

## **Money-Laundering with Derivatives**

Wolfgang Hafner

Geneva, Sept. 2001

1. Money-laundering as ordinary Business
2. No money-laundering through cash-transactions in industrial countries
3. Money-Laundering: Instruments replace transactions
4. Derivatives: The different markets
5. Derivatives: The different types
6. How a swap works
7. How to launder money in the derivatives-market
8. Bunched orders or how the US-Government made it easy to launder money with derivatives
9. Money-laundering with derivatives is no issue

1. Money-laundering as an ordinary business

Money-laundering is a mechanism that conceals the illicit origin of property. A mechanism that works as a firewall against detection and subsequent confiscation of such property. How this mechanism functions depends on the stage of development of a given financial system. The methods of money laundering are being developed according to the dynamics of challenge and response between the law and the offender. On one side there are those who try to erect a firewall against confiscation. And on the other side there is the law of the national state trying to remove this wall and collect the dirty money.

Money-launderers behave like normal business-men as Ingo Walter wrote in his book "The secret money market". The demand for hidden money varies depending on the customer's motivation. And the cost of secrecy varies with the risk. Different kinds of assets have different rates, returns and costs. More secrecy costs more money. And of course here plays also the Economy of Scales influenced by politics. The Bank of New York - for example - where huge sums of Russian money was laundered seems to have no bigger problems with the wrongdoing.

So the process of money-laundering could be seen as an ordinary business. It follows the law of all economic development with innovations as a response to bottlenecks. The

famous economist Joseph A. Schumpeter defined innovations as “the setting up of a new production function.” And, to quote Schumpeter again: “Innovations do not remain isolated events, and are not evenly distributed in time, but on the contrary they tend to cluster, to happen in bunches.” In the present context this means that other techniques using financial instruments as derivatives or the Internet could also be used to erect a firewall. Nevertheless, we are restricting our discussion to derivatives.

The main result of this development is visible in historical perspective. Looking back in time reveals how money laundering has evolved from low tech in a small environment to high tech in a globalized world. In the second half of the 19<sup>th</sup> century all a bank robber like Jesse James had to do when the job was done was to leave town and deposit the stolen cash in a bank account in the next town. In those times of the Wild West money in a bank account was as good as clean money.

But by the time of the roaring twenties putting dirty money in a bank account was not enough any more. The laundrymen also progressed, adding new features to their business: cross-border transactions and the use of different jurisdictions. For instance take the Canadian accounts of Chicago mobster Al Capone. Or the invention of tiny Liechtenstein as a tax haven for rich Germans by some lawyers from Zurich. Liechtenstein also served as an escape from the German currency embargo in the twenties and thirties.

Sixty years later, when the war on money laundering began in the mid eighties, even the smartest mix of domestic and cross-border transactions proved to be fallible. The relations between Italy and Switzerland are a good example of this development. Until the breakthrough of a group of Milan prosecutors called 'mani pulite' or 'clean hands against corruption' in January 1993 there was an impenetrable wall between the police and judiciary (tschudischeri) of the two countries. Since the beginning of 'mani pulite' in spring 1992 the Swiss authorities have received more than 1000 letters from the prosecutors' office in Milan asking them to lift banking secrecy, which they did in most cases. But Americas clocks work different. As a report from the US-General-Accounting-Office tells money-laundering through cross border-transactions is still possible on a large scale in the USA. Even if the money originates from Russia.

## 2. No money-laundering through cash-transactions in industrial countries

This improvement in cross-border co-operation not only happened between Switzerland and Italy. Under the guidance of the G-7-states the combat against money laundering got tighter in all developed countries. During the nineties as a consequence the rather cash-oriented way of laundering money disappeared in developed economies. To quote Peter Qurik, an IMF-researcher: "The result (for the nineties) suggests that in industrial countries, proceeds of tax evasion, like those of crime, are no longer laundered primarily through cash transactions."

