Crime can be highly profitable. Money generated in large volume by illegal activities must be “laundered,” or made to look legitimate, before it can be freely spent or invested; otherwise, it may be seized by law enforcement and forfeited to the government.1 Transferring funds by electronic messages between banks—“wire transfer”—is one way to swiftly move illegal profits beyond the easy reach of law enforcement agents and at the same time begin to launder the funds by confusing the audit trail.

The Senate Permanent Subcommittee on Investigations, in January of 1994, asked OTA to assess the feasibility of using computer techniques derived from artificial intelligence (AI) to monitor the records created by international wire transfers and thereby detect money laundering.

Wire transfers of illicit funds are readily concealed among wire transfers moved by electronic funds transfer systems. Each day, more than 465,000 wire transfers, valued at more than two trillion dollars, are moved by Fedwire and CHIPS, and an estimated 220,000 transfer messages are sent by SWIFT (dollar volume unknown). The identification of the illicit transfers could reveal previously unsuspected criminal operations or make investigations and prosecutions more effective by providing evidence of the flow of illegal profits.

Until now, it has seemed impossible to monitor or screen wire transfers as they occur, both because of the tremendous volume of transactions and because most wire transfers flow through fully

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1 Legitimately earned money that has been concealed from tax authorities is also at risk of seizure.
automated systems with little or no human intervention. As a possible way out of this impasse, it has been proposed that a computer-based system be developed to screen wire transfers on a continuing basis. Such a system would be designed to use advanced techniques derived from artificial intelligence research to recognize and flag unusual events or recurring suspicious patterns, for investigation. This proposal was developed within law enforcement, defense, and intelligence agencies concerned with drug trafficking, terrorism, espionage, and illegal arms trade.

The OTA assessment concluded that the original concept in its simplest form—continuing, real time monitoring of wire transfer traffic, using artificial intelligence techniques—is not feasible. There are, however, several ways in which information technology may be applied to wire transfer records to support and enhance law enforcement against money launderers. This report presents several technological scenarios, or alternative technical configurations and institutional embodiments of information technology. The legal, economic, and social implications of each scenario are identified, to provide a framework for consideration of policy options for the Congress.

This chapter describes modern money laundering, its relationship to drug trafficking and other crimes that operate on a national and international level, its importance to law enforcement, and the role played by banks in control of money laundering.

**MONEY LAUNDERING—WHAT IS IT?**

To launder money is to disguise the origin or ownership of illegally gained funds to make them appear legitimate. Hiding legitimately acquired money to avoid taxation also qualifies as money laundering.

Federal agencies estimate that as much as $300 billion is laundered annually, worldwide. From $40 billion to $80 billion of this may be drug profits made in the United States. A multinational Financial Action Task Force estimated that about

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2 It is also extremely difficult to find wire transfer records after the fact, in order to reconstruct the flow of money, unless the name or account number, the time and place of origin, or other specific characteristics are known. In addition, either a search warrant or a subpoena is generally required for law enforcement agents to view domestic wire transfer records in electronic form; international wire transfer records (in the United States) will soon be available on request.

3 The U.S. Customs Service’s Financial Division began work on a system in the mid-1980s to analyze Currency Transaction Reports (CTRs). When the Financial Crimes Enforcement Network (FinCEN) was established by the Department of the Treasury in 1988-89, the Customs group involved in this development were transferred to the new agency, which then developed the Financial Artificial Intelligence System (FAIS) now used for targeting suspicious patterns in the CTR database. Other work on artificial intelligence (AI) systems for money laundering control was funded by the Advanced Research Projects Agency (ARPA) in 1991, according to Dr. Al Brandenstein, now director of the Counternarcotics Technology Assessment Center in the Office of National Drug Control Policy (ONDCP), in discussions with OTA, June 1994. ARPA’s interest in money laundering was primarily related to terrorism and illegal sales of arms rather than drug trafficking. The agency funded several projects to explore the feasibility of using artificial intelligence techniques to detect electronic money laundering, but when its budget was tightened in 1992, these projects were dropped. Several research contractors, including MITRE Corporation, which had been contractor to ONDCP and to the Drug Enforcement Administration, have continued to push for further development in this area. MITRE analysts were instrumental in bringing the concept to the attention of congressional committees, including the Permanent Subcommittee on Investigations of the Senate Government Affairs Committee, as a potentially powerful tool for attacking drug traffickers. Intelligence agencies are believed to use techniques based on artificial intelligence for some kinds of pattern recognition and analysis related to national security.

4 This is the estimate used by the international Financial Action Task Force (U.S. Dept. of State (Narcotics) Fact Sheet, “Combating Drug Money Laundering,” March 2, 1992). It appears that this estimate was first generated by one U.S. government analyst as “mostly a guess,” and has since been accepted as reasonable by other agencies, including the International Narcotics Matters unit within the U.S. Department of State. The Department of the Treasury declines to provide an estimate, beyond saying that the volume “is very big.” Approximately $100 billion is thought to be drug-related laundering, the rest is thought to be tax evasion, or proceeds of other crimes including securities manipulation. See also National Institutes of Justice, *Research in Brief*, September 1992, p. 1. Colombia estimates that $1 billion to $2 billion in drug profits comes into its economy from foreign sources.
$85 billion per year could be available for laundering from drug proceeds alone. However, this and other estimates of the scale of money laundering must be viewed skeptically. The official estimates are derived from a mix of experience, extrapolation, and intuition; the hard evidence to support them is limited. No one can be sure how much money is laundered (see box 1-1 and box 1-2).

Money laundering has attracted growing attention in the last decade, in part because of its importance to drug trafficking. It has proven nearly impossible to interdict the flow of drugs into the United States or to halt their distribution within the country. Those most responsible for the international drug trade—high-level drug lords—are the least likely to be apprehended; they are often overseas, out of legal reach. Possibly the most effective way to discourage drug suppliers, therefore, is to cut off the flow of their profits and seize their assets.

