

INDEX

- abandonment option, 678–679
- ABN AMRO, 468–469
- absolute borrowing advantage, 950
- absolute purchasing power parity
 - comparing incomes across countries, 338–342
 - and currency exchange
 - explaining deviations in, 336–338
 - using CPI data, 331–335
 - theory of, 317–319
- Abu Dhabi Investment Authority, 27
- accounting standards, 751–753
- accounts receivable
 - credit terms, 855
 - currency of denomination, 850–853
 - leading and lagging payments, 853–855
 - selling, 812
- accuracy
 - CAPM model, 591
 - exchange rate forecasting, 403–404
- Acharya, Viral V., 7
- acquisitions. *See* mergers and acquisitions
- activism (shareholder)
 - and CalPERS, 26
 - as way to overcome agency problems, 15, 17
- ad valorem duties, 845
- adjusted net present value analysis (ANPV)
 - foreign currency loans, 746–747
 - and hedging value, 760
 - International Wood Products, Spain, 701–703
 - steps, 665–668
 - Teikiko Printing Co., 718–719
- Adler, Michael, 571
- ADRs. *See* American depositary receipts
- affiliate bank, 471
- African Development Bank, 23, 168, 170
- agency costs, 669
- agency theory
 - defined, 13
 - methods of overcoming problems in, 15–18
- Aggarwal, Rajesh K., 513
- agricultural industry, 29
- AIC. *See* American International Group
- Aitken, Brian J., 32, 33
- Aizenman, Joshua, 182, 187
- Akram, Farooq, 239
- Alcalá, Francisco, 2
- algorithmic electronic trading firms, 54
- Alibaba, 529
- Allayannis, George, 784, 785
- Allen, Franklin, 18
- all-in-cost principle (AIC)
 - defined, 484–487
 - swaps, 950, 954
- allocative efficiency, 33
- Almeida, Hector, 450
- Alphabet (company), 830–831
- Altman, Edward L., 675
- AMB, 6
- Amegbeto, Koffi, 197
- American Airlines Group, 827
- American depositary receipts (ADRs)
 - and global registered shares, 531
 - and market liberalization, 583
- American International Group (AIG)
 - credit default swaps, 938–939
 - credit rating, 487
 - political risk insurance, 648
- American option, 882, 887
- American quote, 61
- American Stock Exchange (AMEX), 511
- Amiti, Mary, 33
- Ammer, John, 72
- Andersen, Torben G., 410
- Andrade, Sandro C., 620, 630
- Ang, Andrew, 452, 554, 590, 592
- AngloGold, 536
- AngloGold Ashanti, 536
- Anheuser-Busch InBev, 1, 11
- ANPV. *See* adjusted net present value analysis
- anti-globalization
 - defined, 31–32
 - and MNCs, 32

- Antofagasta, 605
 Apple Corporation
 cash hoard of, 830–831
 floating-rate notes, 463
 pricing to market strategy, 371
 appreciation. *See also* real appreciations
 historical statistical depiction of, 92
 principles of, 79–80
 rates of, 80–83
 and risk premiums, 292–294
 and the unbiased hypothesis, 284–283
 Aracruz Celulose, S.A., 89
 arbitrage
 conversion, 907
 covered interest, 230–233, 236–238
 credit spreads across countries, 491–495
 and cross-listing, 530
 defined, 47
 and the global financial crisis, 243
 arbitrage pricing theory (APT), 591
 ArcelorMittal, 1
 ARCH model, 118
 Argentina
 currency boards, 199–200
 currency exchange controls in, 606
 political risk in, 642–644
 sovereign credit debt in, 630
 arm's-length price, 843–845
 Armstrong, Christopher S., 753
 Ashanti Goldfields Corporation, 536
 Asian Development Bank
 Dragon bonds, 460
 Eurobonds trading, 458
 global bonds in, 460
 as MDB, 23
 political risk insurance, 648
 Asian Infrastructure Development Bank, 23
 Asian Tigers (countries), 430–431
 ask rate, 67
 asset market approach, 407–410
 asset substitution, 749
 assets. *See also* capital asset pricing model
 abroad, 139
 inventories as, 828
 net foreign, 146
 reserve, 181
 unencumbered, 476
 Association of Southeast Asian Nations (ASEAN), 3, 207
 asymmetric economic shocks, 212
 asymmetric information, 775–777
 AT&T Credit Corporation, 888
 auction goods, 322
 Aufsichtsrat, 16
 Augustin, Patrick, 938
 Australia
 political risk insurance in, 648
 subsidiary cash flow analysis, 724–735
 Australian dollar (AUD)
 exchange rate system, 168
 forecasting depreciation of, 734–735
 forecasting projected project cash flow, 727–730
 NPV in, 732–733
 other countries adopting, 170, 201
 real depreciation of, 734–735
 Australian Stock Exchange, 888
 Autobahn (electronic trading platform), 53
 average (statistical), 911
 average returns (international investment), 549
 average-rate option, 911
 Baba, Naohiko, 240, 243
 back-to-back loans, 935
 Bai, Yan, 157
 Baidu, 529
 Baillie, Richard, 119
 Baker Plan, 610
 Baker, James, 610
 balance of payments (BOP)
 capital account transactions, 134–135
 central bank
 domestic credit, 179
 foreign exchange interventions, 183–184
 impossible trinity/trilemma, 182–183
 inflation, 181–182
 money creation, 181
 official reserves, 180–181
 pegging currencies, 185–187
 reserves and circulating currency, 178–179
 countries as creditors/debtors, 146
 currency board, 199
 current account double-entry transactions, 130–134
 current and capital accounts, 129
 defined, 128
 dynamics of, 145
 and government deficits, 151–154
 and national income and products accounts, 149–150
 and national savings, 150–151
 official reserves account transactions, 135–136
 and the openness of international capital markets, 157–158
 and PPP deviations, 338
 and real exchange rates, 413
 surpluses and deficits in, 136
 world statistics, 143–144

Index

1001

- balance of payments (BOP) United States
 - capital and financial accounts, 139–143
 - current account, 136–139
 - net international investment position, 146–148
- balance sheet
 - hedge, 448
 - recording bank activities, 473–474
- Balassa, Bela, 338
- Baldwin, Richard E., 213
- Ball, Lawrence, 8
- Ball, Ray, 752
- Bangkok Airways, 852
- Bangkok International Banking Facilities, 472
- bank holidays, 245
- Bank of England, 10, 185–186
- Bank for International Settlements (BIS), 25, 49, 50, 459, 462, 466, 469–470, 475–477, 480, 937
- bank line of credit, 810
- Bank of New York, 526–527
- bank run
 - as example of financial crisis, 9
 - and Northern Rock Bank, 10
 - regulation to prevent, 473
- banker's acceptance (B/A)
 - defined, 801
 - exporting with, 801–807
 - types of, 811
- Bankhaus Herstatt, 75–76
- bankruptcy. *See* financial distress costs
- banks. *See also* interbank market;
 - international banking
 - affecting currency crises, 426
 - communication systems, 73–74
 - electronic trading platform development, 53
 - financing exports, 809–818
 - as foreign exchange dealers, 51, 458
 - foreign exchange risks, 74–78
 - forward contract made by, 867–868, 884
 - and global financial crisis, 240–243, 469–470
 - globalization of, 468–469
 - MNC preference for, 445, 793
 - required reserves in, 178
 - using swaps, 112, 948
- Barclay Currency Traders Index (BCTI), 423
- Barclays Bank
 - consolidation attempt by, 468–469
 - high frequency traders in, 515
 - international bonds, 483
- Barclays Global Investors (BGI), 21, 290
- barcode data. *See* Universal Product Codes
- Barings Bank, 8
- Barrick Gold, 605
- barrier option, 912
- Bartelsman, Eric J., 843
- barter (international), 820
- Bartram, Söhnke, 784, 785
- base currency
 - creation of, 181
 - exchange rate depiction, 59
 - quote conventions for, 60
- base money. *See* monetary base
- Basel Accord (1988), 473–474
- Basel Accord II (1999), 474–475
- Basel Accord III (2006), 475–477
- Basel Committee on Banking Supervision, 25
- basis point adjustment, 958
- basis risk, 877–880
- basket of currencies, 169–170
- Bates, Thomas W., 829
- Baxter, Marianne, 157
- Bayer, 680
- BCCI (Bank of Credit and Commerce International), 472
- bear market correlations, 554
- Bear Stearns, 10
- bearer bonds, 457
- Bebchuk, Lucian, 17
- Becht, Marco, 15–18
- Beer, Christian, 290
- Beetsma, Roel, 843
- Beim, David, 432
- Beine, Michel, 190
- Bekaert, Geert
 - asymmetric correlations, 554
 - banking globalization, 468
 - carry trade, 289, 297
 - Columbia CaseWorks, 438
 - currency crashes, 426
 - economic integration, 213
 - emerging markets, 580
 - equity market liberalization, 582, 583
 - expectations hypothesis, 452
 - home bias, 587, 589, 590
 - idiosyncratic variance, 552
 - investment barriers, 534
 - market integration measurement, 584
 - open equity markets, 30
 - political risk, 625, 644–645
 - stock market capitalization, 506
 - and target zone currency risk, 173
 - trading costs, 519
- Belgium
 - cross-listing in, 523
 - lack of corruption in, 607
- benchmark currency exchange rates, 52

- Bernanke, Ben, 464
 beta
 comparing firm and industry, 576
 defined, 567–569
 Fama–French Three-Factor Model, 591
 Bharti Enterprises, 11
 bid rate, 67
 bid–ask spreads
 costs of, 518–519
 defined, 67
 in foreign exchange swap market, 111–115
 forward foreign exchange market, 107–110
 interest rate swap, 943
 percentage, 69–71
 reciprocal nature of, 67–68
 and true hedging cost, 762
 Big Mac index, 415
 bilateral investment treaties (BITs)
 legal cases involving, 631–632
 proliferation of, 630
 bill of lading (B/L), 797–798
 binary options, 912–914
 BITs. *See* bilateral investment treaties
 Bjornes, Geir H., 70
 Black, Fischer, 903
 Black, Susan, 492
 Blackrock, 21, 544
 Blanchard, Olivier J., 433
 block (stock), 513, 515
 blocked funds, 830, 848–850
 Bloom, Nicholas, 9
 Bloomberg, 73
 BMW, 363–364, 669
 BNP Paribas, 458, 477–478, 888
 BNY Mellon, 528, 529
 Bodnar, Gordon, 783–784
 Boeing, 816, 850–853
 Bolivia, 613
 Bollerslev, Tim, 118, 119, 410
 Bolton, Patrick, 15–18, 775
 bond portfolio effect, 189
 bondholder conflict, 747–751
 bonding hypothesis, 535
 bonds. *See also* international bonds
 defined, 251
 domestic, 457
 maturity length of, 450
 performance, 870
 pricing of, 251–253
 private placement, 453
 pure discount, 251–253
 Bone, Peter, 614
 bookrunner, 459
 BOP. *See* balance of payments
 Borenzstein, Eduardo, 33
 Borri, Nicola, 645
 Brady bonds
 country credit spreads, 635
 as debt reduction tool, 612–614
 historical background of, 632–633
 Mexican Peso Crisis, 637–634
 political risk probabilities, 636
 and sovereign credit rating, 633–635
 Brady Plan, 612–614
 brand awareness, 536
 brand loyalty, 390
 Branstetter, Lee, 33
 Brav, Alon, 17
 Brazil
 balance of payments, 144
 covered interest rate parity, 244–245
 break-even spot rate, 264
 breakout (chartist), 417
 Bretton Woods agreement
 and currency futures, 869
 and the IMF, 192
 and stability, 208
 Brexit, 26, 207, 215
 bribes. *See* corruption
 BRICs (Brazil, Russia, India, China), 1
 Bris, Arturo, 535
 British Airways, 851
 British Petroleum (BP), 26, 501, 603
 British Telecom, 528
 Broda, Christian, 323
 Brogaard, Jonathan, 515
 brokerage firms, 51
 Brooks, Robin, 554
 Brown, Gregory W., 777, 781–782, 784, 785
 Brown, Martin, 492
 Brown, Stephen, 578
 Brunner, Allan D., 72
 Brunnermeier, Markus, 294
 budgets. *See* capital budgeting
 buffer (capital), 475–477
 bull market correlations, 554
 bullet bonds, 462
 Bulow, Jeremy, 612
 Bundesbank, 210
 Bureau of Information Services (US), 454
 Burnside, Craig, 297, 426
 buy credit, 811–812
 buyback, 821–822
 Caballero, Ricardo J., 464
 CAC (Cotation Assistée en Continu), 515

Index

1003

- Cai, Fang, 587
 California Public Employee's Retirement System (CalPERS), 26
 Campa, José, 378
 Campbell, John Y., 552
 Campello, Murillo, 450, 785
 Canada
 balance of payments, 143–144
 dollar, 334–335, 419, 548
 effect of commodity currency on, 548
 legal system speed in, 607
 political risk insurance in, 648
 target zone currency risk in, 172–174
 Cantale, Salvatore, 535
 Canzoneri, Matthew, 338
 capital account
 defined, 129
 and real exchange rates, 413–414
 transactions, 134–135
 US, 139–143
 capital account transfers, 139
 capital allocation line (CAL), 560–562
 capital asset pricing model (CAPM). *See also* assets
 benchmark problem with, 573–574
 beta estimation in, 575–576
 defined, 275–277
 derivation of, 566–567
 domestic vs. world, 569–572
 in emerging markets, 578–580
 equilibrium, 567–568
 in integrated and segmented markets, 580–586
 market risk premium, 568
 origins of, 565–566
 and portfolio diversification argument, 305–307
 recipe for, 572
 capital budgeting. *See also* terminal value
 ANPV analysis
 foreign subsidiary, 682–690
 parent company, 690–698
 ANPV analysis steps
 free cash flow NPV calculation, 666–667
 NPVF addition, 667
 value real options, 667–668
 and bondholder and stockholder conflict, 747–751
 Consolidated Machine Tool Company, 724–735
 currency choices in, 722
 FTE analysis, 719–721
 and political risk insurance, 651
 pros and cons of analysis methods, 721
 WACC analysis, 713–719
 capital conservation buffer, 475–477
 capital controls
 defined, 182–183
 lead-lag operations, 205
 capital expenditures (CAPX)
 defined, 668
 foreign subsidiary, 684–685
 and free cash flow, 671
 capital flight, 134
 capital flows. *See also* international finance
 globalization of, 5–10
 and Level III depository receipts, 525
 capital growth, 535–536
 capital inflows, 134–135
 capital markets
 openness of international, 157–158
 and the unbiased hypothesis, 272
 capital outflows, 134
 capital-adequacy framework, 473–477
 CAPM. *See* capital asset pricing model
 carry trade
 and market inefficiency, 288–291
 and peso problem, 297
 “carry trade behavior”, 492
 Casablanca Stock Exchange (CSE), 520–521
 cash flows
 in ANPV analysis, 666–667
 and capital expenditures, 671
 in forward contracts, 870
 interest rate and currency swaps, 933, 939
 as a source of MNC long-term capital, 447
 in a swap, 113–115, 947–949
 cash-in-advance payment method, 801
 Cassel, Gustav, 313, 343
 Caterpillar, 450, 816
 CEESG (Central and Eastern Europe Stock Exchange Group), 511
 central bank
 BOP functions
 domestic credit, 179
 foreign exchange interventions, 183–184
 impossible trinity/trilemma, 182–183
 inflation, 181–182
 money creation, 181
 official reserves, 180–181
 pegging currencies, 185–187
 reserves and circulating currency, 178–179
 interventions in flexible exchange systems, 187–191
 centralized debt denomination model, 448
 certificate of analysis, 800
 certificate of origin, 800
 Cetes investments, 245–247, 634–637, 639
 CFA franc zone, 168, 170
 Chaboud, Alain, 54
 Chang, P.H. Kevin, 417
 chartists. *See* technical analysis forecasting

