

Investment Banking

An **investment bank** is a financial institution that assists individuals, corporations, and governments in raising capital by underwriting or acting as the client's agent in the issuance of securities (or both). An investment bank may also assist companies involved in mergers and acquisitions and provide ancillary services such as market making, trading of derivatives and equity securities, and FICC services (fixed income instruments, currencies, and commodities).

Unlike commercial banks and retail banks, investment banks do not take deposits. From 1933 (Glass–Steagall Act) until 1999 (Gramm–Leach–Bliley Act), the United States maintained a separation between investment banking and commercial banks. Other industrialized countries, including G8 countries, have historically not maintained such a separation. As part of the Dodd-Frank Act 2010, Volcker Rule asserts full institutional separation of investment banking services from commercial banking.

There are two main lines of business in investment banking. Trading securities for cash or for other securities (e.g. facilitating transactions, market-making), or the promotion of securities (e.g. underwriting, research, etc.) is the "sell side", while buy side is a term used to refer to advising institutions concerned with buying investment services. Private equity funds, mutual funds, life insurance companies, unit trusts, and hedge funds are the most common types of buy side entities.

An investment bank can also be split into private and public functions with an information barrier which separates the two to prevent information from crossing. The private areas of the bank deal with private insider information that may not be publicly disclosed, while the public areas such as stock analysis deal with public information.

An advisor who provides investment banking services in the United States must be a licensed broker-dealer and subject to Securities & Exchange Commission (SEC) and Financial Industry Regulatory Authority (FINRA) regulation.^[1]

Organizational structure

Investment banking is split into front office, middle office, and back office activities. While large service investment banks offer all lines of business, both "sell side" and "buy side", smaller sell-side investment firms such as boutique investment banks and small broker-dealers focus on investment banking and sales/trading/research, respectively.

Investment banks offer services to both corporations issuing securities and investors buying securities. For corporations, investment bankers offer information on when and how to place their securities on the open market, an activity very important to an investment bank's reputation. Therefore, investment bankers play a very important role in issuing new security offerings.^[2]

Core investment banking activities

Investment banking has changed over the years, beginning as a partnership form focused on underwriting security issuance (initial public offerings and secondary offerings), brokerage, and mergers and acquisitions, and evolving into a "full-service" range including securities research, proprietary trading, and investment management. In the modern 21st century, the SEC filings of the major independent investment banks such as Goldman Sachs and Morgan Stanley reflect three product segments: (1) investment banking (fees for M&A advisory services and securities underwriting); (2) asset management (fees for sponsored investment funds), and (3) trading and principal investments (broker-dealer activities including proprietary trading ("dealer" transactions) and brokerage trading ("broker" transactions)).^[3]

In the United States, commercial banking and investment banking were separated by the Glass–Steagall Act, which was repealed in 1999. The repeal led to more "universal banks" offering an even greater range of services. Many large commercial banks have therefore developed investment banking divisions through acquisitions and hiring. Notable large banks with significant investment banks include JPMorgan Chase, Bank of America, Credit Suisse, Deutsche Bank, Barclays, and Wells Fargo. After the financial crisis of 2007–2008 and the subsequent passage of the Dodd–Frank Wall Street Reform and Consumer Protection Act, regulations have limited certain investment banking operations, notably with the Volcker Rule's restrictions on proprietary trading.^[2]

The traditional service of underwriting security issues has declined as a percentage of revenue. As far back as 1960, 70% of Merrill Lynch's revenue was derived from transaction commissions while "traditional investment banking" services accounted for 5%. However, Merrill Lynch was a relatively "retail-focused" firm with a large brokerage network.^[2]

Front office

Front office is generally described as a revenue generating role.

There are two main areas within front office:

Investment Banking and Markets, which includes: Sales Trading Research Structuring
Investment Banking involves advising the world's largest organizations on mergers, acquisitions, as well as a wide array of fund raising strategies. This is, on average, the most prestigious and highest paid department in the bank with first year analysts typically making £60,000 upwards (depending on individual, team and firm performance).

Markets are then split into further divisions; sales, trading, some research and also structuring. Though the average investment banker will make considerably more than the average trader, the best trader will make significantly more than the best investment banker.

