

## Index

- Abacus 2007 AC1, 150–2
- ABCP. *See* Asset-backed commercial paper (ABCP)
- ABN AMRO Mortgage Group, 67–8, 150
- Abu Dhabi Investment Authority, 68
- ABX indices
- crisis, during, 154, 156, 157, 183–5
  - early Obama Administration, during, 282, 284
  - leadup to crisis, during, 118–20
  - recovery, during, 321–2
- Ackman, William, 132–3
- Adjustable Rate Mortgages (ARM), 53
- Adobe, 349–56
- Advanced Semiconductor, 91–2
- AIG
- generally, 180, 207
  - bank run theory and, 3, 221–2
  - beginning of crisis, losses during, 160–2
  - Blackstone Group and, 267
  - bond rating, downgrading of, 160–1
  - cost of remediation measures, 309
  - credit default swaps and, 80, 142, 179–80, 223, 260
  - downgrading of, 169
  - Federal Reserve and, 171, 216, 218, 219, 267, 303
  - Goldman Sachs and, 125, 127, 129–30, 153, 267
  - government rescue of, 273
  - government taking control of, 3
  - increase in debt, 114
  - JP Morgan Chase and, 267
  - leadup to crisis, problems during, 125, 127
  - Lehman Brothers situation compared, 179–80, 223, 271–2, 279–80
  - losses during crisis, 3–4, 266–7
  - margin borrowing by, 112
  - poor management, 5–6
  - private equity, investing in, 86
  - repo market and, 111, 174
  - role in crisis, 266–7
  - securities lending and, 111, 112
  - stock prices, 84, 162, 170, 207
  - subprime mortgage guarantees, 133
  - TARP and, 273, 281
  - Treasury and, 219
  - uncertainty at, 212–13
- AIG Financial Products (AIGFP), 160–1
- Airbus, 337
- Albertson's, 91–2
- Alcatel SA, 17–18
- Allison Transmission, 163
- Ally Financial, 238, 268–9
- Alt-A mortgages
- credit deterioration in, 230
  - defaults in, 154–6
  - increase in debt, 115
  - insurance companies guaranteeing, 131–2
  - leadup to crisis, during, 63
  - lying and fraud and, 231
  - mortgage rates, 231
  - second and investment homes and, 231
  - shift to, 56–9
- Alternative investments
- derivatives (*See* Derivatives)
  - insurance companies investing in, 114
  - search for higher returns and, 34, 35, 41–4
  - 2004–2006 period, during, 114
- Alvarez & Marsal, 275, 278–9
- Amaranth Advisors, 107, 349–56
- Amazon, 156, 337

- AMBAC, 132–3  
 American Express, 277  
 American Recovery and Reinvestment Act of 2009, 300  
 Amgen, 351–7  
 Apollo Global Management, 86–7, 203  
 Apple, 15, 337, 349–56  
 ARAMARK, 91–2  
 Archstone Realty, 125, 255, 274  
 Argentina, financial crisis in, 22  
 Arthur Andersen, 21–2  
 Asian financial crisis (1997), 12–14  
 Asset-backed commercial paper (ABCP)  
   generally, 1  
   ABCP Money Market Mutual Fund  
     Liquidity Facility, 218  
   beginning of crisis, during, 160–1  
   Citigroup and, 71, 115  
   commercial banks and, 70–4  
   decline in, 160–1  
   European banks and, 115  
   JP Morgan Chase and, 71, 115  
   leadup to crisis, during, 119–22  
   Lehman Brothers and, 74  
 Asset-backed securitizations (ABS), 52–3  
 Assured Guaranty, 133  
 AT&T, 17–18  
 Aurora Loan Servicing, 150–2  
 Auto industry  
   beginning of crisis, problems during, 163–4  
   “Cash for Clunkers,” 300  
   Obama Administration and, 182  
   TARP and, 182, 220, 301–2  
  
 Bain Capital, 86–7  
 Bair, Sheila, 216–17  
 Balanced Budget Act of 1997, 17  
 Ball, Laurence, 271, 278–9  
 Bankers Trust, 213–14  
 Bank for International Settlements (BIS)  
   credit default swaps and, 79–80  
   on government guarantees, 3, 273  
   on leveraged debt, 242, 352–60  
   M&A and, 94, 95–8  
 Bank of America  
   generally, 180  
   acquisitions in mortgage industry, 150  
   capital requirements, 256–7  
   commercial real estate, investing in, 70, 98,  
     138–40  
   cost of remediation measures, 309  
  
   Countrywide Financial and, 125–6, 150  
   Federal Reserve and, 182  
   government guarantees and, 3  
   Lehman Brothers and, 274  
   litigation costs, 238–9  
   losses during crisis, 205–6  
   Merrill Lynch and, 171, 182, 216, 281  
   mortgage securitization, effect of, 237  
   New Century Financial and, 123  
   restitution costs, 238  
   RMBS, investing in, 63–4  
   stock prices, 70–1, 260  
   “Stress Test” and, 294  
   tangible common equity, 257, 258  
 Bank of England, 129, 170–1  
 Bank of New York Mellon, 111  
 Bank run theory  
   CMBS and, 3–4  
   failure of, 3–4  
   housing bubble, inability to explain, 4  
   proposed as cause of crisis, 2–3, 221–2  
   repo market and, 174  
 Bankruptcies  
   early Obama Administration, during,  
     282–6  
   Lehman Brothers, 275–7, 278, 279  
   recovery, during, 321–2  
 Bankruptcy Abuse Prevention and Consumer  
   Protection Act of 2005, 111–12  
 Banks. *See also specific bank*  
   acquisitions in mortgage industry, 150  
   alternative investments and, 114  
   beginning of crisis, during, 160–1  
   capital flows and, 1–2  
   commercial banks (*See Commercial banks*)  
   commercial real estate, investing in, 102  
   counterparty risk, 175–7  
   European banks (*See European banks*)  
   failures of, 160–1  
   housing, investments in, 4  
   income of, 127  
   investment banks (*See Investment banks*)  
   leadup to crisis, problems during, 122–31  
   losses during crisis, 205–13  
   mark to market losses during crisis, 212–13  
   pre-tax income of, 205–7  
   pre-tax losses of, 207–8  
   private equity and, 86–8  
   receivables, 176  
   reserves for fines and litigation, 239  
   RMBS, investing in, 63–4, 70–1

- stock prices of, 130–1
- “Stress Test,” 294
- Banque Nationale de Paris et Pays Bas (BNP-Paribas)
  - bank run theory and, 3
  - leadup to crisis, problems during, 125
  - RMBS, investing in, 67–8
- Barclays
  - acquisitions in mortgage industry, 150
  - Lehman Brothers and, 170–1, 216, 270–1, 274–5
  - New Century Financial and, 123
  - RMBS, investing in, 67–8
- Barry, Andres, 125
- Basel II capital rules, 7, 67, 249–51
- Basis Yield Fund, 169–70
- Bear Stearns
  - generally, 207
  - bank run theory and, 3
  - commercial real estate, investing in, 98
  - cost of remediation measures, 309
  - downgrading of, 254
  - failure of, 160–2, 217
  - financial investments and, 249
  - illiquid assets and, 82, 83, 84
  - increase in debt, 114
  - JP Morgan Chase and, 160–2, 181
  - leadup to crisis, problems during, 123–4, 127, 129–30, 152–3
  - Lehman Brothers situation compared, 271–2, 279–80
  - losses during crisis, 3–4, 253–4
  - New Century Financial and, 123
  - poor management, 5–6
  - RMBS, investing in, 63–4
  - role in crisis, 253–4
  - TARP and, 181
  - Thornburg Realty and, 126
- Bell Canada, 18
- Bell Labs, 17–18
- Berkshire Hathaway, 62
- Bernanke, Ben
  - leadership of, 6
  - leadup to crisis and, 149
  - Lehman Brothers and, 272, 277, 278–9
  - on RMBS, 67
- The Big Short, 124–5, 150–2
- Biogen, 351–7
- Biomet, 91–2
- Biotechnology industry, 351–7
- BIS. *See* Bank for International Settlements (BIS)
- Bischoff, Win, 264
- Black Rock, 69, 212
- Blackstone Group
  - generally, 277
  - AIG and, 267
  - commercial real estate, investing in, 138–40
  - crisis, during, 203
  - investors in, 35–6
  - M&A and, 92
  - as private equity fund, 86–7
- Bloomberg, 212, 349–56
- Blue Chip Economic Consensus, 164
- Blueprint for the American Dream, 66
- Blundell-Wignall, Adrian, 67
- BNC Mortgage, 150–2
- Boeing, 337
- Bond market
  - beginning of crisis, during, 160–1, 164–5
  - crisis, during, 192–5, 203–5
  - Federal Reserve bond holdings, 307–8
  - high yield bonds (*See* High yield bonds)
  - inferred B-rated bond prices, 243
  - leadup to crisis, during, 145
  - spreads, 27–8, 160–1, 164–5, 192–5
  - yield curves, 332–5, 337–40
- Boston Consulting Group, 238–9
- Brazil, financial crisis in, 12–14, 22
- Breit, John, 212
- Budget Enforcement Act of 1990, 24
- Buffet, Warren, 62, 173–4, 316
- Bureau of Economic Analysis, 304–6
- Bureau of Economic Research, 164
- Bush, George W.
  - Blueprint for the American Dream, 66
  - Federal Reserve changes under, 24
  - fiscal policy under, 22–4
  - regulation under, 22–4
  - remediation measures under, 7–8
  - response to crisis, 216
  - SEC changes under, 24
  - TARP and, 181
- Cablevision, 91–2
- Calendar of remediation measures efforts, 217–20
- California
  - electricity crisis in, 21
  - municipal bonds in, 282
  - Public Employees Retirement System (CALPERS), 21

