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#### 1. VA Loan

A VA loan is the mortgage which is made by banks and insured by the Veterans Administration (VA), which is a federal agency insuring mortgages.

#### 2. Valuation Reserve

Loan-loss reserve reported on the balance sheet; losses can be charged only against this reserve. In the balance sheet, it is listed as loan and lease loss allowance.

# 3. Value Additivity (VA) Principle

In an efficient market, the value of the sum of two cash flows is the sum of the values of the individual cash flows. No matter how the payments are divided among claimants, the sum of the values will be the same. Value of bond + value of stock = value of firm.

## 4. Value At Risk

Value at risk (VaR) is a procedure for estimating the maximum loss associated with a security or portfolio over a specific period of time, associated with a given confidence level. VaR can be used to measure either market risk or credit risk. In a loss distribution, loss can be either expected loss (EL) or unexpected loss (UL). The UL is considered the measure of VaR.

# 5. Vanilla Option

A standard option or other derivative. For example, ordinary puts and calls are "vanilla" options.

All vanilla options share a few common characteristics: (i) one underlying asset; (ii) the effective

starting time is present; (iii) only the price of the underlying asset at the option's maturity affects the payoff of the option; (iv) whether an option is a call or a put is known when sold; and (v) the payoff is always the difference between the underlying asset price and the strike price, and so on. Vanilla options have many limitations resulting from their lack of flexibility. Each kind of exotic options, to some degree, overcomes one particular limitation of vanilla options.

#### 6. Variable Annuities

Annuity contracts in which the insurance company pays a periodic amount linked to the investment performance of an underlying portfolio. Variable annuities are structured so that the investment risk of the underlying asset portfolio is passed through to the recipient, much as shareholders bear the risk of a mutual fund. There are two stages in a variable annuity contract: an accumulation phase and a payout phase. See also Accumulation phase and Payout phase

#### 7. Variable Cost

A cost that varies directly with volume and is zero when production is zero. For example, if a variable cost is \$3\u00e4nit, and it has 100 units, its total variable cost is \$300. When the number of units becomes 200, the total variable cost is \$600.

### 8. Variable Life Policy

An insurance policy that provides a fixed death benefit plus a cash value that can be invested in a variety of funds from which the policyholder can choose. First introduced in 1975, variable life policies gained popularity after 1980 as an insurance vehicle providing some protection against inflation. Like whole life policies, variable life policies require level premium payments throughout the policyholder's life, but there are important differences. For example, excess premiums that add cash value earn variable, not fixed, rates return, based

on the insurer's yield on assets of the *policyholder's* choice. If the selected assets perform well, cash value and death benefits both increase. If not, the cash value may be zero, so the insured bears the entire investment risk. A minimum death benefit is specified in the policy, although there is no maximum. The actual payment to beneficiaries depends on yields earned on excess premiums.

## 9. Variable Rate Securities

A floating rate security refers to the applicable market interest rate has tied to some index and changes whenever the index changes. In other words, a variable rate security is automatic repricing, usually by changing the interest rate at predetermined intervals. For example a variable rate CD.

#### 10. Variable Universal Life

The newest type of life insurance product is variable universal life, introduced in 1985. So named because it combines the investment flexibility of variable life with the death benefit and premium flexibility of universal life See also Universal policy] this new type of policy has gained rapid acceptance among purchasers of life insurance. Variable universal life gives policyholders the greatest freedom to adjust death benefits, premium payments, and investment risk/expected return as their cash-flow and death protection needs change. (Some sources also use the name flexible premium life for this new policy)

#### 11. Variance

The historical risk of an asset can be measured by its variability of its net income in relation to its **arithmetic average**. See also **Arithmetic average**! The variance,  $\sigma^2$ , from a sample of data of random variable X is computed by summing the squared deviations and dividing by n-1.

$$\sigma^2 = \frac{\sum_{t=1}^n (X_t - \overline{X})^2}{n-1},$$

where  $X_t$  = observation t for random variable X;  $\overline{X}$  = arithmetic average of X; and N = number of observations for X.

Squaring the terms can make the variation difficult to interpret. Therefore, analysts often prefer the **standard deviation**, which is simply the square root of the variance. See also **Standard deviation**]

## 12. Variance Rate

It represents variance per unit of time. In a generalized Wiener process has two variables: (i) expected drift rate (average drift per unit of time); and (ii) variance rate. See also **Brownian motion** and **Wiener process**]

#### 13. Variance Reduction Procedures

Procedures for reducing the error in a Monte Carlo simulation. See also **Antithetic variant method** and **Control variant method**]

## 14. Variation Margin

An extra margin required to bring the balance in a margin account up to the initial margin when there is a margin call.

## 15. Vega

The change in the price of a derivative due to a change in volatility. Also sometimes called *kappa* or *lambda*. Based upon the call option formula defined in option pricing model See also **Option pricing equation** for variable definitions. The mathematical result can be defined as:

$$\frac{\partial C}{\partial \sigma} = S\sqrt{T}N'(d_1) > 0,$$

where 
$$N'(d) = \frac{2N(d_1)}{2\sigma}$$
.