- Chauffour, Jean-Pierre, 817
 Chavez, Hugo (President of Venezuela), 603, 654
 Chen, Hui, 775
 Chen, Joseph, 592
 Cheng, Xiaoqiang, 244
 Cherkaoui, Mouna, 520–521
 Chernenko, Sergey, 941
 Cheung, Yin-Wong, 244
 Chevron, 37–38
 Chhaochharia, Vidhi, 630
 Chicago Mercantile Exchange (CME), 869
 Chile
 investment barriers, 534
 political risk in, 605
 China
 accounting standards in, 752
 ascent of banking in, 469–470
 balance of payments, 144
 capital controls in, 183
 corruption in, 607
 currency crisis not affecting, 430
 current account imbalances, 154–157
 FDI in United States petroleum sector, 37–38
 global depository receipt growth, 529
 private sector and economic growth in, 18
 reserve assets in, 181
 and SDR, 169–170
 stock market capitalization, 501–505, 506–509
 stock market manipulation in, 512–513
 as target zone, 203
 trilemma in, 186–187
 turnover in, 518
 and WTO, 5
 yuan-denominated debts, 465
 China Export & Credit Insurance Corporation (SINOSURE), 817
 China Petrochemical Corporation (Sinopec), 465
 China Venture Capital Group, 512–513
 Chinese National Offshore Oil Corporation (CNOOC), 37–38
 Chinn, Menzie D., 6, 182, 293
 chi-square distribution, 310–311
 Chi-X Europe, 514
 Chi-X Global, 514
 Chor, Davin, 818
 Christoffersen, Peter, 590
 Chui, Michael, 481
 CIBOR (Copenhagen), 235
 Ciccone, Antonio, 2
 circulation (currency in), 179
 Cisco Systems, 830–831
 Citibank, 21, 793, 909
 Citic Pacific, 89
 Citigroup
 carry trade, 290
 Eurobonds trading, 458
 foreign exchange market, 55
 market share of, 55–56
 sovereign wealth funds, 27
 CK Hutchinson, 11
 Claes, Anouk, 458
 Claessens, Stijn, 476
 Clarida, Richard H., 410, 420
 Claus, James, 578
 Clausing, Kimberly, 843
 clean acceptance, 810
 clean bill of lading, 798
 clearing arrangements, 821
 Clearing House Interbank Payment System (CHIPS)
 for dollar transfers, 73
 and UID, 74
 clearing member, 869
 clearinghouse (exchange), 869–870
 Clearstream, 460
 Clements, Kenneth W., 415
 Clinton, William (Bill), US President, 429
 closed-end funds, 558
 CLS Bank, 78
 CME Group
 currency options and, 885–887
 emerging markets futures, 875–876
 as exchange, 868, 881
 margin requirements, 870
 Coca-Cola Company
 bonds, 458
 currency warrants, 888
 embargo forcing Iranian shutdown, 607
 and globalization, 1
 international investment in, 557
 Coffey, Niall, 240
 collateralized debt obligations (CDOs), 8
 Columbia CaseWorks, 438
 Comercial Mexicana, 89–90
 commercial banks. *See* banks
 commercial invoice, 799
 commission costs, 518
 commodity currency, 548
 Commodity Futures Modernization Act of 2000 (CFMA), 944
 Commodity Futures Trading Commission (CFTC), 869
 Common Agricultural Policy (EU), 29
 common carrier, 797
 Compagnie Française d'Assurance pour le Commerce Extérieur (COFACE), 794, 815
 comparable profits method, 844
 comparable uncontrolled price method, 844

Index

1005

- comparative advantage (law of), 2
- comparative borrowing advantage, 949–956
- compensatory trade, 822
- competition
 - between retail and interbanks in foreign exchange, 55–57
 - and exchange rate risk, 358
 - hedging, 785
 - real exchange risk for importer, 361–371
- computerized trading. *See* electronic trading systems
- concentration (stock ownership), 16
- conditional distribution, 171–172
- conditional expectation, 94–97, 126
- conditional mean, 94–97
- conditional probability distribution, 94–97, 126, 266–268
- conditional standard deviation, 126
- conditional volatility, 126
- confidence level, 284
- confirmed documentary credit, 804
- ConocoPhillips, 603, 653–654
- consignee, 797
- consignor, 797
- Consolidated Machine Tool Company (CMTC)
 - discounted cash flow analysis, 726–727
 - economic data gathering, 725–726
 - expected Australian dollar depreciation, 734–735
 - projected project cash flow, 727–733
 - subsidiary investment proposal, 724–725
- consular invoice, 799–800
- consumer price index. *See* price index
- consumption expenditures, 164
- Continental Cablevision, 642–644
- Continuous Linked Settlement Bank (CLS), 78
- continuously compounded appreciation rates
 - defined, 82–83
 - logarithms in calculations for, 86–87
- continuously compounded interest rates, 228–230
- contracts
 - cylinder options, 910–911
 - governmental repudiation of, 605
 - preventing law of one price, 321
 - and real exchange risk sharing, 364–371
- Control Risks, 623
- “convergence criteria”, 211
- conversion, 907
- Convertibility Law (Argentina), 199, 200
- convertible bond, 463
- convertible currency, 194
- convex tax code, 770–774
- Cooley, Thomas, 7
- core capital, 473–477
- corporate governance
 - defined, 13
 - overcoming agency problems in, 15–18
 - as reason to cross-list, 535
- correlation (statistical)
 - defined, 547
 - developed countries, 552–554
 - developing countries, 579
 - home bias, 589–590
- correspondent bank, 470
- corruption. *See also* scandals
 - Chinese, 607
 - food industry scandals, 14
 - investment industry, 14
 - as political risk, 606–607
 - Russian, 607
- cost of capital, 26
- cost of living. *See* price level
- cost-plus method, 844
- costs
 - agency, 669
 - cross-listing, 532
 - debt equilibrium, 676–677
 - electronic trading reducing, 53
 - Eurocredit, 479–480
 - in external currency market, 234–235
 - financial distress, 675–676
 - financial globalization, 30
 - forecasting foreign subsidiary, 685–687
 - of foreign exchange transactions, 52
 - of forward hedge, 100–101
 - and free cash flow, 670
 - of hedging, 278–281, 762–763
 - monetary union, 212
- Council of Ministers (European), 25
- counter currency, 59
- counterpurchase, 822
- countertrade
 - defined, 820
 - types of
 - with money/credit, 821–822
 - without money, 820–821
- country credit spreads
 - in computing political risk probabilities, 635, 644–646
 - defined, 628
- country funds, 558
- country risk
 - defined, 603
 - and the Mexican Peso Crisis, 637–634
- country risk premium, 247
- country risk ratings
 - attribute approach, 621–616
 - Control Risks, 623
 - Economist Intelligence Unit ranking, 623

- Euromoney* country risk score, 623
- ICRG rating system, 623–628
- IHS Energy Group's Political Risk Ratings, 623
- international bank ratings, 622
- objective of, 621
- S.J. Rundt & Associates, 623
- Coval, Joshua D., 589
- covariance (random variable), 274
- covary, 274
- covered interest arbitrage, 225, 230–233, 236–238
- covered interest rate parity (CIRP)
 - and covered interest arbitrage, 230–233
 - defined, 223
 - derivation of, 228–230
 - deviations, 239–245
 - and international parity, 398–399
 - intuition behind, 225–228
 - in practice, 319
 - theory of, 223–225
 - validity of, 239
- covered yield, 225–226
- crawling peg systems, 171, 205–207
- Crédit Agricole, 458
- credit cards, 71
- credit default swaps (CDS), 938–939
- credit line (Eurocredit), 478, 480
- credit rating
 - companies, 487
 - schemes, 487
- credit risk
 - and the Basel Accord II, 474
 - cover, 814
- credit spread
 - across countries, 491–492
 - and the all-in-cost principle, 485–487
 - and cost of debt minimization, 489–490
- Credit Suisse, 290, 515
- credit terms, 855
- credit transactions
 - in balance of payments, 130
 - in commercial goods exports, 130–131
 - in commercial services imports, 131–132
 - countries as, 146
 - in double-entry accounting, 130
 - foreign asset income, 132–133
 - gifts to foreign residents, 133–134
 - and long-term loans, 23
 - official reserves account, 135–136
 - US balance of payments, 141–143
- crisis (economic). *See* global crisis
- cross-border bond market, 454
- cross-border trading, 501
- cross-currency settlement risk, 74–78
- cross-holding, 505
- cross-listing. *See also* globalization
 - advantages of, 532–536
 - disadvantages of, 536–537
 - increase in, 522–524
 - stock exchanges, 510–511
- cross-rates
 - defined, 62–63
 - and triangular arbitrage, 63–66
- Crucini, Mario, 157
- CTrip.com, 536
- Cumby, Robert, 338
- Curcuro, Stephanie, 290
- currency
 - convertible, 194
 - and the euro, 25
 - and foreign project cash flow forecasting, 722
 - fundamental analysis forecasting, 401
 - governmental control of as political risk, 606
 - international bond market, 463–465
 - managed floating, 167–169
 - in MNC debt funding, 448–450
 - and price level, 314
 - and tax shields, 741–747
- currency basket, 208–209
- currency board
 - currency risks in, 176
 - defined, 171
 - as type of fixed exchange rate system, 198–200
- currency crisis (1997), 144, 424–426
- currency exchange. *See* foreign exchange market
- currency futures. *See also* derivative security
 - contract basics, 867–872
 - contract components
 - options trading, 884–888
 - terminology, 882–884
 - future quotes, 873–876
 - hedging risk with, 876–881
 - option combinations
 - exotic, 911–914
 - range forwards and cylinder options, 909–911
 - options in risk management
 - bidding, 888–889
 - hedging transaction risk, 890–895
 - hedging with options as buying
 - insurance, 895–899
 - speculating with, 899–903
 - valuation, 903–908
 - pricing, 872–873
- currency loans, 746–747
- currency of denomination, 850–853

Index

1007

- currency quotes and prices. *See also* exchange rate systems
 - conventions for, 60
 - spot foreign exchange market, 62–66
 - and PPP, 325–327
 - US dollar, 60
- currency risk
 - in exchange rate systems
 - currency board and monetary union systems, 176
 - floating systems, 172
 - pegged systems, 174–176
 - quantifying, 171–172
 - target zone systems, 172–174
 - forecasting, 402
- currency swap. *See also* swap
 - defined, 936
 - size of market, 936–938
 - World Bank - IBM, 935
- currency warrants, 887–888
- Currenex
 - independent electronic trading platform, 53
 - technology inroads of, 55
- current account
 - defined, 129
 - double-entry transactions, 130–134
 - and government deficits, 151–154
 - and national income and products account, 149–150
 - and national savings, 150–151
 - and real exchange rates, 410–414
 - and trade/investment income accounts, 145
 - US, 136–139
- current assets, 828
- customer goods, 322

- Dabora, Emile, 529
- DaimlerChrysler AG, 530–532
- Damodaran, Aswath, 576, 643
- Daniel, Kent, 297
- dark pools, 514
- Datastream, 518
- Davidson, Sigrun, 290
- Davis, Josh, 420
- De Bondt, Gabe J., 508
- De Ceuster, J. K., 458
- De Gregorio, José, 33
- De Haas, Ralph, 481
- dealers. *See* foreign exchange dealers
- debit transactions
 - in balance of payments, 130
 - in commercial goods exports, 130–131
 - in commercial services imports, 131–132
 - countries as, 146
 - in double-entry accounting, 130
- foreign asset income, 132–133
- gifts to foreign residents, 133–134
- official reserves account, 135–136
- US balance of payments, 141–143
- debt
 - buyback, 611–613
 - creating conflict between stockholders and bondholders, 747–751
- debt costs
 - all-in-cost principle, 484–487
 - between various debt instruments, 483–484
 - equilibrium in, 676–677
 - minimization of, 941
 - minimizing through internationalization, 488–492
- Debt Crisis (1980s). *See also* sovereign debt crisis
 - and borrowers from developing countries, 481
 - and the Brady Plan, 612–614
 - management of, 610–612
 - origins of, 607–610
 - underinvestment in, 751
- debt instrument types. *See also* swap
 - costs of, 483–492
 - Eurocredits, 477–481
 - Euronotes, 481–483
- debt overhang argument, 610–611
- debt-equity swap, 611
- decentralized debt denomination model, 448
- deemed-paid credit, 693
- deep-discount bonds. *See* pure discount bonds
- “default free” interest rate, 485–487
- default risks
 - and the 1988 Basel Accord, 473–474
 - and interest rate parity, 239–243
 - sovereign, 630
- default spread (multiplicative), 954–955
- defense mechanisms (target zone system), 204–205
- deficit
 - in BOP, 136
 - cause of current account, 152–154
 - in short-term cash management, 833
 - US capital and financial accounts, 139
 - US current account, 139
- deflation, 314
- Del Negro, Marco, 554
- Della Corte, Pasquale, 294
- demand curves
 - monopolist exporter, 372
 - monopolist importer, 375
- DeMarzo, Peter M., 775–776
- demutualization, 511
- Denmark

- and the euro, 203
- lack of corruption in, 607
- density function, 123
- depository receipt (DR), 524
- Depository Trust Company (DTC), 531
- depreciation (exchange rate)
 - expected, 734–735
 - foreign subsidiary, 684–685
 - and free cash flow, 668, 671
 - and high-interest rates, 284–285
 - historical statistical depiction of, 92
 - in optimal inventory theory, 856–859
 - principles of, 79–80
 - rates of, 80–83
- deregulation, 7–8
- derivative security. *See also* currency futures
 - defined, 7, 867
 - in new financial landscape, 7–8
- Dermeier, Jeff, 557
- Desai, Mihir C., 30, 31, 33
- Designated Market Makers (DMMs), 515
- Deutsche Bank
 - carry trade, 290
 - currency warrants, 888
 - electronic trading platform development, 53
 - foreign exchange market, 55
 - global registered shares and, 531
 - international bonds, 483
 - market share of, 55–56
 - technical analysis evaluation of, 423
- Deutsche Börse, 511, 531
- Deutsche Börse Clearing (DBC), 531
- Deutsche mark (German currency), 419
- devaluation premium, 297
- devaluations (currency)
 - Argentina, 199–200
 - defined, 79–80
 - and monetary unions, 212
 - in optimal inventory theory, 856–859
 - predicting pegged system
 - causes of, 424–426
 - ERM, 427–429
 - Icelandic and Latvian crisis, 432–433
 - macroeconomic signals, 426
 - Mexican crisis /tequila effect, 429–430
 - Southeast Asian crisis, 430–431
 - and speculative attacks, 204
- developed countries
 - balance of payments, 143–144
 - bond markets in, 464–465
 - consumption expenditures in, 164
 - and international trade, 3–5
 - protectionism in, 29, 34
 - return correlation matrix, 552–554
 - stock market turnover and transaction costs, 516–519
- developing countries. *See also* emerging markets
 - average tariff rates, 320
 - balance of payments, 144
 - banking expansion in, 476
 - bond markets in, 464–465
 - and the 1980s debt crisis, 607–610
 - debt denominated in developed countries, 604
 - Eurocredit secondary market, 481
 - and international trade, 3–5
 - pegged currencies in, 193–195, 205–207
 - rate of trade liberalization in, 28–29
 - reserve assets in, 181
 - sharing globalization benefits, 34
 - stock market capitalization in, 506–509
 - stock market turnover and transaction costs, 521
 - technology transfer to, 33
 - transaction exchange risk history in, 89
 - and the World Bank, 22–23
- Diba, Behzad, 338
- Didier, Tatiana, 580
- Diebold, Francis X., 410
- digital options, 912–914
- dim sum bonds, 465
- Dimson, Elroy, 577
- Ding, Liang, 70
- direct debt, 453
- direct quotes, 59–61
- dirty float systems, 172
- discipline (fixed exchange rate), 197–198
- disclosure requirements (bank), 475
- discount rates
 - and APNV analysis, 666–667
 - defined, 228
 - and foreign project cash flow forecasting, 722–723
 - free cash flows (FCF), 671–673
 - and political risk, 618–620
 - and project future cash flow calculation, 674–675
- discounted cash flow analysis
 - calculation, 671–673
 - Consolidated Machine Tool Company, 726–727, 732
 - currency choice in, 722–723
 - problems with, 679
 - vs. ratio analysis, 680–681
- discrete distribution, 124–126
- Dittmar, Robert, 420
- diversifiable risk, 274
- diversification argument
 - in emerging markets, 578–580
 - in international investments, 544, 598