Money laundering is not, however, limited to drug trafficking. It is associated with nearly all kinds of “crime for profit,” including organized crime and white collar crimes, such as the real estate fraud and savings and loan abuses that marked the last decade. One economist lists a number of other reasons (not all of them criminal) for wishing to hide money:  

- to prevent the erosion of business and personal asset values through legal means (such as law suits or divorce proceedings);
- tax evasion, either personal or corporate;
- capital flight from one country to other countries, triggered by adverse changes in economic, political, and social conditions;
- securities law violations, especially insider trading;
- government undercover activities such as spying and support for “freedom fighters”;
- smuggling of contraband.

Until 1986, money laundering itself was not illegal apart from the underlying (or predicate) crimes that it helped to conceal. Money laundering was first defined as an independent crime in the Money Laundering Control Act of 1986, codified at Sections 1956 and 1957 of Title 17 of the U.S. Code. The penalties include 10 to 20 years in prison and substantial fines. 

In 1988, Congress extended the use of civil asset forfeiture to money laundering. As a civil law process, forfeiture requires a lower standard of proof and carries reduced procedural guarantees compared to criminal prosecution. Critics argue that this may lead prosecutors to pursue money launderers rather than “real” criminals, whose actions directly create victims. Law enforcement officials, however, insist that they are properly targeting those who manage, control, and profit by crime, yet insulate themselves from direct contact with it.

**“PLACING” DIRTY MONEY**

Law enforcement officials describe three steps in money laundering:

- placement—introducing cash into the banking system, or into legitimate commerce;
- layering—separating the money from its criminal origins by passing it through several financial transactions, for example, transferring it

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7 In some cases, when dirty money is legitimated or integrated by investment in real estate or legitimate businesses, “the principals may willingly pay taxes on their profits (or file returns that use allowable deductions to avoid taxes).” In other situations, complete avoidance of taxes is an important objective.” (National Institutes of Justice, *Research in Brief*, September 1992, p. 1.)

8 The average sentence imposed on convicted money launderers by federal judges in FY 1992 was 46.1 months, as compared with an average sentence for drug trafficking of 89.4 months or racketeering of 106.4 months. “Convicted Launderers Fit White-Collar Profile,” *Money Laundering Alert*, December 1994, p. 2, quoting from a 1993 report by the U.S. Sentencing Commission.
4 Information Technologies for Control of Money Laundering

BOX 1-1: Estimating Money Laundering

The Financial Action Task Force on Money Laundering used three indirect methods of estimating the amount of money laundering:

1. Extrapolation based on estimation of world drug production. This method involves many uncertainties, including the following:
   - global crops of opium poppies, coca shrubs, cannabis, etc.,
   - internal consumption and export of drugs in each of the producing countries,
   - clandestine laboratory production of psychotropic substances,
   - street prices of drugs,
   - the role of each kind of drug in the generation of proceeds and the level at which proceeds are generated (retail, traffic, wholesale distribution, production, etc.), and
   - financial flows within individual countries.

2. Extrapolation from the consumption needs of drug users. Because consumption of drugs such as heroin and cocaine is illegal in many places, both reporting and sampling are unreliable.

3. Extrapolation from seizures of drugs by law enforcement, using a multiplier usually ranging from 5 to 20 percent depending on the drug and the country.


into and then out of several bank accounts, or exchanging it for travelers’ checks or a cashier’s check;

integration—aggregating the funds with legitimately obtained money or providing a plausible explanation for its ownership.

Profits from organized crimes (drugs, gambling, racketeering, and prostitution) are commonly in the form of cash, mostly in small denominations, that must somehow be slipped into the banking system or the regular stream of commerce before it can be safely spent in this country or sent up the rungs of the criminal hierarchy to those demanding their profits. 9

Street sales of drugs are usually conducted with $5 or $20 bills. A million dollars in $20 bills weighs 111 pounds, in $5 bills 444 pounds. 10 Both convenience and, more importantly, the risk of having the money found and seized by police or by other criminals, make it desirable to take the currency to a bank and either convert it into a negotiable instrument (such as a cashier’s check), or wire transfer it to another location.

In 1970, many U.S. banks would accept large cash deposits without question, even from otherwise unknown customers—at times receiving large trash bags stuffed with currency. Money laundering was not illegal. The 1970 Bank Secrecy Act (BSA) required only that financial institutions report currency transactions of over $10,000 to federal law enforcement agencies for possible investigation. This did, however, create an ex-

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9 The recurring cash surplus in certain Federal Reserve Districts, resulting from an abnormally high volume of cash deposits, has been discussed as a possible indicator of money laundering, but this turns out to be unreliable. Miami, Los Angeles, San Antonio, Jacksonville, and El Paso consistently report cash surpluses. Some seasonal peaks in cash surplus in San Antonio were apparently associated with the State Fair. New York City always shows a large cash deficit, and some cities show wide swings. For example, San Francisco, Philadelphia, Denver, Nashville, and New Orleans had large surpluses in early 1994 but large drops at mid-year. “Mystifying Fed Currency Surpluses Show Major Shifts,” Money Laundering Alert, August 1994, p. 4.

The Office of National Drug Control Policy (ONDCP) recently published estimates of the amount spent on illegal drugs in the United States. The study, produced by Abt Associates under contract with ONDCP, estimates that Americans spent $49 billion on illegal drugs in 1993. Of that, about $31 billion was spent on cocaine, $7 billion on heroin, $9 billion on marijuana, and the remaining $2 billion on miscellaneous other drugs. The study estimates that spending on illegal drugs has declined steadily since 1988, when spending was estimated to be over $64 billion. The primary causes for the decline include a decrease in the number of users of cocaine and heroin and a decrease in the prices of those drugs since 1988.

Estimating the amount spent on illegal activities is fraught with difficulty, but the ONDCP study’s estimates appear quite credible. They track closely with independent estimates made by OTA prior to obtaining the study, and they are based on more precise data. They are probably the most easily estimated portion of total money laundering in the United States, because other activities (e.g., fraud, extortion, etc.) are not subject to the same levels of detection and data gathering.

However, drug spending estimates are difficult to make because few statistics on use and prices are known with certainty. Instead, estimates must be made based on surveys and law enforcement data which are error-prone and uncertain but provide starting points for estimates of drug use and fairly reliable evidence of drug prices. The known data can be combined with additional medical and economic knowledge. For example, there are upper bounds on the amount of drugs that a single individual can consume and on the amount of money that an individual can spend each day on illegal drugs.