- Callan, Erin, 277  
 Cambridge Associates, 88, 105–6  
 Capital flows, role of instability in crisis, 1–2  
 Capital One, 68  
 Carlyle Group, 86–7, 92  
 Caterpillar, 337  
 Causes of crisis  
   generally, 221  
   AIG, role of, 266–7  
   bank run theory proposed as, 2–3, 221–2  
   Bear Stearns, role of, 253–4  
   capital flows, instability in, 1–2  
   commercial banks, role of, 256–66  
   commercial real estate, role of, 244–6  
   consumer debt, role of, 223–7  
   Fannie Mae, role of, 229, 247–8  
   Freddie Mac, role of, 229, 247–8  
   General Electric, role of, 269–70  
   General Motors, role of, 267–9  
   highly leveraged debt, role of, 1–8, 33, 222–3  
   highly leveraged loans, role of, 152–3, 222  
   investment banks, role of, 248–53  
   Lehman Brothers, role of, 255  
   leveraged debt, role of, 5, 222, 240–4  
   Merrill Lynch, role of, 255–6  
   modern portfolio theory and, 223  
   Morgan Stanley, role of, 256  
   mortgage debt, role of, 223–7  
   mortgage securitization, role of, 222, 228–9  
   multiple factors, 222  
   regulation failures, 2–3  
   regulators, role of, 2, 5–6  
   scale, importance of, 222–3  
   speculation, role of, 222  
 Cayne, James, 254  
 CDOs. *See* Collateralized debt obligations (CDOs)  
 Celgene, 351–7  
 Cerberus Capital Management, 86–7, 163, 268–9  
 Cheyne Capital, 169–70  
 Chicago Board of Trade, 74  
 Chicago Mercantile Exchange, 74  
 China Investment Corporation, 128  
 Chrysler  
   beginning of crisis, problems during, 163  
   government rescue of, 217, 273  
   Lehman Brothers situation compared, 271–2  
   TARP and, 182, 220, 301–2  
 Chrysler Financial, 268  
 CIT Financial, 220  
 Citigroup  
   generally, 180  
   ABCP and, 71, 115  
   acquisitions in mortgage industry, 150  
   bank run theory and, 3, 221–2  
   beginning of crisis, losses during, 160–2  
   borrowing by, 263  
   collateral claims and, 176–7  
   commercial real estate, investing in, 70  
   cost of remediation measures, 309  
   credit default swaps and, 142, 196, 223, 260  
   derivatives and, 77, 258, 263–4  
   downgrading of, 181–2, 264  
   equity raised by, 150  
   FDIC and, 181–2  
   Federal Reserve and, 181–2  
   government guarantees and, 3  
   highly leveraged debt and, 262  
   highly leveraged loans and, 262, 264  
   increase in debt, 114  
   leadup to crisis, problems during, 128–30, 153  
   Lehman Brothers situation compared, 223, 271–2, 279–80  
   leveraged debt, 262  
   losses during crisis, 3–4, 212  
   market exposure of, 262  
   mortgage securitization, effect of, 237  
   New Century Financial and, 123  
   poor management, 5–6  
   receivables and, 176  
   repo market and, 174  
   restitution costs, 238  
   RMBS, investing in, 63–4, 69  
   SIV and, 115  
   stock prices, 70–1, 86, 162, 170, 260  
   “Stress Test” and, 294  
   structured investment vehicles and, 121  
   tangible common equity, 258, 261  
   TARP and, 181–2, 220, 281  
   Thornburg Realty and, 126  
   uncertainty at, 212–13  
   Wachovia and, 175, 218, 266  
 Clayton Homes, 62  
 Clear Channel, 91–2  
 Clinton, Bill, 66  
 CLOs. *See* Collateralized loan obligations (CLOs)  
 CMBS. *See* Commercial mortgage-backed securities (CMBS)  
 CME, 349–56

- Coca-Cola, 337
- Cold War, 9, 11–12
- Collateralized debt obligations (CDOs)  
generally, 1, 71  
complexity of, 231–2  
downgrading of ratings, 234, 281–2, 283  
losses during crisis, 236  
RMBS repackaged as, 119  
2004–2006 period, during, 58, 59–60
- Collateralized loan obligations (CLOs)  
generally, 1, 71  
crisis, during, 196–9, 243  
M&A and, 98
- Comcast, 337
- Commercial banks. *See also specific bank*  
ABCP and, 70–4  
capital requirements, 256–7  
commercial paper and, 72–3  
commercial real estate, investing in, 70  
credit default swaps and, 259–60  
derivatives, investing in, 77, 80–2, 258–9,  
263–4  
equity, 258  
highly leveraged loans and, 69–70, 74  
high yield bonds, investing in, 49–50, 51  
increased risk for, 70, 74  
increase in debt, 115  
leveraged debt and, 262, 265–6  
litigation costs, 238–40  
losses during crisis, 205–6, 210, 211–12,  
256–66  
mortgage securitization, effect of, 237  
pre-tax losses of, 207–8  
private equity, investing in, 86–8  
regulators and, 256–7  
restitution costs, 238, 239–40  
risk assets, growth in, 69–70  
RMBS, investing in, 64–7, 69  
role in crisis, 256–66  
search for higher returns and, 70–2  
SIV and, 70–4  
stock prices during crisis, 207–8, 260  
tangible common equity and, 257–8, 261  
2004–2006 period, during, 69–82
- Commercial mortgage-backed securities  
(CMBS). *See also specific investor*  
generally, 1  
adverse selection in, 229–30  
bank run theory and, 3–4  
commercial real estate and, 102  
credit deterioration in, 230  
crisis, during, 202  
downgrading of ratings, 286–8, 326–30  
early Obama Administration, during, 286–8  
Fannie Mae and, 102, 229–30  
Freddie Mac and, 102, 229–30  
recovery, during, 326–30  
RMBS compared, 52–3
- Commercial paper, 72–3
- Commercial Paper Funding Facility, 219
- Commercial real estate. *See also specific investor*  
banks investing in, 102  
beginning of crisis, during, 156–8  
CMBS and, 102  
commercial banks investing in, 70  
crisis, during, 196–203  
delinquencies, 245  
early Obama Administration, during,  
286–9, 311  
highly leveraged debt and, 244–6  
highly leveraged loans and, 100–2  
increased attractiveness of, 99  
increase in debt, 115  
institutional investors in, 140  
leadup to crisis, problems during, 138–41  
losses during crisis, 244–6  
mark to market losses, 199–203  
pension funds investing in, 138–40  
price indices, 99  
prices, 99–100, 156–8, 245  
real estate investment trusts (REITs), 100  
recovery, during, 326–30, 347–50  
role in crisis, 244–6  
2004–2006 period, during, 98–102
- Commerzbank, 67–8
- Commodities Futures Act of 2000, 7
- Commodities Futures Modernization Act of  
2000 (CFMA), 74, 80
- Commodities Futures Trading Commission  
Bush Administration, changes under, 24  
derivatives and, 74  
President's Working Group on Financial  
Markets and, 152
- Commodities market during crisis, 203–5
- Community Reinvestment Act of 1977, 64
- Consumer confidence  
beginning of crisis, during, 154–6  
crisis, during, 186–7, 217  
early Obama Administration, during, 291–4  
hi-tech bubble and, 19  
leadup to crisis, during, 117

