**Abenomics** Refers to the set of policy measures introduced by Japanese Prime Minister Shinzo Abe after the December 2012 elections to boost the domestic economy. The set of policies encompasses three "arrows": monetary stimulus, fiscal flexibility, and structural reforms.

**Accommodative policies** Central bank policies designed to stimulate economic growth by making borrowing less expensive.

Additional Tier 1 capital The sum of (1) instruments issued by banks that meet the criteria for inclusion in Additional Tier 1 capital (and are not included in Common Equity Tier 1); (2) stock surplus (share premium—the value of paid-in capital that exceeds the shares' nominal value) resulting from the issuance of instruments included in Additional Tier 1 capital; (3) instruments issued by consolidated subsidiaries of the bank and held by third parties that meet the criteria for inclusion in Additional Tier 1 capital and are not included in Common Equity Tier 1; and (4) applicable regulatory adjustments. See *Common Equity Tier 1* and *Tier 1 capital*.

**Asset encumbrance** An asset is considered encumbered if it has been pledged or may be required to secure or collateralize a transaction from which it cannot be freely withdrawn. The asset may be pledged to reduce the credit risk of the underlying transaction (for example, a "credit enhancement").

**Bail in** A statutory power to restructure the liabilities of a distressed financial institution by writing down, or converting to equity, its unsecured debt.

**Bail-in debt** Also frequently called bailin-able debt refers to any liabilities that can be "bailed-in," by being written off, written down, or converted into equity through the application of statutory bail-in powers in a bank resolution.

**Balance-sheet constraints** In the context of Chapter 2, constraints related to the capital or liquidity position of banks, to their access to market finance or, more generally, to their cost of funds, all of which can make lending by banks more difficult or expensive.

Bank insolvency A bank becomes insolvent when its equity value falls below zero—namely, when the value of its assets falls below the value of its debt. Before becoming insolvent, a bank breaches minimum regulatory capital requirements, which usually leads to a series of actions from the supervisor, including, but not limited to, intensified supervisory monitoring, restrictions on dividend payouts, and instructions to take specific managerial actions.

Bank resolution There are two broad forms of bank resolution. One is a liquidation—namely a "gone concern" resolution, under which a bank ceases to operate and its assets are distributed among creditors according to their seniority. The other is a "going concern" resolution, under which some parts of the bank's operations continue, typically with some financial and operational restructuring. The latter could include purchase and assumption (P&A): a healthy bank purchases the assets and assumes the liabilities of an unhealthy bank, and a bridge bank, authorized to hold the assets and liabilities of an unhealthy bank, continues the bank's operations until it is solvent and is acquired by another entity or until it is liquidated.

**Banking union** A European Commission policy response to the global financial crisis: establishment of a single supervisory-regulatory framework, harmonized national resolution regimes for credit institutions, and harmonized standards across euro area national deposit insurance programs.

## Basel Committee on Banking Supervision (BCBS)

A committee of banking supervisory authorities that provides a forum for regular cooperation on banking supervisory matters. The committee develops guidelines and supervisory standards in various areas, including the international standards on capital adequacy, the Core Principles for Effective Banking Supervision, and the Concordat on cross-border banking supervision.

**Basel III** A comprehensive set of reform measures introduced as a result of the global financial crisis to improve the banking sector's ability to absorb financial and economic shocks, enhance banks' risk management

and governance, and increase transparency and disclosure. These measures revise the existing definition of regulatory capital under the Basel Accord, enhance capital adequacy standards, and introduce minimum liquidity adequacy standards for banks.

**CDS spread** A credit default swap (CDS) is a credit derivative whose payout is triggered by a "credit event," often a default. The "spread" of a CDS is the annual amount (the "premium") the protection buyer must pay the protection seller over the length of the contract, expressed as a percent of the notional amount.

**Collateral** Assets pledged or posted to a counterparty to secure an outstanding exposure, derivative contract, or loan.

Common Equity Tier 1 (CET1) The sum of (1) common shares issued by a bank that meet the regulatory criteria for classification as common shares (or the equivalent for non-joint-stock companies); (2) stock surplus (share premium—the value of paid-in capital that exceeds the shares' nominal value) resulting from the issuance of instruments included in CET1; (3) retained earnings; (4) accumulated other comprehensive income and other disclosed reserves; (5) common shares issued by consolidated subsidiaries of the bank and held by third parties (that is, minority interest) that meet the criteria for inclusion in CET1 capital; and (6) applicable regulatory adjustments. See *Tier 1 capital*.

