INDEX

Accounting procedures
for low coupon bonds, 151n
for mortgages, 212

Accurate forecasting hypothesis, 407
See also Expectations hypothesis.

Accretion costs, and mortgage yield differential, 212

Agency issues
as collateral, 386n
Cyclical behavior of, 387–390

Allocation inefficiency, and interregional mortgage yield differentials, 213–214

Almon-Lagrange interpolation technique, 154n–155n

Amortization schedule, and probability of ex ante quality, 286n

Amplitudes of interest rates, see Cyclical amplitudes of interest rates.

Analysis of variance test, 58–59, 59n

Arbitrage, see Seasonal arbitrage.

Assets, money as, 121n, 128

Atkinson, T.R., 311n, 330n

Auditing, see Accounting procedures.

Autonomous forecasting, xxxi, 426–429

Autoregressive component of forecast, xxxi, 429–431

Baltimore and Ohio Railroad, 145n–146n

Bank-note circulation curves, seasonal variations in, 51

Bankers’ acceptances yields
F statistic for, 63
seasonal adjustment of, 66–68 seasonal patterns for, 43, 130
See also Short-term interest rates.

Bankers’ discount, 358n

Banks, monetary policies of, 112
See also Commercial banks; Mutual savings banks.

Beck, Morris, xxiii n, 193n

Becker, Gary, 337n

“Behavioral” theories of forecasting, xxxi–xxxii

Bid prices, and call prices, 140n

Bierwag, G.O., 391n

Blank, David M., xxvi, 193n

Bond indebtedness, and call options, 146, 145n–146n

Bond yields
cyclical amplitudes of, 19, 21
and ex ante quality concept, 282, 282n, 291–292
monthly computation of, 42n
secular trends in, 14–16
See also Long-term bond yields; Short-term bond yields; Yields.

Borrower, advantages of callability to, 135, 139

Borrowing cost, and seasonal arbitrage, 115n

Bowlin, Oswald D., 144, 144n

Brown, William H., Jr., 3n, 4n, 35n

Burns, Arthur, 50n, 52n, 58n, 97n

Business conditions
and call money market, 13–14
and cyclical amplitude of interest rates, 21
and Treasury bill rates, 13–14
See also Business cycle.

Business cycle
and ex ante quality of debt instruments, 263–264
Index

Business cycle (cont.)
and seasonal adjustment, 55–56, 98
and securities yields, xxix
See also Cyclical behavior.

Cagan, Phillip, xxiii, xxiii n, xxiv, xxix n, 35n, 120n, 134n, 138n, 281n, 391n

Call deferment
and computation of probability of ex ante quality, 318–322
and exercise of call option, 135
influence on public utility bond yields, 164–172
and interest rates, 162n
and yields on new issues, 137–138

Call money rate
and business cycles, xxiv, 13–14
conformity to reference cycles, 5
and Federal Reserve System, 339
lagged timing of turns in, 12
seasonal amplitude of, 39, 40, 40n

Call options, 138–139
and bond indebtedness, 146, 145n–146n
and bond yield, 141–142
definition of, 135
disadvantages to lender of, 140–141
factors influencing exercise of, 135, 142–146
and influence of coupon rate on bond yields, 146, 149–150

Call price, 140n
and call protection, 161
and exercise of call option, 135
and profitability of call, 141

Call protection
and government and corporate bonds, xxviii, 321, 321n
and multiple regressions on relationships between coupon rate and bond yields, 152–153

Call provisions
and corporate bond yields, 134–138
and ex ante quality of direct placements, 289
restrictions on, see Call deferments.

Capital flows, between mortgage markets, 208
Capital gains limitation, and coupon rate, 170
Capital loss risk, and term structure, xxix
Capital markets
determinations of seasonality in, 51
imperfections in, and call deferment, 166

Capital outflows, and term structure, xxx
Capital-deficit areas, fund transfers to, 212

Chandler, Lester V., 3n
Charles E. Quincey Co., 388n
Chicago, mortgage yields in, 202
Chow, Gregory, 391n
Climate, and soft-drink consumption, 97
Clustering, of turning points in interest rates, 12–13

Cohan, Avery, xxiii, xxiii n, xxv, xxvii, xxviii
Collateral for bank loans, 433
agencies and governments compared for, 386n
Commerce Department, 195
Commercial banks, and residential mortgages, 189ff

Commercial paper rates
and business cycles, xxiv
conformity to reference cycles, 5
lagged timing of turns in, 12
seasonal adjustment of, 67, 69–70, 97n
See also Short-term interest rates.