Investment banking

Corporate finance is the traditional aspect of investment banks which also involves helping customers raise funds in capital markets and giving advice on mergers and acquisitions (M&A). This may involve subscribing investors to a security issuance, coordinating with bidders, or

negotiating with a merger target. Another term for the investment banking division is corporate finance, and its advisory group is often termed "mergers and acquisitions". A pitch book of financial information is generated to market the bank to a potential M&A client; if the pitch is successful, the bank arranges the deal for the client. The investment banking division (IBD) is generally divided into industry coverage and product coverage groups. Industry coverage groups focus on a specific industry – such as healthcare, public finance (governments), FIG (financial institutions group), industrials, TMT (technology, media, and telecommunication) – and maintains relationships with corporations within the industry to bring in business for the bank. Product coverage groups focus on financial products – such as mergers and acquisitions, leveraged finance, public finance, asset finance and leasing, structured finance, restructuring, equity, and high-grade debt – and generally work and collaborate with industry groups on the more intricate and specialized needs of a client. *The Wall Street Journal*, in partnership with Dealogic, publishes figures on investment banking revenue such as M&A in its Investment Banking Scorecard.^[4]

Sales and trading

On behalf of the bank and its clients, a large investment bank's primary function is buying and selling products. In market making, traders will buy and sell financial products with the goal of making money on each trade. *Sales* is the term for the investment bank's sales force, whose primary job is to call on institutional and high-net-worth investors to suggest trading ideas (on a caveat emptor basis) and take orders. Sales desks then communicate their clients' orders to the appropriate trading desks, which can price and execute trades, or structure new products that fit a specific need. *Structuring* has been a relatively recent activity as derivatives have come into play, with highly technical and numerate employees working on creating complex structured products which typically offer much greater margins and returns than underlying cash securities. In 2010, investment banks came under pressure as a result of selling complex derivatives contracts to local municipalities in Europe and the US.^[5] *Strategists* advise external as well as internal clients on the strategies that can be adopted in various markets. Ranging from derivatives to specific industries, strategists place companies and industries in a quantitative framework with full consideration of the macroeconomic scene. This strategy often affects the way the firm will operate in the market, the direction it would like to take in terms of its proprietary and flow positions, the suggestions salespersons give to clients, as well as the way structurers create new products. Banks also undertake risk through proprietary trading, performed by a special set of traders who do not interface with clients and through "principal risk"—risk undertaken by a trader after he buys or sells a product to a client and does not hedge his total exposure. Banks seek to maximize profitability for a given amount of risk on their balance sheet. The necessity for numerical ability in sales and trading has created jobs for physics, computer science, mathematics and engineering Ph.D.s who act as quantitative analysts.

Research

The equity research division reviews companies and writes reports about their prospects, often with "buy" or "sell" ratings. Investment banks typically have sell-side analysts which cover various industries. Their sponsored funds or proprietary trading offices will also have buy-side research. While the research division may or may not generate revenue (based on policies at

different banks), its resources are used to assist traders in trading, the sales force in suggesting ideas to customers, and investment bankers by covering their clients. Research also serves outside clients with investment advice (such as institutional investors and high net worth individuals) in the hopes that these clients will execute suggested trade ideas through the sales and trading division of the bank, and thereby generate revenue for the firm. Research also covers credit research, fixed income research, macroeconomic research, and quantitative analysis, all of which are used internally and externally to advise clients but do not directly affect revenue. All research groups, nonetheless, provide a key service in terms of advisory and strategy. There is a potential conflict of interest between the investment bank and its analysis, in that published analysis can affect the bank's profits.

Front and middle office

Risk management

Risk management involves analyzing the market and credit risk that an investment bank or its clients take onto their balance sheet during transactions or trades. Credit risk focuses around capital markets activities, such as loan syndication, bond issuance, restructuring, and leveraged finance. Market risk conducts review of sales and trading activities utilizing the VaR model and provide hedge-fund solutions to portfolio managers. Other risk groups include country risk, operational risk, and counterparty risks which may or may not exist on a bank to bank basis. Credit risk solutions are key part of capital market transactions, involving debt structuring, exit financing, loan amendment, project finance, leveraged buy-outs, and sometimes portfolio hedging. Front office market risk activities provide service to investors via derivative solutions, portfolio management, portfolio consulting, and risk advisory. Well-known risk groups in JPMorgan Chase, Goldman Sachs and Barclays engage in revenue-generating activities involving debt structuring, restructuring, loan syndication, and securitization for clients such as corporates, governments, and hedge funds. J.P. Morgan IB Risk works with investment banking to execute transactions and advise investors, although its Finance & Operation risk groups focus on middle office functions involving internal, non-revenue generating, operational risk controls.^{[6][7][8]} Credit default swap, for instance, is a famous credit risk hedging solution for clients invented by J.P. Morgan's Blythe Masters during the 1990s. The Loan Risk Solutions group^[9] within Barclays' investment banking division and Risk Management and Financing group^[10] housed in Goldman Sach's securities division are client-driven franchises. However, risk management groups such as operational risk, internal risk control, legal risk, and the one at Morgan Stanley are restrained to internal business functions including firm balance-sheet risk analysis and assigning trading cap that are independent of client needs, even though these groups may be responsible for deal approval that directly affects capital market activities. Risk management is a broad area, and like research, its roles can be client-facing or internal.

