Glossary

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The literature on e-finance has spawned a lot of technical terms. These are the meanings assigned to terms in the papers in this volume. Other documents may use some terms in other ways.

Terms in *italics* denote a cross reference.

Access	The possibility to participate in a market.
Adverse selection bias	Problem of an insurer being unable to assess risk and therefore pricing inappropriately and so attracting excessive numbers of poor risks.
Aggregator	*Internet*-based facility allowing customers to view information about (and perhaps shift funds between) their accounts from several financial institutions on a single screen eg Yodlee. Also known as "screen scraper".
Akerlof's lemons model	Analysis of *adverse selection bias* by George Akerlof, originally published in August 1970 issue of the Quarterly Journal of Economics.
Algorithm (order execution)	Rules to determine the method by which orders are matched.
AMEX	A major US equity market, organised as a floor-based *order book*.
Analogue	Information that is continuously variable (cf *digital*).
Anonymity	Non-disclosure of identities of counterparties (pre-trade or post-trade).
Architecture (market)	Broadly, key features of market structure such as participation arrangements, venues, trading *protocols*.
Asymmetric information	See *Information asymmetry*.
ATS	Alternative trading system; a non-traditional market for trading securities, particularly one which matches buy and sell orders automatically without the intervention of a human *broker* or *market-maker*.
BCBS	Basel Committee on Banking Supervision. A committee established by the G10 central banks with secretariat support from the BIS.
Bertrand competition	A model of duopoly pricing in which price equals average cost.
Bid-ask spread	Difference between the buying and selling price.
Block trade	Large, potentially market-moving trades, which may be exempt from an exchange's usual disclosure rules.
Broker	Firm which operates in a market on behalf of other participants to arrange transactions without being a party to the transactions itself (cf *dealer*).
Bundle matching	An *algorithm* that matches orders for securities in bundles and provides *price discovery*.

Call market	An order-driven market where orders are processed at discrete points in time, being matched by a particular *algorithm*. (Referred to as *crossing system* where prices are matched at the price in another market.)
Cherry-picker	Firm only competing in the most profitable areas of a business rather than providing a range of services.
Clearing	The process of transmitting, reconciling and sometimes confirming instructions to transfer instruments prior to *settlement*.
Clicks-and-mortar	Bank which operates through both the *internet* and physical branches, also known as "hybrid operation" or "surf and turf" (cf *virtual bank*).
Consolidation of trading	Bringing together aspects of the trading process (*order routing*, *execution*) into a smaller number of markets (cf *fragmentation of trading*).
Contestable market	Market where potential competitors can readily enter (and exit) and compete effectively with existing firms.
Continuous market	Market that trades on an ongoing basis (cf *call market* or periodic market).
Counterparty credit risk	The risk that the market participant on the other side of a transaction will default.
Crossing system	System matching buy and sell orders at a price determined in another market, eg POSIT. Such systems play no part in *price discovery*. Also known as "price-taking systems". (See *call market*). (See pages 44-5).
Cryptography	The application of mathematical theory to develop techniques that can be applied to data to ensure goals such as confidentiality, data integrity and/or authentication.
Cybermoney	*E-money* that is transferred via telecommunications networks such as the *internet*.
DDOS	Distributed denial of service. An attack where hackers overload a website with spurious messages so that others cannot access it. (See page 22).
Dealer	Firm whose primary business is entering into transactions on both sides of wholesale financial markets and seeking profits by taking risks in these markets (cf *broker*).
Dealer market	Market where orders for *execution* pass to an intermediary (*dealer*) who executes them from their inventory.
Debit card	Card enabling the holder's purchases to be directly charged to an account at a deposit-taking institution.
Delivery-versus-payment (DVP)	A mechanism in a *settlement* system ensuring that the final transfer of one asset (eg a purchase) occurs simultaneously with, and only with, the transfer of another asset (eg a payment).
Demutualisation	Process of exchanges converting from a cooperative organisation owned by member *dealers* and *brokers* to a profit-oriented company.
Derivative	A financial contract whose value depends on the value of one or more underlying reference assets, rates or indices.
Digital	A method of representing data via discrete, well-defined samples (cf *analogue*).
Digital certificate	The electronic equivalent of the handwritten signature and unique to the holder. It verifies identity and address and can be used to validate digital cheques and other payment instructions (cf *digital signature* and *smartcard*).