Part of the ONDCP study evaluated drug demand in order to estimate drug expenditures. Consumption estimates were based on data from several sources: 1) the National Household Survey on Drug Abuse (NHSDA), which surveys individuals about their drug use; 2) The Drug Use Forecasting (DUF) program, which questions a random sample of arrestees in central city jails and lockups about their drug use and conducts urinalysis; 3) the Drug Abuse Warning Network (DAWN), which reports on drug-related emergency room visits.

The comparatively large amount spent on cocaine is due to the relatively large base of users of cocaine (estimated at over two million hardcore users and about four million occasional users) as compared with heroin and the relatively high price of cocaine as compared with marijuana.

(continued on next page)
tens of thousands of emergency room admissions for drug-related conditions; and 4) the System To Retrieve Drug Evidence (STRIDE), which makes estimates of drug prices based on the experiences of street officers and undercover agents. By using these data sources, the study estimated the total number of users of each drug, how much of each drug users consume, and the street prices of each drug.

In addition to estimating drug demand, part of the ONDCP study evaluated drug supply. It did this only for cocaine, because reliable figures were not available for other drugs. The cocaine supply estimate was based on: 1) State Department figures on land under cultivation in major coca producing countries, crop yields, and eradication efforts; 2) data from law enforcement agencies on seizures, and 3) data from the Drug Enforcement Agency on conversion rates at various stages of cocaine processing. This information was combined through a simple model of coca cultivation, cocaine processing, and drug shipment. The resulting estimate was in close agreement with the demand-based estimate.

The study’s estimates are large, but given the estimated number of users in the United States, even modest expenditures can multiply quickly. For example, the study estimates the number of hard-core cocaine users at just over two million and puts the median users’ weekly expenditures at $221. This produces total annual expenditures of $23.3 billion (the remaining $7.5 billion of estimated cocaine spending is by occasional users).

Not all drug use produces money that must be laundered through sophisticated means. Not all use of illegal drugs generate money that must be laundered at all. Some drugs are kept by dealers for personal use, some drugs are given to users who assist dealers, and some drugs are exchanged for other services (e.g., crack cocaine is sometimes exchanged for sex). The ONDCP study estimates that such “income in kind” amounts to $3 billion to $5 billion annually, although such estimates are highly uncertain. Not all currency generated by drug sales would be laundered using electronic means. Some funds are used directly by dealers to pay for services and non-drug goods (e.g., living expenses, transportation, and firearms).


ampere, when a large cash deposit seems inappropriate from a given customer, or when other unusual circumstances mark the transaction as questionable. One simple way to do this is by checking one block in the CTR for that transaction. Alternately, banks can directly notify a law enforcement agency. About 0.5 percent of CTRs are marked “suspicious,” and only about 5 percent of suspicious transaction reports now involve wire transfers as one of the reasons for suspicion. The Criminal Division of the Internal Revenue Service (IRS) is changed with checking on suspicious transactions, but does not have enough investigators to do this consistently or quickly. Therefore, reports of suspicious transactions have in the past been used more often to support an investigation already underway than to initiate an investigation.

Banks, or bank examiners, also have the duty of filing Criminal Referral Forms (CRFs) when they believe they have detected a potential money laun-
Between 1970 and April 1983, there were 498 million Currency Transaction Reports (CTRs) filed; thereafter, the rate greatly increased, growing by nearly 13 percent per year from 1987 to the present. (Note that inflation averaged 3.3 percent) In 1994, there were 10,765,000 CTRs filed. Until mid-1993, the volume of CTRs filed far overwhelmed any attempt to investigate all of them and made it difficult to locate specific records needed to complete an investigation or to provide evidence in prosecutions. Now, the Financial Crimes Enforcement Network (FinCEN), a law enforcement support unit in the U.S. Department of the Treasury, uses the FinCEN Artificial Intelligence System (FAIS) to process every CRT. By relating this information to other BSA records, suspicious subjects can be targeted for investigation.

The requirement for a CTR applies to every transaction over $10,000. This includes cash deposits, withdrawals, and purchases of financial instruments by individuals, but it also includes deposits (and other transactions) carried out by businesses. Banks must file CTRs for the regular deposits of retail goods and services vendors such as bars, grocery stores, liquor stores, restaurants, laundromats, and gas stations whose customers often pay in currency.

Over 98 percent of CTRs are filed by banks, although other financial institutions, such as money exchangers, are also required by law to file. The banking industry maintains that this imposes a heavy and unnecessary burden on banks. In 1993, reportedly, the 368 largest banks (those with assets of over $1 billion) filed 4.5 million CTRs, and this compliance was estimated to have cost the banks $72 million dollars. The American Bankers Association says that it costs a bank from $3 to $15 to file a CTR, depending on the size of the bank, its overhead, and whether its system is manual or automatic. The IRS says it costs the federal government $2 to process and store each one.

Ninety percent of the businesses that are the subjects of CTRs are involved in 50 or fewer CTRs a year, or about one a week, while just over half of one percent filed 400 to 1000 CTRs a year, or better than one a day. About 30 to 40 percent of the currency transactions are regular and routine deposits by well-known retail stores or chains. Banks have the power to establish exemptions for regular customers of this kind, and so eliminate many of these routine filings, but most do not. Banks say that they are reluctant to use their exemption power for fear of penalties if they err on the side of exemptions. Also, most large banks have automated the CTR filing in such a way that exercising the exemption is more expensive (for the bank) than filing the CTR.

The CTRs are sent to six federal and state law enforcement or regulatory agencies and are processed in two databases. One maintained by the Internal Revenue Service in Detroit and one maintained by the U.S. Customs Service in Virginia. Because of the huge volume of CTRs, access to these data is cumbersome. The data can be used in building a case or as prosecutorial evidence more easily than in identifying money laundering activities not already under active investigation.

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1 General Accounting Office (GAO), Money Laundering: Characteristics of Currency Transaction Reports Filed in Calendar Year 1992, GAO/GGD-94-45FS, November 1993
2 John Byrne, General Counsel, American Bankers Association (ABA), compliance cost was extrapolated from a survey of 10,000 ABA member banks in 1990
3 GAO, op. cit., footnote 1
dering violation, regardless of the size of the transaction. These reports, which may be accompanied by a direct telephone notification to bank regulators or to Treasury’s Office of Financial Enforcement, are supposed to be based on reasons more substantial than the mere size of a cash transaction.