Index

1009

- dividends
 - cash from affiliates to parent companies, 838–840
 - parent company, 690–691
- Dixon, Jay, 632
- Djankov, Simeon, 606–607
- documentary collection, 807–808
- documentary credits (D/Cs), 801–807
- documents (trade), 796–800
- documents against acceptance collection (D/A), 807
- documents against payment collection (D/P), 807
- Dodd, Randall, 913
- Dodd-Frank Wall Street Reform and Consumer Protection Act (US), 72, 477, 939, 944
- Doha Round, 3, 28
- Doidge, Craig, 523, 535, 537
- dollar (Canadian)
 - and absolute PPP, 334–335
 - as commodity currency, 548
 - moving average rules, 419
- dollar (US)
 - and absolute PPP, 332–335
 - Brady bonds in, 632–633
 - moving average rules, 419
 - and real interest rate differential, 412
 - strength of in current account equilibrium, 414
 - and zero-coupon bonds, 462
- dollar loan, 744
- dollar volume of trade, 49
- dollarization, 198, 200–201
- domestic bonds, 454
- domestic CAPM, 569–572, 574
- domestic real exchange risk, 361–371
- Dominguez, Kathryn M., 190
- Domowitz, Ian, 247, 521
- Dooley, Michael, P., 156
- Dornbusch, Rudiger, 200, 313, 409
- double-entry accounting system, 130
- Dragon bonds, 460
- dual-currency bond, 463–465
- Duarte, Jefferson, 523
- Duffie, Darrell, 775–776
- Duhale, Eduardo, President of Argentina, 200
- Dumas, Bernard, 571, 572
- dumping (trade), 821
- early exercises, 882
- earnings before interest and taxes (EBIT), 670
- East African Community (EAC), 207
- Eastern Caribbean Currency Union (ECCU), 168, 171
- e-commerce standards (eUCP), 796
- economic and monetary union (EMU), 25
- Economist Intelligence Unit (EIU), 623
- EDF, 450
- Edge Act banks, 472
- Edison, Hali, 412
- Edwards, Sebastian, 200
- efficient frontier, 564
- Eichenbaum, Martin, 426
- Eichengreen, Barry, 192, 426
- Electronic Brokering Service (EBS)
 - as foreign exchange broker, 51–52
 - and non-deliverable forward contracts, 111
- electronic communication network (ECN)
 - in foreign exchange market, 53–54
 - FXTrades, 55
- electronic communication networks (ECNs), 513–515
- electronic trading systems
 - affecting size of stock markets, 513–515
 - categories of, 53–54
 - as foreign exchange brokers, 51–52
 - foreign exchange trading volume of, 52–53
- eligible banker's acceptance, 811
- Ellis, Jesse, 21
- embargoes, 607
- emerging market crisis. *See* Debt Crisis
- Emerging Market Index, 579
- emerging markets. *See also* developing countries
 - discount rates and political risk in, 620
 - futures contracts for, 875–876
 - investing in, 578–580
 - political risk insurance in, 649
- employees. *See also* executives
 - and anti-globalization, 32–33
 - and hedging costs, 762
 - human resources recruitment, 536
- end-end rule, 106–107
- Engel, Charles, 323
- Engle, Robert, 118, 281, 409, 412
- environment, 32
- Eolis (Internet company), 793–794
- equilibrium
 - CAPM, 567–568
 - of return on investment, 736–738
- equity market liberalization, 582–583
- equity risk premiums, 576–578
- equity-related bonds, 463
- Eraslan, Sercan, 244
- Ericsson, 477–478
- ERM II, 212
- Errunza, Vihang, 582
- Esty, Ben C., 653
- ethnic violence, 607
- Eubanks, Walter W., 475
- Euler Hermes, 793–794
- Eun, Cheol, 470
- Eurex, 881

- EURIBOR (Euro Interbank Offered Rate), 235
- euro (currency). *See also* monetary unions
 and absolute PPP, 332
 call option against dollars, 883
 as central bank dominant foreign reserve asset,
 180–181
 and European monetary integration, 207, 211–212
 exchange rate system, 168
 futures contracts, 876–877
 and global financial crisis interest rate parity, 240–243
 history of, 25
 loans, 744–745
 marking to market process, 870–872
 naming politics, 210–211
 process of adopting, 211–212
 term structure of interest rates, 250
 transfer through TARGET, 73
 transfer through TARGET2, 74
 as a vehicle currency, 63
- Eurobanks, 477
- Eurobond
 borrower types, 458–459
 defined, 453–454
 secondary market for, 460
 shelf registration in, 458
 syndicates as primary market for, 459–460
- Euroclear, 460
- Euro-commercial paper (Euro-CP), 481
- Eurocredits
 defined, 477
 fees and costs of, 479–480
 and floating interest rates, 477–478
 history and size of, 480–481
 secondary market for, 481
 and syndicates, 478–479
 types of, 478
- euro-currency. *See* external currency market
- Euro-equity market, 528
- euromarket, 446
- Euro-medium-term notes (Euro-MTNs), 482–483
- Euromoney*, 56, 623, 838
- Euronext, 510, 514, 528
- Euronotes, 481–483
- European Bank for Reconstruction and Development, 23,
 606
- European Central Bank, 74, 212
- European Commission, 25
- European Community (EC), 208
- European Currency Unit (ECU), 169–170, 208–209
- European Economic Community (EEC), 3
- European Financial Stability Facility (EFSF), 215
- European Monetary Institute (EMI), 211
- European Monetary System (EMS)
 defined, 207–208
 success of, 210–211
 as target zone, 202–203
- European Monetary Union (EMU)
 and currency risk, 172
 and ECU, 169
 and euro adoption, 207
 exchange rate system, 168
 predicting instability in, 427–429
 pros and cons of, 212–215
- European option, 882, 885
- European Parliament, 25
- European quote, 61
- European Rating Agency (Eurorating), 487
- European Stability Mechanism (ESM), 215
- European System of Central Banks (ESCB), 212
- European Union (EU)
 bearer bonds in, 457
 and ERM II, 212
 Eurobonds trading, 458
 and Grecian GDP, 165
 and international finance, 25–26
 loans dominate as MNC funding source, 446–447
 mergers and acquisitions in banking, 467
 monetary union in, 198
 protectionism in, 29
 as regional trade agreement, 3
 sovereign debt crisis (2010), 213–215
- ex ante*
 and cost of hedging, 100–101
 and interest rate parity, 247
 using the options market to sell insurance, 899–903
- ex ante* real interest rate. *See* expected real
 interest rate
- ex post*
 and cost of hedging, 100–101
 options in risk management, 896
- exchange controls (currency)
 and interest rate parity, 243–245
 as political risk, 606
- exchange rate
 and CAPM, 569–571
 conditional expectation of the, 266
 and foreign project cash flow forecasting, 722–723
 and the unbiased hypothesis, 278
- Exchange Rate Mechanism (ERM), 208
- exchange rate systems. *See also* currency quotes and
 prices
 and central bank functioning, 178–187
 currency risks in, 171–176
 European Monetary Union, 207–215
 fixed
 currency boards, 198–200
 discipline and stability reasons for, 197–198
 dollarization, 200–201

Index

1011

- and International Monetary System history, 191–193
- pegged currencies in developing countries, 193–195
- flexible, 187–191
- foreign exchange interventions in, 183–184
- limited flexibility
 - crawling pegs, 205–207
 - target zones, 202–205
- and premiums mattering in, 278
- trends in, 176–178
- types of, 167–171
- exchange rates
 - forecasting
 - currency, 401–405
 - currency exchanges, 734–735
 - devaluations, 424–433
 - evaluation, 422–424
 - fundamental analysis, 405–415
 - parity conditions, 394–400
 - technical analysis, 415–422
 - and forward contracts, 97–100
 - ISO abbreviation standardization, 57–59
 - quote depiction, 59–61
- exchange-traded fund (ETF), 544, 558
- executives. *See also* employees
 - compensation, 15, 16–17
 - fiduciary responsibilities of, 17
- exercise price, 882, 905
- Ex-Im Bank, 815–816
- exotic options
 - average-rate option, 911
 - barrier option, 912
 - defined, 908–909
 - digital options, 912–914
 - lookback options, 912
 - range forwards and cylinder, 909–911
- expectations hypothesis, 452, 483–484
- expected cash flows, 614–618
- expected rate of inflation, 396
- expected real interest rate, 396
- expenditures
 - categories of, 164–165
 - consumption, 164
 - government purchases, 164
 - gross private domestic investment, 164
 - net exports, 165
- experience goods, 390
- export cannibalization, 669
- export credit agencies (ECA), 815
- Export Credits Guarantee Department (ECGD), 648
- Export Development Corporation (EDC), 648
- export factor, 814–815
- Export Finance and Insurance Corporation (EFIC), 648
- Export-Import Bank of China, 794, 815
- Export-Import Bank of India, 794, 815
- Export-Import Bank of the United States (EX-Im Bank), 794, 815–816
- exports
 - cannibalization of, 703–705
 - defined, 129
 - financing of, 809–818
 - monopolist, 372–375
 - net government, 165
 - payment methods, 800–809
 - problems with financing, 794–796
 - real exchange rates risk, 356–359
 - and real profitability, 354–356
 - trade documents for, 796–800
 - using options to hedge risk in, 890–892
- expropriation
 - defined, 603
 - insurance coverage, 648
 - political risk factor, 605
- external bond market, 454
- external currency market, 233–236
- external debt market, 454
- external equity market, 528
- external purchasing power, 317–318
- Exxon Mobil
 - BITs in, 632
 - Venezuela seizure of oil, 603, 654
- Ezzell, John R., 719
- face value (bond), 251
- factor (export), 814–815
- fair value exchange rate models, 415
- Fama, Eugene, 293, 578, 591–593
- Fama–French Three-Factor Model, 591–593
- “fat tails”
 - defined, 94
 - and the Sharpe ratio, 292
 - statistical, 125
 - and target zone currency risk, 173–174
- Faulkender, Michael, 453, 941
- Faust, Jon, 410
- FDI. *See* foreign direct investment
- Federal Deposit Insurance Corporation (FDIC), 471
- Federal Express, 769
- Federal Reserve System (US)
 - and CLS Bank, 78
 - domestic credit in, 179
 - Fedwire System in, 74
 - and IBFs, 472
 - swaps and, 937–938
 - Treasury rates, 942
- Fedwire, 74
- Feenstra, Robert C., 843

- fees
 - affiliate/parent transfer
 - Eurocredits, 479–480
 - overhead management, 681
 - parent company after-tax, 695–698
- Fehle, Frank R., 784
- Feldstein, Martin, 157–158
- Fernandes, Nuno, 532
- Fernandez, Andrés, 6
- filter rules, 419
- financial account. *See* capital account
- Financial Conduct Authority (UK), 457
- financial disintermediation, 453
- financial distress
 - and hedging, 774
 - and incentive for risky projects, 748–749
 - misrepresentation to keep creditors away, 751
 - and underinvestment, 749–751
- financial distress costs, 675–676
- financial market globalization, 5–10
- financial openness measurement, 6–7
- Financial Services Agency (Japan), 457
- financial slack, 669
- Financial Times*, 251
- Financial Times Stock Exchange (FTSE) Global Index, 573
- Finland, 607
- Fintelco, 642–644
- Fisher hypothesis, 395–397
- Fitch Ratings, 487
- Fitzgerald, Doircann, 378
- 5-day forecasts, 833–834
- fixed exchange rate
 - and absolute PPP, 332
 - in currency crises, 427–428
 - defined, 79
 - and exchange rate systems, 167–169
 - and official reserves accounts, 135–136
- fixed-price re-offer method, 459
- fixed-rate debt
 - interest rate payment type, 451–453
 - and interest rate swaps, 940
- Flash Crash (2010), 515
- floating currencies rates
 - and exchange rate systems, 167–169
 - risks in, 172
- floating interest rates, 477–478
- floating-rate debt
 - interest rate payment type, 451–453
 - and interest rate swaps, 940
- floating-rate notes (FRNs), 463
- Flood, Robert, 424
- Floor Brokers, 515
- flow-to-equity (FTE)
 - background of, 713
 - equivalence of, 720
- Teikiko Printing Co., 720–721
- Flughafen Zurich AG, 632
- Foerster, Stephen, 532
- Foley, Fritz, 30, 31, 33
- Folkerts-Landau, David, 156
- food industry scandals, 14
- Forbes, Kristin, 31
- Ford Motor Company
 - credit spreads, 491
 - cross-border acquisitions, 21
 - currency warrants, 888
 - risk management, 758
- forecast error, 270–271
- forecasting cash flow
 - foreign currency value, 722
 - free, 669–671
 - market, 293
 - parent, 690–698
 - short-term, 833–834
 - subsidiary, 683–690
- forecasting exchange rates
 - evaluation, 402–405
 - fundamental analysis, 405–415
 - types of, 401–402
- foreign bonds
 - defined, 453–454
 - as type of international bond, 458
- foreign branch (bank), 471
- foreign currency call option, 882, 883, 896
- foreign currency futures contracts, 868
- foreign currency options contracts
 - combinations
 - exotic, 911–914
 - range forwards and cylinder options, 909–911
 - contract components
 - options trading, 884–888
 - terminology, 882–884
 - defined, 175, 881
 - risk management
 - bidding, 888–889
 - hedging transaction risk, 890–895
 - hedging with options as buying insurance, 895–899
 - speculating with, 899–903
 - valuation, 903–908
- foreign currency put option, 882, 883–884, 903
- foreign currency receivables, 900–902
- foreign currency swaps
 - comparative borrowing advantages, 949–956, 960–962
 - currency and amount negotiations in, 945–947, 949
 - mechanics of, 947–949
 - rationale for, 964–965
 - standardization of, 956–960
 - value of, 962–963
- foreign direct investment (FDI)
 - defined, 18