Middle office

This area of the bank includes treasury management, internal controls, and internal corporate strategy.

Corporate treasury is responsible for an investment bank's funding, capital structure management, and liquidity risk monitoring.

Financial control tracks and analyzes the capital flows of the firm, the finance division is the principal adviser to senior management on essential areas such as controlling the firm's global risk exposure and the profitability and structure of the firm's various businesses via dedicated trading desk product control teams. In the United States and United Kingdom, a financial controller is a senior position, often reporting to the chief financial officer.

Internal corporate strategy tackling firm management and profit strategy, unlike corporate strategy groups that advise clients, is non-revenue regenerating yet a key functional role within investment banks.

This list is not a comprehensive summary of all middle-office functions within an investment bank, as specific desks within front and back offices may participate in internal functions.^[11]

Back office

Operations

This involves data-checking trades that have been conducted, ensuring that they are not wrong, and transacting the required transfers. Many banks have outsourced operations. It is, however, a critical part of the bank.

Technology

Every major investment bank has considerable amounts of in-house software, created by the technology team, who are also responsible for technical support. Technology has changed considerably in the last few years as more sales and trading desks are using electronic trading. Some trades are initiated by complex algorithms for hedging purposes.

Firms are responsible for compliance with government regulations and internal regulations.

Other businesses

- **Global transaction banking** is the division which provides cash management, custody services, lending, and securities brokerage services to institutions. Prime brokerage with hedge funds has been an especially profitable business, as well as risky, as seen in the "run on the bank" with Bear Stearns in 2008.
- **Investment management** is the professional management of various securities (shares, bonds, etc.) and other assets (e.g., real estate), to meet specified investment goals for the benefit of investors. Investors may be institutions (insurance companies, pension funds, corporations etc.) or private investors (both directly via investment contracts and more commonly via collective investment schemes e.g., mutual funds). The investment

management division of an investment bank is generally divided into separate groups, often known as private wealth management and private client services.

- **Merchant banking** can be called "very personal banking"; merchant banks offer capital in exchange for share ownership rather than loans, and offer advice on management and strategy. Merchant banking is also a name used to describe the private equity side of a firm.^[12] Current examples include Defoe Fournier & Cie. and JPMorgan's One Equity Partners and the original J.P. Morgan & Co. Rothschilds, Barings, Warburgs and Morgans were all merchant banks. (Originally, "merchant bank" was the British English term for an investment bank.)

Industry profile

There are various trade associations throughout the world which represent the industry in lobbying, facilitate industry standards, and publish statistics. The International Council of Securities Associations (ICSA) is a global group of trade associations.

In the United States, the Securities Industry and Financial Markets Association (SIFMA) is likely the most significant; however, several of the large investment banks are members of the American Bankers Association Securities Association (ABASA)^[13] while small investment banks are members of the National Investment Banking Association (NIBA).

In Europe, the European Forum of Securities Associations was formed in 2007 by various European trade associations.^[14] Several European trade associations (principally the London Investment Banking Association and the European SIFMA affiliate) combined in 2009 to form Association for Financial Markets in Europe (AFME).

In the securities industry in China (particularly mainland China), the Securities Association of China is a self-regulatory organization whose members are largely investment banks.

Global size and revenue mix

Global investment banking revenue increased for the fifth year running in 2007, to a record US\$84.3 billion,^[15] which was up 22% on the previous year and more than double the level in 2003. Subsequent to their exposure to United States sub-prime securities investments, many investment banks have experienced losses. As of late 2012, global revenues for investment banks were estimated at \$240 billion, down about a third from 2009, as companies pursued less deals and traded less.^[16] Differences in total revenue are likely due to different ways of classifying investment banking revenue, such as subtracting proprietary trading revenue.