Because of the Money Laundering Suppression Act of 1994, however, new suspicious transaction reporting regulations will be issued sometime in 1995. A new form will be required, which combines the features of a suspicious transaction report and a CRF, and the duty of reporting suspicious transactions will apply to wire transfers, as well as currency transactions.

When banks began regularly to report large currency transactions, money launderers responded by dividing large deposits into several deposits of under $10,000. A number of messengers are often used to make repeated deposits in several branches of the same bank or in several banks. In legal terms, this is “structuring” a deposit; on the street it is called “smurfing,” a name derived from superactive characters in an animated cartoon. Structuring of deposits is itself now a crime.

Money could be smurfed into banks by cash deposits through automated teller machines (ATMs), and in many cases could be withdrawn through an ATM in another country. This would avoid the hazard of facing a teller with a duffel bag full of cash. However, physical limitations on ATM deposits (stacks of bills will not go through the deposit slot) and monetary limitations on withdrawals (usually $300 to $500 a day) make this kind of international money laundering impractical for most criminal organizations.

Strong anti-money-laundering policies, including criminal referral and suspicious transaction reporting, impose costs on banks and may require them to assume a quasi-governmental role in taking on some of the duties of law enforcement. U.S. banks have developed a good track record in cooperating with law enforcement. They have in the last decade put in place policies and procedures, generally described under the rubric “know your customer,” which are extolled by many bankers and law enforcement agencies. The Department of the Treasury is expected to issue formal “know-your-customer” rules in late 1995.

Some people outside of and even within the banking industry are, however, more skeptical, pointing out that such policies are not a complete solution. As criminals become more familiar with traditional customer identification procedures used by banks, they adopt new strategies or go back to reliance on old strategies such as smuggling cash across the borders and into foreign banks, from where it may be wired back into U.S. banks.

**LAYERING: STRATEGIES FOR HIDING DIRTY MONEY**

Money is still often smuggled out of (or into) the United States in the form of currency, but law enforcement agencies expend great resources trying to stop criminals from physically smuggling their cash profits across national borders, only to have the money flow without hindrance through electronic communication systems to countries where bank accounts are protected by secrecy laws.

By 1989, an American Bankers Association Task Force, while maintaining that stopping the placement of dirty cash through the bank teller’s window is the top priority, nevertheless acknowl-

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15 CRFs have been required since 1989 under 12 CFR 21.11.
16 Banks will not, however, be required to monitor wire transfers, many of which pass through the bank on automated systems (as will be explained in chapter 2), but merely to report those which do come to their attention and attract suspicion.
17 Smurfs today are typically only peripherally involved in the drug trade, earning usually 1 percent of the funds they are able to deposit in banks. They may be, for example, day laborers, janitors, or hotel maids seeking to supplement meager incomes.
edged that “Wire transactions, which are essentially unregulated, have emerged as the primary method by which high-volume launderers ply their trade.”

Suspect wire transfers are effectively hidden by the huge volume of legitimate transfers. There are about 700,000 wire transfers a day, of which perhaps from 0.05 percent to 0.1 percent represent money laundering (see chapter 4). The $300 million (or less) that is estimated to be laundered every day is dwarfed by the more than $2 trillion that is transferred by wire on an average day. Most criminal transfers are on their face indistinguishable from legitimate transactions.

Bank-to-bank transfers of aggregate funds for settlement or loans constitute about half of the total volume of wire transfers, but with the complicity of corrupted bank employees, these can also contain suspect money. The primary reasons for bank-to-bank activity are Federal Reserve funds sales and returns, securities transfers and repurchase agreements, and settlement for cash letters. Many customer-initiated transactions are one-time only, and some are infrequent transfers spaced over a long period of time. The types of relationships and level of activity between U.S. banks differ greatly from those between banks in other countries, such as Canada and Australia, according to the American Bankers Association. The number of financial institutions, the constantly changing relationships and varying levels of activity make it difficult to identify suspicious activity.

One way of getting money into the banking system, more subtle and sophisticated than smurfing, is to provide a rationale or cover for its existence as cash. Money launderers may use a legitimate business as a front, or they may use “shell companies” (corporations that exist only on paper), often chartered in another country. In choosing a legitimate business to serve as a front, money launderers usually look for businesses with high cash sales and high turnover.

International money launderers also use false invoicing. Greatly overpricing goods being imported into the United States can explain large amounts of money being wire transferred abroad. Researchers at Florida International University developed an analytical computer program to identify “irregularities” in government trade data—such as the pricing of the drug erythromycin at $1,694 a gram for imports, as compared with eight cents a gram for exports. Their results indicate frequent use of inflated invoices. A federal grand jury in 1994 indicted five importers of medical devices on 50 counts of money launder-

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20 Clifford Karchmer, “International Money Laundering: Analysis of Information on Successful Cases,” October 1987, author’s manuscript. Seymour Rosen of Citibank and Prof. Carl Felsenfeld of Fordham Law School agreed that approximately half of wire transfers are bank-to-bank transfers (i.e., not on behalf of a specific customer).
21 Jewelers and gold merchants are also favored, since the buying and selling of gold is usually conducted in cash.
Money laundering is associated with all categories of “crimes for profit” (as contrasted with “crimes of passion”), but to differing extents. Drug traffickers and other kinds of organized crime such as gambling and prostitution must struggle to get large volumes of small denomination bills to safety. The traditional American crime families, however, are thought to keep most of the money in the United States and to invest it in domestic assets; the South American cartels attempt to get the lion’s share of the profits out of this country. “White collar” crimes (embezzlement, fraud, tax evasion) seldom require the placement of cash. Typically, in fraud cases, money extracted from the victims under false pretenses is in the form of their personal checks, which the perpetrator accumulates in one or more bank accounts and then wire transfers to an account in a country with strong bank secrecy laws. In real estate fraud, developers may take out huge loans, wire the money out of the country, and then declare bankruptcy. With terrorism and illegal arms trades, the intent may be to conceal the intended destination and use of funds as well as their origin.  

