INDEX

(The discussions have not been included in the index.)

Abramovitz, Moses, 12, 12n, 14
Accelerator principle, 14n, 19n, 22, 23
Accelerator variables, 14, 14n, 22
Adelman, Frank L., 25n, 26, 27n, 242, 243, 262n
Adelman, Irma, 25n, 26, 27n, 242, 243, 262n
Aggregate economic activity
  in business cycle recessions and slowdowns, 90–92, 99, 110–12, 125
  and the conceptions of business cycles, 2–3, 39–40, 125–26
  and the definition of growth cycles, 41, 47
  indicators of
    in 1948–70, 93, 94–97t, 98–99
    in 1969–70, 112, 113, 114t, 115, 115t, 116t, 117
pecuniary and real measures of, 90–92, 117–21
  relation to price-level changes, 118–19
See also Business cycle indicators;
  Business cycles; GNP (gross national product)
Andersen, Leonall C., 31n, 32n
Ando, Albert, 15, 15n, 29n
Anti-inflationary measures, effects on fluctuations and growth, 10
ASA-NBER (American Statistical Association and National Bureau of Economic Research)
Quarterly Survey of Economic Outlook, 185, 185n, 228
AT&T trend in production, 130–31t, 132, 133t
Average workweek, 244, 245t
Balance of payments, 6
Banking and financial system reforms, 7
Barger, Harold, 109
Becker, Gary S., 11
Benchmark forecasts. See Business cycle indicators; Extrapolative models
Bernstein, Martin, 12, 12n
Blyth, C. A., 39n
Boschan, Charlotte, 26n, 43, 43n, 44, 45, 54n, 59n, 63, 67, 140, 185, 185n, 240, 241n, 252n
Boschan-Bry computer program. See Bry-Boschan computer program for cycle dating
Brady, Dorothy S., 15n
Brainard, William C., 247n
Bronfenbrenner, Martin, 2n, 10n, 14n, 34n
Brookings model, 14n, 26n, 33n, 233n
  in business cycle analysis of econometric model simulations, 242, 243–44, 245–50t, 259
  hundred-quarter ex ante simulations with, 253–56, 257t, 258
  sample-period simulations with, 249, 250r, 251–53, 253t
Brumberg, R. E., 15, 15n
Bry, Gerhard, 12, 43, 43n, 44, 45, 54n, 59n, 63, 67, 140
Index

Bry-Boschan computer program for cycle dating, 42–43, 44, 45, 53–57, 69–70, 70n, 140
Bureau of Labor Statistics, 154n, 166, 244
Burns, Arthur F., 1, 2n, 3n, 7n, 8n, 12n, 13n, 14n, 15n, 16n, 18n, 24n, 39n, 40, 40n, 41n, 42, 42n, 44, 44n, 90n, 91n, 99n, 121, 122n, 123, 126n, 127n, 134, 134n, 135–36, 136n, 137, 139, 147

Business Conditions Digest (BCD), 53, 53n

Business cycle analysis of econometric model simulations
conclusions from, and their interpretation, 25–27, 258–59
exogenous variables in, 243–44, 251, 254–55
hundred-quarter ex ante simulations, 253–56, 257t, 258
methods and data, 243–44, 245–46t
questions addressed to, 241–42
sample-period simulations, 249, 250t, 251–53
six-quarter simulations around business cycle turns, 244, 247, 248t, 249
See also Business cycles; Econometric models

Business cycle indicators, 16, 50–53
deviation cycles in, 65–67, 72t
leading, in business cycles and growth cycles, 36, 47n, 82, 82n, 83–84
in 1948–70 and in contractions since 1920, 93–99, 94–97, 100–109r
in 1969–70, compared with earlier episodes, 115, 116t, 117
"roughly coincident," in 1969–70, 114t, 115t

step cycles in, 67–73, 72t
turning points in, 54–55
used in dating U.S. business cycles by computer methods, 88t
used in dating U.S. growth cycles, 73, 73n
used in forecasting GNP, 200–202
See also indicators of under Aggregate economic activity