In terms of total revenue, SEC filings of the major independent investment banks in the United States show that investment banking (defined as M&A advisory services and security underwriting) only made up about 15-20% of total revenue for these banks from 1996 to 2006, with the majority of revenue (60+% in some years) brought in by "trading" which includes brokerage commissions and proprietary trading; the proprietary trading is estimated to provide a significant portion of this revenue.^[3]

The United States generated 46% of global revenue in 2009, down from 56% in 1999. Europe (with Middle East and Africa) generated about a third while Asian countries generated the remaining 21%.^{[15]:8} The industry is heavily concentrated in a small number of major financial centers, including City of London, New York City, Frankfurt, Hong Kong and Tokyo.

According to estimates published by the International Financial Services London, for the decade prior to the financial crisis in 2008, M&A was a primary source of investment banking revenue, often accounting for 40% of such revenue, but dropped during and after the financial crisis.^{[15]:9} Equity underwriting revenue ranged from 30% to 38% and fixed-income underwriting accounted for the remaining revenue.^{[15]:9}

Revenues have been affected by the introduction of new products with higher margins; however, these innovations are often copied quickly by competing banks, pushing down trading margins. For example, brokerages commissions for bond and equity trading is a commodity business but structuring and trading derivatives has higher margins because each over-the-counter contract has to be uniquely structured and could involve complex pay-off and risk profiles. One growth area is private investment in public equity (PIPEs, otherwise known as Regulation D or Regulation S). Such transactions are privately negotiated between companies and accredited investors.

Banks also earned revenue by securitizing debt, particularly mortgage debt prior to the financial crisis. Investment banks have become concerned that lenders are securitizing in-house, driving the investment banks to pursue vertical integration by becoming lenders, which is allowed in the United States since the repeal of the Glass-Steagall Act in 1999.^[17]

Top 10 banks

The ten largest investment banks as of December 31, 2013, are as follows (by total fees from all advisory).^[18] The list is just a ranking of the advisory arm of each bank and does not include the generally much larger portion of revenues from sales and trading and asset management.

Rank	Company	Fees (\$m)
1.	JP Morgan Chase	\$6,272.92
2.	Bank of America Merrill Lynch	\$5,658.95
3.	Goldman Sachs	\$5,049.47
4.	Morgan Stanley	\$4,443.85
5.	Citi	\$3,951.24
6.	Deutsche Bank	\$3,583.95
7.	Credit Suisse	\$3,557.12
8.	Barclays	\$3,451.65
9.	Wells Fargo	\$2,286.19
10.	RBC Capital Markets	\$2,028.34

World's biggest banks are ranked for M&A advisory, syndicated loans, equity capital markets and debt capital markets.

The Financial Times, *The Wall Street Journal* and *Bloomberg* often cover mergers and acquisitions and capital markets. League tables are also available:

- Investment Banking Review, *The Financial Times*.
- Investment Banking Scorecard, *The Wall Street Journal*.
- Global M&A Financial Advisory Rankings, *Bloomberg*.
- Global Capital Markets League Tables, *Bloomberg*.

Financial crisis of 2008

The 2008 financial credit crisis led to the notable collapse of several banks, notably including the bankruptcy of large investment bank Lehman Brothers and the hurried sale of Merrill Lynch and the much smaller Bear Stearns to banks which effectively rescued them from bankruptcy. The entire financial services industry, including numerous investment banks, was rescued by government loans through the Troubled Asset Relief Program (TARP). Surviving U.S. investment banks such as Goldman Sachs and Morgan Stanley converted to traditional bank holding companies to accept TARP relief.^[19] Similar situations occurred across the globe with countries rescuing their banking industry. Initially, banks received part of a \$700 billion TARP intended to stabilize the economy and thaw the frozen credit markets.^[20] Eventually, taxpayer assistance to banks reached nearly \$13 trillion, most without much scrutiny,^[21] lending did not increase^[22] and credit markets remained frozen.^[23]

The crisis led to questioning of the business model of the investment bank^[24] without the regulation imposed on it by Glass-Steagall. Once Robert Rubin, a former co-chairman of Goldman Sachs, became part of the Clinton administration and deregulated banks, the previous conservatism of underwriting established companies and seeking long-term gains was replaced by lower standards and short-term profit.^[25] Formerly, the guidelines said that in order to take a company public, it had to be in business for a minimum of five years and it had to show profitability for three consecutive years. After deregulation, those standards were gone, but small investors did not grasp the full impact of the change.^[25]