There may be other significant differences in the characteristics of money laundering associated with different crimes, which further complicate attempts to define a profile or pattern by which money laundering can be recognized. Law enforcement agents believe that organized crime lords and money launderers are highly flexible and agile at shifting among these various modes of money laundering, responding to changes and improvements in law enforcement initiatives. This is another factor that complicates efforts to lay out a “profile” of characteristics of money laundering that could be used to design other artificial-intelligence-based monitoring systems.

THE GLOBAL UNDERGROUND ECONOMY

Electronic money laundering often requires the complicity of a foreign bank to serve as the immediate or final destination for illegal funds. Money launderers look for a country with a “dollar economy” or a place where U.S. dollars circulate freely—for example, Panama or Hong Kong. Especially favored are relatively or completely unregulated banks in the Caribbean nations that were formerly British colonies, for example, the Cayman Islands, a tiny British Crown Colony. On the other hand, money launderers may choose a bank in a country such as Switzerland, Luxembourg, or Ireland, which have well-regulated banking industries but also offer tax advantages and bank secrecy laws that protect financial data.

Legitimate companies also make much use of offshore banks, however, for a variety of reasons, most related to tax laws and regulatory structures, or what one economist has termed “national friction structures and distortions.” For example, U.S. banks send money to the Cayman Islands and other places to sidestep a Federal Reserve System (FRS) requirement that a percentage of deposits
held in the United States be placed with the reg-

ional Federal Reserve Bank (FRB) each night in a reserve account that does not bear interest. Banks with a high volume of corporate accounts, reluctant to forego interest on this money (or to de-

prive their customers of interest) even overnight, may establish a branch overseas, “creating profit centers from which profits may be repatriated at the most suitable moment for tax minimiza-

tion.”

Both multinational corporations and individual investors may place money offshore for reasons related to cash management. The Euro-
dollar market is based in offshore banks. As one economic geographer says, “Offshore finance is an essential and characteristic element of the contemporary world financial system.”

There are now at least 30 “international off-

shore financial centers.” At present, the Cayman Islands alone boast 546 banks, including branches of 44 of the world’s 50 largest banks, more than any cities except New York and London. The Caymans also have about 600 mutual funds and 400 insurance companies (see box 1-4).

These uses of offshore banking centers are le-

gal, and probably discourage any strong pressure by the U.S. government on other governments to restrain offshore banking. They also make it more difficult to distinguish transnational money laun-

dering from legitimate commercial operations. Thus, Under Secretary of the Treasury Ron Noble speaks of international money laundering as “crime hidden in the details of legitimate com-

merce.”

Some banks in other countries may remain profitable, or may even be kept afloat, only because of the high volume of illicit money that enters or resides on their books. However, even the infamous Bank of Commerce and Credit Interna-

tional (BCCI), while it was deeply engaged in money laundering, was a legitimate and profitable bank in some of the countries in which it operated.

Complicity in money laundering has now be-

come extremely risky for U.S. banks and bankers. Bankers may be jailed if convicted of complicity. The Department of the Treasury has the authority to levy monetary penalties for failure to comply with anti-money-laundering laws, and regulators are required to commence a proceeding to revoke the charter of a financial institution convicted of a BSA crime. Regulators do not wish to revoke bank charters except in extreme circumstances, since this would harm stockholders, hence there is sometimes reluctance to prosecute a banker. In fact, no bank charter has been revoked on the basis of BSA violations, but few U.S. banks are willing to take these risks except perhaps some nearing insolvency or owned or controlled by criminal organiza-

ng.

Some law enforcement officers argue that some foreign banks operating in the United States “lack a strong compliance ethic,” because their home country traditions and culture emphasize bank se-

crecy. Overseas branches or offices of U.S. banks may also be a problem; the Office of the Com-

troller of the Currency, which regulates national banks in the United States, can examine records of


29 Eurodollars are U.S. currency circulating outside of the United States, originally as a result of U.S. foreign aid after World War II and later as a result of chronic trade imbalances. (See box 1-4). In the 1960s, because of U.S. banking law and regulations (Regulation Q and the Interest Equalization Tax of 1963, for example), trading in Eurodollars abruptly moved from New York to London and offshore financial centers. See Susan Roberts, op. cit., footnote 28.


31 “Cayman Islands,” Euromoney, October 1994, pp. 40-46; Michael Schachner, “Big Spurt of New Captives for Cayman,” Business Insur-


32 FinCEN, Year End Review 1994, p. 5.
their foreign branches only with the permission of
the host country. Countries with strong bank se-
crecy laws, including France, Germany, and Italy,
do not give access to U.S. examiners.

Most of the knowledge that U.S. law enforce-
ment agencies have about international money
laundering and the criminal organizations that use
it, is drawn from experience with western hemi-
sphere drug trafficking. Less is known about the
heroin trafficking industry, especially that based
in Southeast Asia, and the flow of money
associated with it. In 1984, a Department of the
Treasury analysis found that a large increase in
small-denomination U.S. currency repatriated
from Hong Kong to the United States appeared to
parallel the increase in Southeast Asian heroin
marketed in the United States. In the early 1980s,
a National Intelligence Council document is said
to have reported that “. . . the lion’s share of heroin
money probably is handled within Asia by the
Chinese underground banking system.”

The explosion of organized crime in Russia,
other former members of the USSR, and Eastern
European nations also enormously increases op-
portunities for international money laundering. In
1994, General Mikhail Yegorov, head of the Organ-
ized Crime Control Department of Russia’s Min-
istry of Internal Affairs, told a group of U.S.
Senators that first on his list of professional con-
cerns was “financial operations involving laun-
dering of money [and] the penetration of these
criminals groups into the economy of our coun-
try. It was said at that time that nearly one quar-
ter of the banks in Moscow are controlled by
organized crime groups.