Computers, for seasonal adjustment, 59

See also X-11 method.

Conard, Joseph W., xxiii n, 3n, 134n

Contract rate differentials, distinguished from effective rate differentials, 197–199

Cootner, Paul, 134n, 337n

Corporate bonds
characteristics, and probability of call, 141–142

cyclical behavior of, 387–390
definition of, 42n

and exercise of call option, 142–146

See also Corporate bond yields; Yields.

Corporate bond yields, xxvii

and call features, 139–142

and coupon rate, xxv–xxvi

and exercise of call option, 144

increased amplitude of, 19

influence of call provisions and coupon rates on, 134–138

seasonal variations for, 46–47

See also Corporate bonds; Yields.

Corporate investment funds

diminished supply of, 39, 39n–40n

seasonal needs for, 42–43

Cost, of call options, 140n

See also Cost-return analysis.

Cost-return analysis, of seasonal arbitrage, 111

Coupon rates

and corporate bond yields, xxv–xxvi, 134–138

and ex ante quality of debt instrument, 286, 286n

and probability of call, 142, 170

and public utility bond yields, 146–161

Credit demand, and interest rates, 119–120

Crop movements

and seasonal demand for credit, 41

and seasonal variations of interest rates, 37, 39

Cross-spectral analysis, see Spectral analysis.

Culbertson, John M., 337n, 338, 341n, 355n

Currency supply, see Money supply.

Cyclical amplitudes of interest rates, 16–21

and business activity, xxiv

seasonal, see Seasonal amplitudes.

Cyclical behavior of interest rates of agency issues and corporates compared, 387–390

amplitude of expansions and contractions as measure of, 16–21

and data accuracy, 4–8

and liquidity preference and expectations hypotheses and agency issues and corporates compared, 387–390

Hicks model, 379–387

Lutz-Meiselman model, 373–379

on reference cycle basis, 8

series covered for study of, 3

trends in, 21

de Chazeau, Melvin G., 337n

Dearborn, DeWitt C., 281n

Debt, see Bond indebtedness; Ex ante quality.

Debt instruments, ex ante quality of, see Ex ante quality.

Decomposition of time series, see Macaulay's test.

DeLeeuw, F., 391n
Demand, for money, 121n, 126, 128–130
Demand analysis, 128–130
Demand curve, and interest rates and money supply, 119–120
Denney, R.L., 151n
Depression of 1921, recovery of short-term rates from, 12
Deviations from trend-cycle component, see SI ratios.
Devine, C.J., 354n
Diller, Stanley, xxiii, xxiv–xxv, xxxi
Direct placement market, see Ex ante quality.
Dobell, A.R., 393n
Dow Jones index of industrial stock prices, 428–429
Dummy variable technique, 52–53, 191–192
Durand, David, 151, 151n, 352, 353, 363, 366ff, 417n
Durand’s yield curves, 349–350
“Easy money” policies, xxv
Eckstein, Otto, 35n
Eclectic theories of term structure, 112n
Econometrica Society, 337n
Economic climates, and ex ante quality of debt instruments, 283–285
See also Business cycles.
Economic models, and relation between interest rates and money supply, 53n
Economy, adaptation to seasonal movements, 53
Eisenpress, Harry, 48n, 49n, 57n
Elasticity of demand, for money 126, 128–130
Equations bias, and yield changes, 154n
Equilibrium trade-off, between yield and certainty of principal, 110–111
Error-learning theory of forecasting, xxxi, 417–421, 425
Ex ante quality of debt instruments
assumptions and extraneous influences on, 290–294
and economic climate, 283–285
ideal measure of, 281–282
probabilities of, see Probabilities of ex ante quality.
uses for measurements of, 288–290
and yield differentials, 288
Expansion, economic
and term structure, xxx
and yield differentials, 384
and autonomous forecasting, 426–429
Culbertson’s test of, 341
and cyclical behavior of interest rates
Hicks model, 379–387
Lutz-Meiselman model, 373–379
description of, 338–339
existing evidence of, 339–353
and extrapolative forecasting, 417–421
and Federal Reserve influence on yield curve, xxx
and forecasting, xxix, 429–433
Hickman’s tests of, 340–341
and inertia, 359
Macaulay’s tests of, 339–340, 392–397
and market segmentation hypothesis, 343
Meiselman’s test of, 344–353
new evidence for, 353–373
and return-to-normalcy hypothesis, 422–425
and seasonality in money market, 370–371
and term structure of interest rates, 413–414, 431–433
tests of, xxix–xxx, xxxi
Walker’s test of, 341–344
and yield curve, 154n, 391
and Macaulay’s test, 401–411
and time pattern, 397–401
Expected yield, on risk securities, xxviii
Extrapolative forecasting, xxxi, 425
and expectations hypothesis, 417–421

