The Spider Network

Prologue

- Spread out across time zones and continents, a group of bankers, brokers, and traders had tried to skew interest rates that served not only as the foundation of trillions of dollars of loans, but also as an essential vertebra of the financial system itself. It all boiled down to something called Libor: an acronym for the London Interbank Offered Rate, it's often known as the world's most important number. Financial instruments all over the globe - a volume so awesome, well into the tens of trillions of dollars, that it is hard to accurately quantify - hinge on tiny movements in Libor. In the United States, the interest rates on most variable-rate mortgages are based on Libor. So are many car loans, student loans, credit card loans, and on and on - almost anything that doesn't have a fixed interest rate. The amounts that big companies pay on multibillion dollar loans are often determined by Libor. Trillions of dollars of exotic-sounding instruments called derivatives are linked to the ubiquitous rate, and they have the ability to touch virtually everyone: Pension funds, university endowments, cities and towns, small businesses and giant companies all use them to speculate on or protect themselves against swings in interest rates
- Hayes didn't come up with the idea of manipulating Libor to turbocharge his profits. But during the course of his career, he took the practice to fantastic new heights, oblivious to or uninterested in the fact that he was engaging in unethical activity with the real potential to harm unsuspecting victims

Watching the Coronation

- Insider trading didn't become a crime in England until 1985
- Pulling off profitable transactions on behalf of clients wasn't the only way that traders made money. They also were expected to place their own separate bets on the direction of markets and to amass positions so that they profited if their bets turned out to be correct. This was fundamentally different from market making, but market makers were among those plying this type of trade in addition to their main jobs
- No longer was the bank serving mainly as an intermediary whose trading was designed to lubricate the financial system or assist clients in managing their finances; this type of trading was an end in itself, designed to benefit nobody other than the bank and its employees
- One was that regulators in the United States, Britain and elsewhere, lulled by the lack of a recent financial crisis and swayed by the industry's enormous political clout, had taken a hands-off approach to overseeing this sort of speculative

activity. In the United States, a law imposed in the wake of the Great Depression that prohibited commercial banks from partaking in investment banking activity was repealed, paving the way for the creation of megabanks like Citigroup whose trillion-dollar balance sheets allowed the placement of massive wagers with the banks' own money. Another factor was that, over the past couple of decades, many old Wall Street partnerships - firms like Bear Stearns, Lehman Brothers, and Morgan Stanley, which had been owned by a small group of their uppermost, longest serving employees - had converted into publicly traded companies. That allowed the firms' partners to cash in on their ownership stakes, catapulting some of them to near-billionaires status. But it also meant that the companies became accountable to a new class of owners, many of whom demanded to see profits grow quarter after quarter, year after year

- The great news for the trader was that, if his positions gained in value, he would share in the spoils. And if his bets didn't pan out, the worst-case scenario was that he lost his job. That rarely happened and when it did, it tended to be pretty easy to find a new gig, without having to explain much about the reasons for his sudden departure from the prior job. As a result, traders were basically in a no-lose situation

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The Hall of Mirrors

- On the trading floor at RBS, Hayes noticed that it wasn't the biggest clients who elicited enthusiastic laughter and applause when they called. Instead, it was small pension funds and other unsophisticated investors - so called dumb money. They lacked access to high-quality financial data and generally weren't as sensitive to tiny differences in the prices that banks would offer them. In other words, they were ripe for being duped, and RBS traders fought to get access to them. Shouting matches on the trading floor over who had the right to the clients were routine
- Hayes landed in a subgroup of the interest-rate team that specialized in products derived from Japanese rates. At first, one of his main tasks was to rewrite the computer models that RBS used to figure out how much its derivatives were worth. It was a monstrously complex task. Hayes needed to come up with intricate models to predict not only the the future direction of Japanese interest rates, but also the prices of a variety of instruments that were underpinned by those interest rates, as well as their likely interactions with interest rates elsewhere in the world. The process was made all the more gruelling by the archaic state of RBS's computer and software systems
- Goodwin was introduced to a group of traders. He looked at each of them, asking what they did for the bank. "Prop trading," came the proud response. The CEO looked queasy. After all, what business did a Scottish bank really have employing high-stakes gamblers on the opposite side of the globe? Years later, Hayes would recall that Goodwin appeared to be "a bit nervous that there was some Nick Leeson waiting in the wings in Tokyo"