- Consumer confidence (cont.)  
  post-hi-tech bubble, 24–5  
  recovery, during, 321–2, 326–8, 348–53
- Consumer debt  
  crisis, during, 217  
  early Obama Administration, during, 291–4, 295–8  
  increase in, 1, 8, 114, 117  
  leadup to crisis, during, 117  
  net worth versus, 117  
  recovery, during, 321–2  
  role in crisis, 223–7
- Consumer Financial Protection Bureau, 303
- Containment of crisis, belief in, 142–53
- Continental Illinois Bank & Trust, 181, 273
- Cooperman, Leon, 106
- Corporate debt  
  early Obama Administration, during, 300  
  highly leveraged debt, 303  
  increase in, 8
- Corporate profits, 339
- Co-Star, 231
- Costco, 337
- Council of Economic Advisors, 142, 144, 153, 216–17
- Counterparty risk, 175–7
- Countrywide Financial  
  generally, 207  
  Bank of America and, 125–6, 150  
  commercial real estate, investing in, 70  
  delinquent mortgages, 60–1  
  disappearance of, 217  
  Fannie Mae and, 248  
  increase in debt, 114  
  leadup to crisis, problems during, 125–6, 152–3  
  Lehman Brothers situation compared, 223, 271–2, 279–80  
  losses during crisis, 3–4  
  Morgan Stanley and, 128  
  poor management, 5–6  
  restitution costs, 238  
  RMBS, investing in, 63–4, 68  
  stock prices, 63
- Cox, Christopher, 6, 7, 249–51, 271
- Crédit Agricole, 67–8
- Credit default swaps. *See also specific investor*  
  generally, 7, 79–82  
  beginning of crisis, during, 156–9, 164–5  
  commercial banks and, 259–60  
  crisis, during, 192–7  
  early Obama Administration, during, 281–94  
  exposures of major banks, 79–82  
  increase in exposure, 115  
  insurance companies and, 142, 260  
  leadup to crisis, problems during, 142–3  
  leverage of, 81  
  market value of, 156–9  
  notional values, 79–80, 142–3, 195, 266  
  regulators and, 153  
  Credit Reform Act of 2006, 124–5
- Credit Suisse  
  credit default swaps and, 80  
  derivatives and, 79  
  equity in, 214–16  
  losses during crisis, 213–14  
  New Century Financial and, 123  
  RMBS, investing in, 67–8  
  Thornburg Realty and, 126
- Cuomo, Andrew, 126–7
- CVS, 337
- Darling, Alistair, 271
- Dealscan, 97–8, 242
- Deere, 337
- DeFusco, Anthony A., 54
- Delinquent mortgages, 60–1, 326–7, 345–7
- Dell, 15
- Delphi, 163
- Derivatives  
  assets of major banks, 79  
  collateral requirements, 77  
  commercial banks investing in, 77, 80–2, 258–9, 263–4  
  credit default swaps (*See* Credit default swaps)  
  historical evolution of, 74–5  
  increase in exposure, 115  
  interest rate swaps, 79–80  
  investment banks investing in, 259  
  leverage, 78  
  market risks of, 79  
  market value, 77  
  Master Netting Agreements, 77–8  
  netting, 75–6, 77–8, 79, 263–4  
  notional value, 75–6, 77–82, 115, 142–3, 192–7, 258–9
- Deutsche Bank  
  credit default swaps and, 80

- derivatives and, 79
- equity in, 214–16
- losses during crisis, 213–14
- New Century Financial and, 123
- RMBS, investing in, 67–8
- on underwater mortgages, 225–7
- Deutsche Telekom, 18
- Diamond, Robert, 271
- Dillon Read, 160–2, 213–14
- Dimon, Jamie, 63–4
- Disney, 337
- Dodd-Frank Act of 2010, 301–3, 326, 355
- Dollar
  - leadup to crisis, during, 145–7
  - post-hi-tech bubble, 26
  - recovery, during, 339–41
  - rise in, 22
  - 2004–2006 period, during, 109
- Donaldson, Lufkin, & Jenrette, 213–14
- Drexel Burnham, 9, 44, 277, 279
- Duopolies, 337
- Earnings estimates
  - crisis, during, 192–3, 217
  - early Obama Administration, during, 288–92
  - hi-tech bubble and, 15, 19–20
  - S&P 500, 10, 19, 21, 29, 37–9, 147–8, 192–3, 332–5, 349–56
- Economic Report of the President, 117, 149–50
- Economic Stimulus Act of 2008, 168
- E.F. Hutton, 277
- Ehrman, Fred, 277
- Einhorn, David, 125
- Eisenhower, Dwight, 22, 32
- Eisinger, Jesse, 125
- Elul, Ronel, 231
- Emergency Economic Stabilization Act of 2008, 181, 216
- Emerging markets
  - crisis, during, 203–5
  - foreign equity in, 107–8, 110
  - hedge funds in, 105–6, 107
- Enron, 21–2, 31–2, 46–7, 78
- Equifirst Corporation, 150
- Estée Lauder, 337
- Euro, 12–14, 22
- European banks. *See also specific bank*
  - ABCP and, 115
  - equity in, 214–15
  - highly leveraged debt and, 67
  - highly leveraged loans and, 213–14
  - leadup to crisis, problems during, 125, 129
  - Lehman Brothers situation compared, 279–80
  - litigation costs, 238–9
  - losses during crisis, 213–15
  - pre-tax income of, 214
  - RMBS, investing in, 67–8, 222
  - SIV and, 115
  - stock prices, 215
  - structured investment vehicles and, 121
  - subprime mortgages, as buyer of, 6
- European Central Bank, 147–9, 322, 323
- European Financial Stability Facility, 323
- European Stability Mechanism, 323
- European Union, fiscal crisis in, 322, 323, 337
- Facebook, 349–56
- Fannie Mae. *See* Federal National Mortgage Association (Fannie Mae)
- Farrell, Greg, 257
- FDIC. *See* Federal Deposit Insurance Corporation (FDIC)
- Federal Communications Commission (FCC), 17
- Federal debt during recovery, 301–2, 322–3, 342
- Federal deficit
  - at end of Millennium, 11
  - Obama Administration, under, 7–8, 301–2
  - recovery, during, 342
- Federal Deposit Insurance Corporation (FDIC)
  - generally, 216–17
  - bank run theory and, 221–2
  - Citigroup and, 181–2
  - cutbacks at, 7
  - guarantees, 216, 219, 281
  - IndyMac and, 168–9
  - oversight by, 6
  - Shared National Credit Program (SNCP), 97–8
  - TARP and, 181
  - Temporary Liquidity Guarantee Program (TLGP), 219, 270
  - Wachovia and, 266
  - Washington Mutual and, 174–5, 218
- Federal funds rate
  - crisis, during, 164–5, 177–8
  - post-hi-tech bubble, 22–3
  - recovery, during, 304–5, 306, 342–5
- Federal Home Loan Bank Board, 126

- Federal Home Loan Mortgage Company (Freddie Mac)
- alternative investments and, 114
  - bank run theory and, 3–4, 221–2
  - beginning of crisis, losses during, 162–3
  - capital flows and, 1–2
  - CMBS and, 102, 229–30
  - containment of crisis, belief in, 144
  - cost of remediation measures, 309
  - equity raised by, 150
  - government taking control of, 3, 169–70, 216, 217, 218, 248, 273
  - highly leveraged debt and, 5, 222, 247–8
  - Housing and Economic Recovery Act and, 162–3
  - housing bubble and, 2
  - increase in debt, 114
  - insurance companies and, 131
  - leadup to crisis, problems during, 131, 153
  - Lehman Brothers situation compared, 179–80, 271–2, 279–80
  - leveraged debt and, 5, 222, 247–8
  - long-term status of, 342
  - losses absorbed by government, 237
  - low-income home ownership and, 7, 62, 64–7
  - mortgage securitization versus, 229
  - oversight of, 6
  - remediation measures and, 7
  - risks and, 247–8
  - RMBS and, 52–3, 64–7, 68–9, 115, 222
  - role in crisis, 229, 247–8
  - stock prices during crisis, 207
  - subprime mortgages, as buyer of, 6
  - underwater mortgages held by, 227
- Federal National Mortgage Association (Fannie Mae)
- alternative investments and, 114
  - bank run theory and, 3–4, 221–2
  - beginning of crisis, losses during, 162–3
  - capital flows and, 1–2
  - CMBS and, 102, 229–30
  - containment of crisis, belief in, 142, 144, 153
  - cost of remediation measures, 309
  - Countrywide Financial and, 248
  - derivatives and, 78
  - equity raised by, 150
  - government taking control of, 3, 169–70, 216, 217, 218, 248, 273
  - highly leveraged debt and, 5, 222, 247–8
  - Housing and Economic Recovery Act and, 162–3
  - housing bubble and, 2
  - increase in debt, 114
  - insurance companies and, 131
  - leadup to crisis, problems during, 131, 153
  - Lehman Brothers situation compared, 179–80, 271–2, 279–80
  - leveraged debt and, 5, 222, 247–8
  - long-term status of, 342
  - losses absorbed by government, 237
  - low-income home ownership and, 7, 62, 64–7
  - mortgage securitization versus, 229
  - oversight of, 6
  - remediation measures and, 7
  - risks and, 247–8
  - RMBS and, 52–3, 64–7, 68–9, 115, 222
  - role in crisis, 229, 247–8
  - stock prices during crisis, 207
  - subprime mortgages, as buyer of, 6
  - underwater mortgages held by, 227
- Federal Reserve. *See also* Monetary policy generally, 216–17
- ABCP Money Market Mutual Fund Liquidity Facility, 218
  - AIG and, 171, 216, 218, 219, 267, 303
  - asset holdings, 149, 166–7, 323–4, 342–5
  - Bank of America and, 182
  - bank run theory and, 221–2
  - bond holdings, 307–8
  - Bush Administration, changes under, 24
  - Citigroup and, 181–2
  - Commercial Paper Funding Facility, 219
  - containment of crisis, belief in, 142–4, 145–9, 153
  - federal funds rate (*See* Federal funds rate)
  - Federal Open Market Committee (FOMC), 116–17, 142–4, 164, 306
  - foreign exchange swaps and, 218
  - on GDP, 166–8
  - General Electric and, 270
  - “Goldilocks” economy and, 9
  - highly leveraged corporate debt and, 303
  - on housing prices, 116
  - indecision in, 164
  - on inflation, 9–11, 37, 145–7, 166–8
  - Lehman Brothers and, 272, 273, 279
  - as lender of last resort, 3
  - on leveraged debt, 135