**Contingent convertible bonds or CoCos** Bonds with principal and coupon payments that are automatically converted into equity or written down, in accordance with their contractual terms, when a predetermined trigger event occurs.

**Contingent cost** Cost that may or may not materialize, depending on the outcome of a future event.

**Corporate spread** Difference between the yield on a corporate bond and the yield on a government bond of the same maturity.

**Countercyclical** Movement of an economic or financial quantity that is opposite to the economic cycle. For example, countercyclical capital buffers are built up during an economic upturn so that they can be drawn down in a downturn.

**Credit cycle** The expansion and contraction of credit over time.

**Credit guarantee** A promise to repay the lender if the borrower defaults.

**Credit policies** Policies implemented to promote credit creation.

**Credit registry** A database, often maintained by central banks or bank supervisors, with detailed information on loans granted by financial intermediaries. In particular, a credit registry usually contains detailed information about both the borrower and the lender.

**Credit risk** The risk that a party to a financial contract will incur a financial loss because a counterparty is unable or unwilling to meet its obligations.

**Creditless recovery** A situation in which economic recovery after a downturn is not associated with corresponding growth in credit.

**Currency overlay funds** Structured products that feature an outright investment in an underlying asset, such as a domestic stock, compounded with an "overlay" exposure to a (possibly unrelated) currency.

**Debt overhang** A situation in which excessively indebted borrowers do not act as they would if they had less debt outstanding. For example, corporations might not pursue otherwise profitable business opportunities, or highly indebted households may choose not to invest or consume, but rather pay off their loans.

**Debt restructuring** A change in the terms of a borrower's outstanding debt, often to the benefit of the borrower.

**Deleveraging** The reduction of the leverage ratio—the percent of debt on a financial institution's balance sheet.

**Deposit preference** Preference given to depositors in the creditor hierarchy that gives them a preferential claim over the assets of a failed deposit-taking institution compared with other senior unsecured creditors.

**Direct credit easing** Direct purchases (or sales) by the central bank in specific credit market segments with impaired functioning.

**Duration** A measure of the sensitivity of bond prices to interest rate fluctuations, based on the bond's weighted average cash flows.

Earnings before interest, taxes, depreciation, and amortization (EBITDA) A measure of a company's operating cash flow obtained by looking at earnings before the deduction of interest expenses, taxes, depreciation, and amortization. This measure is used to compare companies'

profitability without the accounting and financing effects of various asset and capital structures. This measure may be of particular interest to creditors because it represents a company's income available for interest payments.

**Endogeneity** In a statistical model, endogeneity may arise when an independent variable (regressor) is correlated with the error term, which makes it difficult to identify causal relationships. Endogeneity may be caused, for example, by omitted variables or simultaneity.

**European option** An option that may be exercised only on its expiration date.

**European Stability Mechanism (ESM)** An international organization that assists members of the euro area in financial difficulty to safeguard the financial stability of the euro area. The ESM may raise funds, for

stability of the euro area. The ESM may raise funds, for example, by issuing bonds and other debt instruments and entering into arrangements with euro area members.

**Evergreening** Additional loans by banks to stressed borrowers to enable them to repay existing loans or interest. This practice can prevent loans from becoming nonperforming, but it further increases a bank's exposure to a troubled borrower.

**Exogenous variable** In an econometric model, an explanatory variable is exogenous if it is not correlated with the error term.

**Externality** Cost or benefit arising from an economic activity that affects not only those engaged in the activity but also those not engaged in the specific activity.

**Financial fragmentation** A broad retrenchment in cross-border flows and assets so that private capital is invested and held more along national lines. In a currency union such as the euro area, fragmentation can lead to a breakdown in monetary policy transmission across the region's banking and credit markets.

**Fire sale** A panic condition in which many holders of an asset or class of assets attempt a market sale, thereby driving down the price to extremely low levels. A fire sale may also denote a seller's acceptance of a low price for assets when faced with bankruptcy or other impending distress.