Digital cheque	An internet-based payment system, eg *PayPal*.
Digital divide	Situation where only the affluent and IT-literate have easy access to the financial system.
Digital money	See *cybermoney*.
Digital signature	A string of data generated by *cryptography* attached to a message to ensure its authenticity and protect the recipient against repudiation by the sender.
Direct debit	Pre-authorised deduction from a payer's bank account initiated by the payee.
Dot com	New, often speculative, companies based on *internet* applications.
E-banking	Banking operations conducted using the *internet*.
eBay	A prominent *internet*-based auction system.
EBG	Electronic Banking Group; a group of experts established by the *BCBS*.
E-broking	The processing of orders for purchase and sale of share sent to *brokers* from customers using the *internet*.
EBS	Electronic broking services. *Electronic trading* system for trading foreign exchange.
E-cash	Multi-purpose *SVCs* and *smartcards* eg *Mondex*.
ECB	European Central Bank.
ECNs	Electronic Communication Network, a class of *ATS* used for US equities, notably those listed on *Nasdaq*, eg Instinet, Island. (Sometimes used more broadly as a synonym for *ATS*).
E-commerce	Sale of goods and services carried out over the *internet* or other public networks.
Economies of scale	Situation where unit costs drop as volume increases.
E-finance	Electronic finance. The provision of financial services over the *internet* or other public electronic media. This includes money, banking, payments, trading, broking, insurance etc. Also known as "digital finance". Subset of *e-commerce*.
Efficient market	Market where prices balance underlying supply and demand and adjust as smoothly as possible to embody all available information, without discontinuities or excessive volatility unrelated to fundamentals.
EFT	Electronic funds transfer. A standard mechanism for electronically transmitting funds between two parties.
E-insurance	Insurance operations conducted using the *internet*.
Electronic order routing	Delivery of orders to *execution* system.
Electronic trading	Use of electronic means for transforming orders into trades.
E-money	Money stored electronically in a device such as a *smartcard* or *SVC*, or as *cybermoney*.
EMU	Economic and Monetary Union, within the European Union.
Encryption	The use of *cryptography* to encode text to prevent unauthorised observation.
Eurex	A Swiss/German electronic derivatives exchange offering trading, *clearing* and *settlement* on one platform.

EuroMTS	A trading platform for euro-denominated government bond benchmarks of nine euro area countries.
Execution	Turning matched orders or trade proposals into actual trades.
Explicit trading costs	Costs such as market access fees, commissions, tax, *clearing* and *settlement* costs and staff and *IT* overheads (cf *implicit trading costs*). (See page 42).
Extranet	Linked network of *intranets* or part of a company's *intranet* that is extended to users outside the company. They may be used to share securely part of a business's information or operations with suppliers, vendors, partners or customers.
Financial portal	A financial institution of the future that develops proprietary indices focusing on individual needs and providing customers with financial instruments based on these indices. The business model resembles that of internet portals such as AOL and Yahoo!
First mover advantage	Possible ability of first entrant to a market to achieve a dominant position eg by setting standards or through establishing a dominant brand name. (See page 38).
Fragmentation of trading	Division of some aspects of the trading process (*order routing*, *execution*) between different markets (cf *consolidation*).
Giro transfer	A credit transfer system.
Governance	Rules covering the operation of a market and its participants.
GSM	Global standard for mobile communications.
Hotelling model	Model of duopolistic competition.
IAIS	International Association of Insurance Supervisors.
IBAN	International Bank Account Number.
Iceberg order	An order (partially) invisible on the order book.
ICT	Information and communication technology.
Implicit trading costs	The *bid-ask spread* and impact on market price of a trade (cf *explicit trading costs*). (See page 43).
Indication of interest (IoI)	An investor's stated, but non-binding, desire to purchase securities at a given price.
Information asymmetry	Tendency for some market participants (eg banks, *brokers*) to be better informed than others (eg customers).
Infrastructure	Features required for a market to operate, such as communication devices, software and equipment for *execution*, *clearing* and *settlement* procedures.
Internet	An open worldwide communication infrastructure consisting of interconnected computer networks and allowing access to remote information and the exchange of information between computers.
Intranet	An *internet*-like system only operating within a single organisation.
IPO	Initial Public Offering; the initial sale of shares in a new company.
IT	Information technology.
LIFFE	London International Financial Futures Exchange.
Liquidity	Characteristic of a market where transactions do not markedly move prices. Liquid markets usually have low *bid-ask spreads* and high volume.

Limit order	Order to buy a specified quantity up to a maximum price, or sell subject to a minimum price (cf *market order*)
Market impact cost	Cost of a trade resulting from an order moving the price against a *trader*. Such costs are smaller in a market with high *liquidity*.
Market-maker	*Dealer* obliged to quote buy and sell prices in return for certain privileges within a market.
Market order	Order to buy (or sell) a specified quantity at the prevailing price (cf *limit order*).
M-commerce	Sale of goods and services carried out using mobile phones, particularly if they are also used to make payment.
Micropayment	A small payment (sometimes taken as under US$ 10, sometimes meaning not more than a few cents) which would be uneconomical to process through traditional payment media.
Microstructure (market)	Literature analysing specific institutions, exchanges and trading rules, especially their role in *price discovery*.
Mondex	A type of *smartcard* designed for consumer purchases.
Money base	Monetary liabilities of the central bank. Sometimes called "high-powered money".
Monex	A Japanese e-*broker*.
Moral hazard	Problem of insurance leading to the insured engaging in riskier behaviour.
Nasdaq	*OTC* market for US equities specialising in high-tech stocks.
Network effect, network externalities	Tendency for liquid markets to attract further liquidity as market participants want to trade where others are already actively trading. Sometimes referred to as "demand side *economies of scale*". (See page 38).
Network money	See *cybermoney*.
Network puzzle	Observation that despite pressures for *consolidation*, many markets are subject to *fragmentation*.
NYSE	New York Stock Exchange.
Opacity	Opposite of *transparency*.
Open network	System design based on publicly available and standardised software, enabling easy interlinkage (cf *proprietary system*).
Order book	A market where prices are determined by an order execution algorithm from participants sending firm buy and sell orders (cf *quote-driven* or *dealer* market).
Order routing	Delivery of messages from end users to the *execution* system.
OTC	Over the counter. Bilateral transactions not conducted on a formal exchange.
Outsourcing	The practice of a firm contracting a non-core activity to a third party.
Pareto improvement	A change that makes at least one person better off but nobody worse off.
PayPal	A type of *digital cheque*.
Positive feedback	Situation whereby a market with high *liquidity* attracts more participants, all participants benefit from the additional liquidity, making the *network* more attractive to others, and so on.