- Long Term Capital Management and,  
 12–14, 106
- M&A and, 95–8
- Merrill Lynch and, 281
- Money Market Investor Funding Facility, 219
- money supply and, 12, 179–80, 304–5
- Open Market Trading Desk, 218
- post-hi-tech bubble, 22, 32
- President's Working Group on Financial  
 Markets and, 152
- Primary Dealer Credit Facility, 164–5,  
 172–3, 218
- QE-1, 8, 179–80, 218
- QE-2, 8, 323, 355
- QE-3, 8, 342–5, 355
- remediation measures and, 7
- response to crisis, 177–80
- securities lending and, 112–14
- Term Asset-backed Securities Loan Facility  
 (TALF), 219
- Term Auction Facilities (TAF), 147–9,  
 164–5, 219
- Term Securities Lending Facility, 164–5, 218
- Treasury Auction Loan Facility (TALF), 304
- treasury rates (*See* Treasury rates)
- Federal Reserve Act of 1913, 272, 273
- Fedex, 337
- FHLMC. *See* Federal Home Loan Mortgage  
 Company (Freddie Mac)
- Fiat, 301
- Fink, Larry, 212
- First Boston Corporation, 213–14
- First Franklin Financial, 63–4, 68, 150
- First Magnus Alt-A, 169–70
- First Republic Bank, 150
- First Union Corporation, 70
- Fiscal policy
- Bush Administration, under, 22–4
  - cost of remediation measures, 311–12
  - leadup to crisis, during, 149–50
  - Obama Administration, under, 294–303,  
 342, 355–60
  - post-hi-tech bubble, 22–4, 32
  - recovery, during, 355–60
- Fitch Ratings, 97–8, 242, 352–60
- Florance, Andrew C., 199–202
- FNMA. *See* Federal National Mortgage  
 Association (Fannie Mae)
- Food and Drug Administration (FDA), 12
- Forbes 400 Richest Americans, 49
- Ford Motor Company, 163–4, 182, 301
- Ford Motor Credit, 163–4
- Foreign equity
- in emerging markets, 107–8, 110
  - growth in assets, 107–8
  - 2004–2006 period, during, 107–11
- Foreign exchange funds, 68
- Foreign exchange swaps, 218
- Forstmann Little, 86–7
- Fortress Investment, 86–7
- Foundations, investments by, 4
- Frank, Barney, 66
- Freddie Mac. *See* Federal Home Loan  
 Mortgage Company (Freddie Mac)
- Freescale Semiconductor, 91–2
- Fremont General, 68, 123, 124, 279–80
- Galbraith, John Kenneth, 1
- GDP. *See* Gross domestic product (GDP)
- GE Credit, 269–70
- Geithner, Tim
- AIG and, 171
  - on cost of remediation measures, 308–9
  - lack of experience, 216–17
  - leadership of, 6
  - Lehman Brothers and, 272, 273, 277, 278–9
  - Rubin and, 265
  - “Stress Test” and, 294
  - on “too big to fail,” 273
- Genentech, 351–7
- General Electric, 269–70, 271–2
- General Growth Properties, 288
- Generally Accepted Accounting Principles,  
 299, 309
- General Mills, 337
- General Motors
- beginning of crisis, problems during, 163
  - government rescue of, 217, 273
  - increase in debt, 114
  - Lehman Brothers situation compared, 271–2
  - losses during crisis, 267–9
  - poor management, 5–6
  - role in crisis, 267–9
  - stock prices, 269
  - TARP and, 182, 220, 268–9, 301–2
- General Motors Acceptance Corporation  
 (GMAC), 163, 267–9, 271–2, 273, 294
- Gilead, 351–7
- Glass-Steagall Act of 1933, 7
- Global Crossing, 18
- Glucksman, Lewis, 277
- Golden West Financial, 63–4, 70, 175, 238, 265

- “Goldilocks” economy, 9
- Goldman Sachs
- acquisitions in mortgage industry, 150
  - AIG and, 125, 127, 129–30, 153, 267
  - as bank holding company, 174, 177, 216, 218
  - commercial real estate, investing in, 98
  - derivatives and, 258
  - financial investments and, 249
  - high yield bonds and, 51, 242
  - illiquid assets and, 82–3, 84
  - income of, 128
  - Lehman Brothers situation compared, 271–2
  - liquidity of assets, 253
  - litigation costs, 238–9
  - losses during crisis, 205–6
  - M&A and, 92
  - mortgage securitization, effect of, 237
  - New Century Financial and, 123
  - other assets, 251–2
  - preparation for crisis, 150–2, 153
  - repo market and, 173–4
- Gold prices
- beginning of crisis, during, 164–5
  - crisis, during, 204–6
  - early Obama Administration, during, 288, 293, 315
  - at end of Millennium, 14
  - leadup to crisis, during, 145
  - post-hi-tech bubble, 32
  - recovery, during, 339–41, 355
  - 2004–2006 period, during, 43
- Google, 337, 349–56
- Government guarantees, 3
- Government National Mortgage Association (Ginnie Mae), 74
- Gramm-Leach-Bliley Act of 1999, 7
- Great Depression, 183–5, 309
- Greece, fiscal crisis in, 322, 323
- Greenberg, Hank, 6
- Greenlaw, David, 208–9
- Greenlight Capital, 125
- Greenpoint Mortgage, 68
- Greenspan, Alan, 11, 28
- Gregory, Joseph, 277
- Griffin, John M., 230
- Gross domestic product (GDP)
- crisis, during, 186–91
  - early Obama Administration, during, 288–91, 304–6
  - Federal Reserve on, 166–8
  - hi-tech bubble and, 19
  - recovery, during, 316–20, 345, 346
  - 2004–2006 period, during, 37
- Group of 7, 219
- Grove, Andy, 351–7
- Haircut index, 172–3
- H&R Block, 68, 122–3
- Harrah’s, 91–2
- Harvard University, 103, 112
- Hatzius, Jan, 208–9
- HCA, 91–2
- Hedge funds
- in Asian markets, 105–6
  - crisis, during, 203–5
  - in emerging markets, 105–6, 107
  - in foreign countries, 105
  - growth in assets, 103
  - highly leveraged debt and, 12–14
  - increase in debt, 115
  - largest funds, 103–4
  - leveraged debt and, 107
  - returns, 103–6, 108
  - risk analysis, difficulty in, 106–7
  - search for higher returns and, 105
  - 2004–2006 period, during, 103–8
  - types of funds, 103
  - university endowments investing in, 103, 104
  - volatility in, 103–5, 107
- Hershey, 337
- Higher returns, search for
- alternative investments and, 34, 35, 41–4
  - commercial banks, 70–2
  - hedge funds and, 105
  - high yield bonds and, 45–7
  - insurance companies, 35–6
  - pension funds, 34–5, 172
  - RMBS and, 63
  - role in causing crisis, 172
  - university endowments, 35–6
- Highly leveraged debt
- Citigroup and, 262
  - commercial banks and, 262, 265–6
  - commercial real estate and, 244–6
  - corporate debt, 303
  - crisis, during, 173, 208–11
  - early Obama Administration, during, 300
  - European banks and, 67
  - Fannie Mae and, 5, 222, 247–8
  - Freddie Mac and, 5, 222, 247–8
  - hedge funds and, 12–14, 107