**Fitted values** Values predicted by a model that has been fitted to a set of data.

**Fixed-rate full allotment** Under fixed-rate full allotment liquidity provisions, central bank counterparties'

bids are fully satisfied (against adequate collateral) at a predetermined price.

**Flexible Credit Line (FCL)** An IMF credit line for the purpose of crisis prevention and mitigation for countries with very strong economic fundamentals and policy track records.

**Forbearance** A temporary postponement of loan payments granted by a lender or creditor. Forbearance gives the borrower time to make up overdue payments on a loan.

**Foreclosure** A lender's seizure of pledged or mortgaged assets, such as a house, usually with the intention of selling them to recover part or all of the amount due from the borrower.

**Funding cost** Cost at which banks can obtain funds (in the form of equity or debt).

**Funding liquidity risk** The risk that increases in assets cannot be funded or obligations met as they come due without incurring unacceptable losses. Funding liquidity risk sometimes refers to the risk that solvent counterparties might have difficulty borrowing in the very short term to meet required liability payments.

Global systemically important bank (G-SIB) Large banking institution with global operations with a potential impact on the financial system. The Financial Stability Board (FSB) has tentatively identified 29 global banks as G-SIBs. These banks have been provisionally earmarked for additional loss absorbency, or capital surcharges, ranging from 1 percent to 2.5 percent of the ratio of Common Equity Tier 1 capital to risk-weighted assets.

**Government-sponsored enterprise (GSE)** A financial institution that provides credit or credit insurance to specific groups or areas of the economy, such as farmers or housing. In the United States, such enterprises are federally chartered and maintain legal and/or financial ties to the government.

**Great Moderation** Period beginning in the 1980s of substantially reduced macroeconomic volatility in the United States.

**Identification** In an econometric model, a parameter is said to be identified if it can be consistently estimated from the observed data.

**Indirect credit easing** The provision of long-term funds to banks by the central bank (instead of through regular weekly operations) specifically so that banks can expand lending to firms and households.

**Information asymmetry** Situation in which one party in a transaction has more or better information than the other. This imbalance in information can potentially affect the nature of the transaction and lead to a market failure. See *Market failure*.

**Instrumental variable (instrument)** Alternative variable used in an econometric analysis whose original variable represents either cause or effect. Ideally, an instrumental variable is highly correlated with the original variable so that it behaves like the original variable, but it should have little correlation with the dependent variable to eliminate effects of dependent variable movements.

**Insured deposits** Deposits insured by deposit guarantee programs. Some types of deposits, such as retail deposits, are eligible for the insurance but are not insured because the amount of the deposit exceeds the maximum insurance coverage.

**Interest coverage ratio (ICR)** Earnings before interest, taxes, depreciation, and amortization (EBITDA) divided by the interest expense. It measures firms' ability to service their debt.

**Jumbo loan** In the U.S. mortgage market, a mortgage loan that exceeds a certain legally determined limit and can therefore not be sold by banks and other lenders to government-sponsored enterprises.

**Lending standards** Internal guidelines or criteria that reflect the conditions under which a bank will grant a loan. These include various nonprice lending terms in a typical bank business loan or line of credit, such as collateral, covenants, and loan limits.

**Leverage** The proportion of debt to equity (also assets to equity) often expressed as a multiplier, such as 20X, or the capital-to-asset ratio in banking, expressed as a percent. Leverage can be built up by borrowing relative to a fixed amount of capital (on-balance-sheet leverage) or through off-balance-sheet transactions that increase the future exposure of the bank relative to its loss-absorbing capacity. See *Loss-absorbing buffers* (or capacity).

**Leverage ratio** A bank's leverage ratio typically refers to Tier 1 capital as a ratio of adjusted assets. Assets are adjusted for intangible assets not included in Tier 1 capital.

**Liquidity coverage ratio (LCR)** A liquidity standard introduced by Basel III. It is defined as the stock of high-quality liquid assets as a proportion of the bank's "net

cash outflows over a 30-day time period." Two types of liquid assets are included, both of which should have high credit quality and low market risk: Level 1 assets should be unlikely to suffer large price changes during periods of distress; Level 2 assets are more likely to suffer price changes and be subject to a haircut and a limit on their quantity in the overall liquidity requirement.