Business cycles, 8–9, 10
and agriculture, 120n
and "built-in stabilizers," 6–8, 134
causes of, in economic theory, 17–25
changes in, 2–8, 36–37, 39–40, 134–35
chronology, compared with price cycle chronology, 145, 146t, 147
"classical" and new, concepts of, 2–5, 39–42
compared with "growth cycles," 36–37, 44–49, 81, 135
cumulation of knowledge about, 10–16
definition of, 2, 40, 41, 44, 90, 99, 111–12, 121–22, 139
endogenous and exogenous factors in, 17–18, 21–35, 37, 123–26, 234, 241–42, 258–59
endogenous and exogenous models of, 17–18, 21–22, 23
foreign, 2, 10, 10n, 40n, 42
Keynesian analysis of, 8, 20, 21–25
labor force changes and changes in, 8, 120n
mathematical models of, 20–22
monetary analysis of, 28–34
multiplier-accelerator models of, 20–23
National Bureau studies in, 1–2, 11–16, 18–20, 23–24, 25–26, 41, 137–38, 183–84
and “policy cycles,” 10, 34, 34n
research needed, 36–37, 39n, 82–83, 135–36, 166, 227 ff, 258–59
and stabilization policies, 7–10, 31–35, 134–35
and structural changes in the economy, 6–7, 36, 134–35
See also Aggregate economic activity; Business cycle analysis of econometric model simulations; Business cycle indicators
Cagan, Phillip, 11, 12, 31n, 68n
Cairncross, Alec, 50n
Capital appropriations, backlog of, 114t
Carlson, Keith M., 31n, 32n
Chiang, A. C., 236n
Chow, Gregory C., 37n, 262n
Christ, Carl F., 17n, 27n, 184, 239
Civilian labor force, 1948–70, 96–97t
Cloos, George W., 46n, 58n, 59n, 62, 62n, 63
Cold War, 5
Cole, Rosanne, 121n, 184, 239
Compensation per man-hour, 158, 159t, 161, 165t, 166
Composite indexes
amplitudes of, 78n, 79n
of growth cycles and business cycles, 84
and identification of deviation cycles, 65, 72t, 73n
for selected cyclical indicators, 73–79, 75t, 77t
for step cycles, 74n
Computerized cycle dating, 42–43
See also Bry-Boschan computer program for cycle dating
Conard, Joseph W., 11
Conference on the Economic Outlook, 196, 196n
Construction costs in expansion prior to 1969, 124
Consumer buying intentions and attitudes, 188n
Consumer goods and services, diffusion of price changes in, 147, 148t
Consumer Price Index
diffusion of changes in, 147, 148t
forecasts of, 195, 195n
rates of change in, 142t, 145, 146t, 147, 149, 151t
reference chronology for prices based on, 139–44, 144t, 163–64
timing of, 149, 152–53t, 154, 156t, 157–58
See also Price cycle chronology; Prices
Consumption expenditures
and built-in stabilizers, 6–7
in economic forecasts, 193, 209, 210t, 217, 219t, 220t
errors in forecasts of, 193, 219t, 220t
Consumption theory, 11n, 14–15, 15n
Contractions in economic activity
and business cycle recessions, 111–12, 125–26
and increase in monetary growth, 29
irregularities in, 121–23
and low-rate phase of growth cycle, 45, 81
and price changes, 145, 146t
and rates of increase in GNP and industrial production, 68, 86t, 87t
Index