This raises the question, whether this development is reflected by the regulatory boards and if their concept still functions in a world of high developed labour division, where one does not understand and at least does not want to know what the real sense behind a financial transaction is. And even “tough” fighters against money-launderers like

Transparency International capitulate confronted with the complexity of the issue. In the Wolfsberg Principles they wrote: "The private banker will perform due diligence on the intermediary and establish that the intermediary has a due diligence process for its clients, or a regulatory obligation to conduct such due diligence, that is satisfactory to the bank." The principles are rather swampy. The principles put the know-your-customer-burden on the shoulders of the intermediary. You can take it also as "I am not responsible if money is being laundered; the intermediary is responsible." A very easy way out of the problem.

Two English criminologists, Michael Gold and Michael Levi did a study of the suspicion-based reporting of money laundering. They found: "Few of the cases we looked at could be described as sophisticated money-laundering ... They were often rather amateurish attempts to bank the proceeds of crime, using some precautions but insufficient to conceal the suspicion.... This is not to argue that more sophisticated laundering does not exist: rather it indicates that such sophistication is not caught by the present system of suspicion." And this is where derivatives, the wild card of international finance, come in as a globalized and sophisticated financial instrument. For the money-launderer this was part of a real innovation: Financial Instruments replacing transactions.

### 3. Money-laundering: Instruments replace transactions

Within the last twenty years derivatives have evolved from an obscure instrument for speculators into a pillar of today's global capitalism. They have moved to the financial mainstream and now operate on a par with their more traditional counterparts, stocks and bonds. But do not think derivatives are a new development. They are as old as trade. Here for example you have two derivative-contracts from the time of Hammurabi 4000 years ago. In one contract a female trader pays in advance a sum of money for grain delivered after the harvest. The other contract is a promise for the delivery of slaves. And, what makes this contract really modern, it was possible to sell the contract.

Modern derivatives come in three varieties: forwards, options and swaps. Basically they are a bet on the direction of price movement of some underlying value, which can be a commodity, a financial asset, foreign exchange or an index thereof. The party betting that the price of the underlying value will go down is said to be "short" on the contract. The party betting that the price of the underlying value will go up is said to be "long" on the contract. If the price of the underlying value moves there will be a winner and a loser in respect to the contract. If the price goes up, the long side will win. If the price goes down, the short side will win. Generally anyone can sell a derivative (subject to their credit) and anyone can buy a derivative (subject to their paying for it).

So much for the working mechanism of derivatives. The key to money-laundering with derivatives is to manipulate the two sides of the contract in such a way that the losing side is associated with the dirty money. Thus the winning side gets clean money from successful futures, options and swap contracts - a well-defined, legal and economically legitimate source of income.

Derivatives are complex financial constructions. Ask an accountant about derivatives and

he will tell you that it is nearly impossible to understand the real deal behind a complex derivative construction if he did not construct the instrument himself. The prime opportunity for laundering lies in this complexity. And, as the FATF-report remarks: A high volume of activity on the market is essential to ensure the high degree of liquidity for which these markets are known. The way in which derivatives are traded and the number of operators in the market ensure that there is the potential obscuring of the connection between each new participant and the original trade. No single link in the series of transactions will likely know the identity of the person beyond the one he is directly dealing with.

#### 4. Derivatives: The different markets

The majority of trades are in over-the-counter (OTC) products. Those privately negotiated contracts are provided directly to end-users and contain mainly foreign exchange- and interest rate-derivatives. Especially the OTC-market as a wholly privately organised market has until now not been subject to regulatory oversight as the Commodity Futures Trading Commission as well as the Bank for International Settlement can tell you.

Well known are the so called standardised contracts sold on exchanges. The conditions of these exchange-traded derivatives (quantity and quality of the underlying good, contract period) are standardised.