**Loan covenants** Provisions in a loan agreement binding on the borrower or lender.

**Loan loss provision** Losses (noncash charge to earnings) that a bank expects as a result of uncollectible or troubled loans and that is used to create a loan loss reserve. Examples include transfers to bad debt reserves (Japan) and amortization of loans (Japan).

**Long-term refinancing operation (LTRO)** Open market operations conducted by the European Central Bank to provide long-term liquidity to the banking system.

Loss-absorbing buffers (or capacity) Bank liabilities that can be used to absorb losses from assets to maintain the bank's viability. Equity and capital-qualifying debt, recognized under bank capital rules, are important components. Additional debt instruments could also be used to absorb losses without going through a liquidation process, including under statutory bail-in powers.

**Macroprudential policies** Policies to maintain the safety and soundness of the financial system as a whole (for example, countercyclical capital buffers).

**Mark-to-market valuation** The act of recording the price or value of a security, portfolio, or account to reflect its current market value rather than its book value.

Market failure Occurs when free markets fail to allocate resources efficiently. Market failures are often associated with asymmetric information (when buyers and sellers do not operate with the same set of information), non-competitive markets (such as monopolies), externalities (see *externality*), or public goods (when the traded good cannot be excluded from others' use).

**Market liquidity** Ability to trade an asset's large nominal value without significantly altering its market price.

**Microprudential policies** Supervisory and regulatory policies aimed at maintaining the safety and soundness of individual financial institutions. Examples are capital and liquidity requirements, banks' recovery and resolution

plans, restrictions on executive compensation, limits on dividend distributions, etc.

**Model herding** Tendency for financial sector players to act together, often as the result of using similar common financial models.

**Money market mutual fund (MMMF)** An open-ended mutual fund that invests in short-term money market securities, such as U.S. Treasury bills and commercial paper.

Moral hazard A situation in which an agent (an individual or institution) will act less carefully than otherwise because the consequences of a bad outcome will be largely shifted to another party. Often such behavior is present because the other party cannot observe the actions. For example, a financial institution may take excessive risks if it believes that governments will support them during a crisis and that governments cannot observe the risky behavior ex ante to prevent it.

Mortgage-backed security (MBS) A security, backed by pooled mortgages on real estate assets, that derives its cash flows from principal and interest payments on those mortgages. An MBS can be backed by residential mortgages (RMBS) or mortgages on commercial properties (CMBS). A private-label MBS is typically a structured credit product. RMBSs that are issued by a government-sponsored enterprise are not structured (that is, do not have a tiered or tranched payments structures with payment priorities to the different holders).

## Mortgage real estate investment trusts (mREIT)

Investment vehicles designed for borrowing at shortterm rates and investing in long-term mortgage-related securities.

Net stable funding ratio (NSFR) Introduced by Basel III to provide a more sustainable maturity structure of assets and liabilities. The NSFR stipulates that the ratio of a bank's available stable sources of funding to its required stable funding be greater than 100 percent. Each asset category (including off-balance-sheet contingent instruments) is assigned a factor to reflect its potential liquidity characteristics. The NSFR aims to limit overreliance on short-term wholesale funding during times of buoyant market liquidity and to encourage better assessment of liquidity risk across all on- and off-balance-sheet items.

**Nonbanks** Financial institutions that do not have full banking licenses or are not supervised by a national or

international banking regulatory agency. They facilitate bank-related financial services, such as investment, risk pooling, contractual savings, and market brokering, and can include money market mutual funds, investment banks, finance companies, insurance firms, pension funds, hedge funds, currency exchanges, and microfinance organizations.

Nonperforming loan (NPL) A loan for which the contractual payments are delinquent, usually defined as being overdue for more than a certain number of days (for example, more than 30, 60, or 90 days). The NPL ratio is the amount of nonperforming loans as a percent of gross loans

**Originate-to-distribute model** A banking model, popular in North America, whereby banks tend to distribute loans, such as mortgages, credit card credits, and corporate loans, that they originate to other investors.

Overcollateralization When issuing covered bonds, issuers usually pledge collateral so that the total value of the collateral exceeds the borrowed amount. The extent of overcollateralization varies significantly across bonds, ranging from a few percent to well over 100 percent. A rating agency will often require a certain degree of overcollateralization for the bond to attain a high rating (for example, AAA).