$F$ statistic
for bankers’ acceptances yields, 63
and evaluation of seasonality of interest rates, 60, 62–63
for private long-term securities, 87–88
and test for stable seasonality, 52
for Treasury bills, 62, 85
$F$ test
and seasonal adjustment methods, 58
for stable seasonality, 101n
Fand, D., 393n
Federal Home Loan Bank Board, xxvi, 187, 189n, 190, 209, 388n
Federal Power Commission, 161–162
Federal Reserve Act
and relationship between interest rates and components of money stock, 55–56
and seasonal changes in demand for currency, 40
Federal Reserve Bulletin, 112
Federal Reserve System
and business cycles, xxiv
and cyclical amplitude of interest rates, 21
discount rate, lagged timing of turns in, 12
and elimination of seasonality of interest rates, 41–42
influence on arbitrage of, 116
and money supply, 40, 125n
“operation twist,” xxx–xxxi
pegging of U.S. bond and bill yields, 5
and seasonal variations of call money rate, 339
and seasonal variations of credit supply, 36
and seasonal variations of interest rates, 37, 118–119
and shape of yield curve, xxx
and short-period fluctuations in credit demand, 42, 42n
and tight and easy money policies, xxv
and Treasury bill prices, 63
Finance company issues
probabilities of ex ante quality of, 289–290, 298–309
compound, 322–326
computed, 317n
Financial institutions, and ability to equate yields, 292
Financial markets, sensitivity to cyclical influences, xxxiv, 21
Financial Survey of Urban Housing, 195
Fisher, Lawrence, 281n
Fisher, Walter D., 35n, 120n, 338
Forecasting
accuracy measures of, 429–433
and index of industrial production, 428–429
and return-to-normalcy hypothesis, 422–425
See also Autonomous forecasting; Expectations hypothesis;
Forecasting (cont.)

Extrapolative forecasting.

Forecasting models, see Extrapolative forecasting; Error-learning theory of forecasting; Return-to-normalcy hypothesis.

Forman, H. Irving, 3n, 35n, 281n, 337n, 363n

Forward rates, and future spot rates, 338, 349n

See also Expectations hypothesis.

Fraine, Harold, 281n, 327ff

See also Hickman-Fraise method.

Frankena, Mark W., xxiii, xxv, xxv—xxvi, 138n, 154n

Fredericksen, D.N., xxiii, xxv, xxv—xxvii, 195n

Friedman, Milton, 3n, 40n, 55n, 118n, 129n, 281n

Fund transfers, interregional, 212

G-21 computer, 393n

Geographical location, and mortgage yields, see Residential mortgage yields.

GNP

and ex ante quality of debt instruments, 283

seasonal amplitude of, 120n

Gouldin, Gnomi Schrift, 35n

Government bond yields

compared with corporate bond yield, xxvii—xxviii

cyclical behavior of, 379–387

and expectations hypothesis, 341, 364–373

seasonal variation of interest rates for, 44–45

long-term, 289

See also Yields.

Government fiscal activity, and seasonal variations in credit demand, 39

Government securities, see Government bond yields; Treasury bill rates.

Granger, C.W.J., 393n

Graphic analysis of seasonal variations of interest rates of municipal securities, 87

of private long-term securities, 87–89

of U.S. Treasury securities. 83–86

Grebler, Leo, xxvi, 193, 193n

Gross national product, see GNP.

Grove, M.A., 391n

Guttentag, Jack M., xxiii n, 3n, 35n, 42n, 134n, 138n, 193n, 209, 209n, 281n, 391n

Hale, William, 281n

Hardy, Charles O., 39n

Hawtrey, Ralph G., 343n

Hedging theory, 111

Henderson curve, 49n

Hendrickson, Robert, 281n

Hess, Arleigh P., Jr., 138, 138n, 162n, 163, 163n, 164, 164n


See also Hickman-Fraise method.

Hickman-Fraise method, 290, 330ff

Hicks, John R., 338, 348n, 392n

See also Hicks model.