PROFESSIONALIZING MONEY
LAUNDERING

Money launderers are increasingly sophisticated
in manipulating financial systems and instru-
ments. Professionals who have become white col-

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33 The Sicilian Mafia launder the proceeds of their own organized crime activities, often by commingling with the proceeds of Mafia-owned legitimate businesses; they are said to act also as money launderers for other criminal organizations or as brokers for independent money launderers. Jamieson, A., “Recent Narcotics and Mafia Research,” Studies in Conflict and Terrorism, vol. 15, No. 1, January-March 1992, pp. 39-51. See also Mark Richard, Dep. Asst. Attorney General, Criminal Division, Dept. of Justice, in Federal Government’s Response to Money Laundering Hearings, before the Committee on Banking, Finance, and Urban Affairs, U.S. House of Representatives, 103rd Cong., 1st Sess., May 25-26, 1994. Greg Meacham, former chief of the Money Laundering Unit of the FBI, believes that because the American Mafia is a domestic organization very little of their drug profits go overseas, and they are not heavily involved with international money laundering. (Interview, March 14, 1992). Other experts point out, however, that since the U.S. government began aggressively pursuing the seizure of illegal assets, the American Mafia has had ample reason to seek shelter for its profits overseas.


36 Ibid., p. 2.
By some estimates, up to two-thirds of the nearly $380 billion of U.S. currency in circulation in 1994 was either overseas or "in the underground economy" and unaccounted for. Of all U.S. $100 bills, 69 percent are said to be overseas. U.S. Customs officers report that about 60 percent of all new U.S. bank notes are going to Eastern Europe and the former USSR; many people in these countries keep all of their savings in U.S. currency, believing in its integrity and stability. In Panama and Liberia, U.S. dollars are the primary currency.

U.S. currency is carried overseas by travelers and spent there. It is sent overseas in regular large shipments by money center banks, to foreign financial institutions or to governments; or it is sent by other U.S. banks and businesses as a service to their customers overseas. As proceeds from criminal activities, it may be smuggled out of the United States. Foreign financial institutions commonly return only worn or damaged U.S. currency, or—less often—surplus bills not expected to be needed.

The information just cited applies to currency. But about one-sixth of "M1," which includes all kinds of demand deposits and travelers checks as well as currency, is thought by some observers to be outside of the United States. This is about $2 trillion. Transactions between large multinational corporations (regardless of their country of origin) are usually conducted in these "Eurodollars," especially trade in commodities such as oil, coffee, sugar, gold, and silver.


lar criminals provide "the link between the underworld and limitless commercial and financial opportunities in the legitimate sector" of the economy. These are often lawyers or accountants.

In the large drug trafficking operations or cartels of South and Central America, there is generally an effective separation between the part of the organization actively involved in drugs distribution and that which provides money laundering and reinvestment. In most cases, the actual money launderers are not cartel employees but contractors, often serving several drug trafficking organizations. Colombian cocaine cartels are said currently to pay contractors a 20 percent fee for money laundering; the contractors give the cartel a certified check for 80 percent of the dirty cash, up

"Clifford Clifford and Douglas Ruch, "State and Local Money Laundering Control Strategies," National Institutes of Justice Research in Brief, October 1992. OTA was told by law enforcement personnel and also by a convicted money launderer (who himself fit this profile) that money launderers (except for "smurfers" and smugglers) were typically well-educated professionals. However, an analysis by the U.S. Sentencing Commission of the 943 persons convicted of money laundering in 1992 showed that 17.7 percent were college graduates and another 25.9 percent had some college training. ("Convicted Launderers Fit White-Collar Profile," Money Laundering Alert, December 1993, p. 2.) It maybe that those with most professional training are more successful and less likely to be caught or convicted.

"FinCEN, An Assessment of Narcotics-Related Money Laundering, FinCEN Reference Series, Redacted Version, July 1992. The lower level drug distributors must launder only their own salaries or commissions, and are likely to do this either through depositing the money into local banks or smuggling money across a land border.
front, and themselves assume the risk of cleaning it.\textsuperscript{39} The cartels operate much like large multinational corporations, and their money laundering operations are becoming global in scope. Three Colombian drug kingpins—Pablo Escobar, Jorge Ochoa, and Jose Gacha—were in Forbes’ list of the world’s billionaires in 1988.\textsuperscript{40}

Financial institutions and their wire transfer systems provide the battlefield for the struggle to control money laundering. The internationalization of financial services has created a highway for the movement of the profits of international crime.\textsuperscript{41} Much of the money from drug trafficking is thought to return to this country after being laundered, either to pay wages, bribes, commissions, and other expenses, or for investment in legitimate businesses, real estate, or the securities market.

The great importance of this reverse flow to criminal organizations has sometimes been overlooked in law enforcement detection strategies. These strategies tend to focus on the flow of illegal profits out of the United States rather than reinvestment in the United States. The two-way flow, in theory, offers a double opportunity for detection and seizure, but the illegality of funds is far more difficult to detect and document on the return trip.

Law enforcement agencies are becoming more aware of this problem, and in early 1995, the New York Stock Exchange for the first time took action against a member for failure to monitor the receipt of suspicious cash, money orders, and wire transfers.\textsuperscript{42}

Securities houses are obligated by the Annunzio Wylie Anti-Money Laundering Act of 1992 to report large currency transactions and use of foreign bank accounts by American customers. Brokerage houses may be prosecuted for participating in money laundering, and customers’ funds being held by the brokerages as collateral (i.e., margin) may be seized in forfeiture actions. Few CTRs are in fact filed, because it is unusual for securities transactions to be settled in cash and few securities firms will accept cash from a customer. The 1992 act authorized the Department of the Treasury to write rules requiring all nonbank financial institutions such as securities houses to have anti-money-laundering compliance programs, but these rules have not yet been issued. They are expected to require broker dealers to file suspicious transaction reports,\textsuperscript{43} including “the use of wire transfers and other complex transactions or devices by the firms’ clients to hide the illicit sources

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\textsuperscript{39} Interview with Greg Meacham, Chief of the Government Fraud Unit, Federal Bureau of Investigations, March 14, 1994. The Colombian criminal organizations known as the Medelin Cartel and the Cali Cartel have dominated global trade in cocaine. The Medellin cartel leader, Pablo Escobar, was killed by Colombian law enforcement authorities on Dec. 2, 1993, after a 17 month manhunt; this is reported to have “effectively dealt the \textit{coup de grace} to the organization.” (U.S. Dept. of State, \textit{International Narcotics Control Strategy Report}, April 1994, p. 1.)

\textsuperscript{40} By 1993, however, only Escobar—estimated worth $1 billion—was on the Forbes list, and the others were in jail; by the time of the 1994 list, Escobar had been killed. For more about these men, see Guy Gugliotta and Jeff Leen, \textit{Kings of Cocaine: Inside the Medellin Cartel} (New York: Simon and Shuster, 1989).