**Quantitative easing (QE)** Direct purchases of government bonds by the central bank, usually when the official policy interest rate is at or near the zero lower bound.

## Quantitative and qualitative monetary easing

**(QQME)** Policies introduced by the Bank of Japan that involve significantly increasing its holdings of government bonds and other assets through extending the maturity of Japanese government bond purchases. The aim is to achieve a consumer price index stability target of 2 percent year over year as soon as possible.

**Pari passu** When creditors rank equally in the creditor hierarchy for repayment of their debt from the obligor's assets.

**Perpetual bonds** Perpetual bonds, also known as perp bonds, are those with no maturity date.

**Pillar 1 (of Basel II)** One of the three mutually supporting pillars that form the Basel II accord. Pillar 1 sets a minimum capital requirement for all internationally active banks that covers credit risk, operational risk, and market risk.

**Pillar 3 (of Basel II)** One of the three mutually supporting pillars that form the Basel II accord. Pillar 3 provides disclosure requirements for information regarding regulatory capital ratios.

**Preferred creditor** An individual or organization that has repayment priority if the debtor declares bankruptcy.

**Preferred share** A preferred share (or stock) is an equity security that has features not possessed by common stock, including properties of both an equity and bonds and is generally considered a hybrid instrument. It usually has no voting rights, but may carry dividends and may have priority over common stock in the payment of dividends, and may receive cash flows upon liquidation.

**Price-to-book ratio** Used to compare a firm's stock market value to its book value. It is calculated by dividing the current closing price of the stock by the firm's recent-quarter accounting book value per share.

**Primary market** The financial market that deals with the issuance of new financial instruments, such as stock and bonds. See also *Secondary market*.

**Probability of default (PD)** Likelihood of default over a given time horizon.

**Prudential measures** These comprise micro- and macroprudential policy measures.

Regulatory forbearance A situation in which bank regulators or supervisors allow banks to avoid adhering to established regulations. To temporarily help borrowers, regulators or supervisors may allow banks to avoid recognizing nonperforming loans on their balance sheets or discourage banks from seizing collateral underlying their loans.

Relationship banking A situation in which a bank attempts to cultivate a long-term relationship with their borrowers. Typically, a bank will attempt to accumulate soft (proprietary) information in existing customers in addition to hard (quantifiable, verifiable) information to assess a borrower's creditworthiness. Various products, such as long-term contracts, can help to establish a borrower's long-term commitment to the bank.

Repurchase (repo) transaction A sale of securities coupled with an agreement to repurchase the securities at an agreed price at a future date. This transaction occurs between a cash borrower (or securities lender)—typically a fixed-income securities broker-dealer—and the cash lender (or securities borrower), such as a money market mutual fund or a custodial bank. The securities lender receives

cash in return and pledges the legal title of a security as collateral.

**Return on assets (RoA)** The amount an investor would earn from a firm as a proportion of the total assets. Usually calculated as: (Net income before preferred dividends plus ((interest expense on debt-interest capitalized) multiplied by (1 minus tax rate))) divided by last year's total assets multiplied by 100.

**Risk premium** The extra expected return on an asset that investors demand in exchange for accepting its higher risk.

**Secondary market** The financial market in which previously issued financial instruments, such as stock or bonds, are bought and sold. The existence of liquid secondary markets can encourage people to buy in the primary market, as they know they are likely to be able to sell easily should they wish to. See *Primary market*.

**Secured creditor** Any creditor or lender that takes collateral for the extension of credit, loan, or bond issuance.

**Secured funding** Funding secured by certain collateral, including repos, asset-backed securities, mortgage-backed securities, and covered bonds. At liquidation, secured debt holders have priority claim up to the value of the pledged collateral over general creditors, including depositors.

**Securitization** The creation of securities from a reference portfolio of preexisting assets or future receivables that are placed under the legal control of investors through a specially created intermediary: a "special purpose vehicle" (SPV) or "special purpose entity" (SPE). In the case of "synthetic" securitizations, the securities are created from a portfolio of derivative instruments.

**Senior creditor** A creditor who receives higher priority for the repayment of a debt instrument from the obligor's assets, for example, compared to subordinated or junior creditors.