- housing bubble and, 5
- housing market and, 115
- increase in, 303
- investment banks and, 248–9
- leadup to crisis, during, 134–7
- losses from during crisis, 240–4
- Morgan Stanley and, 256
- recovery, during, 352–60
- REITs and, 100
- role in crisis, 1–8, 33, 222–3, 240–4
- 2004–2006 period, during, 41–4
- Highly leveraged loans
  - Citigroup and, 262, 264
  - commercial banks and, 69–70, 74
  - commercial real estate and, 100–2
  - crisis, during, 170–1, 196–9, 202, 211–13
  - European banks and, 213–14
  - high yield bonds and, 51
  - investment banks and, 82
  - Lehman Brothers and, 274–5
  - M&A and, 94–8
  - private equity and, 84–5, 94–8
  - recovery, during, 352–60
  - role in crisis, 152–3, 222
  - 2004–2006 period, during, 96, 97
- High yield bonds
  - commercial banks investing in, 49–50, 51
  - cyclical nature of returns, 46
  - defaults, 48, 282–5
  - early Obama Administration, during, 282–5, 312–14
  - highly leveraged companies and, 51
  - increased attractiveness of, 46–7
  - institutional investors in, 47–51
  - insurance companies investing in, 49–50, 51
  - investment assets, 49
  - investment banks investing in, 49–50, 51
  - investment -grade bonds versus, 45–6
  - mutual funds investing in, 49–50, 51
  - outstanding bonds, 45
  - pension funds investing in, 49–50
  - recovery, during, 339–41, 356
  - regulators and, 42–4
  - risk compared with investment grade bonds, 45–6
  - RMBS compared, 60
  - search for higher returns and, 45–7
  - 2004–2006 period, during, 42–51
  - university endowments investing in, 49–50
- Hi-tech bubble
  - bursting of, 14–22
  - consumer confidence and, 19
  - earnings estimates and, 15, 19–20
  - economic strength at end of Millennium as backdrop, 9–15
  - GDP and, 19
  - telecommunications and, 17–18
- Home Affordable Modification Program (HAMP), 300
- Home Depot, 337
- Home equity loans, 224
- Hong Kong & Shanghai Bank (HSBC), 67–8, 123, 150–2
- Household Finance, 68, 150–3
- Housing and Economic Recovery Act of 2008 (HERA), 162–3, 169
- Housing and Urban Development, Department of, 64–7
- Housing bubble
  - bank run theory unable to explain, 4
  - Fannie Mae and, 2
  - financing of, 2
  - Freddie Mac and, 2
  - leveraged debt and, 5
  - major investors, 4–5
  - RMBS and, 1
  - subprime mortgages as minor factor in, 2
- Housing market
  - containment of crisis, belief in, 142–53
  - Home Affordable Modification Program (HAMP), 300
  - leveraged debt and, 115
  - negative equity, 225–7, 321
  - speculation in, 53–5
  - warning signs in, 145
- Housing prices
  - beginning of crisis, during, 154
  - crisis, during, 183–5, 217, 223–7
  - decline in, 116, 124–5, 154, 183–5, 223–7
  - early Obama Administration, during, 281–2, 311
  - increase in, 53, 55
  - leadup to crisis, during, 116, 124–5
  - recovery, during, 319–21, 326–7, 345–7
  - regulation and, 124–5
  - 2004–2006 period, during, 53
- Housing starts
  - crisis, during, 154–6
  - early Obama Administration, during, 288–91, 311
  - leadup to crisis, during, 116
  - recovery, during, 324–6, 347

- Housing starts (cont.)  
2004–2006 period, during, 37
- IMF. *See* International Monetary Fund (IMF)
- Indonesia, financial crisis in, 12–14
- Industrial production  
beginning of crisis, during, 164  
crisis, during, 186–91, 217  
early Obama Administration, during,  
288–91, 311  
at end of Millennium, 19  
leadup to crisis, during, 144  
post-hi-tech bubble, 25  
recovery, during, 311, 348–52
- Industriekreditbank, 125, 150–2
- IndyMac  
failure of, 168–9  
FDIC and, 168–9  
leadup to crisis, problems during, 126,  
152–3  
Lehman Brothers situation compared,  
279–80  
RMBS, investing in, 68  
stock prices, 63
- Inflation  
at end of Millennium, 9–11  
Federal Reserve on, 9–11, 37, 145–7, 166–8  
leadup to crisis, during, 145–7  
recovery, during, 345  
remediation measures, effect of, 324  
2004–2006 period, during, 37
- ING, 67–8
- Institutional Brokers' Estimate System (IBES),  
19–20
- Institutional investors. *See also specific type of investor*  
generally, 2  
alternative investments and, 114  
in commercial real estate, 140  
equity raised by, 150  
in high yield bonds, 47–51  
increase in debt, 115  
post-hi-tech bubble, 33  
in private equity, 85–8  
securities lending and, 112–14
- Insurance companies. *See also specific company*  
Alt-A mortgage guarantees, 131–2  
alternative investments and, 114  
capital flows and, 1–2  
credit default swaps and, 142, 260  
Fannie Mae and, 131  
Freddie Mac and, 131  
high yield bonds, investing in, 49–50, 51  
investments in housing, 4  
leadup to crisis, problems during, 131–4  
private equity, investing in, 85–6  
ratings, 132  
search for higher returns and, 35–6  
securities lending and, 112–14  
subprime mortgage guarantees, 131–4
- Intel, 15
- Interest rates  
recovery, during, 339–41  
swaps, 79–80  
2004–2006 period, during, 41
- International Monetary Fund (IMF)  
Argentina and, 22  
Brazil and, 22  
containment of crisis, belief in, 142, 144  
on cost of remediation measures, 308–9  
on financial sector losses, 209–10  
Greece and, 322  
Turkey and, 12–14, 22
- Intuitive Surgical, 337
- Investment banks. *See also specific bank*  
beginning of crisis, stock prices during, 170  
capital requirements, 249–51  
derivatives, investing in, 259  
financial instruments and, 175, 249–50  
highly leveraged loans and, 82  
high yield bonds, investing in, 49–50, 51  
illiquid assets of, 82–4  
leveraged debt and, 248–9  
liquidity of assets and, 253  
litigation costs, 238–40  
losses during crisis, 205–6, 210–12  
market ready equity capital and, 252, 253  
mortgage securitization, effect of, 237  
other assets and, 251–2  
pre-tax losses of, 207–8  
private equity, investing in, 86–8  
restitution costs, 238, 239–40  
RMBS, investing in, 64–7  
role in crisis, 248–53  
SEC and, 249–51  
stock prices during crisis, 207, 209  
tangible equity and, 249–50, 251  
2004–2006 period, during, 82–4
- Iran, oil production in, 37
- Iraq War, oil production and, 37
- Ireland, fiscal crisis in, 322, 323
- Italy, fiscal crisis in, 322, 323

- Jaguar, 163
- Japan, economic stagnation in, 12–14
- Jobs, Steve, 15
- Jones, Paul Tudor, 106
- JP Morgan Chase  
generally, 274  
ABCP and, 71, 115  
AIG and, 267  
Bear Stearns and, 160–2, 181  
collateral claims and, 176–7  
commercial real estate, investing in, 70  
credit default swaps and, 80  
derivatives and, 75–6, 258, 263–4  
litigation costs, 238–9  
losses during crisis, 205–6  
mortgage securitization, effect of, 237  
preparation for crisis, 150–2, 153  
receivables and, 176  
repo market and, 111, 173  
restitution costs, 238  
RMBS, investing in, 63–4  
securities lending and, 111  
SIV and, 115  
stock prices, 70–1  
tangible common equity, 258  
Washington Mutual and, 218
- Jumbo mortgages, 56–9, 115
- “Junk bonds.” *See* High yield bonds
- Kellogg, 337
- Kerviel, Jerome, 129–30
- Kinder Morgan Energy, 91–2
- Kohlberg Kravis Roberts, 86–7
- Korea Development Bank, 170–1
- Korea Investment Corporation, 128
- Kravis Roberts, 203
- Krugman, Paul, 216–17, 316, 323
- Kuwait Investment Authority, 128
- Labor, Department of, 6
- LaGarde, Christine, 271, 273
- Land Rover, 163
- Lazard Frères, 254
- Lehman, Robert, 277
- Lehman Brothers  
generally, 207  
ABCP and, 74  
Bank of America and, 274  
bank run theory and, 3, 221–2  
bankruptcy proceedings, 275–7, 278, 279  
Barclays and, 170–1, 216, 270–1, 274–5  
beginning of crisis, losses during, 160–2  
collateral claims and, 176–7  
commercial real estate, investing in, 98, 138–40  
containment of crisis, belief in, 153  
depth of problems at, 273–5  
derivatives and, 77  
downgrading of, 255  
equity raised by, 150  
excessive focus on as cause of crisis, 179–80, 223, 270–1, 279–80  
failure of, 170–1, 217  
Federal Reserve and, 272, 273, 279  
financial investments and, 249  
highly leveraged loans and, 274–5  
illiquid assets and, 82, 83, 84  
income of, 128  
lack of respect for, 277  
leadup to crisis, problems during, 125, 129–30, 153  
leveraged debt and, 144  
losses during crisis, 255  
loss of trust in, 278  
mortgage securitization, effect of, 237  
poor management, 5–6  
preparation for crisis, 150–2  
recklessness of, 277–8  
repo market and, 173, 174  
rescuing proposed as alternative to bankruptcy, 270–3, 278–9  
RMBS, investing in, 63–4  
role in crisis, 255  
SEC and, 272, 278  
stock prices, 169, 170  
uncertainty at, 212–13  
upgrading of rating, 144  
valuation of assets, 275, 278–9
- Lehman Brothers Holding Inc. (LBHI), 275–7, 279
- Lehman Brothers Inc. (LBI), 275–7, 279
- Leverage  
credit default swaps, 81  
Fannie Mae, 247  
Freddie Mac, 247  
highly leveraged debt (*See* Highly leveraged debt)  
highly leveraged loans (*See* Highly leveraged loans)
- Levitin, Adam J., 230