Index

1013

- economic effects of, 32–33
- and foreign market penetration, 11–13
- as GDP, 18–19
- insurance for, 647–648, 650
- and investment income, 145
- and mergers and acquisitions, 19–21
- and protectionism, 37–38
- foreign exchange brokers, 51–52
- foreign exchange dealers
 - interest rate swap, 943–944
 - risk avoidance in, 76
- foreign exchange interventions, 187–189
- foreign exchange market
 - and absolute PPP, 331–335
 - and developing country debt, 604
 - and dollarization, 201
 - risk premiums in, 272–277
 - speculation in
 - currency, 266–268
 - forward contracts, 264–266
 - uncovered foreign money market investments, 262–264
 - uncovered interest rate parity, 269–272
 - and transfer prices, 847
- foreign exchange rate
 - in external currency market, 235–236
 - median, 125
- foreign exchange reserves, 180–181
- foreign exchange risks, 840
- foreign exchanges dealers
 - defined, 51
 - top twenty, 55–56
- foreign subsidiary
 - cash flow value of, 681–682
 - International Wood Products, Spain, 683–690
 - long-run viability of, 385–386
 - multilateral netting systems, 834–836
 - profit calculation, 379–384
 - short-term cash planning, 832–833
 - types of, 379
- forex. *See* foreign exchange market
- forfeiting, 812–813
- Fortis NV, 468–469
- forward contracts
 - and CAPM, 275–276
 - currency swaps package of, 960–962
 - and hedging, 97–101
 - maturities and value data, 106–107
 - non-deliverable, 111
 - outright, 106
 - vs. currency futures
 - credit risk, 869
 - exchange trading, 867–868
 - margins, 869–870
 - marking to market process, 870–872
 - vs. swaps, 965
- forward discount, 115–117
- forward foreign exchange market
 - bid-ask spreads, 107–110
 - contract maturities and value data, 106–107
 - defined, 89
 - and foreign money market investments, 264–266
 - hedging transaction exchange risk, 97–105
 - market organization of, 106
 - net settlement in, 111
 - premiums and discounts, 115–117
 - speculation in, 264–266
 - statistics to describe uncertainty in
 - probability distribution, 94–97
 - using historical data, 92–94
 - swap market, 111–115
 - transaction exchange risk in, 90–91
 - volatility in, 117–119
- forward hedge, 97–105
- forward market investment, 265
- forward market return, 265
- forward premium, 115–117
- forward rate
 - calculation in arbitrage, 245–247
 - defined, 98
 - exchange rate forecasting, 404–405
 - and long-term interest rate parity, 254–256
- forward rate bias
 - and market efficiency, 288–291
 - and the unbiased hypothesis, 285–288
- forward settlement date, 106–107
- forward value data, 106–107
- foul bill of lading, 798
- franc zone, 170
- France
 - balance of payments, 143–144
 - cross-listing in, 523
 - target zone currency risk in, 172–174
- franchising, 11
- Frankel, Jeffrey A.
 - foreign exchange market and cattle drives, 190
 - forward premiums, 293
 - national investment/savings rates, 157–158
 - risk premiums in, 293
 - trade liberalization, 2
- free cash flows (FCF)
 - derivation of NPV of, 668–673
 - International Wood Products, Spain, 682–690
 - International Wood Products, US, 690–698
 - parent vs. subsidiary, 681–682
 - vs. ratio analysis, 680–681
- free trade. *See* trade liberalization
- French, Kenneth R., 578, 591–593
- frequency distribution, 123
- Friedman, Milton, 187, 869

- Fromagerie du Provence, 362–363
 frontier markets, 506, 516
 fronting loans, 848–849
 Froot, Kenneth
 appreciation rates and forward premiums, 293
 arbitrage, 529
 experience goods, 390
 hedging, 278, 775
 FTE. *See* flow-to-equity
 full-service banks, 467
 fundamental analysis, 401
 Funke, Michael, 244
 future commission merchant (FCM), 869
 future value (of money), 227–228
 futures, 870
 markets. *See* currency futures
 futures quotes, 873–876
 FX Concepts, 423–424
 FXall (electronic trading platform), 53
 FXConnect (electronic trading platform), 53
 FXTrades, 55
- G5 countries
 ICRG political risk ratings, 627–630
 legal system quality in, 606–607
 G7 countries
 balance of payments, 143–144
 foreign equity volatility in, 117–119
 interventions, 191
 price indexes of, 315
 Sharpe ratios in, 550
 G10 currencies, 290, 473–477
 G20, 24
 Gabaix, Xavier, 294
 Gagnon, Louis, 530
 Galati, Gabriele, 180, 290
 Garber, Peter M., 156, 424
 GARCH model, 117–119
 Garman, Mark B., 903
 GDP. *See* gross domestic product
 Géczy, Christopher, 784, 941
 Gehrig, Thomas, 402
 General Agreement on Tariffs and Trade (GATT), 3, 24
 General Electric, 816, 888
 generally accepted accounting principles (GAAP), 752
 Germany
 balance of payments, 143–144
 gross national income, 166
 lack of corruption in, 607
 target zone currency risk in, 172–174
 Ghysels, Eric, 520–521
 Giannetti, Mariassunta, 481
 gifts
 in balance of payments, 133–134
 and gross national income, 166
 Glass Steagall Act (US), 471
 GlaxoSmithKline (GSK), 827
 Glen, Jack, 247, 521
 Glick, Reuven, 426
 Glitner Bank, 432–433
 global bonds, 460
 global crisis (1994–98), 29–30
 global crisis (2008–9)
 and European MNC funding sources, 447
 global crisis (2008–10)
 and anti-globalization, 33–34
 and the Basel Accord III, 475–477
 and carry trade, 292
 and credit default swaps, 938–939
 credit ratings during, 486–487
 and deviations from interest rate parity, 240–243
 and Eurocredits, 481
 and executive compensation, 16–17
 and forward market bid-ask spreads, 110
 and international organizations, 24
 and international trade, 6
 inverted swap spreads, 942
 and protectionism, 29
 original sin contributing to, 464
 quantitative easing in, 179
 and the trade finance gap, 817–818
 and trade liberalization, 31
 workings of, 8–10
 global crisis (European 1991–93), 297–299, 427–429
 global crisis (Mexican 1994–95), 429–430
 global crisis (Southeast Asian 1997), 430–431
 global depository receipts (GDRs), 524, 528–530
 Global Insight, 269
 global macro hedge funds, 54
 global minimum-variance portfolio, 564
 Global Offset and Countertrade Association (GOCA), 820
 global registered shares (GRS), 530–532
 globalization. *See also* international investments
 cross-listing
 anti-globalist movement, 31–33
 benefits and costs of, 29–31
 defined, 1
 and growth of capital flows, 5–10
 and growth of international trade, 2–5
 primary equity markets, 528–529
 and trade liberalization, 27–29
 transforming banking sector, 468
 and volume of foreign exchange markets, 49
 globally integrated corporation, 13
 Globex trading platform, 867–868
 Goedhart, Marc, 668

Index

1015

- Goetzmann, William N., 578
 gold standard, 191, 193
 Goldberg, Linda, 32, 378
 Goldberg, Pinelopi, 378
 Goldman Sachs, 2, 38, 888
 goods
 auction and customer, 322
 and GDP, 164
 parent company NPV on, 698
 PPP deviations and
 non-traded, 337–338
 relative prices, 336–337
 US current account, 136–138
 goods market arbitrage, 318–319
 Google, 830–831
 Gopinath, Gita, 378
 Gourinchas, Pierre-Olivier, 147, 614
 government bonds
 importance of, 454–457
 and open market operations, 179
 governments. *See also* political risk
 and capital accounts, 129
 causes of current account surpluses and deficits,
 152–154
 creating segmented markets, 580–582
 exchange controls in, 243–245
 financial regulations, 7
 in foreign exchange market, 52
 and international finance, 26
 official reserves account, 135–136
 and protectionism from globalization, 29
 purchases and GDP, 164
 sources of credit insurance, 817–818
 sources of export financing, 815–818
 as sovereign borrowers, 488
 and sovereign wealth funds, 27
 subsidizing firms, 38
 Gray, Stephen, 173, 426
 Great Depression (US), 191–192
 Great Moderation, 578
 Great Recession. *See* global crisis
 Greece
 GDP in, 165
 return correlation matrix, 552–554
 sovereign debt crisis (2010), 214, 614
 greenfield investments, 13
 Greif, Avner, 795
 Grenadier, Steven, 679
 Grexit, 214
 Griffin, John M., 572
 Griffiths, Mark, 433
 gross domestic product (GDP)
 and balance of payments, 143–144
 and the bond market, 464–465
 and BRICs, 1
 defined, 163
 and expenditures, 164–165
 and gross national income, 149–150, 165–166
 and international trade, 3–5
 and PPP exchange rates, 340–342
 and stock market capitalization, 509
 gross national income (GNI)
 defined, 149–150
 and GDP, 165–166
 and national savings, 150–151
 gross private domestic investment, 164
 growth option, 667
 Gruss, Bertrand, 433

 Hail, Luzi, 532, 536, 752, 753
 haircut (asset), 476, 870
 Haller, Stefanie, 378
 Halling, Michael, 534
 Hammond, Grant T., 820
 Hansen, Lars Peter, 283
 Hanson, Gordon H., 843
 hard currency policy, 210–211
 Harris, Robert S., 574
 Harrison, Ann E., 32, 33
 Harrod, Roy, 338
 Harvard Management Company (HMC), 938
 Harvey, Campbell R.
 ADRs, 582
 banking globalization, 468
 emerging market returns, 581
 euro benefits, 213
 home bias, 589
 market integration measurement, 584
 market liberalization, 583
 open equity markets, 30
 political risk, 625
 political risk spread, 644–645
 stock market capitalization, 506
 trading costs, 519
 Haslem, Paul A., 632
 Hassan, Tarek, 289
 Hayt, Greg S., 783–784
 HDFC Bank, 536
 HDG Inc (pseudonym), 781–782
 He, J., 512
 head and shoulders pattern (chartist), 417
 hedge funds
 and currency speculation, 53–54
 defined, 27
 foreign exchange trading volume of, 52–53
 FX Concepts, 423–424
 technical analysis evaluation of, 423
 hedging (currency risk). *See also* risk management

- arguments against
 - bad incentive creation, 769
 - cost of, 762–763
 - difficulty of equity risk, 763–768
- arguments for
 - changing management assessment, 775–777
 - future investment improvement, 774–775
 - lowering financial distress costs, 774
 - tax reduction, 769–774
- and carry trade, 290
- cost of, 278–281, 491
- defined, 89–90
- desirability of
 - entrepreneurial, 759–760
 - irrelevant argument, 760–761
 - MNC, 760
- empirical analysis of, 784
- foreign currency options
 - bidding, 888–889
 - transaction risk, 890–895
- and forward contracts
 - costs and benefits for, 100–101
 - currency swaps, 960–962
 - principles of, 97–100
 - and unbiased hypothesis, 277–278
- and interest rate parity, 223
- MNC strategies for
 - HDG Inc., 781–782
 - Merck Pharmaceuticals, 777–781
- and real exchange risk, 390
- synthetic forward, 247–249
- trends in, 783–784
- with futures contracts
 - Nancy Foods, 876–877
 - potential problems, 877–880
- Henderschott, Terry, 515
- Henriksson, Roy D., 405
- Henry, Peter B., 583, 752
- Herstatt risk, 74–78
- high frequency traders (HFT), 514–515
- high-variance project, 748–749
- Hilscher, Jens, 645
- Hines, James R., 30, 33
- histogram, 123
- Hodrick, Robert J.
 - CAPM model accuracy, 589, 590
 - foreign currency options valuations, 903
 - home bias, 590
 - volatility, 552
- home bias
 - characteristics of, 586–589
 - pricing implications, 589
- time-varying correlations, 589–590
- Hong Kong
 - currency board, 171, 199
 - currency crisis not affecting, 430
 - stock exchange, 507–509
 - stock market capitalization, 501–505
 - transfer price regulations, 843
- Hong Kong Stock Exchange, 888
- Horioka, Charles, 157–158
- HotSpot (electronic trading platform), 53
- housing. *See* real estate
- Hoyem, Wei, 589
- Hrung, Warren B., 240
- HSBC, 793
- Hu, Yu-Hau, 415, 589
- Huberman, Gur, 589
- Huizinga, Harry, 843
- human resources recruitment, 536
- hurdle rate, 555–557
- Hutchison, Michael, 426
- hyperinflation. *See also* inflation
 - and dollarization, 200
 - and International Monetary System history, 191–192
 - money creation and, 182
- IBM, 13, 113–115, 501, 935
- ICAP, 51
- ICE LIBOR, 235–236
- Iceland, 432–433
- idiosyncratic risk, 274
- idiosyncratic variance, 552
- IHS Energy Group's Political Risk Ratings, 623
- illegal currency markets, 195
- Imbs, Jean, 323
- IMF. *See* International Monetary Fund
- imports
 - defined, 129
 - monopolist, 375–377
 - payment methods to exporter, 800–809
 - real exchange rates risk, 359–361
 - tariffs and quotas, 320
 - using options to hedge risk in, 893–895
- impossible trinity
 - in China, 186–187
 - defined, 182–183
- income
 - and absolute PPP, 338–342
 - national, 163
- income flows (balance of payment), 132–134
- income tax liability (US), 693–695
- incremental profit, 669
- index funds, 565

Index

1017

- India
 - accounting standards in, 752
 - balance of payments, 144
 - exchange controls in, 243
 - stock market capitalization, 506
- indirect quotes, 59–61
- individual investors
 - budget constraints, 153
 - and international finance, 26
- Indonesia
 - balance of payments, 144
 - currency crisis in, 430–431
 - market liberalization in, 585
 - project financing in, 654–655
- Industrial and Commercial Bank of China, 38
- ineligible banker's acceptance, 811
- inflation. *See also* hyperinflation
 - calculating annual rate of, 316
 - calculating cumulative rate of, 316
 - calculating expected, 738–740
 - and the EMS, 210–211
 - and the Fisher hypothesis, 395–397
 - and price level, 314
 - and real exchange risk sharing, 368–369
- information set, 266
- information technology, 3
- informed traders, 513–515
- initial margin, 870
- initial public offering (IPO)
 - Chinese, 507–509
 - and depositary receipts, 529
 - underwriting discount costs, 673
- institutions (international), 22–26
- Instituto Nacional de Ecología (INE), 605
- insurance
 - best trade provider, 793–794
 - export credit, 817
 - governmental sources for credit, 817–818
 - hedging with options as, 895–899
 - open policies, 799
 - political risk, 647–652
- integrated markets
 - and liberalization, 582–583
 - measurement models, 584
 - time-varying, 584–586
- Inter-American Development Bank (IDB), 23, 648
- interbank market. *See also* banks
 - access to, 49
 - bid–ask spreads, 67–71
 - communication systems, 73–74
 - cross-currency settlement risk, 74–78
 - defined, 47
 - and external currency market, 233–236
 - foreign exchange risks, 74–78
 - internalization affecting, 57
 - lack of liquidity in, 110
 - trading volume of, 52–53
- Intercontinental Exchange Group (ICE), 235, 511, 868
- interest rate parity
 - covered
 - and covered interest arbitrage, 230–233
 - defined, 223
 - derivation of, 228–230
 - intuition behind, 225–228
 - in practice, 319
 - theory of, 223–225
 - validity of, 239
 - and devaluation premiums, 297–299
- deviations
 - default risks, 239–243
 - exchange controls, 243–245
 - political risk, 245
 - and exchange rate forecasts, 394–400
 - and hedging money market transaction risk, 247–249
 - international conditions for, 399–400
 - long-term structure
 - bond pricing, 251–253
 - forward rates and premiums, 254–256
 - spot interest rates, 250–251
- uncovered
 - speculation, 269–272
 - and the unbiased hypothesis, 277–281
- interest rate payments
 - notational principal, 936
 - types of, 451–453
- interest rate swap
 - cash flows associated with, 939
 - contracts, 941–944
 - credit risks, 944
 - defined, 936
 - reasons to use, 940–941
 - size of market, 936–938
- interest rates
 - to defend target zones, 204–205
 - and forward premium/discounts, 115–117
 - short-term pro-cyclical nature of, 940
 - subsidized, 677
 - US and Australian, 725
- interest tax shield
 - parent company NPV, 698–701
 - securities, 673–674
 - WACC analysis, 716
- intermediary (currency swap), 951–954, 956–960
- intermediated debt, 453
- internal capital markets, 30
- internal debt market, 454