Prepayment card	A card on which value is stored for which the holder has paid the issuer in advance.
Price discovery	Determination of prices in a market (cf *crossing system*).
Pricing engines	Systems that automatically generate prices.
Proprietary system	System that can only be used with a specific market or *dealer* (cf *open network*).
Protocol	A set of rules governing trading, eg the types of orders allowed (*market order*, *limit order*, stop-loss, off-market, etc), minimum tick size, rules to halt trading, special rules for openings and closings.
Public good	Commodity or service available to everyone in an area, regardless of their willingness to pay, and where one person's consumption does not diminish that of others. Classic examples include defence and street lighting.
Public key infrastructure	The system of technology, rules and institutions to use *cryptography* to ensure data confidentiality. Elements include certification authorities issuing *digital certificates* and use of different keys for encryption and decryption.
Pure-play internet bank	See *virtual bank*.
Quality (market)	Broadly, market performance across a range of attributes such as *liquidity*, volatility and *resilience*.
Quote-driven	Refers to a market where a class of participants, possibly *market-makers*, post bid and ask quotes, often indicative, with prices being determined through bilateral negotiation.
Regulatory arbitrage	Institutions choosing their preferred (possibly laxest) among alternative regulators.
Relabelling	A financial institution selling another's product under its own name to its customers.
Resilience	Ability of a market to function in an efficient, *liquid* and orderly manner at times of great price uncertainty and market stress.
SEC	Securities and Exchange Commission. A major regulator of financial markets in the United States.
Seigniorage	Profit earned by a central bank by printing money, ie issuing an interest-free liability to buy interest earning assets.
Selection bias	Use of a non-random sampling procedure that does not provide an accurate representation of the population. A class of this is *adverse selection bias.*
Service level agreement (SLA)	A contract between the service provider and receiver that defines the services and service levels and also specifies the guarantees. (See page 22).
Settlement	Completion of a transaction by exchange of instrument and funds.
Shill bidding	The deliberate placing of bids in an auction to raise artificially the price of an item. (See pages 22-3).
Smart agent	A *vertical portal* that not only compares products and services offered by different financial institutions but automatically selects the best offer.
Smartcard	An integrated circuit card with a microprocessor, capable of performing calculations and producing a *digital signature*.

STP	Straight-through-processing: the capture of trade details directly from front office systems to back office. Completes automated processing of *clearing* and *settlement* instructions without the need for re-keying or reformatting data.
SVC	Stored value card. A prepaid card in which the record of funds can be increased as well as decreased. Also called an electronic purse.
SWIFT	Society for Worldwide Interbank Financial Telecommunication. An international messaging system for payment instructions.
TCE	Technology, communication and entertainment industries.
Technology neutral	Approach of supervisors which balances the desire to set regulatory guidelines before market developments go too far against the risk that a heavy-handed regulatory approach may stifle innovation.
Tipping	Tendency for a system provider that has achieved a large market share to move quickly to a (near) monopoly.
Token money	Items such as precious metals and stones that have intrinsic or alternative use value, or objects such as notes and coin that are essentially valueless but generally accepted as media of exchange.
Trader	Employee of *dealer* or end user paid to operate in financial markets.
Transparency	Ability of market participants to observe trade information in a timely fashion. (See page 40).
Tunnelling protocols	Standards governing methods of transferring encapsulated data through private tunnels over public networks.
Upstairs trading	Special arrangement for handling (usually) *block trades*, possibly involving less transparency.
Vertical portal	*Internet*-based, possibly customised, facility allowing customers to compare products and services offered by a range of financial institutions with links to the individual institutions eg CNNfn, Yahoo Finance, Motley Fool.
Virtual bank	A bank operating through the *internet* with no physical branches (cf. *Clicks-and-mortar*).
VPN	Virtual private network. A private data network that uses public networks but maintains security through *tunnelling protocols* and security procedures such as access control and *encryption*. (See page 22).
Xenocurrency	A currency in common use outside its country of issue. Also termed "eurocurrency".
Y2K issue	Concerns that computer systems would be disrupted by treating 1 January 2000 as 1 January 1900 as old programs only stored the last two digits of years.