A number of former Goldman-Sachs top executives, such as Henry Paulson and Ed Liddy were in high-level positions in government and oversaw the controversial taxpayer-funded bank bailout.^[25] The TARP Oversight Report released by the Congressional Oversight Panel found that the bailout tended to encourage risky behavior and "corrupt[ed] the fundamental tenets of a market economy".^[26]

Under threat of a subpoena, Goldman Sachs revealed that it received \$12.9 billion in taxpayer aid, \$4.3 billion of which was then paid out to 32 entities, including many overseas banks, hedge funds and pensions.^[27] The same year it received \$10 billion in aid from the government, it also paid out multi-million dollar bonuses; the total paid in bonuses was \$4.82 billion.^{[28][29]} Similarly, Morgan Stanley received \$10 billion in TARP funds and paid out \$4.475 billion in bonuses.^[30]

Criticisms

The investment banking industry, and many individual investment banks, have come under criticism for a variety of reasons, including perceived conflicts of interest, overly large pay packages, cartel-like or oligopolic behavior, taking both sides in transactions, and more.^[31] Investment banking has also been criticised for its opacity.^[32]

Conflicts of interest

Conflicts of interest may arise between different parts of a bank, creating the potential for market manipulation, according to critics. Authorities that regulate investment banking (the FSA in the United Kingdom and the SEC in the United States) require that banks impose a "Chinese wall" to prevent communication between investment banking on one side and equity research and trading on the other. Critics say such a barrier does not always exist in practice, however.

Conflicts of interest often arise in relation to investment banks' equity research units, which have long been part of the industry. A common practice is for equity analysts to initiate coverage of a company in order to develop relationships that lead to highly profitable investment banking business. In the 1990s, many equity researchers allegedly traded positive stock ratings for investment banking business. Alternatively, companies may threaten to divert investment banking business to competitors unless their stock was rated favorably. Laws were passed to criminalize such acts, and increased pressure from regulators and a series of lawsuits, settlements, and prosecutions curbed this business to a large extent following the 2001 stock market tumble after the dot-com bubble.

Philip Augar, author of *The Greed Merchants*, said in an interview that, "You cannot simultaneously serve the interest of issuer clients and investing clients. And it's not just underwriting and sales; investment banks run proprietary trading operations that are also making a profit out of these securities."^[31]

Many investment banks also own retail brokerages. During the 1990s, some retail brokerages sold consumers securities which did not meet their stated risk profile. This behavior may have led to investment banking business or even sales of surplus shares during a public offering to keep public perception of the stock favorable.

Since investment banks engage heavily in trading for their own account, there is always the temptation for them to engage in some form of front running – the illegal practice whereby a broker executes orders for their own account before filling orders previously submitted by their customers, there benefiting from any changes in prices induced by those orders.

Documents under seal in a decade-long lawsuit concerning eToys.com's IPO but obtained by *New York Times'* Wall Street Business columnist Joe Nocera alleged that IPOs managed by Goldman Sachs and other investment bankers involved asking for kickbacks from their institutional clients who made large profits flipping IPOs which Goldman had intentionally undervalued. Depositions in the lawsuit alleged that clients willingly complied with these demands because they understood it was necessary in order to participate in future hot issues.^[33]

Reuters Wall Street correspondent Felix Salmon retracted his earlier, more conciliatory, statements on the subject and said he believed that the depositions show that companies going public and their initial consumer stockholders are both defrauded by this practice, which may be widespread throughout the IPO finance industry.^[34] The case is ongoing, and the allegations remain unproven.

Compensation

Investment banking is often criticized for the enormous pay packages awarded to those who work in the industry. According to Bloomberg Wall Street's five biggest firms paid over \$3 billion to their executives from 2003 to 2008, "while they presided over the packaging and sale of loans that helped bring down the investment-banking system."^[35]

The highly generous pay packages include \$172 million for Merrill Lynch & Co. CEO Stanley O'Neal from 2003 to 2007, before it was bought by Bank of America in 2008, and \$161 million for Bear Stearns Co.'s James Cayne before the bank collapsed and was sold to JPMorgan Chase & Co. in June 2008.^[35]

Such pay arrangements have attracted the ire of Democrats and Republicans in Congress, who demanded limits on executive pay in 2008 when the U.S. government was bailing out the industry with a \$700 billion financial rescue package.^[35]

Writing in the Global Association of Risk Professionals, Aaron Brown, a vice president at Morgan Stanley, says "By any standard of human fairness, of course, investment bankers make obscene amounts of money."^[31]

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