- internal purchasing power, 316
- internal rate of return (IRR), 253
- Internal Revenue Service (IRS), 827, 843–845
- International Accounting Standards Board, 752
- International Bank for Reconstruction and Development (IBRD), 23
- international banking. *See also* banks
 - compared to domestic banking, 465–467
 - country credit rating analysis, 622
 - loans
 - Eurocredits, 477–481
 - Euronotes, 481–483
 - as MNCs, 467–469
 - organizational structure, 470–472
 - regulations for, 472–477
- international banking facility (IBF), 234, 472
- international barter, 820
- international bonds. *See also* bonds
 - country risk and, 603
 - debt instrument types
 - currency of denomination, 463–465
 - equity-related, 463
 - floating-rate notes, 463
 - straight fixed-rate, 462
 - defined, 453–454
 - size and structure of, 454–457
 - and sovereign borrowers, 488
 - top arrangers of, 483–482
 - types of
 - Dragon bonds, 460
 - Eurobonds, 458–460
 - foreign bonds, 458
 - global bonds, 460
- international CAPMs, 571–572
- international cash management. *See also* money
 - with a centralized pool
 - demands for money, 831–832
 - forecasting short-term cash flow, 833–834
 - limits of, 838
 - multilateral netting systems, 834–836
 - reducing precautionary cash demands, 836–838
 - short-term planning, 832–833
 - surpluses and deficits in, 833
 - constraints on, 831
 - goal of, 829–830
 - transfer from affiliates to parents
 - dealing with blocked funds, 848–850
 - international dividend cash flows, 838–840
 - international royalty and management fees, 840
 - transfer pricing, 841–847
- International Center for the Settlement of Investment Disputes (ICSID), 631–632
- International Chamber of Commerce (ICC), 795–796
- International Consolidated Airlines Group, 463
- International Container Terminal Services, Inc., 450
- International Country Risk Guide (ICRG), 623–628, 644–646
- International Development Association (IDA), 23
- International Factors Group (IF-Group), 814
- international finance. *See also* capital flows
 - and differences in accounting standards, 751–753
 - equity
 - organization and operation of, 509–515
 - size of, 501–509
 - turnover and transaction costs
 - and governments, 26
 - and hedge funds, 27
 - individual and institutional investors, 26
 - and international banking, 21–22
 - and international institutions, 22–26
 - openness of international capital markets, 157–158
 - and private equity firms, 27
 - and sovereign wealth funds, 27
- International Finance Corporation (IFC), 23, 465, 580, 818
- international financial reporting standards (IFRS), 751–753
- international Fisher relationship. *See* uncovered interest rate parity
- international investments. *See also* globalization
 - emerging markets, 578–580
 - equity risk premiums, 576–578
 - expected returns on, 549
 - home bias in, 586–590
 - in integrated and segmented markets, 580–586
 - measurement models, 583–586
 - optimal portfolio allocation
 - mean-standard deviation frontier, 562–565
 - preferences, 558–562
 - political risk investment structuring, 646–647
 - portfolio diversification benefits
 - risk reduction, 550–554
 - Sharpe ratios, 554–558
 - risks of, 545–546
 - Sharpe ratios, 549–550
 - volatility of, 546–548
- International Monetary Fund (IMF)
 - and absolute PPP, 331, 332, 334, 335
 - affecting international finance, 22
 - and anti-globalization, 31
 - average long-term government bond yields, 397
 - balance of payments, 133
 - and the Bretton Woods agreement, 192
 - exchange controls, 606
 - exchange rate systems, 167–171, 177, 412
 - foreign exchange reserves, 180
 - and the 1980s debt crisis, 610–614
 - world GDP, 143–144
- International Monetary Market (IMM), 869
- International Order Book, 528

Index

1019

- International Organization for Standardization (ISO), 57–59
- international parity conditions
 - defined, 398–399
 - and real interest rates, 399–400
- International Securities Exchange, 881
- International Swaps and Derivatives Association (ISDA), 934
- international trade
 - countertrade, 819–822
 - documents, 796–800
 - export financing, 809–818
 - fundamental problem with, 794–796
 - and globalization, 2–5
 - list of best in financing, 793–794
 - payment methods to exporter, 800–809
- International Trade and Forfaiting Association (ITFA), 813
- International Wood Products, Inc. (IWPI)
 - background of, 682–683
 - export sales cannibalization, 703–705
 - financial side effect value, 698–702
 - foreign subsidiary cash flow analysis, 683–690
 - full ANPV of Spain subsidiary, 701–703
 - parent cash flow analysis, 690–698
- intertemporal budget constraint
 - defined, 152
 - individual, 153
- interventions (central bank)
 - effectiveness of, 190–191
 - and the EMS, 208
 - exchange rate system, 183–184
 - sterilized, 187–189
- interwar period
 - and the Bretton Woods agreement, 192
 - hyperinflation in, 191–192
- intrinsic value, 882, 903
- inventory
 - as asset, 828
 - optimal inventory theory, 856–859
- investment banks
 - activities of, 467
 - as currency swap intermediary, 951–954, 956–960
 - Eurobonds trading, 460
- investment barriers
 - and cross-listing, 534–535
 - in emerging markets, 580
 - to measurement of equity market liberalization, 584
- investment income account
 - central bank open market operations, 179
 - and current account, 137, 138, 145
 - net international, 146–148, 157–158
- investment industry
 - scandals, 14
 - and trade liberalization, 31
- investment spending
 - and current account, 153–154
 - and hedging, 774–775
 - openness of international capital markets, 157–158
 - and pecking order, 776–777
- Investment Technology Group (ITG)
- investment time horizon (MNC), 13
- investment trusts, 558
- Ireland, 614, 831
- Iron Curtain (fall of), 3
- irrevocable D/C, 804
- Islamic Development Bank, 23
- Italy, 143–144, 614
- Ito, Hiro, 6, 182
- Itskhoki, Oleg, 378
- Jaffee, Jeffrey F., 591, 769
- Japan
 - accounting standards in, 752
 - balance of payments, 143–144
 - bond market MNC funding source, 446–447
 - convertible bonds and, 463
 - dual-currency bonds, 464
 - FDI in the United States, 33
 - government bonds in, 454–457
 - lack of corruption in, 607
 - net factor income, 165–166
 - political risk insurance in, 648
 - popularity of retail aggregators in, 54
 - return correlation matrix, 552
 - stock market capitalization, 501–505
- Japan Bank for International Cooperation, 794, 815
- Japan Credit Rating Agency (JCR), 487
- Japanese Offshore Market (JOM), 472
- Jeanne, Olivier, 181, 425
- Jensen, Michael C., 829
- Jiang, Wei, 17
- Johannesburg Stock Exchange, 888
- Johnson, Simon, 614
- joint venture
 - and transfer prices, 847
 - defined, 537–538
 - MNC strategy to penetrate foreign markets, 11
 - repatriation schedule cash flow, 840
- Jordà, Òscar, 415, 420
- Jordan, Bradford, 769
- JPMorgan
 - Basel Accord, 474
 - and Bolivian debt buyback, 612
 - carry trade, 290
 - Chinese globalization, 38
 - credit default swaps by, 938–939
 - depository receipts and, 528
 - international bonds, 483
- Ju, Jiandong, 156

- Jurek, Jakub W., 297
 Jylhä, Petri, 285
- Kahle, Kathleen, 829
 Kalay, Avner, 675
 Kaminsky, Graciela, 425, 426
 Karnani, Aneel, 21
 Karolyi, G. Andrew
 ADRs, 532
 cross-listing, 530, 535, 537
 DaimlerChrysler merger, 532
 Kasa, Kenneth, 371
 Kaupthing Bank, 432–433
 Kearney, A. John, 777, 778
 keiretsu, 17
 Kerviel, Jérôme, 8
 Keynes, John Maynard, 425
 Khwaja, Asia I., 513
 Kick In Kick Out contracts, 912–914
 Kidwell, Grant, 816
 Kim, E. Han, 583
 King, Michael R., 54, 56
 Kiribati, 201
 Klein, Michael W., 198
 Klein, Naomi, 31
 Klemperer, Paul, 390
 Knetter, Michael, 378
 Kohlberg Kravis Roberts & Co., 27
 Kolhagan, Steven W., 903
 Koller, Tim, 668
 Kong, Katie, 523
 Kookmin Bank, 535
 Korea
 balance of payments, 144
 bonding hypothesis in, 535
 currency crisis in, 430–431
 investment barriers, 534
 Kick In Kick Out contracts, 912–914
 removal of investment restrictions in, 584
 stock market capitalization, 506
 turnover in, 518
 Korea Fund, 584
 Kose, M. Ayhan, 31
 krona (Iceland), 432–433
 krona (Sweden), 297–299
 Krugman, Paul, 424
 Kryiazidou, Ekaterini, 82
 kurtosis, 125
 Kwan, Yum, 199
- La Porta, Rafael, 18, 606–607
 Lactalis, 14
 Laeven, Luc, 481, 843
- lag operation, 204–205
 lagging payments, 853–855
 Lan, Yihui, 415
 Landsbanki Bank, 432–433
 Lane, Philip R., 7, 147
 Lang, Mark H., 535
 Laranjeira, Bruno, 450
 Larrain, Mauricio, 30
 latent volatility, 174–176
 Latvia, 432–433
 law of iterated expectations, 272, 408
 law of one price
 deviations from, 323–325
 and monopolistic exporter pricing to market strategy, 375
 in a perfect market, 319
 violations, 319–322
 lead manager (Eurocredit), 478–479
 lead operation, 204–205
 leading payments, 853–855
 LeBaron, Blake, 419
 Lee, Inmoo, 673
 Lee, Jong-Wha, 33
 Lee, Yoolim, 913
 Leeson, Nicholas, 8
 legal inefficiency, 606–607
 Lehman Brothers
 bankruptcy of, 10, 433
 credit rating, 487
 interest rate parity deviations, 240–243
 volatility of markets, 70
 leptokurtosis, 94, 173–174
 Lessard, Donald, 379
 Lettau, Martin, 578
 letter of credit (L/C), 801
 Leuz, Christian, 523, 524, 532, 536, 752, 753
 Level I/II/III ADRs, 525
 leverage
 in the banking sector, 476
 and Sharpe ratios, 290–292
 leveraged buyout (LBO), 719
 Levich, Richard M., 291, 419, 423
 Lewent, Judy C., 777, 778
 Lewis, Michael, 515
 Li, Haitao, 941
 liability
 fixed vs. floating rate debt, 940
 foreign currency, 903
 income tax, 693–695
 short-term, 829
 licensing
 agreements, 681
 MNC strategy to penetrate foreign markets, 11

Index

1021

- Lin, Stephen, 752
- Lins, Karl V., 536
- Lintner, John, 565
- Lipsey, Robert E., 32
- liquidating dividend, 668
- liquidity (market)
 - defined, 51
 - and electronic trading, 53
 - in forward markets, 107–110
 - as reason to cross-list, 533
 - traders, 513–515
 - trading practices and, 511–512
 - and turnover, 516
- Liquidity Coverage Ratio (LCR), 475
- liquidity shortfall (bank), 476
- Liu, Francis, 199
- Lizondo, Saul, 426
- loans
 - back-to-back, 935
 - central bank to domestic financial institutions, 179
 - dollar, 744
 - euro, 744–745
 - fronting, 848–849
 - parallel, 934–935
 - as a source of MNC long-term capital, 446
 - yen, 746
- Lockhead, Scott, 673
- Lockheed Martin Corporation, 822
- logarithms (natural), 86–87
- London Interbank Offer Rate (LIBOR)
 - in external currency market, 235–236
 - and global financial crisis, 241
 - and interest rate swap contracts, 941–943
 - and swaps, 938, 947–949
 - and the TED spread, 244
- London Stock Exchange, 514, 515, 528, 888
- Long Term Capital Management (LTCM), 937–938
- Longin, François, 554
- Longstaff, Francis A., 645
- long-term capital
 - bond types in, 453–454
 - MNC sources for, 445–446
- long-term interest rate parity
 - bond pricing, 251–253
 - and the expectations hypothesis, 452
 - forward rates and premiums, 254–256
 - and spot interest rates, 250–251, 253–254
- long-term time horizon
 - loans, 23
 - for MNC investments, 13
- lookback options, 912
- Lopez-de-Silanes, Florencio, 18, 606–607
- Losq, Etienne, 582
- Lothian, James, 338
- Louis Vuitton, 371
- Lowenstein, Roger, 937
- low-variance project, 748
- Lu, Liang, 512–513
- Lucas, Deborah, 816
- Ludvigson, Sydney, 578
- Lundblad, Christian
 - banking globalization, 468
 - euro benefits, 213
 - open equity markets, 30
 - political risk, 625
 - political risk spread, 644–645
 - trading costs, 519
- Lustig, Hanno, 285, 294
- Luxembourg Stock Exchange, 528
- Ma, Guonan, 244
- Maastricht Treaty (1992), 25, 207, 211–212
- MacPPP standard, 327–330, 340
- Macquarie Bank Ltd., 888
- Madhaven, Ananth, 247, 521
- Madoff, Bernard, 14
- Magendzo, Igal, 200
- Maggiori, Matteo, 294
- Maghribi, 795
- maintenance margins, 870
- Majluf, Nicolais, 777
- Malawi, 607
- Malaysia, 144, 430–431
- Malouche, Mariem, 817
- management strategy
 - accounts receivable, 850–855
 - inventory, 856–859
 - marketing, 389–390
 - political risk, 646–655
 - pricing to market, 371–378
 - real exchange risk, 386–390
 - transfer price incentives in, 845
- Mancini-Griffoli, Tomasso, 240, 241
- mandated reciprocity (trade), 822
- manipulation (stock market), 512–513
- Mankhoff, Lukas, 402
- Mankiw, Gregory, 7, 8
- Mannesmann A.G., 17, 481
- Mano, Rui C., 289
- Manova, Kalina, 818
- Mao, Connie X., 941
- Marazzi, Mario, 378
- margin account, 870
- margin call, 870
- marginal revenue, 373
- margins (forward contract), 869–870