- Lewis, Michael, 124–5, 150–2  
 Limits of theory, 5–6  
 Litigation costs, 238–40  
 Litton Mortgage, 150  
 Long Beach Savings, 68, 124  
 Long Term Capital Management, 12–14, 106, 277  
 L'Oréal, 337  
 Lowe's, 337  
 Lowitt, Ian, 248  
 Lucent Technologies, 17–18
- Mack, John, 128, 256  
 Malaysia, financial crisis in, 12–14  
 M&A. *See* Mergers and acquisitions (M&A)  
 Markit Group, 118  
 Marks, Howard, 34  
 Mars, 337  
 Mastercard, 337  
 MCI, 22  
 Media industry, 337  
 Mergers and acquisitions (M&A). *See also specific company*  
   beginning of crisis, during, 164–5  
   CLOs and, 98  
   crisis, during, 196–9  
   early Obama Administration, during, 282–6  
   Federal Reserve and, 95–8  
   growth in, 91–3  
   highly leveraged loans and, 94–8  
   largest acquisitions, 92–5  
   leadup to crisis, during, 134–7  
   post-hi-tech bubble, 32, 33  
   private equity and, 91–4  
   recovery, during, 352–7  
   telecommunications and, 17–18  
   2004–2006 period, during, 91–8
- Merrill Lynch  
   generally, 180, 207  
   acquisitions in mortgage industry, 150  
   Bank of America and, 171, 182, 216, 281  
   bank run theory and, 221–2  
   beginning of crisis, losses during, 160–2  
   credit default swaps and, 179–80, 196, 223, 260  
   equity raised by, 150  
   Federal Reserve and, 281  
   illiquid assets and, 83, 84  
   leadup to crisis, problems during, 128, 129–30, 153
- Lehman Brothers situation compared, 179–80, 223, 271–2, 279–80  
 losses during crisis, 3–4, 212, 255–6  
 mortgage securitization, effect of, 237  
 poor management, 5–6  
 restitution costs, 238  
 RMBS, investing in, 63–4, 68  
 role in crisis, 255–6  
 uncertainty at, 212–13
- Metropolitan Life, 86  
 Mexico, financial crisis in, 12–14  
 Meyer, Jack, 112  
 MGIC, 132–4  
 Mian, Atif R., 1, 230–1  
 Michael's Stores, 91–2  
 Microsoft, 15, 337, 349–56  
 Milken, Michael, 9, 44  
 Miller, Harvey, 278  
 Mitsubishi Financial, 173–4  
 Mizuho Corporate Bank, 128  
 Modern portfolio practices, 2, 4, 223  
 Monetary policy. *See also* Federal Reserve  
   cost of remediation measures, 309  
   at end of Millennium, 11  
   leadup to crisis, during, 147–9  
   money supply, 179–80  
   Obama Administration, under, 303–8, 355–60  
   post-hi-tech bubble, 22, 32, 33  
   recovery, during, 355–60  
   in response to crisis, 177–80
- Money Market Investor Funding Facility, 219  
 Money supply, 12, 179–80, 304–5  
 Moody's  
   on Bear Stearns, 127  
   CDOs, downgrading of ratings, 281–2, 283  
   on Citigroup, 129, 181–2, 264  
   downgrading of ratings, 124  
   fines paid by, 236  
   on General Electric, 270  
   on Lehman Brothers, 255  
   on Morgan Stanley, 256  
   RMBS, downgrading of ratings, 156–7, 183–5, 232, 281–2, 283, 321–2, 326–30
- Morgan Stanley  
   acquisitions in mortgage industry, 150  
   as bank holding company, 174, 177, 216, 218  
   Countrywide Financial and, 128  
   credit default swaps and, 142, 179–80, 196, 223, 260  
   downgrading of, 256

- equity raised by, 150
- highly leveraged debt and, 256
- illiquid assets and, 83, 84
- leadup to crisis, problems during, 128, 129–30, 153
- Lehman Brothers situation compared, 271–2, 279–80
- litigation costs, 238–9
- losses during crisis, 3–4, 205–6, 212, 256
- M&A and, 92
- mortgage securitization, effect of, 237
- New Century Financial and, 123
- repo market and, 173–4
- RMBS, investing in, 63–4
- role in crisis, 256
- stock prices, 170
- uncertainty at, 212–13
- Mortgage debt
  - home equity loans and, 224
  - increase in, 2, 53
  - role in crisis, 223–7
  - underwater mortgages, 225–7, 321
- Mortgage intermediaries
  - generally, 2
  - leadup to crisis, problems during, 122–31
  - post-hi-tech bubble, 33
- Mortgage market
  - Adjustable Rate Mortgages (ARM), 53
  - Alt-A mortgages (*See* Alt-A mortgages)
  - defaults in, 117–18, 154–6
  - delinquent mortgages, 60–1, 326–7, 345–7
  - jumbo mortgages, 56–9, 115
  - leadup to crisis, during, 117–18
  - originations, 53–4, 57
  - recovery, during, 345–7
  - refinancings, 25, 54–6, 114, 119
  - RMBS (*See* Residential mortgage-backed securities (RMBS))
  - shifts in, 56–9
  - subprime mortgages (*See* Subprime mortgages)
  - 2004–2006 period, during, 56–9
- Mortgage rates
  - Alt-A mortgages, 231
  - post-hi-tech bubble, 24–5
  - recovery, during, 324–5
  - 2004–2006 period, during, 53
- Mortgage securitization
  - adverse selection and, 229–30
  - CDOs (*See* Collateralized debt obligations (CDOs))
  - CLOs (*See* Collateralized loan obligations (CLOs))
  - CMBS (*See* Commercial mortgage-backed securities (CMBS))
    - commercial banks, effect on, 237
    - credit deterioration and, 230
    - historical evolution of, 228
    - investment banks, effect on, 237
    - lying and fraud and, 230–1
    - rates, 58–9
  - RMBS (*See* Residential mortgage-backed securities (RMBS))
    - role in crisis, 222, 228–9
    - second and investment homes and, 231
    - share of mortgage market, 229
- Motorola, 15
- Mutual funds
  - early Obama Administration, during, 312–14
  - high yield bonds, investing in, 49–50, 51
  - leadup to crisis, during, 148
  - recovery, during, 339–41
  - securities lending and, 112–14
- NAREIT Composite Index, 100
- NASDAQ
  - biotechnology stocks, 351–7
  - hi-tech bubble and, 14–15 (*See also* Hi-tech bubble)
- National Association of Realtors, 54, 231
- National Council of Real Estate Investment Fiduciaries (NCREIF), 99
- National Homeownership Strategy: Partners in the American Dream, 66
- National Shared Loan Program (SNLP), 242
- NetBank, 60
- Netflix, 349–56
- Net worth
  - consumer debt versus, 117
  - real estate as, 224–6
- Neuberger Berman, 170–1, 275
- New Century Financial, 63, 123, 124, 128, 152–3, 279–80
- New York State Teachers Retirement System, 88
- NIB Holding, 125
- Nigeria, oil production in, 37
- Nike, 337
- 9/11 attacks, 21, 31–2
- 1970s, economic problems during, 12
- Nintendo, 349–56