Another derivatives market is the hedge fund industry. Hedge funds often are investment partnerships operating out of offices in New York or other US cities, but the legal corporation is hidden away, offshore, far away from the prying eyes of US-regulators and tax authorities. Hedge-funds are heavily leveraged by borrowing and use derivatives. Fortune magazine estimated that there were more than 3000 hedge funds in 1998. The managers of these speculative funds place large bets on the direction of price movements and get good money. Each year about half of the top 20 names on the Financial World list of Wall Street's highest-paid professionals are hedge-fund managers. But also the famous Long Term Capital Market was a hedge fund, being betted in the wrong directions - the outcome was fatal for UBS. *That UBS has lost much money is no accident. Swiss banks are heavily involved in hedge-funds.*

In most countries such hedge funds are not at all controlled by financial regulators. They have nevertheless a very big influence on the international financial markets. Last November for example the Ecuadorian government was not able to meet debt payments. If - so the New York Federal Reserve Board - the hedge funds do not stay clear, the Ecuadorian debt restructuring would have descended into chaos and international financial destabilisation.

And with the modern means of communication there also is a lack of transparency. Beside the exchanges and the phone-based-otc-deals there evolved - thanks to the Internet - the so called Electronic Communication Networks or ECN. ECN's are alternative trading systems which disseminate the price and size of open orders and match buyers and sellers of securities over an electronic network.

For the ECN's anonymity is a very important issue. Connected to one of the nets, you can - for example - enter a larger order than you wish to have displayed in the system. You are allowed to make discretionary orders which enable you to set a more aggressive price for your order without "exposing your hand" to the market. These tricky possibilities help to conceal a money-laundering-mechanism and are therefore quite useful for money-lauderer to do their business.

ECN's are no extraordinary construction. Tradepoint, the London-based-stock-exchange and joint-venture-partner of the Swiss Exchange (SWX) was mainly founded by two ECN's: By Instinet, a firm owned by Reuters, and by Archipelago, owned by big American investment firms.

## 5. Derivatives: The different types

First you have heard some information about the market places where derivatives are being dealt. And now I will give you a short overview about derivatives and how they are used. Generally there are three different - lets say vanilla - types of derivatives:

- Forward
- Option
- Swap

Forwards : A forward contract obliges one party to buy, the other to sell, a nominated underlying at a specific price, quantity and date in the future. The underlying could be the interest-rate, a currency a commodity or anything else. The change in value in a forward contract is broadly equal to the change in value in the underlying. One of the contract-partners expects - for example - a higher interest-rate in future and the other partner has a contradictory view. At the end of the committed period one side will win, the other lose. Financial Futures, the standardised variation of a forward, are purchased or sold at a stock-exchange.

A call option confers upon the holder the right (but not the obligation) to buy the underlying contract or instrument at a fixed price during or at the end of the option period, whatever the case may be. On the other side a put option confers upon the holder the right (but nor the obligation) to sell the underlying at a fixed price. Options could be standardised , which means being dealt on stock exchanges or privately negotiated.

A swap transaction commits the participants to exchange cash flows at specific intervals. Those intervals are called payment or settlement dates. Except with currency swaps, the notional principal is used to calculate the payment stream. The principal itself is not exchanged. The vast majority of swaps are classified into the two following groups:

- interest rates
- currency

All swaps are otc-contracts.

## 6. How a swap works

Whereas the details of a swap may be complicated, the basic idea of an interest-swap is very simple. Two parties take out loans and swap the interest payments. Each party, rather than paying the interest on its own loan, pays the interest on the loan taken out by the other party. Let's have a look at an example: A Swiss multinational corporation wants to build up a net of retail-sellers in Switzerland. The corporation is very well known and can therefore borrow at a very good rate both in the direct market and the indirect market. The corporation needs for this investment about 10 Million Swiss Francs.

On the other side a small Swiss research-firm needs 10 Million for a long-term research-project. How does the swap work now? for a long-term investment the big corporation gets the money for a better price from the bond-market, then the small research-firm. The big corporation also gets the money for a better price from a bank

Because it is not well known, the small Research-Firm has to pay a much higher price for a bond-loan, than the international corporation. But compared to the prices for a bank-loan the difference is rather smaller. This means that, compared to the corporation, the research firm has a comparative advantage in bank loans; it is at a smaller disadvantage compared to the corporation when it borrows from a bank than when it borrows in the bond market.