- market efficiency
 - defined, 272
 - and the unbiased hypothesis, 288–291
- market entry, 389
- market equilibrium
 - and monopolistic importer pricing to market strategy, 375–376
 - real exchange risk, 374–375
- market integration, 534–535
- market portfolio
 - defined, 274
 - in CAPM, 565, 573
- market risk premium, 568
- market variance, 551
- marketing management, 389–390
- Markets in Financial Instruments Directive (EU), 514
- marking to market process, 870
- Markowitz, Harry, 565
- Marsh, Paul, 577
- Marston, Richard, 371, 383, 783–784
- Matesi, 605
- maturity (debt)
 - and floating interest rates, 477–478
 - forward contract, 106–107
 - forward contract and currency futures, 868
 - and liquidity, 107–110
 - MNC, 450
- maturity matching, 450
- McBrady, Matthew R., 492
- McCauley, Robert N., 244
- McDonald's corporation, 11, 849–850
- MDB. *See* multilateral development banks
- mean (statistical)
 - conditional, 94–97
 - exchange rate, 92–94
 - and expected value, 123
 - in a normal probability distribution, 125
 - sample, 122
- mean absolute error, 403
- mean reversion, 411–412
- mean-standard deviation frontier, 562–565
- mean-variance preference, 559
- mean-variance-efficient portfolio (MVE), 564
- measurement
 - financial openness, 6–7
 - purchasing power, 314
 - real exchange risk exposure, 361–363
- median, 125
- Meese, Richard, 406, 412
- Melamed, Leo, 869
- Melvin, Michael, 110
- Mende, Alexander, 72
- Mendoza, Enrique, 157
- Menkhoff, Lukas, 72, 190, 191
- menu costs, 322
- merchant banks, 467
- Merck Pharmaceuticals, 777–781
- Mercosur countries, 3, 207
- mergers and acquisitions (M&A)
 - bad business decision affecting, 468–469
 - cross-border, 19–21
 - DaimlerChrysler AG, 530–532
 - as reason to cross-list, 536
 - stock exchanges, 510–511
 - strategic alliances, 537–538
- Merton, Robert, 405, 534
- Metalclad Corporation, 631–632
- Metallgesellschaft, 8
- Metallwerke, A.G., 364–371
- Mexico
 - arbitrage opportunities in, 245–247
 - BITs in, 631–632
 - currency crisis in, 429–430
 - pegged currencies in, 205–207
 - peso crisis in, 637–634, 640
 - political risk in, 605
 - starting 1980s debt crisis, 610
 - stock market capitalization, 506
- Mian, Atif, 513
- Mian, Shehzad L., 850
- Micossi, Stefano, 215
- Microsoft, 830–831
- MidAmerica Energy Holdings Company, 654–655
- migrant crisis, European (2015), 25
- Miles, James A., 719
- Milesi-Ferretti, Gian Maria, 7, 147
- Miller, Darius P., 460, 532, 535
- Miller, Merton, 714, 758, 760–761
- minimum-desired balance, 833
- minimum-variance frontier, 562–565
- Minton, Bernadette, 784, 785
- Miranda-Agrippino, Silvia, 183
- Mishkin, Frederic S., 178
- Mitchell, Jason, 340
- mixture of normals distribution, 175
- MNC. *See* multinational corporations
- Mobil Cerro Negro, 632
- Modigliani, Franco, 714, 758, 760–761
- Moeller, Sara B., 21
- monetary base
 - creation of, 181
 - defined, 179
- monetary exchange rate model, 408
- monetary unions. *See also* euro
 - currency risks in, 176
 - and the Maastricht Treaty, 211–212
 - pros and cons of, 212–215

Index

1023

- money. *See also* international cash management
 and countertrade, 820–822
 creation, 181
 defined, 179
 time values of, 227–228
 money market hedge, 247–249
 money market investment (uncovered), 262–264
 money market securities, 454
 Money Market Surveys (MMS), 410
 money neutrality, 181
 money supply, 184
 Monte Carlo simulation model, 780
 Moody's Investors Service, 487, 830–831
 Morgan Stanley Capital International (MSCI)
 classification system, 506
 correlations between foreign and US equity market
 returns, 556
 foreign equity return characteristics, 547, 548
 home bias, 590
 hurdle rates, 557
 return correlation matrix, 552–554
 Morgan Stanley Capital International (MSCI) Index, 573
 Morocco, 520–521
 Mortal, Sandra, 492
 mortgages
 as carry trades, 290
 and the financial crisis, 9–10
 subprime, 938–939
 Moskowitz, Tobias J., 589
 Mossin, Jan, 565
 motor vehicle industry
 dominating largest MNCs, 11
 scandals, 15
 moving-average cross-over filter rule, 419
 Mugabe, Robert, President of Zimbabwe, 201
 multilateral development banks (MDBs), 23
 Multilateral Investment Guarantee Agency (MIGA), 648,
 649
 multilateral netting systems, 834–836
 multilateral trading facilities (MTFs), 514
 multinational corporations (MNC)
 affecting international trade, 5–7
 banks as, 467–469
 corporate governance around the world in, 15–18
 cross-listing pros and cons for, 532–537
 debt funding options
 global sources, 445–446
 world variety in, 446–447
 debt instrument characteristics
 currency of denomination, 448–450
 international character of, 453–454
 maturity, 450
 nature of interest payments, 451–453
 and trading, 453
 defined, 1
 effects of globalization on, 27–34
 entering foreign markets, 11–13
 and foreign direct investment, 18–21
 in foreign exchange market, 52
 foreign exchange trading volume of, 52–53
 goals of, 13–15
 hedging
 desirability of, 760
 irrelevant argument, 760–761
 and institutional investors, 26
 and international banks, 21–22
 international bond market importance, 457
 and international financial institutions, 22–26
 and the 1980s debt crisis, 611
 world's top, 11
 multiplicative default spread, 954–955
 Mumtaz, Haroon, 323
 Munro, Anella, 492
 Mussa, Michael, 413
 mutual funds, 27
 Myers, Stewart, 777
 Nagel, Stefan, 294
 Nakamura, Emi, 378
 Nance, Deana R., 783
 Nancy Foods, 876–877
 NASDAQ (National Association of Securities Dealers
 Automated Quotations), 511, 515, 525
 NASDAQ OMX PHLX (exchange), 881, 885
 national government savings, 151–152
 national income, 163
 national income and product accounts (NIPA)
 and current account, 149–150
 defined, 149, 163
 nationalization, 603, 605
 natural logarithms, 86–87
 Neely, Christopher J., 190–191, 420
 negotiable bill of lading, 797
 Nestlé, 11, 574
 net exporter, 379
 net exports (NX), 165
 net factor income, 166
 net foreign assets, 146
 net foreign income, 149–150, 166
 net importer, 379
 net international investment position, 146
 net operating profit less adjusted taxes (NOPLAT), 669,
 687
 net present value (NPV)
 Consolidated Machine Tool Company, 730–731
 defined, 666–667
 foreign subsidiary, 682, 690
 of free cash flow, 668–673
 parent company after-tax dividends, 695–696
 swaps and, 937

- net present value of financial side effects (NPVF), 667
- net private savings, 151–152
- net settlement, 111
- Net Stable Funding Ratio (NSFR), 476
- net working capital
 - accounts receivable, 850–855
 - cash transfer from affiliates to parents, 838–850
 - defined, 668
 - foreign subsidiary, 684–685
 - international cash management, 829–838
 - inventory management, 856–859
 - purpose of, 828–829
- Netherlands, 607
- netting arrangements, 76–78
- neutral firm, 379
- New York Stock Exchange (NYSE), 501, 515, 523, 525
- New York University, 576
- Ng, David, 589
- Nguyen, Hoai-Luu, 240
- Nielsen, Bo, 423
- Nippon Export and Investment Insurance, 648
- Nishiotis, George P., 534, 535
- Nixon, Richard, US President, 193, 869
- nominal price, 314
- Nomura, 113–115
- non-competitive markets, 321–322
- non-deliverable forward contracts (NDFs), 111
- non-governmental organizations (NGOs), 32
- non-sterilized interventions, 183–184
- Norfolk Southern, 450
- normal probability distribution
 - characteristics of, 124–125
 - and currency speculation, 266–268
 - and exchange rate uncertainty, 92–94
- normalized home bias, 586–589
- North American Free Trade Agreement (NAFTA)
 - and BITs, 632
 - as regional trade agreement, 3
- Northern Rock Bank, 10
- Nosbusch, Yves, 645
- notational principal, 936, 943
- note issuance facility (NIF), 481
- note purchase, 812–813
- notes, 450
- Novartis, 522, 537–538
- NPV. *See* net present value
- NPVF. *See* net present value of financial side effects
- NSC (Nouveau Système de Cotation), 515
- null hypothesis, 282
- NYSE Euronext, 510–511
- NYSE MKT, 888
- Oanda (retail aggregator), 54, 63, 66
- Obama, Barack (US President), 477
- Obstfeld, Maurice, 182, 183, 425
- Ofek, Eli, 784
- off-balance sheet activities, 473–474
- official reserves account
 - central bank, 180–181
 - defined, 129
 - and gold, 192–193
 - transactions, 135–136
 - US, 140, 141–143
- official settlements account, 129
- offset, 822
- offshore banking center, 471–472
- offshore currency deposits, 234
- O'Hara, Maureen, 515
- Okun, Arthur, 322
- Olimov, U., 606
- OLS estimator (ordinary least squares), 308–310
- Olympia Communication Exporters, 357–358
- on-board bill of lading, 798
- Ong, Li Lian, 340
- Ongena, Steven, 290, 492
- open account payment method, 809
- open equity markets. *See* trade liberalization
- open insurance policies, 799
- open interest, 872
- open market operations, 179
- open price, 875
- open-end funds, 558
- openness (trade). *See* trade liberalization
- operating currency hedge, 778
- operational risk, 474
- optimal inventory theory, 856–859
- optimal portfolio allocation (stock)
 - mean-standard deviation frontier, 562–565
 - preferences, 558–562
- optimum currency area, 212, 213–215
- option premium, 882
- options. *See* foreign currency options contracts
- Oracle, 830–831
- order bill of lading, 798
- order-driven trading systems, 511, 515
- Organisation for Economic Co-operation and Development (OECD)
 - defined, 24
 - GDP in, 340–342
 - national income accounts, 163
 - transfer price regulations, 843, 844
- Organization of Petroleum Exporting Countries (OPEC), 607–610
- original sin (bond), 464
- Osler, Carol, 56, 70, 417

Index

1025

- outright forward contracts, 106
- outsourcing
 - defined, 3
 - and job loss, 33
- over the counter (OTC), 525, 884, 888
- overhead management fees, 681
- Overseas Private Investment Company (OPIC), 622, 648, 655
- overvalued currency
 - and absolute PPP, 331–335
 - and MacPPP standard, 327–330
 - and PPP, 325–327
- Owen-Illinois, 605
- Özatay, Fatih, 645
- Özmen, Erdal, 645

- Packer, Frank, 240, 243
- packing list, 799
- Pagano, Marco, 534, 536
- Pakistan
 - political risk in, 605
 - segmentation implications in, 580–582
 - stock market manipulation in, 513
- Palmisano, Samuel, 13
- Pan, Jun, 645
- Panayotov, George, 289, 297
- Panizza, Ugo, 630
- Papaioannou, Elias, 180
- parallel loans, 934–935
- Paravisini, Daniel, 818
- Paris Bourse, 515
- parity conditions (option put/call), 906–908
- Parmalat, 14
- participating bank (Eurocredit), 478–479
- Pasquariello, Paolo, 189
- pass-through-pricing, 377
- Pauls, B. Dianne, 412
- paying agent (Eurocredit), 478–479
- payment vs. payment (PvP), 78
- payoffs (futures contract), 873
- pecking order theory of financing, 776–777
- Pedersen, Lasse, 294, 645
- Pedersen, Niels, 420
- pegged currencies
 - central banks, 185–187
 - crawling peg systems, 171
 - and currency crisis, 424–426
 - currency risks in, 174–176
 - defined, 171
 - and exchange rate systems, 167–169
- Peltonen, Tuomas A., 508
- People's Bank of China, 465
- PepsiCo, 820
- perfectly competitive market, 55
- performance bond, 870
- performance evaluation
 - of countries' risk, 620–623
 - foreign subsidiary, 379–386
- periodic costs (Eurocredit), 479–480
- perpetual bonds, 450
- perpetuity formula, 710
- Peru, 605
- peso (Mexican)
 - and absolute PPP, 335
 - crisis, 637–634, 640
 - futures contracts, 875–876
- peso problem, 294–297
- Peter, Marcel, 290
- Petrobras, 528, 529
- Petroleos de Venezuela S.A. (PDVSA), 653–654
- petroleum industry
 - countertrade in, 822
 - dominating largest MNCs, 11
 - Enron scandal, 14
 - FDI in, 37–38
 - and the 1980s debt crisis, 607–610
 - and sovereign wealth funds, 27
 - Venezuela seizure of oil, 603
- Petrozuata, 653–654
- Phebo, 677
- Philippines
 - balance of payments, 144
 - currency crisis in, 430–431
 - perpetual bonds in, 450
- Philippon, Thomas, 614
- pink sheet trading, 525
- “pip”, 69–71
- Plaza Accord (1985), 190
- PLN, 654–655
- plowback ratio, 736
- “Poincaré's Bear Squeeze”, 297
- Pojarliev, Momtchil, 291, 423
- Poland, 607
- Polfliet, Ruud, 458
- political risk. *See also* governments
 - in Argentina, 642–644
 - and Brady bonds, 636
 - computing probabilities of, 644–646
 - defined, 603
 - and interest rate parity, 245
 - management strategy, 646–655
 - MNC capital budgeting for
 - cash flow adjustment, 614–618
 - discount rate adjustment, 618–620
 - MNC investment factors, 605–607
 - transferring cash from affiliates to parent companies, 839

- political risk insurance
 - and capital budgeting, 651
 - defined, 615
 - emerging markets, 649
 - OPEC countries, 648
 - sources of, 647–648
- Political Risk Services Group (PRS), 623–628
- political risk spread, 644–645, 646
- Ponzi scheme, 14
- portal (electronic trading) types, 53
- Portes, Richard, 180
- portfolio investment
 - defined, 145
 - diversification argument, 305–307
 - and the unbiasedness hypothesis, 277
- Portugal
 - return correlation matrix, 552
 - sovereign debt crisis (2010), 614
- pound sterling (UK)
 - and absolute PPP, 332
 - as foreign reserve, 180
 - and global financial crisis interest rate parity, 240–243
 - moving average rules, 419
 - speculating on receivables, 900–902
 - term structure of interest rates, 250
- PPP. *See* purchasing power parity
- Pramborg, Bengt, 784
- Prased, Eswar S., 31
- precautionary demand for money, 831, 836–838
- preferences (economic), 558–562
- present value (of money), 227–228
- price discovery, 511–512
- price index, 314–316
- price level
 - calculating, 314
 - defined, 314
 - futures contracts, 872–876
 - and price indexes, 314–316
 - and real exchange risk, 389
- price-driven trading system, 511, 515
- price-earnings ratio (P/E), 680–681
- “priced” trading costs, 519
- PricewaterhouseCoopers, 752
- pricing to market
 - in non-competitive markets, 321–322
 - strategies, 371–378
- primary market, 501
- prime brokerage
 - and Currenex, 55
 - defined, 54
- private bourse, 509–510
- private company, 27
- private equity firms, 27
- Private Export Funding Corporation (PEFCO), 817
- private placement bonds, 453
- private savings, 151–152
- probability distribution
 - conditional, 94–97
 - defined, 123
 - normal, 92–94
- probability-weighted average, 124
- Procter & Gamble (P&G), 8, 677
- pro-cyclical nature (MNC cash flow), 940
- production and distribution facilities. *See* greenfield investments
- production management risk, 387–388
- profit
 - carry trade, 290–292
 - foreign subsidiary, 379–380
 - hedging and speculation for, 97–105
 - incremental, 669
 - of interventions, 190–191
 - and swap activity, 941
 - in triangular arbitrage, 63–66
- profitability
 - exchange rate forecasting, 405
 - technical analysis filter rules, 419
- project finance
 - and difficulty of hedging equity risk, 763–768
 - and political risk, 652–655
- Prologis, 6
- protectionism
 - and the anti-globalization movement, 32
 - and FDI, 37–38
 - and globalization, 33–34
 - increase in economic, 29
 - preventing growth of international trade, 2–3
- PT Semen Gresik, 585
- public bourse, 509–510
- Pukthuanthong-Le, Kuntara, 419
- purchase order, 797
- purchasing power
 - comparing countries’, 313
 - external, 317–318
 - internal, 316
 - two step measurement of, 314
- purchasing power parity (PPP)
 - absolute
 - deviations explaining, 336–338
 - theory of, 317–319
 - using CPI data, 331–335
 - as baseline forecast of future exchange rates, 313
 - deviations affecting
 - currency overvaluations and underevaluations, 325–327
 - MacPPP standard, 327–330
 - exchange rate forecasting, 415
 - and international parity, 398–399