Contractions in economic activity
(Cont.)
selected measures of, 99, 100–10t,
111–12
See also Recessions
Costs of production
in expansion before 1969–70 re-
cession, 124, 165, 165n
labor costs per unit of output, 14n,
72t, 158, 159–60t, 161, 162t,
165, 165t, 166
other unit costs, 158, 160t, 161,
162t, 165, 165t
relation to cyclical behavior of
prices, 13n, 14n, 19, 23, 118–
19, 138, 158–63, 165–66, 165t
Council of Economic Advisers
(CEA) forecasts, 212, 212n,
213t, 214, 236
Courchene, Thomas J., 15n
Cox, Garfield V., 184, 239
Creamer, Daniel, 12, 12n, 137
Cunnyngham, Jon, 196, 239
Cyclical characteristics of the econ-
yomy, simulations study of. See
Business cycle analysis of econo-
metric model simulations
Damped fluctuations, 21, 22, 26,
234, 249, 251
Darling, Paul G., 15n
de Leeuw, Frank, 27n, 29n, 32, 32n
Demand deposits and currency, 245t
Department store sales, 100–107t
Depression of the 1930's, 4, 7–8
Diffusion indexes, 16, 19, 73–75, 76t,
77–79, 118n, 126
cumulated, for ex ante simulations,
256, 257t, 258
of employment on nonagricultural
payrolls, 97t, 98–99, 108–109t
of price changes, 147, 148t, 164
of production changes, 108–109t,
111, 111n
Diller, Stanley, 239
Dividend distribution, 6
Duesenberry, James S., 15, 15n, 23,
23n, 29n
Durand, David, 11
Dynamic models of business cycles,
17–18, 21–23
Dynamic properties of models, 17–
19, 21–26, 29–30, 36–37, 234,
242, 249, 251, 254
Easterlin, Richard A., 11
Eckstein, Otto, 2, 15n, 29n
Econometric model forecasts
accuracy of, compared with judge-
mental forecasts, 196, 222–23,
224–25t, 225, 226t, 227t
and benchmark forecasts with
leading indicators, 200, 200n,
201–202
ex ante and ex post, 197–99, 218,
219–20t, 221–22, 232–33
and extrapolative benchmark fore-
casts. See Extrapolative models
“fine tuning” of, 197
and judgmental forecasts of exog-
enous variables, 27–28, 196,
196n, 197–98, 232
large and small models, 200–201
monthly, 237–38
reduced-form, 201–202
single-equation, 201–202
and specification errors, 27–28,
232–33, 251, 259, 265n
See also Econometric models;
Economic forecasts; GNP fore-
casts
Econometric models, 24, 28–33
and accelerator variables, 14, 14n
and business cycle analysis and
forecasting, 4, 20, 24–28, 32–
33, 36–37
exogenous variables in, 25–28,
196n, 197–98, 232–33, 258–59
monetary and financial sectors in, 28, 28–29n
and simulation studies of economic policies, 4, 32–33, 35
See also Business cycle analysis of econometric model simulations; Econometric model forecasts; Economic policy simulations with econometric models
Economic forecasts, 4, 192, 196, 230–31
accuracy of, 50, 50n, 186–87, 187–88, 215, 216t, 217
agenda for new studies, 227–28
average errors of, 185–86, 203, 204t, 205–206
base values, changes and levels of, 203, 204t, 205, 209
before and since 1964, 206, 207t, 208, 209, 210–11t, 212
bias in, 188–89
of business economists, 184–85, 187, 215, 216t, 217
CEA forecasts. See Council of Economic Advisers (CEA) forecasts
and cyclical characteristics of forecast period, 173
and cyclical turning points, 189–92
and econometric models. See Econometric model forecasts and economic growth, 188–89
and extrapolative benchmark models. See Extrapolative models feedback effects of, 235–37
of FOMC. See Federal Open Market Committee (FOMC) minutes
of gross national product (GNP). See GNP forecasts
of industrial production. See forecasts of under Industrial production index (Federal Reserve)
leading indicators model as benchmark, 184–86
and national income accounts, 16n
NBER studies of, 16, 16n, 27–28, 183–85
predictive record of, updated, 202–27
of price level, 195–96
private and governmental, compared, 212, 213t, 214–15
private judgmental, 203, 204t, 205–06, 207t, 208–09, 210–11t, 215, 216t, 217
recent and current research on, 183–202
sources and uses of, 183–84
in Western Europe, 236
Economic instability
and changes in business cycles, 2–7
and expectations, 7, 40, 40n
and stabilization policies, 6–10, 31–35
and the structure and institutions of the economy, 3–4, 6–7, 36, 134–36
Economic policy
and business cycle research, 2–3, 13, 13n
correction of errors in, 277n
discretionary vs. nondiscretionary, 252–55
and economic forecasts, 235–37
endogenous and exogenous elements in, 32–34, 235
and implications of growth cycle concept, 42
and 1969–70 recession, 37, 93
role in business cycles, 7–10, 30–35, 134–35
short-term vs. longer-term effects, 9, 34
Economic policy (Cont.)

See also Economic policy simulations with econometric models; Fiscal policy; Monetary policy

Economic policy simulations with econometric models
discount rate in, 272, 272n, 276n
expected utility for each policy, 280–81
experimental simulations described, 265–69
growth rates resulting from, summary statistics of, 277–80, 307, 308t, 309
models used for, 269–71
monetary and fiscal instruments used for, 271–74
personal income tax rate as policy instrument, 271ff
results with FRB-MIT model, 281–85, 286t, 287–88, 289–92t, 293–96
results with Michigan model, 296–97, 298t, 299–301, 302–305t, 306–307
results with Wharton model, 307
stochastic vs. nonstochastic outcomes, 35, 265, 287–88, 289–92t, 293, 301, 302–305t, 306
unborrowed reserves, 271ff, 295, 295t, 296
variances
among-path, 285, 286t, 287, 300, 301t
around constant growth rate paths, 277–80
average stochastic within-path, 282–85, 284t, 299, 300t
See also Economic policy; Fiscal policy; Monetary policy

