.7 per cent in all scenarios.

**Table XI. VAT generated by the laundering operation and destination of the money laundered**

HANDLING OF THE \$32 VAT ASSOCIATED WITH THE \$200 OF FICTITIOUS SALES								
		SCENARIO "A"		SCENARIO "B"		SCENARIO "C"		
Concept		Laundry "A"	Return "A"	Laundry "B"	Return "B"	Laundry "C"	Return "C"	
Invoiced VAT		32.0	16.0	32.0	22.4	32.0	27.2	
Recovered VAT		16.0		22.4		27.2		
VAT Paid		16.0	16.0	9.6	22.4	4.8	27.2	
Destination of the \$232 laundered								
DTO delivers \$232								
LC gains		70.0		42.0		21.0		
RC receives			70.0		98.0		119.0	
Tax Office receives		92.0		92.0		92.0		39.7%
% distribution to:		30.2%	30.2%	18.1%	42.2%	9.1%	51.3%	% of \$232
	LC :							RC

## Bibliography

Sergio Ferragut, *A Silent Nightmare: The bottom line and the challenge of illicit drugs*, <http://www.lulu.com/shop/sergio-ferragut/a-silent-nightmare-the-bottom-line-and-the-challenge-of-illicit-drugs/paperback/product-16513728.html>

Institute for Defence Analyses, 'The Price and Purity of Illicit Drugs: 1981-2007', <http://www.hsdl.org/?view&did=38618>

Moisés Naim, *Illicit: How smugglers, traffickers, and copycats are hijacking the global economy*. (Doubleday 2005).

National Drug Intelligence Center, US Department of Justice, 'Domestic Cannabis Cultivation Assessment 2009'. <http://www.justice.gov/ndic/pubs37/37035/index.htm>

Eric Olson, 'Considering New Strategies for Confronting Organized Crime in Mexico', Wilson Center, March 2012. <http://www.wilsoncenter.org/publication/considering-new-strategies-for-confronting-organized-crime-mexico>

Rand Corporation, 'Estimating the size of global drug market, a demand-size approach' (2009). [http://www.rand.org/pubs/technical\\_reports/2009/RAND\\_TR711.pdf](http://www.rand.org/pubs/technical_reports/2009/RAND_TR711.pdf)

Celina B. Realuyo, 'It's All about the Money: Advancing Anti-Money Laundering Efforts in The U.S. and Mexico to Combat Transnational Organized Crime', Wilson Center, May 2012. <http://www.wilsoncenter.org/publication/it-per-centE2-per-cent80-per-cent99s-all-about-the-money-advancing-anti-money-laundering-efforts-the-us-and-mexico-to>

UNODC, *UN World Drug Report 2010, Additional statistical information: Prices*. [http://www.unodc.org/documents/wdr/WDR\\_2010/World\\_Drug\\_Report\\_2010\\_lo-res.pdf](http://www.unodc.org/documents/wdr/WDR_2010/World_Drug_Report_2010_lo-res.pdf)

US Department of Health and Human Services, 'Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings' (2010). [www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.pdf](http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.pdf)

US Department of Justice, 'National Drug Threat Assessment 2010'. <http://www.justice.gov/ndic/pubs38/38661/38661p.pdf>

Paul Watzlawick et al, *Change: Principles of problem formation and problem resolution*, (W.W. Norton & Company 1974).

## About the Author

Sergio Ferragut is an independent researcher. He held management positions in the information technology, retail and financial industries and taught at the post-graduate university level. He has lived and worked in Mexico, the United States, and South America and travelled on business to many countries in all continents. His realization, while holding top management positions in Mexico, of the impact drug money was having on otherwise legitimate enterprises, led him to do in-depth research on the subject and to write *A silent nightmare: The bottom line and the challenge of illicit drugs*; a systemic analysis of why and how drug trafficking has thrived in the face of prohibition, published in 2007 in the United States and in Mexico in 2010 in Spanish. In recent years he has led key projects within the Attorney General Office and the Treasury Department of Mexico. He currently consults on public policy and business transformation and lectures at universities, business and civic forums on drug policy, money-laundering and business transformation. He holds an engineering degree from the Massachusetts Institute of Technology and a Master of Business Administration from Stanford University.