Index

1027

- and the law of one price
 - deviations affecting, 323–325
 - in a perfect market, 319
 - violations, 319–322
- and real exchange rates, 346–350
- relative
 - symbolic representation of, 342–344
 - with continuously compounded rates of change, 344–345
- pure discount bonds, 251–253
- put-call parity, 906–908
- Puthenpurackal, John J., 460

- Qian, Jun, 18
- Qian, Meijun, 18
- Qian, Xingwang, 244
- Qualified Institutional Buyers (QIB), 453
- quantitative easing, 179, 215
- Quinn, Dennis, 6
- quotas, 320
- quote currency, 59
- quotes
 - exchange rate, 59–61
 - on swap prices, 112–113, 947–949, 956–960

- Radisson Hotel, 849–850
- Rajan, Ragu, 10
- Ramadorai, Tarun, 70
- Ranaldo, Angelo, 240, 241
- Ranciere, Romain, 181
- Randl, Otto, 534
- random walk model, 409, 417
- rate of return (WACC valuation), 717–718
- ratio analysis, 680–681
- rational expectations (investor), 282
- Ravina, Enrichetta, 589
- Ravn, Morten, 323
- raw home bias, 586–589
- Reagan, Ronald, US President, 414
- real appreciations, 347–350, 380–384, *See also* appreciation
- real depreciations, 347–350, 377
- real estate, 338
- real estate investment trust (REIT), 6
- real exchange rates
 - affecting real profitability, 354–356
 - appreciations and depreciations, 347–350
 - and BOP, 413
 - and the capital account, 413–414
 - and current account equilibrium, 414
 - defined, 346–347
 - domestic firm risk, 361–371
 - exporter risk, 356–359
 - foreign subsidiary performance evaluation, 379–386
 - importer risk, 359–361
 - management strategies for, 386–390
 - pricing to market strategies, 371–378
 - and real interest rate differential, 410–412
 - and the trade balance, 413
 - trade-weighted, 349
- real interest rate differential
 - foreign subsidiary, 725–726
 - and the real exchange rate, 410–412
- real options (RO), 667–668, 677–681
- real profitability, 354–356
- real volatility, 31
- realignment rules, 208
- real-time gross settlement (RTGS), 74
- Rebelo, Sergio, 426
- received-for-shipment bill of lading, 798
- Reese, William A., 535
- regression analysis. *See also* statistics
 - basics of, 308–311
 - in CAPM, 575–576
 - problems interpreting, 294–297
 - technical analysis forecasting, 420
 - unbiased hypothesis, 285–288
- regulations
 - domestic bond, 457
 - by governments in financial derivatives, 7
 - international banking, 472–477
 - as political risk, 605–606
 - transfer prices, 843–845
- Reinhart, Carmen, 426
- relative prices, 336–337
- relative purchasing power parity
 - symbolic representation of, 342–344
 - with continuously compounded rates of change, 344–345
- Remolana, Eli M., 645
- repatriation schedule, 840
- representative office (bank), 470
- required reserves, 178
- resale price method, 844
- reserves account
 - government and balance of payments, 129
 - and lead-lag operation pressures, 205
- residuals, 308
- resistance level (chartist), 417
- Resnick, Bruce, 470
- retail aggregators
 - boosting electronic foreign exchange trading, 53–54
 - and Currenex, 55
 - foreign exchange trading volume of, 54
- return on investment (ROI), 736–738
- Reuters. *See* Thomson Reuters
- revaluations (currency), 79–80
- Revenue Equalization Reserve Fund, 27
- reversal (synthetic forward contract), 907
- revocable D/C, 804

- revolving underwriting facility (RUF), 481
- Rey, Hélène, 147, 183, 323
- Ricardian equivalence, 153
- Ricardo, David, 2, 153
- RiceNoodle, 379–386
- Richardson, Matt, 7
- Riddiough, Steven, 294
- riding the yield curve, 477–478
- right of offset (loan), 935
- Rigobon, Roberto, 580
- Riksbank, 297–299
- Rime, Dagfinn
 - bank investment decisions, 421
 - bid–ask spreads, 70
 - equity turnover, 54
 - foreign exchange trading volume, 56
 - interest rate parity, 239
- Riordan, Ryan, 515
- risk. *See also* volatility
 - and Basel Accords, 474–475
 - equity risk premiums, 576–578
 - firms in financial distress incentive for, 748–749
 - foreign exchange market, 74–78
 - forward market, 108–110
 - hedging, 97–105
 - real exchange rates
 - domestic firms, 361–371
 - exporter, 356–359
 - importer, 359–361
 - and securitization, 7
 - and trade liberalization, 29
 - and volatility in the forward exchange market, 117–119
- risk management. *See also* hedging
 - derivative securities in, 759
 - interest rate swap, 944
 - MNC debt repayment clustering, 450
 - in stock portfolio diversification, 550–554, 598
- risk premium
 - and the cost of hedging, 278–281
 - defined, 272–273
 - derivation of, 669
 - determination of, 273–275
 - and the unbiased hypothesis, 292–294
- Risk.net, 758
- risk-averse entrepreneurs, 759–760
- Ritter, Jay, 673
- Rockoff, Hugh, 212
- Rodrik, Dani, 29
- Röell, Ailsa, 15–18, 536
- Rogers, John, 323, 410
- Rogoff, Kenneth, 23, 406, 412, 612
- Roll critique, 573
- Roll, Richard, 573
- Romer, David, 2
- Romero, Simon, 654
- root mean squared error (RMSE), 403
- Rose, Andrew K., 426
- Ross, Stephen A., 578, 591, 769, 776
- Rossi, Barbara, 406
- Roussanov, Nikolai, 285, 294
- Rowland, Patrick F., 557
- Royal Bank of Scotland, 468–469
- Royal Dutch Shell, 11, 522, 529–530
- royalties
 - from affiliates to parent company, 840
 - defined, 11
 - parent company after-tax, 695–698
 - payments, 681
- Rule 144 ADRs (RADRs), 525, 653
- Rule 144A (US), 458
- RUSAL, 528
- Russia
 - balance of payments, 144
 - blocked funds in, 849–850
 - corruption in, 607
 - countertrade in, 820, 821–822
 - and SWIFT, 73
- Ryanair, 458
- S.J. Rundt & Associates, 623
- Safe Air, Inc., 364–371
- Sahinbeyoglu, Gülbin, 645
- sales on open account, 809
- sample variance, 123
- Samuelson, Paul, 338
- Sánchez, Oskar Arias, 34
- Santabábara, Daniel, 508
- SAP, 536
- Sarbanes-Oxley Act
 - effect on cross-listing stocks, 523–524
 - to improve corporate governance, 17–18
- Sarkar, Asani, 240
- Sarkissian, Sergei, 523, 532
- Sarno, Lucio, 239, 294, 421
- scandals (corporate), 14–15, *See also* corruption
- Scatigna, Michela, 645
- Scharfstein, David S., 775
- Schengen Area, 25
- Schill, Michael J., 492, 523, 532
- Schlingemann, Frederik P., 21
- Schmukler, Sergio L., 530, 580
- Scholes, Myron, 903
- Schrand, Catherine, 784
- Schwarz, Robert A., 515
- SDR. *See* special drawing right
- Seah, Shi Pei, 415

Index

1029

- secondary market
- Securities and Exchange Commission (US)
 - accounting standards, 751–753
 - depository receipts and, 525
 - and the domestic bond market, 457
 - and global registered shares, 531
 - hedging, 784
 - Regulation NMS, 514
 - stock market manipulation investigations by, 513
- securitization
 - and the Basel Accord II, 474
 - costs affecting project value, 673
 - defined, 7
 - as a source of MNC long-term capital, 446
 - and WACC valuation, 717–718
- segmented markets, 580–582, 585–586
- seigniorage, 181
- Sengmueller, Paul, 589
- Sengupta, Rajeswari, 187
- sensitivity analysis, 578
- Sercu, Piet, 571
- services
 - that cause transaction costs in goods traded, 320–321
 - and GDP, 164
 - US current account, 136–138
- SETS (Stock Exchange Electronic Trading Service), 515
- settle price, 871
- Shambaugh, Jay C., 182, 198
- shareholder base
 - and cross-listing, 537
 - as reason to cross-list, 534
- shareholder model
 - activism in, 17
 - and MNC goals, 13
 - independent board of directors in, 15–16
 - and the Sarbanes-Oxley Act, 17–18
- shareholders
 - assessing management, 775–776
 - FCF payout to, 668
- Sharp, David, 379
- Sharpe ratios
 - improving the, 599
 - in international investments, 549–550
 - and leverage, 290–292
 - as portfolio diversification benefit, 554–558
- Sharpe, William F., 275, 565
- Sheets, Nathan, 378
- shelf registration, 458
- Shell Oil Corporation, 55
- Shenzhen Stock Exchange, 512
- Shleifer, Andrei, 18, 606–607
- short-term cash planning, 831, 940
- short-term liabilities, 829, 940–941
- Shu, Chang, 244
- SIBOR (Singapore), 235
- Siegel paradox, 303–304
- Siegel, Jeremy, 304, 468, 584, 644–645
- Siegel, Stephan, 523
- Siemens, 712
- SIFIs (Systematically Important Financial Institutions), 476
- sight draft, 801
- Silva, João M. C. Santos, 213
- Singal, Vijay, 583
- Singapore
 - balance of payments, 144
 - currency crisis not affecting, 430
 - dollar, 168
- Singhal, Rajeev, 675
- Singleton, Kenneth, 645
- Siourounis, Gregorios, 180
- Sirajiddinov, N., 606
- S.J. Rundt & Associates, 623
- skewed distribution, 125, 294
- Slovenia, 607
- Smith, Clifford W., 774, 783, 850
- Smithson, Charles W., 783
- Société Générale, 8, 888
- Society for Worldwide Interbank Financial Telecommunications (SWIFT), 73, 76
- Sojli, Elvira, 421
- Solnik, Bruno, 554, 557, 571, 572
- Somalia, 607
- Soros, George, 271
- sovereign borrowers, 488
- sovereign credit ratings, 628–630, 633–635
- sovereign debt crisis (2010), 213–215, 604, 614, *See also* Debt Crisis
- sovereign risk
 - defined, 604
 - spread, 646
- Sovereign Risk Insurance, Ltd., 648
- sovereign wealth funds, 27
- Spain
 - International Wood Products cash flow analysis, 682–690, 698–705
 - sovereign debt crisis (2010), 614
- Spamann, Holger, 18
- special drawing right (SDR), 169–170, 193
- speculation (currency)
 - in the foreign exchange market, 262–268
 - in hedge funds, 53–54
 - and hedging with options, 895–899
 - and the law of one price, 321
 - and pegged currency crisis, 424–426
 - and refining a hedging strategy, 103–105
 - and target zones, 204
 - using the options market to sell insurance, 899–903

- Spiegel, Gerhard, 587
- sponsorship (of ADRs), 526
- spot foreign exchange market
 - appreciation and depreciation
 - principles of, 79–80
 - rates of, 80–83
 - communication systems in, 73–74
 - competition between retail and interbanks in, 55–57
 - currency quotes and prices
 - triangular arbitrage, 63–66
 - vehicle currencies and cross-rates, 62–63
 - describing uncertain futures in
 - probability distribution, 94–97
 - using historical data, 92–94
 - exchange rates
 - ISO abbreviation standardization, 57–59
 - quote depiction, 59–61
 - and forward premium/discounts, 115–117
 - organization of
 - components, 47–49
 - dealers, 51
 - electronic foreign exchange trading, 53–55
 - size of, 49
 - spot market trades, 50–51
 - types of, 51–52
 - trader methodology in
 - bid-ask spreads, 67–71
 - and risk, 74–78
 - speculative trading, 71–72
- spot interest rates
 - and forward exchange rates, 254–256
 - and long-term interest rate parity, 250–251, 253–254
 - and pure discount bonds, 251–253
 - US and Australian, 725
- spot market trades
 - and hedge funds, 54
 - liquidity of, 110
 - timeline of, 50–51
- spot rate
 - break-even, 264
 - and the unbiased hypothesis, 270–272
- stability
 - and the EMS, 210–211
 - and fixed exchange rate systems, 197–198
- stakeholder model
 - and concentrated ownership of stock, 16
 - hedging creating bad incentives for, 769
 - independent board of directors in, 15–16
 - and MNC goals, 13
 - and the Sarbanes-Oxley Act, 18
- Standard & Poor's (S&P), 487, 518, 626, 629
- standard deviation
 - conditional, 126
 - defined, 124
 - exchange rate uncertainty, 92–94
 - in a normal probability distribution, 125
- standard normal random variable, 267
 - of currency changes and forward market returns, 267–268
- standardization
 - in contract futures exchange amounts, 868
 - of currency swaps, 947–949, 956–960
 - potential futures contracts problems with, 877–880
- standby note issuance facilities (SNIFs), 481
- Stanford, Allen, 14
- State Street, 55
- statistical technical analysis. *See* technical analysis
 - forecasting
- statistics. *See also* regression analysis
 - confidence level, 284
 - density function, 123
 - expected value, 123
 - frequency distribution, 123
 - histogram, 123
 - law of iterated expectations, 272
 - median, 125
 - mixture of normals distribution, 175
 - probability distribution, 123
 - probability-weighted average, 124
 - sample mean, 122
 - sample variance, 123
 - standard deviation, 124
 - tests for the unbiased hypothesis, 281–288
 - and uncertain spot foreign exchange
 - market prediction
 - probability distribution, 94–97
 - using historical data, 92–94
 - variance, 123
- Statoil, 603
- Staunton, Mike, 577
- Stein, Jeremy C., 775
- Steinsson, Jón, 378
- sterilized interventions, 183–184
- sticky prices
 - and the monetary exchange rate model, 408–409
 - in non-competitive markets, 322
- Stiglitz, Joseph, 29
- stock market investment
 - depository receipts in, 528–530
 - equity risk premiums, 576–578
 - future contracts, 867–868
 - global registered shares, 530–532
 - optimal portfolio allocation
 - mean-standard deviation frontier, 562–565
 - preferences, 558–562
 - portfolio diversification benefits
 - risk reduction, 550–554
 - Sharpe ratios, 554–558