On the other side, compared to the Research-Firm, the corporation has a bigger advantage in the bond market. Although it has an absolute advantage in both types of borrowing - it can borrow more cheaply than the Research-Firm in both - its advantage over the Research-Firm is greater in the bond-market.

Shown in numbers the borrowing Rates for the corporation and the research firm are:

	Corporation	research firm
Bank loan (floated)	5.1%	5.9%
Bonds (fix)	9.0%	11.0%

If you look at the net interest payments you can see the advantage for both under this contract. (all numbers in %)

Corporation

Pays on the bond	9.0
Receives from RF	10.0

Pays to Research-Firm	5.6
Net-Payment (floated)	4.6

#### Research-Firm

Pays to bank	5.9
Receives from Corporation	5.6
Pays for Corporation	10.0

Net-Payment (fix)	10.3
-------------------	------

With a swap it was possible to separate the credit risk from the interest-risk. Bond-markets perform better with fixed interest-rate-loans than banks, which are used to deal with smaller firms. Banks often have better information and are better at monitoring loan performance and are more flexible in dealing with repayment problems.

Currency-Swaps are similar to interest-rate-swaps. If - for example - a Swiss Corporation wants to invest in the United States, the capital would be rather expensive. The same would apply for an American Firm investing in Switzerland. So it costs both less, if they take loans in their own country, give the loan to the other party and let it pay the interest-rate.

## 7. How to launder money in the derivatives-market

The basic mechanism of money laundering with derivatives is simple. Just make sure you lose the dirty money in a derivative contract and put yourself in a position to lay your hands on the clean derivatives gain on the other side of the contract.

Let's take for example the above mentioned interest-swap. So could a Japanese investment firm with connections to the Yakuza have a contract with an Italian investment firm, owned by the Mafia. As long as agreed in the contract they can exchange interest-rate-payments on an underlying amount between Japan and Italy. One interest rate could be fix, the other floating. If the floating interest-rate goes up, corresponding to the LIBOR, then money is laundered for one party; if the LIBOR goes down, money is laundered for the other party. Should the swap launder money for both parties you need a second contract with similar conditions for the other side.

But as often is the case, the devil lies in the detail. To be able to exploit the laundering potential of derivatives you need to know the mechanisms of these financial instruments as well as of the global derivative markets.

The following typology is provided by the latest Typologies Report February 1999 (case

No 9) from the Financial Action Task Force FATF as an example of how funds can be laundered using the derivatives market.

This is the first time that the leading group of global money laundering experts gathered around the FATF table in Paris have mentioned this particular laundering method. Even though this trick has been known since Syed Ziauddin Ali Akbar from BCCI's derivatives arm Capcom explained it to undercover Agent Robert Mazur from US-customs way back in 1988. Let me quote the most important section out of the Kerry Report, a report that has been made for the US-Senat: "In testimony to the Subcommittee, Customs agent Robert Mazur testified how Akbar used "mirror-image" trading to launder huge sums of money. Mirror image trading involves buying contracts for one account while selling an equal number from another account. Since both accounts are controlled by the same individual any profit or loss is effectively netted. According to Mazur, Akbar explained that because these "mirror image" transactions can be lost among many millions of dollars worth of legitimate transactions "it would take forever for anyone to ever find it."

As a rule, money laundering experts are still focused on cash-transaction based laundering involving offshore-banks, corrupt lawyers, gangsters and the like.

But the world financial markets are competitive and innovative. And in their dark but nevertheless growing money laundering sector the forces of competition and innovation have replaced yesterday's Lombroso type craftsman with a new breed of sophisticated high-tech operators.

In the following example the broker must be willing to allocate genuinely losing trades to the account into which criminal proceeds are deposited. Instead of relying on misleading or false documentation, the broker uses the genuine loss to document it and therefore to be allocated to the detriment of the dirty money account holder.