\textsuperscript{41} Some law enforcement experts suggest that more than half of the dollars generated by the sale of illegal drugs in the United States flow out to South American drug cartels.

\textsuperscript{42} The New York Stock Exchange (NYSE), a self-regulatory organization, fined the Adler Coleman Clearing Corp. $75,000 for failing to have in place procedures required by Securities and Exchange Commission (SEC) regulations. A year earlier the NYSE disciplined another member found to have commingled a large amount of cash from a customer with money of his own without reporting it, although his firm’s policy was to ask clients who wanted to pay with cash to exchange it for a cashier’s check. \textit{Money Laundering Alert}, February 1995, p. 5.

\textsuperscript{43} About 300 suspicious transaction reports per year are filed by securities houses, generally by checking a box on a CTR. As noted, cash transactions are rare in the industry and therefore may usually be regarded as suspicious. (Alexandria Peers, “Brokers Probed in Laundering of Drug Money,” \textit{The Wall Street Journal}, Sept. 21, 1994, p. A3).
of their funds.” They will also probably provide a “safe harbor” against customer suits for such reporting. At present, since no tax withholding is necessary for foreign investors, such investors’ social security numbers need not be recorded and their securities can be registered under the name of a lawyer or a fictitious company.

Several kinds of specialized bank accounts, in conjunction with wire transfer services, invite misuse by sophisticated professional money launderers. “Threshold accounts” are programmed so that when the funds in the account reach a predesignated level, they are automatically wired to a foreign account. The foreign account could be a “cupo account,” which registered U.S. export/import companies maintain in a foreign country; cupo accounts are allowed to receive a certain quota (“cupo”) of U.S. dollars. The export/import company may itself need only a portion of this dollar allowance, letting it be known that the account can also—for a fee—serve as a haven for drug-trafficking profits wired into the account from the United States.

Foreign firms may establish master correspondent accounts in a U.S. bank as “payable-through accounts.” They then give their foreign customers signature authority to use the account to transact business in the United States, including the use of wire transfer services and the right to make cash deposits and withdrawals. The foreign customers are generally known to the U.S. bank only as a name, thus subverting the “know your customer” policy. Payable-through accounts are thought to have become much more common as foreign banks found it harder to get approval to operate in the United States following the BCCI scandal. However, no one knows how many such accounts are held by foreign banks, or how many of their customers have been allowed to use the account, for a fee. Some reports say a single account may be used by thousands of individuals and by other foreign banks. The FRS and the Office of the Comptroller of the Currency (OCC) in March 1995 issued new guidelines, asking banks to tighten rules governing the use of the accounts and to insist on having information about every authorized user.

NONBANK MONEY TRANSMITTERS

Banks have been the chief focus of attempts to control the use of wire transfers for money laundering, but there are also an estimated 200,000 nonbank money transmitters. These are businesses that specialize in transferring money for customers, usually individuals; most also sell money orders and travelers checks. They range from large national enterprises like Western Union and Interpayment Services to small neighborhood businesses. The latter may specialize in services such as sending the wages of recent immigrants back to their families at home. In many cultures, people have always relied on informal, personal financial services, often provided by a wealthier neighbor or “patron.” The use of small nonbank money transmitters perpetuates this tradition. Their activities often have a narrow geographical or ethnic focus. This is the segment

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44 Quoted from a memorandum from Branden Becker, Director of SEC’s Division of Market Regulation, to Arthur Levitt, chairman of the SEC, Oct. 28, 1994, providing a response to questions posed on Sept. 21, 1994, by Rep. Edward Markey, then chairman of the Subcommittee on Telecommunications and Finance of the House Committee on Energy and Commerce. Mr. Markey asked about the responsibilities and activities of the SEC with respect to enforcement of anti-money laundering laws. His questions were prompted by an article appearing that day in The Wall Street Journal (Alexandria Peers, “Brokers Probed in Laundering of Drug Money,” p. A3) reporting that major brokerage houses were being investigated for violations of anti-money-laundering laws. These allegations were denied by the Office of the U.S. Attorney for the Southern District of New York, according to a later article in The American Banker (Shannon Henry, “U.S. Denies a Report It’s Probing Brokerages for Money Laundering,” Oct. 6, 1994, p. 9).

45 Mike Rosenberg, FinCEN, “Wire Transfer Presentation.”


47 Interpayment Services is the company that sells American Express Travelers Checks.
of the industry that is most often suspected of involvement in money laundering, but large nationwide firms have also been used by launderers. Check cashers and sellers of money orders provide necessary services for people who do not have bank accounts and neighborhoods that have been ignored or disdained by banks. The problem is that check cashing services may receive illegally earned currency and use it to cash legitimate checks for their customers, thus avoiding CTRs; or they can structure transmittals by issuing multiple travelers’ checks and money orders for less than $10,000 each.

A task force appointed by the State of Florida to study the money transmitter industry concluded that it is increasingly being used by money launderers, but emphasized the value of the industry. Money transmitters “play a vital role in facilitating international trade and both foreign and domestic tourism,” and the economies of many small countries would be seriously damaged without remittances from immigrants to the United States.

Currency exchange booths (casas de cambio), check cashing services, and giro houses (neighborhood money transmitters) are usually used by money launderers on a relatively small, “retail” scale. They are reportedly used by drug cartels mostly for internal (intracartel) business such as employee payments, while the big profits flow through banks. A casa de cambio changes currency for travelers at a border, or can exchange currency for “bearer” monetary instruments that are readily fungible. In Colombia, for example, U.S. money orders are “as negotiable as cash,” according to U.S. Customs agents. A giro house can simply deposit the wages of an Honduran immigrant, for example, in its bank in Houston (aggregating it with other funds collected that day), and fax its agent in Honduras instructions to withdraw the same amount—less a substantial fee—from the giro house’s disbursement account in an Honduran bank and turn it over to the immigrant’s family. Alternatively, the giro may instruct its Houston bank to wire transfer money to an Honduran bank for disbursement to the family. The giro house—although legally required to file a CTR if the funds amount to more than $10,000—has ample opportunity to launder money by aggregating funds in its account at either end and by concealing the real identity of the sender and recipient. In any currency transaction over $10,000, both the money transmitter and its commercial bank should file a CTR covering that transaction, but this often does not happen. Some state law enforcement officials argue that most giro houses exist only to serve the