- Nomura Securities, 275  
 Nortel Networks, 18  
 Northern Electric, 18  
 Northern Rock Bank, 129, 273  
 Norway Pension Fund, 68  
 Nuclear Nonproliferation Treaty, 37  
 Nvidia, 349–56
- Oaktree Capital, 86–7
- Obama, Barack  
 generally, 281  
 auto industry and, 182  
 continuation of crisis during early Obama Administration, 281–94  
 fiscal policy under, 294–303, 342, 355–60  
 leadership of, 6  
 monetary policy under, 303–8, 355–60  
 remediation measures under, 7–8, 308–14  
 response to crisis, 216–17  
 TARP and, 281, 301–2  
 tax policy under, 301
- Obamacare, 323
- Ocwen, 60, 63
- Office of Federal Housing Enterprise Oversight (OFHEO), 6, 131, 248
- Office of Thrift Supervision, 6, 174–5, 255
- Oil prices  
 beginning of crisis, during, 164  
 crisis, during, 186–91, 217  
 early Obama Administration, during, 288–91, 315  
 end of Millennium, at, 22–3  
 at end of Millennium, 14  
 leadup to crisis, during, 144  
 recovery, during, 316, 348–53  
 2004–2006 period, during, 37
- Oligopolies, 337
- Olympia & York, 98–9
- O’Neal, Stan, 128, 153, 212
- Open Market Trading Desk, 218
- Option One, 60, 68, 122–3, 152–3
- Organization for Economic Cooperation and Development (OECD), 142, 144
- Ownit, 68
- Pacific Gas & Electric, 21
- Paine Webber, 160–2, 213–14
- Pandit, Vikram, 265
- Paulson, Hank  
 generally, 7
- AIG and, 171  
 Bank of America and, 182, 216  
 containment of crisis, belief in, 142, 144, 153  
 Fannie Mae and, 169–70, 248  
 Freddie Mac and, 169–70, 248  
 Housing and Economic Recovery Act and, 163  
 leadership of, 6, 216  
 Lehman Brothers and, 169, 170–1, 272, 278–9  
 Merrill Lynch and, 171  
 Rubin and, 265  
 TARP and, 181, 273
- Paulson, John, 107, 150–2, 254
- Paulson Credit Opportunity Fund, 150–2
- “Peace dividend,” 9, 11–12
- Pelosi, Nancy, 181
- Peloton Partners, 144
- Pension funds. *See also specific fund*  
 actuarial assumptions, 34–5  
 alternative investments and, 114  
 capital flows and, 1–2  
 commercial real estate, investing in, 138–40  
 foreign equity, investing in, 109–11  
 high yield bonds, investing in, 47–50  
 investments in housing, 4  
 private equity, investing in, 85–6, 88  
 search for higher returns and, 34–5, 172  
 securities lending and, 112–14
- Pepsi, 337
- Pershing Square Capital Management, 132–3
- Peterson, Pete, 277
- Pharmaceutical industry, 337, 351–7
- Philippines, financial crisis in, 12–14
- Pimco, 69
- Portugal, fiscal crisis in, 322, 323
- President’s Working Group on Financial Markets, 152
- Priceline, 349–56
- Primary Dealer Credit Facility, 164–5, 172–3, 218
- Prince, Charles, 129, 153
- Private equity  
 advantages of, 85  
 allocations, 88–9  
 banks and, 86–8  
 crisis, during, 203, 205  
 draw downs, 88  
 highly leveraged loans and, 84–5, 94–8  
 institutional investors in, 85–8  
 insurance companies investing in, 85–6



- investment banks investing in, 86–8
  - investors' commitments, 86
  - M&A and, 91–4
  - recovery, during, 352–8
  - returns, 88–91
  - risks, 88–91
  - S&P 500 versus, 85
  - 2004–2006 period, during, 84–91
  - university endowments investing in, 88
- Quantitative Easing (QE)
- QE-1, 8, 179–80, 218
  - QE-2, 8, 323, 355
  - QE-3, 8, 342–5, 355
- Qwest International, 18
- Radion Insurance, 133
- RAM Reinsurance, 133
- Ranieri, Lewis, 228
- Reagan, Ronald, 11–12
- Real estate investment trusts (REITs), 100, 196–200
- Realty, 91–2
- Receivables, 176
- Recession of 2002, 31–2
- Refinancings, 25, 54–6, 114, 119
- Regeneron, 351–7
- Regulation
- Bush Administration and, 22–4
  - Dodd-Frank Act, under, 301–3, 336–7
  - failures, role in crisis, 2–3
  - holding companies, 7, 249–51
  - housing prices and, 124–5
- Regulators
- commercial banks and, 256–7
  - credit default swaps and, 153
  - high yield bonds and, 42–4
  - limits of theory regarding, 6
  - role in crisis, 2, 5–6
- Reinhart, Carmen M., 5
- Remediation measures. *See also specific action or program*
- Bush Administration, under, 7–8
  - calendar of, 217–20
  - crisis, during, 217
  - in fiscal policy, 311–12
  - inflation, effect on, 324
  - limits of, 8
  - in monetary policy, 309
  - Obama Administration, under, 7–8, 308–14
- TARP, 7 (*See also* Troubled Asset Recovery Plan (TARP))
  - vindication of, 355–60
- Repo market
- bank run theory and, 174
  - crisis, during, 172–3
  - securities lending and, 111–14, 115
- Reserve Primary Fund, 171–2, 216
- Residential mortgage-backed securities (RMBS). *See also specific investor*
- adverse selection in, 229–30
  - bank run theory and, 3–4
  - banks investing in, 63–4, 70–1
  - bond insurance and, 63
  - CDOs, repackaged as, 119
  - CMBS compared, 52–3
  - commercial banks investing in, 64–7, 69
  - complexity of, 62
  - credit deterioration in, 230
  - decline in, 355
  - downgrading of ratings, 156–7, 183–5, 232–5, 281–2, 283, 321–2, 326–30
  - Fannie Mae and, 52–3, 64–7, 68–9, 115, 222
  - Freddie Mac and, 52–3, 64–7, 68–9, 115, 222
  - growth of, 52–3
  - high yield bonds compared, 60
  - housing bubble and, 1
  - illiquidity of, 62–3
  - interpretation of private holdings, 69
  - investment banks investing in, 64–7
  - investors generally, 64–5, 68–9 (*See also specific investor*)
  - leadup to crisis, during, 118–20
  - leveraged debt and, 5
  - losses during crisis, 236, 237
  - mark to market losses, 236
  - recovery, during, 326–30, 355
  - search for higher returns and, 63
  - statistics of, 52–3
  - 2004–2006 period, during, 51–69
- Resolution Trust, 273
- Restitution costs, 238, 239–40
- Retail sales
- crisis, during, 154–6, 186–7
  - early Obama Administration, during, 291–4
  - leadup to crisis, during, 116
  - post-hi-tech bubble, 24–5
  - recovery, during, 311, 316, 318, 324–6, 348–53
  - 2004–2006 period, during, 37
- Retirement funds. *See* Pension funds

## Risk

- commercial banks, increased risk for, 70
- counterparty risk, 175–7
- derivatives, market risks of, 79
- Fannie Mae and, 247–8
- Freddie Mac and, 247–8
- hedge funds, difficulty of risk analysis, 106–7
- high yield bonds, risk compared with investment grade bonds, 45–6
- private equity, 88–91
- Riverside Co., 92
- RMBS. *See* Residential mortgage-backed securities (RMBS)
- Robertson, Julian, 106
- Rochester Telephone, 18
- Rohner, Marcel, 214
- Romer, Christina, 216–17
- Roosevelt, Franklin, 309
- Rouse Companies, 288
- Royal Bank of Scotland, 67–8, 126, 213, 214
- Rubin, Robert, 63–4, 264–5
- Russia
  - financial crisis in, 12–14, 149
  - oil production in, 37
- SAFE Investment Company (China), 68
- Salomon Brothers, 64, 228, 265
- Samberg, Arthur, 106
- S&P 500
  - beginning of crisis, during, 164–5
  - crisis, during, 203–4
  - early Obama Administration, during, 288–92, 312–14
  - earnings estimates, 10, 19, 21, 29, 37–9, 147–8, 192–3, 332–5, 349–56
  - end of Millennium, at, 10, 16
  - inflation, adjusted for, 14
  - post-hi-tech bubble performance, 28–31
  - price-earnings ratio, 16, 30, 40
  - private equity versus, 85
  - recovery, during, 332–40, 349–56
  - rotation in, 37–42
  - tech and telecom, 16, 17
  - telecom and, 19
  - treasury notes versus, 30
  - 2004–2006 period, poor performance during, 37–41
  - volatility in (VIX Index), 41–3, 192–4, 312–14
- SARS epidemic, 22, 31–2
- Saudi Arabian Monetary Authority, 68
- Savings and loan crisis, 9, 98–9, 273