## 16. Vega-Neutral Portfolio

A portfolio with a Vega of zero.

## 17. Venture Capital

Venture capitalists invest funds in private companies in return for ownership shares. Venture capital comes from a pool of money raised from a variety of limited partners, such as pension funds, insurance companies, and wealthy individuals; the venture capitalists act as the pool's general partners. The venture capitalist generally invests this capital in equity shares of private firms.

Venture capital does not solve the problem of ownership dilution, especially since venture capitalists often demand large ownership shares in exchange for their funds. The arrangement does have advantages, though. Venture capitalists often have expertise in the technology or marketing needs of the firms in which they invest. Venture capitalists frequently sit on their investees' Board of Directors and offer technical, marketing, and financial advice. Thus, they provide both funds and expertise to the growing firm.

Of course, venture capitalists do not provide their time and money simply as a public service. They invest with a future goal of "cashing out," or selling their shares in the company for much more than they paid. A venture capitalist cashes out if the firm goes public, is acquired by another firm, or if the firm's success allows the original owners to repurchase the venture capitalist's shares at a fair price. The venture capitalist returns the investment's profits to the pool's limited partners.

## 18. Vertical Acquisition

Acquisition in which the acquired firm and the acquiring firm are at different steps in the production process. The acquisition by an airline company of a travel agency would be a vertical acquisition. There are three types of acquisition, which includes horizontal acquisition, vertical acquisition, and conglomerate acquisition. See also Horizontal acquisition and Conglomerate acquisition]

### 19. Vertical Combination

A type of business combination that may involve two firms those are in a supplier-customer relationship. See also **Vertical acquisition**]

## 20. Vertical Spread

The sale of an option at one strike price and purchase of an option of the same type (call or put) at a different strike price, both having the same underlying asset and time to expiration.

### 21. Vested Benefits

These refer to benefits that employees are entitled to even if they leave the firm before retirement. The employee is given a legal claim on his or her pension rights when he or she becomes vested. This means that even if the employee leaves the firm, he or she is still entitled to receive a pension from the firm on retirement. There are various types of vesting formulas, which determine when an employee becomes vested. Most formulas are based on the employee's length of service. For example, if a firm's pension policy states that an employee can become vested after working for the firm for nine years, then after nine years of working for the firm the employee is entitled to receive a pension. From the firm's perspective, the vesting formula may lower the cost of the pension plan because employees who leave the company before they become vested are not entitled to receive any pension benefits.

# 22. Volatile Deposits

Difference between actual outstanding deposits and core deposits; they represent balances with a high probability of being withdrawn. Implicitly, these are a bank's highly rate sensitive deposit that customers withdraw as interest rates vary.

### 23. Volatile Funds

For example, negotiable CDs, repurchase agreements, and fed funds purchased are quite volatile. Management assumes that most of these funds could be withdrawn or become unavailable on short notice.

# 24. Volatility (Options)

The standard deviation of the continuously compounded return on an asset. This measure is one of the five variables used to determine the value of option. See also **Black-Scholes option pricing model**]

# 25. Volatility Matrix

A table showing the variation of implied volatilities with strike price and time to maturity.

# 26. Volatility Risk

The risk in the value of options portfolios due to unpredictable changes in the volatility of the underlying asset.

### 27. Volatility Skew

Generally, implied volatility as a function of the strike price. Volatility skew refers to a difference in premiums as reflected in differences in implied volatility. Skew is sometimes used more precisely to refer to a difference in implied volatilities between in-themoney and out-of-the-money options. See also Constant elasticity variance (CEV) model

## 28. Volatility Smile

A volatility skew in which both in-the-money and out-of-the-money options have a higher volatility than at-the-money options (i.e., when you plot implied volatility against the strike price, the curve looks like a smile.)

## 29. Volatility Swap

Swap where the realized volatility during an accrual period is exchanged for a fixed volatility. Both percentage volatilities are applied to a notional principal. The payments of volatility swap depends upon the volatility of stocks (or other assets).

# 30. Volatility Term Structure

A plot the variation of implied volatility with time to maturity.

### 31. Volume

The number of transactions in a futures contract made during a specified period of time.

## 32. Voluntary Restructuring

Management has three basic approaches to voluntary restructuring. Carve outs occur when the parent sells a partial interest in a subsidiary through an IPO. The carve out may increase the selling firm's value due to benefits from restructuring the asset composition of the firm. Again, value is enhanced if the manager focuses more on the remaining assets. Spin-offs occur when the parent transfers complete ownership of a subsidiary to the existing shareholders. The spin-off allows the shareholders to retain control over a given asset base while allowing management to focus on a smaller segment of the firm's assets. Finally, sell offs involve the direct sale of assets to a third party. The selling firm receives cash, which can be used for debt repayment or reinvestment in the remaining assets. Management in this case cannot only refocus on the main line of core business but also now has the wherewithal to finance any necessary changes.

Any of these voluntary approaches may be used by managers of troubled firms in order to fend off the legal complications stemming from bankruptcy. See also **Spin-offs** and **Voluntary restructuring**]