**Shadow banks** Nonbank financial intermediaries that provide services similar to traditional commercial banks, but are not regulated or supervised like a bank. These can include hedge funds, money market funds, and structured investment vehicles (SIVs), depending on their investment and funding strategies.

**Shifter** In the context of Chapter 2, a variable that shifts either the credit supply curve or the demand curve, without affecting the other.

**Single supervisory mechanism (SSM)** A common banking supervision framework under the aegis of the

European Central Bank for the euro area banks, as proposed by the European Commission in September 2012.

**Small and medium enterprises (SMEs)** In Europe, these firms are classified based on the number of employees and balance sheet turnover (according to EU law).

**Stop-loss sales** Sales orders that are executed when a security falls to a prespecified price.

**Stress test** A process that evaluates an institution's ability to financially withstand adverse macroeconomic and financial situations.

**Subordinated debt (or junior debt)** This debt instrument receives lower seniority than general debt in the event that a company falls into liquidation or bankruptcy, and it receives payments only after all senior debt holders are paid but before equity holders receive any money.

**Swaptions** Interest rate instruments that allow investors to take a view on future interest rate volatility, using options to trigger underlying interest rate swap agreements. A 10-year by 10-year swaption allows an investor to buy/sell a 10-year option on an underlying interest rate swaps contract with a 10-year maturity.

**Tangible assets (TA)** Total assets less intangible assets (such as goodwill and deferred tax assets).

**Tangible leverage ratio** A measure of financial strength using the ratio of a bank's total liabilities to its shareholder's equity less goodwill and tangible assets. It is not a regulatory requirement.

**Term premium** The premium in terms of yield that an investor expects to receive for buying longer-dated securities compared to the yield received if short-term securities were to be reinvested as they come due until the maturity of the longer-dated securities.

**Tier 1 capital** Under Basel III, Tier 1 capital (or going concern capital) comprises Common Equity Tier 1 capital and Additional Tier 1 capital. See *Common Equity Tier 1 capital* and *Additional Tier 1 capital*.

**Tier 1 capital ratio** This is the ratio of a bank's Tier 1 capital to its total risk-weighted assets (RWA). Under Basel III, banks in member countries are required to meet the minimum Tier 1 capital ratio requirement of 6 percent and Common Equity Tier 1 capital ratio of 4.5 percent by January 1, 2015. See *Tier 1 capital*.

**Underwriting** The process that a financial institution, such as a bank or insurer, uses to assess the eligibility of a customer to receive a financial product, such as credit or insurance.

**Universal banking model** Banking system, popular in Europe, whereby banks often provide a range of financial products and services, including both investment and commercial banking, transaction banking, asset gathering, and retail banking.

**Unsecured creditor** Any creditor or lender that lends money without obtaining prespecified assets as collateral.

**Value-at-risk (VaR)** An estimate of the loss, over a given horizon, that is statistically unlikely to be exceeded at a given probability level, usually based on the historical returns, covariances, and volatilities of a portfolio of assets.

**Vertical (bull) spread** An options strategy involving buying a call and selling a put option on the same underlying security with the same expiration date but at different strike prices. In Chapter 3, value of senior debt mirrors a strategy in which the call is purchased at a lower strike price than the put is sold.

Vienna Initiative The European Bank Coordination "Vienna" Initiative (EBCI) was launched in January 2009 to provide a framework for coordinating the crisis management and resolution regime that involved large cross-border banking groups in emerging Europe. The European Bank for Reconstruction and Development, the IMF, the European Commission, and other international financial institutions initiated a process to address possible collective actions for dealing with financial instability. In a series of meetings, the international financial institutions and policymakers from home and host countries' banks met with commercial banks active in emerging Europe to discuss what measures might be needed to reaffirm their presence in the region in general and, more specifically, in countries that were receiving balance of payments support from the international financial institutions.

**VIX** Chicago Board Options Exchange Volatility Index that measures market expectations of financial volatility over the next 30 days. The VIX is constructed from S&P 500 option prices.

Wholesale funding Bank funding instruments typically issued in money and capital markets, including interbank deposits, commercial paper (CPs), certificates of deposit (CDs), repurchase agreements (repos), swaps, and various kinds of bonds. These are typically purchased by institutional investors, including other banks.