- Schumer, Charles, 66, 168–9
- Scully, Robert, 169
- Securities and Exchange Commission (SEC)
  - Bush Administration, changes under, 24
  - capital requirements, 7
  - consolidated supervised entities program, 83
  - illiquid assets and, 83
  - investment banks and, 249–51
  - Lehman Brothers and, 272, 278
  - oversight by, 6
  - short selling and, 218
- Securities Industry and Financial Markets Association (SIFMA), 164
- Securities Investors Protection Act of 1970 (SIPA), 275–6
- Securities lending
  - institutional investors and, 112–14
  - margin borrowing and, 112
  - repo market and, 111–14, 115
  - statistics, 113–14
  - 2004–2006 period, during, 111–14
- Securitization. *See* Mortgage securitization
- Securitized assets, 53. *See also specific asset*
- Semerci, Osman, 255
- Shearson Loeb Rhoades, 277
- Short selling, 218
- Silver Lake Partners, 86–7
- Simon Property, 100
- Small business optimism
  - crisis, during, 186–91
  - early Obama Administration, during, 291–4, 316–20
  - recovery, during, 326–8, 348–53
- Société Générale, 129–30, 213
- Soros, George, 106
- Southern California Edison, 21
- South Korea, financial crisis in, 12–14
- Sovereign funds, investing in, 68
- Spain, fiscal crisis in, 322, 323
- Speculation
  - in housing market, 53–5
  - role in crisis, 222
- Standard & Poor's
  - on Bear Stearns, 127
  - CDOs, downgrading of ratings, 234
  - on Citigroup, 129, 181–2
  - finest paid by, 236
  - on General Electric, 270
  - on Lehman Brothers, 125, 255, 274
  - LSTA leveraged loan index, 98
  - on Morgan Stanley, 256

- RMBS, downgrading of ratings, 234, 326–30  
 Sallie Mae and, 122
- State and local pension funds  
 high yield bonds, investing in, 47–50  
 search for higher returns and, 172  
 securities lending and, 112–14
- State governments, oversight by, 6
- State Street Bank & Trust, 123, 171–2
- Steinhardt, Michael, 106
- Stiglitz, Joseph, 323
- Stock markets  
 beginning of crisis, during, 164–5  
 biotechnology stocks, 351–7  
 crisis, declines during, 170  
 early Obama Administration, during, 288–92, 312–14  
 hi-tech bubble and, 14–15 (*See also* Hi-tech bubble)  
 leadup to crisis, during, 145  
 post-hi-tech bubble, 25–33  
 returns by sector, 25–7  
 rotation in, 37–42  
 S&P 500 (*See* S&P 500)  
 2004–2006 period, poor performance during, 37–41  
 volatility in, 15, 145, 164–5, 192–4
- Strikes, 11–13
- Structured investment vehicles (SIVs)  
 commercial banks and, 70–4  
 leadup to crisis, during, 119–22
- Student Loan Marketing Association (Sallie Mae), 121–2, 299
- Student loans, 121–2, 219, 295–9, 321–2
- Subprime mortgages  
 AIG and, 133  
 defaults in, 117–18, 154–6  
 early Obama Administration, during, 281–2  
 European banks as buyer of, 6  
 Fannie Mae as buyer of, 6  
 Freddie Mac as buyer of, 6  
 housing bubble, as minor factor in, 2  
 increase in debt, 115  
 insurance companies guaranteeing, 131–4  
 leadup to crisis, during, 117–18  
 low-income home ownership and, 62  
 shift to, 56–9
- Sufi, Amir, 1
- Summers, Larry, 216–17
- Swensen, David, 4
- Swiss National Bank, 147–9
- TARP. *See* Troubled Asset Recovery Plan (TARP)
- Tax policy under Obama Administration, 301
- Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2009, 301
- Technology industry, 13, 20, 337, 349–56.  
*See also* Hi-tech bubble
- Telecommunications  
 hi-tech bubble and, 17–18  
 mergers and acquisitions and, 17–18
- Telecommunications Act of 1996, 17
- Temasek, 128
- Term Asset-backed Securities Loan Facility (TALF), 219
- Term Auction Facilities (TAF), 147–9, 164–5, 219
- Term Securities Lending Facility, 164–5, 218
- Thailand, financial crisis in, 12–14
- Thain, John, 128
- Thomas Lee Partners, 86–7
- Thornburg Mortgage, 68, 126, 229, 279–80
- Time Warner, 337
- Tishman Speyer, 255
- Toyota, 163–4
- TPG Capital, 86–7
- Trade deficit at end of Millennium, 14
- Treasury, Department of  
 AIG and, 219  
 Bank of America and, 182  
 bank run theory and, 221–2  
 Exchange Stabilization Fund, 171–2, 216  
 money market funds and, 218  
 “Stress Test,” 294
- Treasury Auction Loan Facility (TALF), 304
- Treasury rates  
 crisis, during, 166–7, 177–8  
 end of Millennium, at, 12  
 post-hi-tech bubble, 22–4  
 recovery, during, 306, 307, 324–5, 342–5
- Trichet, Jean-Claude, 271, 273
- Troubled Asset Recovery Plan (TARP)  
 generally, 3  
 AIG and, 273, 281  
 auto industry and, 182, 220, 268–9, 301–2  
 bank equity and, 216  
 bank run theory and, 221–2  
 Bear Stearns and, 181  
 Bush Administration and, 181  
 Citigroup and, 181–2, 220, 281  
 crisis not resolved by, 180

- Troubled Asset Recovery Plan (TARP) (cont.)  
 enactment of, 181, 218  
 FDIC and, 181  
 Obama Administration and, 281,  
 301–2  
 preferred stock capital, injection of, 219  
 as remediation measure, 7  
 Washington Mutual and, 181  
 Truman, Harry, 221  
 Trump, Donald, 348, 360  
 Turkey, financial crisis in, 12–14, 22
- UBS  
 beginning of crisis, losses during, 160–2  
 credit default swaps and, 80, 142, 179–80,  
 196, 223, 260  
 equity raised by, 150  
 Lehman Brothers situation compared,  
 279–80  
 losses during crisis, 213–14  
 New Century Financial and, 123  
 RMBS, investing in, 67–8  
 Thornburg Mortgage and, 126  
 Underwater mortgages, 225–7, 321
- Unemployment  
 early Obama Administration, during, 291–4,  
 311  
 at end of Millennium, 9–11  
 extension of benefits, 301  
 recovery, during, 311, 319, 326–7
- University endowments  
 alternative investments and, 114  
 hedge funds, investing in, 103, 104  
 high yield bonds, investing in, 49–50  
 investments in housing, 4  
 private equity, investing in, 88  
 search for higher returns and, 35–6  
 securities lending and, 112–14
- Univision, 91–2  
 UPS, 337  
 U.S. Bank, 60  
 U.S. West, 18
- Valukas, Anton, 77, 125, 130, 144, 255, 272,  
 274, 277  
 Vila, Bob, 123  
 Viniar, David, 150–2  
 Visa, 337  
 Voicestream, 18  
 Volatility, 192–4  
 Volcker Rule, 301
- Volvo, 163  
 Vornado, 100
- Wachovia Corporation  
 generally, 207  
 bank run theory and, 221–2  
 beginning of crisis, losses during, 160–2  
 Citigroup and, 175, 218, 266  
 commercial real estate, investing in, 70, 98,  
 138–40  
 disappearance of, 217  
 equity raised by, 150  
 FDIC and, 266  
 increase in debt, 114  
 leadup to crisis, problems during, 129  
 Lehman Brothers situation compared,  
 179–80, 223, 271–2, 279–80  
 leveraged debt and, 265–6  
 losses during crisis, 3–4  
 mortgage securitization, effect of, 237  
 poor management, 5–6  
 restitution costs, 238  
 RMBS, investing in, 63–4  
 stock prices, 70–1, 170, 260  
 tangible common equity, 258  
 Wells Fargo and, 150, 175, 266
- Wagoner, Rick, 301–2  
 Walgreen's, 337  
 WAMU. *See* Washington Mutual  
 Warburg Pincus, 160–2, 213–14  
 Warren, Elizabeth, 303
- Washington Mutual  
 generally, 207  
 commercial real estate, investing in, 70  
 downgrading of, 124  
 failure of, 174–5, 217  
 FDIC and, 174–5, 218  
 increase in debt, 114  
 JP Morgan Chase and, 218  
 leadup to crisis, problems during, 152–3  
 Lehman Brothers situation compared,  
 179–80, 223, 271–2, 279–80  
 losses during crisis, 3–4  
 poor management, 5–6  
 restitution costs, 238  
 RMBS, investing in, 63–4, 68  
 servicers and, 60  
 stock prices, 63  
 TARP and, 181
- Washington Public Power Supply System,  
 132–3

- Wealth losses  
  as burden to recovery, 8, 217  
  early Obama Administration, during, 294–6
- Weil, Gotshall & Manges, 278
- Weil, Jonathan, 125
- Weill, Sandy, 264
- Welch, Jack, 269
- Wells Fargo  
  acquisitions in mortgage industry, 150  
  commercial real estate, investing in, 70, 98,  
    138–40  
  losses during crisis, 205–6  
  mortgage securitization, effect of, 237  
  restitution costs, 238
- RMBS, investing in, 63–4  
  stock prices, 70–1, 170, 260  
  tangible common equity, 258
- Wachovia and, 150, 175,  
  266
- Westdeutsche Landesbank, 160–1
- Western Electric, 17–18
- Willumstad, Robert, 169
- World Bank, 12–14
- WorldCom, 22, 31–2, 46–7
- Young, Michael S., 347–50
- Zuckerman, Gregory, 170–1