Hicks model of expectations hypothesis, 379–387

Hinich, Melvin, 391n

Hoadley, Walter E., 35n

Holding money, cost of, 356–357

Holland, Thomas E., 4n

Homer, Sidney, 134n, 151n, 155, 281n

See also Homer hypothesis.
Homer hypothesis, 157
*House and Home*, 209
Housing demands, and mortgage market, 208–209

Index of industrial production, and forecasts of interest rates, 428–429
Industrial bonds
- probabilities of ex ante quality of, 298–309
  - compound, 322–326
  - computed, 317–318

Inertia hypothesis, and expectations hypothesis, 359

Inflation, 42

Information costs, and mortgage yield differentials, 209

Institutional factors
- and seasonal adjustment methods, 54–55
- and selection of securities, *xxx–* *xxxi*

Institutional investors
- and call deferment and bond yield, 163
- and high-coupon bonds, 151n

Insurance companies, and government securities, 294
*See also* Life insurance companies.

Interest, foregone, and arbitrage decisions, 107

Interest costs, and refunding, 144–145, 162n

Interest income, taxes on, 19

Interest payment, and ex ante quality of debt instruments, 281–282

Interest rates
- cyclical behavior of, *see* Cyclical behavior of interest rates.
- data on
  - periods covered by, 8
  - sources and accuracy of, 4–8

forecasting, *xxix–* *xxx*, *xxxi–* *xxxii*,
*See also* Forecasting.

government policy on, 341–344
and investment, 48
lagged timing at reference turns, 8–16
and liquidity premiums, 358
and long-term borrowing, 40–41
and money supply, 55–56, 119
on mortgages, *see* Mortgage yield differentials; Residential mortgage yields.
seasonal amplitude of, *see* Seasonal amplitude of interest rates.
seasonal variation of, *see* Seasonal variation of interest rates.
special influences on, 5, 8
spectral analysis of, *see* Spectral analysis.
term structure of, *see* Term structure.

and yield structure, *xxv
*See also* Long-term interest rates; Short-term interest rates; Yield.

Interest savings
- and exercise of call options, 144–145
- measurement of, 145n

International Business Machines Corp., 337n

Interregional mortgage yields differentials, 195–196
- and distinction between contract rates and effective rate, 197–199
- impact of risk variables on, 203
- by lender type, 200–202
- method of analysis of, 190–191
- prior research on, 193–195
- by purpose of loan, 199–200
- by states and metropolitan areas, 196–197

Intraregional mortgage yield differentials, 203–208
Investment, and interest rates, 48
Investors’ expectations, see Expectations hypothesis.
Irregular movements
and calculation of turning point
dates, 4n
differentiated from seasonal am-
dplitude, 111
distinguished from seasonal pat-
terns, 53–54
Iteration, and seasonal adjustment, 57

Jen, Frank C., 134n, 145n, 161n
Joint Economic Committee, 386n
Jones, Lawrence, 281n
Juster, F. Thomas, 3n, 281n

Kane, Edward J., xxix, xxix n
Kemmerer, Edwin W., 51, 51n, 55–56, 112n
Kessel, Reuben A., xxiii, xxiii n, xxviii–xxix, xxx, xxxi, 114n, 391, 391n, 422n, 429n
Keynes, 338
Kilgore, Richard, 337n
Klaman, Saul B., xxiii, xxiii n
Knowles, Allen, 388n
Kuznets, Simon, 55n
Kuznets amplitude-ratio method of seasonal adjustment, 97–105