As an example, a broker uses two accounts, one called 'A' into which the client regularly deposits money which needs laundering, and one called 'B' which is intended to receive the laundered funds. The broker enters the trading market and 'goes long' (purchases) 100 derivative contracts of a commodity, trading at an offer price of \$85.02, with a 'tick' size of \$ 0.25. The notional amount for one contract is 10'000 Dollars. At the same time he 'goes short' (sells) 100 contracts of the same commodity at the bid price of \$85.00. At that moment, he has two legitimate contracts which have been cleared through the floor of the exchange.

Later in the trading day, the contract price has changed to \$84.72 bid and \$84.74 offered. The broker returns to the market, closing both open positions at the prevailing prices. Now, the broker, in his own books assigns the original purchase at \$85.02 and the subsequent sale at \$84.72 to account A. The percentage difference between the two prices is 30 points or ticks (the difference between \$84.72 and \$85.02). To calculate the loss on this contract, the tick size which is \$0.25 is multiplied by the number of contracts, 100, multiplied by the price movement, 0.30, multiplied by the notional amount. Thus:  $\$ 0.25 \times 100 \times 0.30 \times 10'000 = \$75,000$  (loss).

The other trades are allocated to the B account, which following the same calculation

theory of tick size multiplied by the number of contracts multiplied by the price movement results in a profit as follows:  $\$ 0.25 \times 100 \times 0.26 \times 10^6 = \$65,000$  (profit).

The account containing the money to be laundered has just paid out \$75,000 for the privilege of receiving a profit of \$65,000 on the other side. In other words, the laundryman has paid \$10,000 for the privilege of successfully laundering \$75,000. Such a sum is well within the amount of premium which professional launderers are prepared to pay for the privilege of cleaning up such money. As a transaction, it is perfectly lawful from the point of view of the broker. He has not taken the risk of creating false documentation, which could conceivably be discovered, and everything has been done in full sight of the market.

The above mentioned example sounds very complicated, but the mechanism behind the transactions is very simple. Bear in mind that the main impact of derivatives lays in their high leverage-factor. Thanks to derivatives small movements in prices can produce huge transfers of money. In our example the difference between the morning-price and the afternoon-price was on the winning-side only 0.26 \$. So a difference of only one Cent moves 2'500 \$.

#### 8. Bunched orders or how the US-Government made it easy to launder money with derivatives

It is important to bear in mind that the above mentioned procedure can only be legal if the regulatory framework of the derivatives markets allows so called bunched orders. This is the case, for example, in the United States, but not in Germany as well as in Switzerland, where bunched orders - German: Omnibuskonti or Sammelkonten - are forbidden. Omnibus accounts are also allowed in Italy. Here the Italian derivatives exchange, "La cassa di compensazione e garanzia" allows to register the positions of clearing members' customers in an omnibus account. After a report, published by an Italian retail-trader-organisation, the Confcommercio, the Mafia invested last ten years about 20 Billions of Swiss Francs in exchange-trading.

Bunched order trading allows a registered derivatives dealer to buy and sell contracts at the exchange in bunches without having to allocate the single contracts to individual clients. Concerning bunched orders, commission regulation 1.35(a-1) of the US-derivatives watchdog, Commodity Futures Trading Commission (CFTC) states that a derivatives broker does not have to identify his clients during a trading session. Only at the closing of his books at the end of the trading day must each contract be assigned to the individual client's account. This rule was introduced against the objections of different anti-money-laundering-divisions of the US-administration.

The introduction of the bunched orders was driven by the world-wide competition for higher volumes in derivative-trading. Since the end of the eighties the US-derivative-exchanges lost a big part of the world-wide traded volumes. Ten years ago three quarters of the world-wide volumes had been traded in the USA. Today it is only around one third. Less regulation produces less transaction-costs and helps the business this way.