Index

1031

- stock markets
 - cross-listing, 522–524
 - exchange rate forecasting, 405
 - legal organization of, 509–510
 - measurement models, 583–586
 - size of
 - automation and electronic trading, 513–515
 - and GDP, 509
 - globalization, 510–511
 - share cross-holding, 505–509
 - stock market capitalization, 501–505
 - trading practices, 511–513
 - strategic alliances in, 537–538
 - trading costs in, 519
 - turnover, 516–518
- stockholders
 - agency theory and corporate governance affecting, 13
 - MNC models for, 13
 - preference for high-variance projects, 748–749
- straight bill of lading, 797
- straight fixed-rate bonds, 462
- straight through processing (STP), 53
- strategic alliances, 537–538
- strengthening (exchange rate). *See* appreciation
- Strickland, Deon, 536
- strike price, 882
- Strine (2010) legal case, 17
- Strobbe, Francesco, 7
- Student Loan Marketing Corporation (Sallie Mae), 888
- Stultz, René M.
 - cross-listing, 523, 535, 537
 - hedging, 774
 - international CAPMs, 572
 - MNC acquisitions, 21
 - MNC cash holdings, 829
 - Nestlé equity capital, 574
- Stumpner, Sebastian, 30
- Sturzenegger, Federico, 630
- subprime mortgages, 938–939
- Subrahmanyam, Marti, 938
- subsidiary. *See* foreign subsidiary
- subsidiary bank, 471
- subsidization
 - interest, 677
 - and MNC foreign currency debt, 448–450
 - of MNCs by governments, 38
 - parent company NPV on, 701–702
- Suharto, Mohamed (President of Indonesia), 654–655
- Suominen, Matti, 285
- Supplemental Liquidity Providers (SLP), 515
- support level (chartist), 417
- surplus
 - in BOP, 136
 - cause of current account, 152–154
 - and national government savings, 151–152
 - in short-term cash management, 833
 - US capital and financial accounts, 139
- surplus cash balance, 833
- survey information
 - and hedging, 783–784
 - money market, 410
- swap. *See also* debt instrument types
 - currency swap
 - defined, 106, 933–934
 - foreign currency
 - comparative borrowing advantages, 949–956, 960–962
 - currency and amount negotiations in, 945–947–949
 - mechanics of, 947–949
 - rationale for, 964–965
 - standardization of, 956–960
 - value of, 962–963
 - interest rate
 - associated cash flows, 939
 - contracts, 941–944
 - credit risks, 944
 - defined, 936
 - market size, 936–938
 - reasons to use, 940–941
 - market size, 936–938
 - vs. forward contracts, 965
- swap market, 111–115
- swap points, 112–113, 116–117
- swap spread, 941–943
- Swaziland, 607
- “sweatshop” anti-globalization argument, 32
- Sweden, 297–299, 607
- Swiss franc
 - and global financial crisis interest rate parity, 240–243
 - moving average rules, 419
 - using options to hedge risk in, 893–895, 898–899
 - and zero-coupon bonds, 462
- Swiss Interbank Clearing system (SIC), 74
- Swiss National Bank (SNB), 79, 174–176, 190
- switch trading, 820–821
- Switzerland
 - currency risk in, 174–176
 - lack of corruption in, 607
- syndicate
 - defined, 459–460
 - and Eurocredits, 477, 478–479
 - and Euronotes, 481–483
- synthetic forward contract, 906–908
- synthetic forward hedge, 247–249
- systematic risk, 274
- systemic variance, 551

- Taiwan, 430, 518
- Tamirisa, Natalia, 7
- Tang, Dragon, 938
- Tanzi, Calisto, 14
- target zone systems
 - currency risks in, 171, 172–174
 - defense mechanisms, 204–205
 - defined, 171, 202–203
 - lead-lag operations, 205
 - speculation (currency), 204
- tariff rates
 - and the law of one price, 320
 - and transfer prices, 845–847
- Tashjian, Elizabeth, 675
- Tata Motor, 21
- tax evasion
 - and bearer bonds, 457, 458
 - and offshore banking centers, 471–472
- tax planning, 839
- tax shields
 - on foreign currency borrowing, 741–747
 - interest, 673–674
- taxes
 - advantages for international royalty and management fees, 841
 - convex tax code, 770–774
 - income, 693–695
 - as political risk, 605–606
 - and transfer prices, 841–845
- tax-loss carry-forward, 769–770
- Taylor, Alan M., 415, 420
- Taylor, Mark P., 110, 338
- technical analysis forecasting
 - chartism, 415–417
 - evaluation, 422–424
 - exchange rates, 402
 - filter rules, 418–419
 - non-linear models, 420–422
 - regression analysis, 420
- technology
 - and electronic trading participants, 56
 - and interbank market communication systems, 73–74
- technology transfer
 - and FDI, 33
 - and globalization, 34
 - as non-traded good, 338
- Tecmed, 605, 631
- TED spread, 244
- Teikiko Printing Co.
 - FTE analysis of, 720–721
 - WACC valuation of, 717
- telecommunications industry, 14
- TeliaSonera AB, 483
- Telmex, 528
- Tenreyro, Silvana, 213
- Tequila Effect, 429–430
- term loan (Eurocredit), 478
- term structure of interest rates, 250
- terminal value. *See also* capital budgeting
 - defined, 737
 - and free cash flow, 671–673, 710
 - foreign subsidiary, 690
 - when return on investment equals WACC, 735–737
 - with perpetual growth and expected inflation, 738–740
- Terrones, Marco E., 31
- terrorism, 607
- Tesar, Linda L., 557
- tesobonos*, 637–634, 639
- Tethyan Copper Company (TCC), 605
- Teva Pharmaceuticals, 529, 536
- Thai baht price (THB), 66, 169–170
- ThaiComp, 379–386
- Thailand
 - balance of payments, 144
 - capital controls in, 183
 - currency crisis in, 430–431
- Thaler, Richard H., 278
- The Blackstone Group, 27
- The Clearing House Interbank Payments Company LLC (CHIPC), 73
- thin markets, 108
- Thomas, Jacob, 578
- Thomas, Lee R. III, 419
- Thomson Reuters
 - communication systems, 74–78
 - and currency change variability, 269
 - as foreign exchange broker, 51–52
- three-factor model, 592–593
- TIBOR (Tokyo), 235
- Tidewater, 632
- Tier 1 Capital, 476
- time draft, 801
- time to expiration (option), 905–906
- time value
 - of money, 227–228
 - of an option, 904–905
- time-varying market integration, 584–586
- Tokyo Financial Exchange (TFX), 868
- Tokyo Stock Exchange (TSE), 515
- “too big to fail”, 10
- Total (oil company), 603
- Toyoda, Maria, 6
- trade acceptance draft, 807
- trade account, 145

Index

1033

- trade balance, 413
- trade liberalization
 - benefits and costs of, 29–31
 - history of, 2–5
 - slowdown in developing countries, 28–29
- trade-weighted real exchange rate, 349
- traders (foreign exchange)
 - defined, 48
 - as foreign exchange dealers, 51
- trading costs (stock), 519
- transaction costs
 - AIC differential, 485–487
 - in external currency market, 234–235
 - that prevent trade, 320–321
 - with covered interest arbitrage, 236–238
- transaction exchange risk
 - defined, 90–91
 - and volatility, 117–119
- transactions demand for money, 831
- Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET), 73
- Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET2), 74
- Trans-Malaysian Airlines, 359–360
- transfer prices
 - in balance of payments, 129, 133
 - defined, 827, 841
 - effects of high and low, 841–843
 - and foreign exchange quotas, 847
 - management incentives for, 845
 - regulations on, 843–845
 - to offset tariffs, 845–847
- transnational corporations. *See* multinational corporations
- transnationality index, 11
- Transparency International (TI), 606
- Treasury and Trade Solutions (TTS), 793
- Treaty of Maastricht (1992), 25, 207, 211–212, 427–428
- triangular arbitrage, 63–66, 283
- Triantis, Alexander, 524
- trilemma
 - in China, 186–187
 - defined, 182–183
- tripartite arrangement, 815
- Trump, Donald, US President, 34
- Tsipras, Alexis, Prime Minister of Greece, 214
- Tunisia, 607
- Turkey, 518
- turnover
 - and cross-listing, 522
 - stock market, 516–518
- two-fund separation, 563
- Tyco, 14
- UBS, 472
- Uganda, 607
- unbiased predictor, 270–271
- unbiasedness hypothesis
 - empirical evidence for, 281–288
 - and market efficiency, 288–291
 - and risk premiums, 292–294
 - and the Siegel paradox, 303–304
 - and uncovered interest rate parity, 269–272, 277–281
- uncovered foreign money market investments, 262–264
- uncovered interest rate parity (UIRP)
 - converting to real terms, 410–412
 - and the exchange rate, 407
 - and international parity, 398–399
 - speculation in, 269–272
- underinvestment problem, 749–751
- undervalued currency
 - and absolute PPP, 331–335
 - and exchange rate risk, 358–359
 - and MacPPP standard, 327–330
 - and PPP, 325–327
- underwriting discount, 673
- unencumbered assets, 476
- Uniform Customs and Practice for Documentary Credits (UCP 600), 796
- unilateral transfers
 - and gross national income, 166
 - US current account, 137, 138
- United Arab Emirates (UAE), 822
- United Kingdom
 - balance of payments, 143–144
 - cross-listing in, 523
 - legal system speed in, 607
 - political risk insurance in, 648
 - stock market capitalization, 501–505
- United Nations Conference on Trade and Development (UNCTAD)
 - cross-border mergers and acquisitions, 19–21
 - and GDP and international trade, 4
 - list of largest MNCs, 11
 - MNC FDI as percentage of GDP, 18–19
- United Nations, National Accounts Statistics, 163
- United States
 - arbitrage opportunities in, 245–247
 - and Chinese FDI, 37–38
 - cross-listing in, 523, 535–536
 - depository receipts in, 524–527
 - dollar currency quotes, 61
 - futures contract regulations, 869
 - GDP and expenditures, 164–165
 - government bond in, 454–457
 - hidden state debt problem, 214
 - and Japanese FDI in, 33

- net factor income, 165–166
- net international investment position, 146–148
- political risk insurance in, 648
- private placement bonds in, 453
- stock market capitalization, 501–505
- target zone currency risk in, 172–174
- United States accounting
 - current account imbalances, 154–157
 - standards in, 752
- United States Department of Commerce, Bureau of
 - Economic Analysis, International Economic Accounts, 137
- United States Department of Commerce, Bureau of
 - Economic Analysis, International Investment Positions, 147
- United States dollar
 - as central bank dominant foreign reserve asset, 180, 192–193
 - currency quotes, 61
 - exchange rate system, 168
 - other countries adopting, 170, 200–201
 - term structure of interest rates, 250
 - transfer through CHIPS, 73
 - transfer through Fedwire, 74
 - as vehicle currency, 62–63
- United States Environmental Protection Agency, 15
- United States Foreign Corrupt Practices Act, 11
- United States foreign tax credit, 693
- United States law
 - effect of the Sarbanes-Oxley Act on stocks, 523–524
 - income tax liability, 693–695
 - legal system speed in, 607
- United States MNCs
 - cash hoards of, 830–831
 - International Wood Products cash flow analysis, 690–698
 - public market equity and bonds, 447
- United States Securities Act (1933), 453
- universal banks, 467
- universal identifier (UID), 74
- Universal Product Codes (UPCs), 323
- Unocal, 37–38
- unsystematic risk. *See* idiosyncratic risk
- up-front cost (Eurocredit), 479–480
- Urias, Michael, 580
- Uruguay Round
 - and financial services deregulation, 22
 - and protectionism, 29
- utility functions, 558
- Uzbekistan, 606
- value
 - currency swap, 962–963
 - foreign currency options contracts, 903–908
 - of swaps, 937–938
- value (project)
 - and costs of issuing securities, 673
 - and debt equilibrium, 676–677
 - of fast growth companies, 740–741
 - financial distress costs, 675–676
 - foreign subsidiary, 687–690
 - and interest subsidies, 677
 - net present, 668–673
 - parent vs. subsidiary, 681–682
 - perpetuity, 710
 - proper discount rate, 674–675
 - and real options, 677–681
 - and security tax shields, 673–674
- value at risk (VaR), 474
- Van Horen, Neeltje, 476, 481, 530
- variance
 - defined, 123–124
 - and hedging tax reductions, 773
 - and option value, 905
 - in portfolio diversification, 550–554
 - sample, 123
 - and volatility, 117–119
- vault cash, 178
- Vayanos, Dimitri, 614
- Vega, Clara, 410
- Venezuela
 - BITs in, 632
 - currency controls in, 827
 - FDI in, 32
 - government seizure of foreign businesses, 603
 - project financing in, 653–654
- Verdelhan, Adrien, 285, 294, 645
- Villanueva, O. Miguel, 288
- violations (law of one price), 319–322
- Vishny, Robert W., 18
- Vodafone, 17, 481
- voice brokers, 51
- volatility. *See also* currency risk
 - of bid–ask spreads, 70
 - conditional, 126
 - defined, 95, 124
 - in the forward foreign exchange market, 117–119
 - hedging prevents, 759
 - international investment, 546–548
 - and Sharpe ratios, 290–292
- volatility clustering, 117–119
- Volcker rule, 72
- Volkswagen, 11, 15, 450
- Vorstand, 16
- VTB Bank, 465

Index

1035

- WACC. See weighted average cost of capital
 Wachter, Jessica, 578
 Wacziarg, Romain, 2
 Wahid, Aida, 753
 Waldman, Daniel, 410
 Wallace, Charles, 262
 Wal-Mart, 11, 89
 Walt Disney Company, 450
 Walter, Ingo, 7
 Wang, Neng, 775
 Wang, Sarah Qian, 938
 Wang, Shing-Yi B., 410
 Wang, Tracy Yue, 524
 Wang, Xiaozheng, 587
 Wang, Yongshong, 187
 Warner, Andrew M., 2
 Warnock, Francis, 587
 warrant (bond), 463
 wash trade, 512
 weakening (exchange rate). See depreciation
 Weekawken project, 763–768
 Wei, Min, 452
 Wei, Shang-Jin, 33, 155, 156
 weighted average cost of capital (WACC)
 background of, 713
 pros and cons of, 719
 reasons to use, 716–717
 Teikiko Printing Co., 717
 and terminal value, 735–741
 with taxes, 715–716
 without taxes, 714–715
 Weinstein, David, 323
 Weisbach, Michael S., 535
 Weisbenner, Scott, 450
 Welch, Ivo, 576
 Weller, Paul, 420
 Welsh, Karen Horn, 2
 WeRToys, 379–386
 Wessels, David, 668
 West, Kenneth D., 409
 Westerfield, Randolph W., 591, 769
 Westmore Coal Company, 585–586
 Weston, James P., 785
 Wharton/CIBC survey, 783–784
 White, Michelle J., 675
 Winter-Nelson, Alex, 197
 WM/Reuters London fix, 52
 Wooldridge, Philip, 180
 working capital, 828, 849
 World Bank
 affecting international finance, 22–23
 and anti-globalization, 31
 currency swap, 935
 Eurobonds trading, 458
 political risk insurance, 648, 649
 turnover, 518
 World Bank Group, 22–23
 world CAPM, 569–572, 574, 620
 World Federation of Exchanges,
 518, 522
 World Investment Report (UNCTAD), 19
 world market index, 573
 World Trade Organization (WTO)
 and anti-globalization, 31
 China inclusion in, 5
 role in international finance, 24
 tariff rates, 320
 Worldcom, 14
 Wright, Jonathan H., 410
 WTO. See World Trade Organization
 Wu, Eliza, 645
 Wu, Guojun, 512, 513
 Wu, Jyh-Lin, 415
 Wynne, Mark A., 817
 Wyplosz, Charles, 426
 Wysocki, Peter, 752, 753

 $x\%$ filter rule, 418
 Xerox Credit Corporation, 888
 Xing, Yuhang, 452, 590

 Yackee, Jason W., 632
 Yahoo, 576
 Yang, Ya-wen, 752
 Ye, Mao, 515
 yen (Japanese currency)
 and absolute PPP, 334
 as foreign reserve, 180
 loans, 746
 moving average rules, 419
 put option against pounds sterling, 883–884
 term structure of interest rates, 250
 Yesin, Pinar, 492
 Yeyati, Eduardo Levy, 530
 yield curve, 253
 yield to maturity (bond)
 defined, 252
 and spot interest rates, 253–254
 Young, Lance, 523
 YPF, 528
 Yu, Gwen, 753
 yuan (Chinese currency)
 demand for, 465
 and exchange rate risk, 358–359
 value of, 313

 Zechner, Joseph, 534, 536
 Zenner, Marc, 536

zero-coupon bonds, 462, 614, 958	home bias, 590
Zettelmeyer, Jeromin, 630	idiosyncratic volatility, 552
Zhang, Jing, 157	international CAPMs, 572
Zhang, Xiaobo, 155	Zhao, Quanshu, 673
Zhang, Xiaoyan	Zhu, Huanliang, 512–513
CAPM model accuracy, 590	Zimbabwe, 201
diversification, 551	Zurich Emerging Markets Solutions, 648