Latané, Henry, 218n
Laws, and mortgage differentials, 210–212
Lee, Jae Won, 35n
Lee, Maurice W., 281n
Lenders
and concept of ex ante quality, 283–288
disadvantages of callability to, 135, 140–141
of residential mortgages, 188–189
and subjective probabilities of yields on new issues, 335–336
Lender type
and area yield differentials on mortgage loans, xxvi
and interregional mortgage differentials, 200–202
See also Lenders.
Lending process, and probabilities of ex ante quality, 285
Life Insurance Association of America, 281n
Life insurance companies
and probabilities of ex ante quality of direct placements, 289
and residential mortgages, 189ff
taxable income of, 150–151
Liquidity preference hypothesis, 111, 342–343
and cyclical behavior of interest rates
of agency issues and corporates compared, 386n, 387–390
and Hicks model, 379–387
and Lutz-Meiselman model, 373–379
and expectations hypothesis, xxix, 337–338, 372–373
stability of, 362–363
and term structure, 433
Liquidity premiums, 379, 379n
estimates of, 364
and expectations hypothesis, 350–352
and interest rates, 355–356, 358
as percentage of total return, 379
stability of, 366
Litzenberger, Robert, 281n
Loan characteristics information costs, see Information costs.
Loan purpose, and yield differentials, xxvi
Long-term bond yields, 4
graphic analysis of seasonal variations in, 90–95
See also Long-term securities.
Long-term interest rates
seasonal variations of, 42–47
lagged timing at reference turns, 8
Long-term securities
holding for limited periods, 43
private, graphic analysis of seasonal variations of, 87–89
seasonal arbitrage on, 106–111
Lovell, Michael C., 53n
Luckett, Dudley G., 343n
Lutz, Friedrich A., 338, 338n, 348n, 355n, 358n
See also Lutz-Meiselman model.
Lutz-Meiselman model of expectations hypothesis, 340, 343n, 344n, 373–379
See also Macaulay’s test.
Macaulay’s test, 392–397
and expectations at short end of yield curve, 397–400
Malkiel, Burton G., xxix, xxix n, 344n, 391n
Manufacturers, and seasonal variations of interest rates, 37
Margin requirements, for Treasury securities and private securities compared, 109–110
Market forecasting, see Forecasting.
Market segmentation hypothesis, 343, 353, 371, 372–373
Marketing, and underwriter bids on deferred and callable bonds, 166n
Maturity, see Term to maturity.
McEnally, Richard, 281n
McRee, James F., Jr., 3n
Meltzer, Allan H., 3n
Mendershausen, Horst, 48n, 55n, 57n
Mincer, Jacob, 337n, 429n, 430n
Minsky, Hyman, 337n
Mitchell, Wesley C., 50n, 52n, 58n, 97n
Models, for forecasting, xxxi–xxxii
See also Extrapolative forecasting; Error-learning theory; Return-to-normalcy hypothesis.
Modigliani, Franco, xxxi n, 391n
Monetary policies
and seasonality, 112
and term structure, xxx
See also Money.
Money
as asset, 121n, 128
infusions, and seasonality of interest rates, 42
See also Money market; Money supply.
Money market
changes in, 5
and interest rates, 55–56
and seasonal amplitude of Treasury bill rates, 127–128
and seasonal variation of interest rates, 35
Money substitutes, Treasury bills as, 356
Money supply
Federal Reserve control of, 125n and interest rates, xxiv, 53
prior to Federal Reserve Act, 40 and seasonal amplitude of Treasury bills, xxiv–xxv
seasonal amplitudes of, see Seasonal amplitudes of money supply.
Index