48 On June 2, 1994, two private bankers working as agents for American Express Bank International were convicted of 11 counts of money laundering, four counts of deceiving Federal Reserve examiners by false representation, and two counts of bank fraud. (Note that American Express Bank International, a part of American Express, is not technically a money transmitter since it no longer is the seller of the travelers checks.) For a customer identified as a gasoline station attendant in Mexico, they had formed companies, opened bank accounts in Switzerland and the Cayman Islands, and sent and received “countless wire transfers of seven figures.” The customer was in fact a money launderer for major Mexican drug trafficking operations. The American Express officials had falsified records about the customer in order to make them appear to conform to the bank’s “know your customer policy.” “Bank’s Know Your Customer Policy Helps Sink its Officers,” Money Laundering Alert, July 1994, p. 3. The two individuals were sentenced to terms of 10 years and 42 months, respectively. American Express Bank International was not criminally charged but entered into a settlement agreement, which required the company to pay $35.2 million, in order to avoid a civil suit and separate forfeiture action. “Am Ex Bank Unit Pays $35 million in Laundering Case,” Money Laundering Alert, December 1994.


50 However, a Los Angeles cocaine ring owned a check cashing service through which it laundered $4 million per month. (U.S. Dept. of State, International Narcotics Control Strategy Report, April 1994, p. 480).

money laundering needs of drug traffickers, because the legitimate income generated by a giro would not be sufficient to sustain the operation.  

Forty-two states regulate check cashing and sale of money orders through licensing and bonding requirements. Only California and New York have separate statutory provisions regarding their funds transfer activities. The Money Laundering Suppression Act of 1994 (signed September 23, 1994) requires all money transmitters to register with the U.S. Department of the Treasury and expresses the “sense of Congress” that states should enact uniform laws regulating money transmitters. Although the money transmitters are classified as financial institutions, they are not depository institutions and therefore operate through accounts with commercial banks. In terms of wire transfers, the neighborhood giro houses are merely another link in the chain from originator to bank to wire transfer system to another bank (or banks) to the final beneficiary. Their intermediation can further obscure the trail of illegal money, as they lump together the funds of many senders and recipients in making their own deposits and transfers. A bank may not recognize that one of its accounts is servicing a money transmitter.

New wire transfer regulations, to be discussed in the following chapter, will regulate recordkeeping by money transmitters as well as other kinds of financial institutions. Until these regulations, neighborhood money transmitters have necessarily created records for their own use, but these were usually limited to the amount of the transfer, the identity of the sender, and the name and location of the intended recipient.

There was usually no computerized record or database that could easily be searched by law enforcement officials, even with a search warrant.

THE OUTLOOK

Neither voluntary “know-your-customer” policies nor cash reporting requirements have yet succeeded in blocking the access of money launderers to the legitimacy and convenience afforded by bank accounts and access to wire transfer services. Nor is it expected that new know-your-customer or reporting regulations will solve the problems. Such regulations may become even more ineffective in the future for several reasons:

- the full-scale automation of wire transfer services, with more and more users having online access, and correspondingly less human intervention or monitoring;
- the tremendous growth in the volume and scale of international and multinational trade and business transactions, which obscures the parallel growth of illegal international operations,

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52 Interview with Michael P. Hodge, project director, and Thomas R. Judd, special counsel, Criminal Justice Project, National Association of Attorneys General, Aug. 9, 1994. Hodge and Judd noted that many giros appear to be set up for the purpose of clearing a specific “stash house” by writing fake receipts, and often disappear six or eight months after they are licensed—to reappear in another location and under a different name.


54 A new Internal Revenue Service form was shown to the industry in draft (Form 9742) in April 1995, and will soon be published for comment.

55 The law applies to businesses that cash checks, exchange currencies, issue or redeem money orders and travelers’ checks, and transmit or remit money. It makes operation without a state license (where states require such license) a federal crime.

56 In June 1994, U.S. Customs Service agents arrested 14 “subagents” of Vigo Remittance Corp. for money laundering. They had repeatedly transmitted money for undercover men posing as drug dealers, falsifying accounts accordingly. The company, which operates through 500 independent subagents in 35 countries, is alleged to have “failed to utilize existing computerized internal controls. . . and turned a blind eye toward the detection and prevention of money laundering by their subagents.” The subagents deposit or wire the money to the company’s accounts before it is sent on to its final destination. “U.S. Charges 14 Agents of Money Transmitter,” Money Laundering Alert, July 14, 1994, p. 3.

57 Typically, one copy went to the sender, one to the money transmitter’s “foreign correspondent” (the agent or business that made the actual payment to the recipient), and a third was retained.
and puts pressure on banks to automate all services and make them widely accessible;
- the interdependence of financial institutions and clearing mechanisms around the world, which together with the speed of wire transfer systems, increases systemic risk and further discourages any intervention that may slow or interrupt payment systems;
- growth in the number of correspondent relationships between U.S. and foreign banks, and increasing use of specialized bank accounts than can be accessed by customers of foreign correspondent banks;
- The development of money management services, foreign exchange trading, swaps and derivatives trading, and other financial services with characteristics that resemble those thought by law enforcers to be characteristic of money laundering, thereby providing cover for illegal money operations;
- immigration patterns encouraging the proliferation of nonbank money transmitters, widely dispersed and more difficult than banks to regulate and monitor; and
- the expected emergence of new modes of payment, such as digital cash.

The ability of law enforcers to delineate a “profile” that can be used to spot money laundering appears to be limited by the following factors:
- the willingness of launderers to shift rapidly among laundering strategies such as physical smuggling of cash, conversion to monetary instruments, reliance on wire transfers, and use of nonbank money transmitters;
- the wide range of covers for wire transfer transactions: shell corporations and front companies, false invoicing, etc.;
- the similarity of illicit operations and legitimate operations, especially in businesses with high cash turnover;
- the growing professionalism and expertise of white collar money launderers; and
- lack of knowledge of characteristics of non-drug-related money laundering, and of money laundering associated with drug trafficking outside of South America.