Classy People

- When a trader wanted to get a sense of where a market was heading, he might call a broker to get a feel for where rival traders were putting their money. The brokers - few of them university educated, but most of them highly astute - also were infamous for spoon-feeding traders bogus information that had no purpose other than trickling them into doing trades that weren't really worthwhile to anyone but the brokers themselves. Similarly, if a trader wanted to spread misinformation in the market - for example, nudging the price of a thinly traded instrument higher based on a hazy rumour about pent-up demand for that particular product - a broker could be an ideal conduit. One illustration of the industry's culture was that brokers used the word broking to mean 'tricking' or 'misleading' - as in, I was broking him to believe something that wasn't true

Peak Performance

- Founded in 1919, the BBA was mainly devoted to lobbying for lax regulations on the banking sector
- The BBA wasn't a bank. It wasn't a government agency. It wasn't even a company. It certainly wasn't regulated. But it was probably one of the financial world's most powerful institutions. And that was because the BBA controlled something called Libor
- Banks had multiple incentives to push or pull Libor. One was that, because each bank's submission was made public, investors scoured the data for indicators about the bank's financial health. A bank that reported a spike in its borrowing costs might be in trouble - after all, why else would rival institutions suddenly be charging it more to borrow money? That gave banks a reason to keep their submission low, especially during periods of market unease. Another enticement for banks to tinker with Libor was to increase the value of the vast portfolios of derivatives that the banks' traders were sitting on at any given time. Those positions incentivise a bank to move Libor higher or lower or both, in the frequent event that different traders at the same bank had amassed different positions. It all depended on what their traders had recently bought or sold
- To bankroll the organisation, the BBA relied on annual dues paid by its members, as well as the occasional conference the group hosted. Those membership payments varied by the size of the bank, but generally they were several thousand pounds a year. The BBA also made money off Libor by selling licenses to companies that allowed them to incorporate the benchmark into their products. If the group is going to keep growing and gaining power, it was going to need new sources of money
- One way for the BBA to wring more revenue out of Libor was to create new versions of the benchmark. The most prominent versions of Libor were the British pound and the US dollar varieties, but by 2005 Libor came in ten flavours: the pound and dollar were joined by the Australian dollar, the Canadian dollar, the Swiss franc, the Danish krone, the euro, the Japanese yen, the New Zealand dollar, and the Swedish krona. And within each of those, there were fifteen

subcategories, broken down by time periods. For example, three-month US dollar Libor was supposed to measure how much it would cost a bank to borrow dollars in London for a three-month period. Other time periods included one month, six months, one year and so on

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The Lucky Turnstile

- Whereas Yen Libor was supposed to measure what banks would pay to borrow Japanese currency from each other in London, Tibor measured borrowing rates in Tokyo. The bigger difference was that Yen Libor and Tibor were based on different groups of banks providing data, and they therefore didn’t move in lockstep
- Read and Goodman had realised something interesting about the mundane run-throughs. Employees at some banks - including Citigroup, J. P. Morgan, Royal Bank of Scotland, West LB, and Lloyds in Great Britain - who where in charge of submitting Libor data sometimes appeared to simply copy ICAP’s data rather than go through the onerous process of coming up with their own hypothetical estimates of what it would cost to borrow across different currencies and time periods. Relying on the run-throughs represented an enticing shortcut. And because of the inherent subjectivity of the Libor estimates, nobody was likely to notice
- There were limits to the extent that traders would tinker with Libor. You could move Libor within a certain plausible band to help yourself, but straying outside that range was at best unwise. Did that principle stem from a sense of propriety, a notion that while the definition of Libor was a bit amorphous, the submissions needed to have at least some integrity? Or was it simply that traders wanted to avoid detection as they rigged a vital interest rate? Years later, that question would be hotly contested

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The Sycophants

- RP Matin’s brokers were known for crashing parties thrown by rival companies in order to get face time with coveted clients

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Your Name in Print

- Market makers viewed themselves as responsible for the proper functioning of the markets - a vital duty, albeit one that primarily benefited the banks and other specialised investors that accounted for the overwhelming majority of trading. “We are the market,” was a common refrain among market makers. Hayes was exceptionally good at his market-making job. He never hesitated to say yes to a trade if he was comfortable with the price that his models spat out

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A Yacht in Monaco

- Switch trade: Two traders at different banks would execute a pair of mirror-image trades. For example, Trader A would sell 100 shares of Company X to Trader B, and then Trader A would buy 100 shares of Company X from Trader B. The rapid-fire transactions neutralised each other, but they still had value, at least to someone. Standing in the middle was the broker, who could collect a commission on both transactions from one or both of the traders' banks. It was a way of thanking the broker for a big night out or for anything else of value

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What's a Cabal?