Monopoly structure, of residential mortgage market, 213n
Monthly factor curves, of Treasury bill rates, 65–66
Moody's series
   Baa and Aaa compared, 388 for new and seasoned Aa public utility bonds, 138n
Moody's Bond Survey, 163, 163n
Moore, Geoffrey H., 3n, 5n, 35n, 281n
Morgan Guaranty Trust, 295, 295n
Mortgage capital, flow into Southern states of, 211n
Mortgage loan purpose, 199–200
Mortgage market
   interest rate changes in, xxiii as local market, 208–209
Mortgage risk characteristics, 203
Mortgage yield differentials, xxvi–xxvii, 208–209, 212–214 and acquisition and servicing costs, 212
distinguished from contract rate differentials, 197–199
and geographical mix, see Interg regional mortgage yield differential; Intraregional mortgage yield differential.
and information costs, 209
legal constraints as factor in, 210–212
See also Residential mortgage yields.
Morton, J.E., xxvi, 193, 193n
Moving averages
   and computation of moving seasonal factors, 54
   of current and past spot rates, 426n
deviations from, 50–51
and elimination of seasonal movements, 36
and estimates of turning point dates, 4n
and seasonal adjustment, 49
of short- and long-term rates, 374n
of varying terms, see Henderson curve.
Multiple regressions
   and expectations hypothesis, 363 on probabilities of ex ante quality, 309–317
and property location as yield determinant, 191–192
and relationship between coupon rates and bond yields, 152–161
and X-11 method, 57n
Multiplicative adjustments, 56–57
Municipal bond yields
cyclical amplitude of, 19
seasonal variations of, 43, 110
graphic analysis of, 87
Mutual savings banks, and residential mortgages, 189ff
National Bureau of Economic Research, xxiii, xxv, xxvii, 4n, 281n, 337n, 340
Bond Project, 282n
Interest Rate Project, 134n
Review Committee, 281n
yield study, 329
National Monetary Commission, 55
Negotiated market rates, lagged timing at reference turns of, 8, 12
New commitments, ex ante quality of, 310–317
New construction mortgages, see Residential mortgages.
New York, mortgage yields in, 202
New York Times, 163–164, 164n
Nonpecuniary yields, and term to maturity, 383–384
Nonseasonal variation of interest rates, 36
O'Leary, James J., 310n
Open-market rates, lagged timing at reference turns, 8, 12
"Operation twist," xxx–xxxi
Output, special influences on, 5, 8
Owens, Richard N., 39n
Panics, seasonality of, 55–56, 56n
Parks, Robert, 281n
Portfolio selection theory, xxxii
Prediction, see Expectations hypothesis; Forecasting.
Price appreciation on coupon bonds, and tax treatment, 150–151
Price maintenance agreements, 166–169
Prices
and callability, 166–167, 166n
of low coupon bonds and high coupon bonds compared, 151n
special influences on, 5, 8
Private bonds
margin requirements for, 109–110
seasonal variation of, 45–47
Probabilities of ex ante quality of direct placements, 289–290, 326–327
and adjustment for differential call deferment, 318–322
compound, 322–326, 330–335
of industrial and utilities compared, 317–318
of industrial and utilities compared with governments, 298–309
method of obtaining, 294–298
realized, 329n
simple, 327–329
subjective probability of, 282–288
and yield-fixing on new issues, 335–336
time series regressions on, 309–317
Public utility bonds
probabilities of ex ante quality of, 298–309
computed, 317–318
compound, 322–326
refundings, and interest costs, 144–145
See also Public utility bonds yield.
Public utility bonds yield, xxvi
influence of call deferments on empirical evidence of, 164–172
and opinions and policies of regulatory commissions and financial community, 161–164
influence of coupon rate on, 146–161
and call option hypothesis, 146, 149–150
historical record, 146
miscellaneous reasons for, 150–152
multiple regression evidence for, 152–161
seasonal factors for, 80
spread between, 138n
Pye, Gordon, 293n, 321, 321n
Quality variables, see Ex ante quality.
Railroad bonds, 78
Ratios
of cyclical amplitudes of specific cycle phases, 17, 20
of lag of rates among reference turns with lags among rates, 12–13
See also SI ratios.
Ratio-to-moving-average method of seasonal analysis, 51
and X-11 program, 57
"Realized compound probabilities," 290
Recessions, and ex ante quality of debt instruments, 283
Index

Refield, John J., 211n
Rees, 393n
Reference cycles
and comparison of cyclical amplitudes between periods, 17
interest rate conformity to, 5
Reference turns, lagged timing of interest rates at, 8–16
Refunding deferments, see Call deferments.
Refundings, see Call options.
Regressions, see Multiple regressions.
Regulatory commissions, see Federal Power Commission; Securities and Exchange Commission.
Residential mortgage yields
and property location, 187–188, 191–192
analysis methods, 190–191
data for, 188–190
and interregional differentials, see Interregional mortgage yield differentials.
and intraregional differentials, see Intraregional mortgage yield differentials.
Retail sales data, seasonal adjustment of, 48–49
Return-to-normality hypothesis, xxxi, 422–425
Risk
and government and corporate bonds, xxviii
measurement, 111n
and short-term and long-term securities, xxix
See also Ex ante quality.
Roberts, George B., 337n
Roberts, Harry V., 350n
Robinson, Joan, 343, 343n
Roll, R., 401n
Rua, A.P., 151n
Sakowitz, Sophie, 3n
Salomon Bros. & Hutzler, 354n
Sampling problems, and seasonal adjustment, 131
Samuelson, Paul A., 337n
San Francisco, mortgage yields in, 202
Sargent, Tom, xxiii, xxix–xxx, 60n, 393n
Savings and loan associations, and residential mortgages, 189ff
Schaff, A.H., 195, 195n
Schoen, R.J., 151n
Schwartz, Anna Jacobson, 35n, 40n, 55n, 118n, 129n
Seasonal adjustment of interest rates, 4n, 48–49
and changes in amplitude, 100
on computers, 57–58
and cyclical components, 98
evaluation of
for long-term bonds, 90–95
for long-term securities, 72, 75–83
for short-term rates, 66–72
and “hunch,” 58n
and moving seasonal factors, 53–57
and one-time changes in SI ratio patterns, 95, 97
and sampling problems, 131
and SI ratios, 49–51
and stable seasonal factors, 52–53
and term structure data, 112–113
for Treasury bills, 95–105
Seasonal amplitude of call money rates, 40n
Seasonal amplitudes in currency outstanding, 40
Seasonal amplitude of GNP, 120n
Seasonal amplitudes of interest rates, xxiv–xxv, 35, 72, 88–89
and arbitrage, 107, 132
cause of variations in, 132–133
determination of, 105–106
Index