## 9. Money-laundering with derivatives is no issue

And generally there seems to be no need for a strong control, because the main issue of regulation is always to “protect the buyer” and not the fight against money-laundering. If there is no objection raised against a completed deal the authorities will not interfere. For example the English Securities and Futures Authority “is not responsible for detecting money laundering. We do not therefore have a database for money laundering.” To quote the compliance-officer.

But money-laundering can be a reason to interfere if other rules are broken. Three years ago the compliance officer of the Securities and Futures Authority in London informed me about a money-laundering-case he was investigating, because some commodity-prices were behaving very strangely. Some market-participants informed him about possible manipulations and he referred the case to the National Criminal Intelligence Service (NCIS). Drug-money as cash had been brought from the United States to some Eastern State. There it was invested in the production of a specific commodity. Because the producer of this base metal had a dominant position in the world market, the producers could influence the ups and downs of the price. Knowing the Ups-and-downs of the price movements, some brokers constructed derivatives on the underlying and made a lot of money that was transferred to the United States.

The compliance-officer also informed the City Metropolitan Police of London and a Detective Superintendent confirmed the whole story. Two years later I phoned the City Metropolitan Police asking how the investigation was getting on. “Still pending” they told me. And in the meantime the responsible Superintendent has retired.

So law enforcement lags behind. A compilation of all decisions made by US-federal courts interpreting US-federal money laundering statues from February 3, 1997 from the US Department of Justice contains not a single case involving derivatives. The FBI has the same record. In March 1998 the FBI database in Washington contained no money laundering cases involving the use of financial derivatives.

In summer 1998 I had a meeting with the Senior Adviser to the US-Under Secretary Enforcement, Michael D. Langan, and with different representatives from the treasury-departments as IRS, drug enforcement and so on. After the discussions some month later Mr. Langan confirmed in a written e-mail statement: “Your theory is interesting. But using derivatives, seems to be an overly work-intensive way to launder money. If we had evidence that money was being laundered the circumstances would be investigated.” Mr. Langan - it seemed to me - did not know the FATF-Typology-Report. I faxed him the report - he was astonished.

In “The National Money Laundering Strategy for 1999”, published in September 1999, it was suggested to convene a high-level working group that will examine: “what steps are needed to assure that banking mechanisms such as concentration accounts cannot be used to obliterate the money trail of particular account holders”. A concentration account is - to quote the US-report - “a banking mechanism in which funds from a variety of sources are placed in a single account during the banking day and paid from that account to a simple

payee at the end of the day.” Bunched orders are not mentioned. The high-level working group should have submitted recommendations to the Secretary of the Treasury and the Attorney General within 90 days. To my knowledge nothing happened until now. I think Mr. Langan will also be retired and will be looking for his grandchildren.

All this does not necessarily indicate that there aren't such cases. It may be that the judges and the FBI just didn't see them. Discussions with several international anti money-laundering agencies in Switzerland, the United Kingdom and the USA have made it clear that these state agencies act on the basis of what they consider to be secured knowledge. Research on this issue? I asked Mr. Alan Beverly, responsible for the new guidelines on money-laundering from the European Commission what their intentions are about this subject? Of course he knows about the possibility that money is being laundered with derivatives. The Commission also had a hearing with Peter Quirk from the IMF. But - to quote Alan Beverly - there is no money for research on money laundering with derivatives.

And the industry itself will not do anything about it. To quote the FATF: "For fear of scaring off investors, there is ...no incentive for traders on the market to ask too many questions. This lack of rigorous government control makes the derivatives market even more attractive from the perspective of a money launderer."

To conclude my short overview let me tell you a joke about Kari Dällenbach. Kari Dällenbach was a well known funny burger or citizen of Bern. One evening people saw him walking up and down under a street-lamp. They wondered what he was doing and asked him if they could help him. He said: "I have lost my purse and I cannot find it." "Where have you lost your purse?" he was asked. Kari grumbled: "On the other side of the street." "But why do you search on this side of the street when you lose your purse on the other side." Kari: "On the other side there is no lamp."