- As the financial crisis intensified, banks' borrowing costs were soaring. Yet Libor wasn't moving. To make matters worse, the Bank of England was sniffing around about the rate's accuracy. At a November 2007 meeting at the central bank's investigation, regulators and bank executives grumbled about Libor being too low. Ewan reassured participants that BA had rigorous quality control measures. To prevent any problems
- At the time in mid-1990s, structured notes were among Wall Street's hottest fads. A type of bond whose value was partly linked to derivatives, the notes were custom-made by investment banks on behalf of companies that were looking for new ways to entice investors to lend them money. Peng soon realised that most of those investors didn't understand what they were buying or what the products were actually worth. The investment banks were taking advantage of that ignorance, which was a big part of the reason the market was booming
- Then, in March, Bear Stearns collapsed. Central banks in several countries launched aggressive plans to try to stabilize the teetering financial system. One weapon in the Federal Reserve's arsenal was doling out billions of dollars in loans to cash-strapped banks. The banks had to bid for the loans, and the prices they paid were made public. Here, Peng realised, was an easy way to measure banks' approximate funding costs. He compared the data about the prices of the Fed loans with where the banks were reporting Libor. Sure enough, the figures diverged. The banks were paying high interest rates to borrow from the Fed, but Libor remained suspiciously flat - in other words, banks appealed to be understating their actual borrowing costs, Libor was artificially low
- Whitehouse started building a massive Excel spreadsheet that compared banks' CDS prices with their Libor data over a several-month period. The finished spreadsheet showed that many banks' Libor submissions had little resemblance to their CDS prices and therefore, their apparent funding costs

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He's the One

- Antitrust laws in many countries included provisions granting immunity or leniency to those who were first to report problems. In the United States, antitrust regulators even give partial amnesty to the second company to tattle. If UBS raced to the authorities in the United States and elsewhere before anyone else did and not only confessed its own sins but also promised to help build cases against its rivals, it might win leniency
- Antitrust authorities in Washington, Brussels, and Bern tentatively accepted the bank's deal and offered it at least partial immunity. But the bigger victory, the

more stunning one, was that UBS somehow ended up in a position to set the course of the unfolding investigations. As part of its agreements to cooperate, UBS volunteered to handle the massive task of sifting through millions of pages of records and interviewing witnesses. That appealed to the regulators, who were constrained by tight budgets and busy schedules and didn't meant that crucial work - the act of laying the first bricks in the investigative foundation - was outsourced to a very biased party. UBS and its high-priced hired guns would now be the ones determining which evidence and witnesses showed up on regulators' and prosecutors' radar screens. If UBS didn't discover certain evidence, or decided for whatever reason not to share it with the authorities - well, it would probably never come to light

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Spiders

- American courtrooms were notoriously inhospitable places for white-collar defendants, thanks in part to US prosecutors' ability to strong-arm witnesses into testifying in exchange for lighter penalties. And prison sentences in the United States tended to be far longer - not to mention less pleasant, given the violent conditions in many American prisons - than those imposed by British courts

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The Unit Cost of Steak

- Unlike in the United States, where defendants unable to afford their own lawyer are assigned a public defender, in Britain they get to pick a private lawyer
- The phenomenon of government officials scoring lucrative jobs at the companies they previously policed was so well established that it had a name: the revolving door. And if everyone was doing it, why shouldn't these guys? Didn't they deserve to enjoy some of the same largesse from putting their unique skills to work? There were no rules prohibiting switching sides, and no matter which direction they looked, they were surrounded by men and women who had enriched themselves by exploiting inefficiencies and loopholes that would be imperceptible to all but the professionally trained eye. So what if their skills were now being used to help powerful institutions avoid the same laws and regulations that they previously had been entrusted to enforce?

Within the Ark

- Hayes still didn't grasp what had really happened. These friends who were not friends, these bosses who now claimed not to be bosses, together they had just engineered their greatest trade of all: Hayes for their own freedom. He was the genius, the university man, the millionaire, the star. And he was the fool. Most of them had their money; his would be seized. They had their liberty; he was in prison. Yes, there had been a spider network. Hayes still didn't realise that in the end, he'd been the fly