and short-term securities, 111–116, 127
and long-term securities, 106–111, 127
differentiation from irregular movements, 111
long-term and short-term compared, 44
and money supply, 116–127
moving, 53–58
of municipal securities, 110
and seasonal adjustments, 100
stable, 58
and term to maturity, 106–111, 130–131
of Treasury bills, 127–128
See also Seasonal variation of interest rates.

Seasonal arbitrage, 106–111
costs of, 115, 115n, 132
and Federal Reserve policies, 116
and seasonality of interest rates, 43, 115, 115n
and term structure, 105
Seasonal demand for credit, and crop movements, 41
Seasonal highs and lows, 101n
Seasonal variations in capital markets, 51
Seasonal variations of credit conditions, 35–36
Seasonal variations in demand for credit, 37
Seasonal variations of interest rates, 35–36, 130–133
adjustment methods, see Seasonal adjustment of interest rates.
and credit conditions, 35–36
determination of, 36
ratio-to-moving-average method, 51
economy's adaptation to, 53
evaluation of evidence of, 58–60
and short-term securities, 60–63
and Treasury bill rates, 63–66
and Federal Reserve policies, 41–42
intuitive evidence for, 47
graphic analysis of, 83–87
and long-term borrowing, 42–47
moving, 53–57
for municipal securities, 87
periods of, 37, 39
reliability of estimates of, 45
short-term, 37–42, 73–76
and Federal Reserve, 40–41
smoothness of, 115n
stable, 52–53
and term to maturity, 44–45
Seasonal variations in money market
and tests of expectations hypothesis, 391
Seasonal variations in soft-drink consumption, 95, 97
Seasonal-irregular ratios, see SI ratios.
SEC, see Securities and Exchange Commission.
Secular trends in interest rates
and cyclical amplitude increases, 19
and timing, 14
Securities and Exchange Commission, 161–162
Selden, Richard T., 4n
Sherman, Helen B., 210n
Sherman, Malcolm C., 210n
Shiskin, Julius, 48n, 49n, 57n
Shiskin-Eisenpress computer program, 4n
Short-term interest rates
and arbitrage, 43, 43n
evaluation of seasonal adjustment of, 66–72
seasonal variations in, 35–42, 130
secular trends in, 14
Short-term interest rates (cont.)

and term structure, 105
timing of turns in, 12–13
trends in cyclical behavior of, 21

Short-term securities
determinations of seasonal amplitudes for, 111–116
evaluation of seasonal variations of, 60–63
preference for, 353
seasonal factors for, 73–76

SI ratios
analysis of variance tests on, 52, 52n
for bankers' acceptances, 68
for commercial paper rates, 69
and estimates of moving seasonal factors, 54–55
and estimates of stable seasonal factors, 52–53
identification of deviations from, 58–59
for municipal bond yields, 87–89
and seasonal adjustment, 49–51, 59–60
and slope of yield curve, 113, 113n
and stable seasonal factors, 52–53
symmetry of, 50
and Treasury bill rates, 63–66
for U.S. government securities yields, 71
for U.S. Treasury securities, 83–86
SI ratio curves, compared with seasonal factor curves, 95–105
Spectral analysis, xxx, 392–397
and implementation of tests of expectations hypothesis, 408–409
and Macaulay's test, 402–406
of seasonal variation of interest rates, 60n
Speculators
and expectations hypothesis, xxix–xxx
in government securities market, 341
Spot rates, and forward rates, see Expectations hypothesis.
States of nature, see Economic climate.
Statistics, see Summary statistics.
Stigler, George J., 213n
Strikes, and interest rates, 5
Subjective probabilities of ex ante quality of direct placements, 282–288
Substitutability between securities, 371
Summary statistics of seasonality of long-term interest rates, 72, 75–83, 90–95
of short-term interest rates, 60–63, 70–72
Supply and demand for credit, and interest rates, 35, 37
Supply and demand for money, and seasonal amplitudes, 132–133
Sutch, Richard, xxxi n, 391n
Symmetry, imposed on SI ratios, 50
Taxes
on bank deposits, 373n
and cyclical amplitudes of interest rates, 19
and government fiscal activity, 39
on insurance company income, 150–151, 150n–151n
and relationship of yield to coupon rate, 150–152
Term to maturity
and arbitrage decisions, 106–111
and exercise of call option, 135
and market segmentation hypothesis, 371
and nonpecuniary yields, 383–384
and seasonal variation of interest rates, 43–45, 130–131
and SI ratios, 85–86
See also Term structure of interest rates.

Term structure of interest rates
eclectic theories of, 112n
expectations component of, 413–417, 431–433
and expectations hypothesis, 337–353
and forecasting, xxxi–xxxii
and liquidity preference hypothesis, 342–343
and monetary policies, xxx
theories of, 111–112

“Tight money” policies, xxv

Time patterns, under accurate forecasting, 397–401

Time series decomposition, 111

Time trend, and yield change, 155, 155n

Timing, of turns in interest rates, 8–16

Tomkins, Judy, 337n

Transaction costs
and arbitrage, 43, 107
on government securities, 293–294
and liquidity, 433

Treasury bill yield
and business conditions, 13–14
F statistic for, 62–63
Macaulay’s test applied to, 401–411
91-day, 43n, 113
role in post-World War II money market, 4
seasonal adjustment of, 95–105
seasonal variations of, xxiv–xxv, xxx, 54, 62–63
distinguished from irregular movements, 53–54
evaluation of, 63–66
graphic analysis of, 83–86
term to maturity related to seasonal amplitudes of, 109–111
tests of expectations hypothesis using, 365–373
timing at reference turns, 8, 12
28-day and 56-day compared, 356–360, 357n
Treasury-Federal Reserve accord, 41
and call options, 142–143
and seasonal variations of interest rates, 54

Trend cycle component, seasonal component as function of, 55

Tron, Joan, 281n, 337n
Trubek, Josephine, 3n
Trustman, Stanley, 281n

Turning point dates, 4–5

Unemployment, seasonal decline in, 55
U.S. Bureau of the Census, 36
U.S. Treasury bills, see Treasury bill yields.

University of North Carolina, 281n

Van Horne, J., 391n

Wallace, Neil, 415n
Wallic, Henry, 281n
Wallis, W. Allen, 350n, 372n
Wartime controls, and interest rates, 5
Wert, James E., 145n, 161n

Wharton School, 162n

Wholesale and retail trade, and seasonal variations of credit demand, 39

Wickens, David L., xxvi, 195, 195n
Willits, Joseph H., 3n
Winn, Willis J., 138, 138n, 151, 151n, 162n, 163, 163n, 164, 164n
Winnick, Louis, xxvi, 193n

Wojnilower, Albert, 134n
Wood, John H., xxx, xxx n, 391n
World War II, government interest rate policy during, 342–344

X-11 method
and analysis of variance test on SI ratios, 52, 52n
and Kuznets method, 113n
and seasonal adjustment, 57–58, 94
and SI ratios, 59

Yields
for direct placements and governments compared, 290–294
equality in, 355n
increase with maturity, 111
and interest rates, xxv
and maturity, xxviii–xxix
offering and realized, 145n
and regressions on relationship between coupon rate and, 153–157
on six-month and three-month securities compared, 43n
See also Bond yields; Long-term bond yields; Short-term bond yields; Yield curve; Yield differentials.

Yield curve, xxix
determination of, xxx
expectations at short end of and Macaulay's test, 401–411
and time pattern, 397–401
and Federal Reserve policies, xxx–xxx1
and long- and short-term yields compared, 342n
and SI ratios, 113, 113n
tendency to incline at diminishing rate, 111
and tests of expectations hypothesis, 366–367, 391

Yield differentials
aggregate, 111n
between corporates and governments, 288
between direct placements and government bonds, 290–294
between low- and high-grade bonds, and business cycles, 389, 389n
between short- and long-term securities, 375
between Treasury bills and governments, 384
and market ratings, 295n

Yield spread
between public utility bonds, 138n
and callability and coupon rate, 165, 165n
level approaching zero, see Zero spreads.
and price maintenance agreements, 167–169

Yntema, Theodore O., 3n

Zarnowitz, Victor, 429n

Zero spreads, and regressions on relationships between coupon rate and bond yield, 159