Economic Report of the President, forecasts in, 200, 212, 212n, 213t, 214
Employment, 114t
cyclical contraction measures, 100–109t, 116t
“full,” meaning and measurement of, 98, 124
and man-hours, nonagricultural, 72t, 95t, 96t
nonagricultural, diffusion indexes and related measures, 97t, 98–99, 108–109t
total civilian, in econometric model simulations, 244, 245t
Employment Act of 1946, 7
Epstein, Lillian, 11n
Evans, Michael K., 24n, 27, 185, 239, 254n
Expansions in economic activity
changes in length, 5, 5n
and high-rate phase of growth cycle, 45, 68, 81
irregularities in, 121–23
and price changes, 145, 146t
prior to 1969–70 recession, 91, 122–25
and rate of increase in GNP, 68
and restrictive forces, 91, 124–25
Expectations, 7, 7n
Explosive fluctuations, 18, 18n, 22
Exports, 120n
changes in, as “autonomous” shocks, 23, 251
Extrapolative models
as aid in explaining structure of forecasts, 186
autoregressive projections, 186
as benchmarks of predictive performance, 186–87, 189–90, 197–99, 230
comparison of errors of forecast with errors of judgmental forecasts, 204t, 205–206, 207t,
208–209, 210–11, 212, 214, 215, 216n, 217
with errors of econometric model forecasts, 218, 219–20r, 221, 222
for consumption and investment, 193, 193n, 230–31
Fabricant, Solomon, 1, 3, 4, 4n, 11, 38, 47n, 48n, 47–49, 89, 137
Federal Open Market Committee (FOMC) minutes, 191–92
Federal Reserve Bank of Minneapolis, 271
Federal Reserve Bank of St. Louis, monetarist model, 32, 32n, 33n, 37n
Federal Reserve Board, 244 and money stock, 296
Fels, Rendigs, 46n, 62, 62n, 63, 174, 190n, 239
Ferber, Robert, 15n
Fiscal policy
built-in stabilizers, 6–7, 8, 134 discretionary, 7–8, 9–10, 31, 32–33, 35, 125, 263–65 instruments for, 271–74 relative effectiveness of, vs. monetary policy, 9, 32–33, 262–65 rules for, 261, 276, 276t, 277 simulation results, 281ff
See also Economic policy; Economic policy simulations with econometric models; Monetary policy
Fisher, Irving, 30
Forecasting. See Econometric model forecasts; Economic forecasts
Free reserves, 114t
Frickey, Edwin, 126n
Friedman, Milton, 7n, 10n, 11, 12, 15, 15n, 18n, 19n, 24n, 25, 28, 28n, 29n, 30n, 31n, 34, 34n, 36n, 45n, 67, 67n, 126, 126n, 137, 262, 262n
Friedman, Rose D., 15n
Frisch, Ragnar, 17n, 20, 21, 21n, 25, 26, 251n
Fromm, Gary, 15n, 29n, 233n
Gilbert, Milton, 10n
GNP (gross national product)
actual and potential in 1958 dollars, compared, 96t, 97t, 98 and aggregate economic activity, 93 alternative measures of deviation from trend, in 1958 dollars, 127, 128–29t, 132, 133t in business cycle contractions since 1920, 100–107t, 111 in cyclical analysis of econometric model simulations, 244, 245t, 249, 250t, 251–53, 253t, 254–56, 257t data revisions and methods of estimation of, 121n and definitions of business cycles and growth cycles, 46–47 deviation cycles and step cycles, in 1958 dollars, 87t in 1948–70, in current dollars and 1958 dollars, 72t, 94t
GNP (gross national product) (Cont.)
in 1969–70 recession and earlier episodes, 113, 114t, 115, 115t, 116t, 117
real, in policy simulations with econometric models, 265, 277ff, 280–84, 283t, 284t, 286t, 288t, 289–90t, 293–94, 297–301, 298–303t, 308t
related to policy variables, 33n
See also Aggregate economic activity; Business cycle indicators; Business cycles; GNP forecasts

GNP forecasts
accuracy of, 187, 189
before and since 1964, 206, 207t, 208–209, 210t, 212
by business economists, 184, 215–17
and forecasts of major expenditure components of GNP, 192–93
governmental and private forecasts of, compared, 200, 212, 213t, 214–15
and industrial production forecasts, 194–95
with leading indicators, 200–202, 200n, 201n
multiperiod, 215, 216t, 217
and price-level forecasts, 195
private judgmental, 203, 204t, 205–206, 207t, 208–209, 210t
See also Econometric model forecasts

GNP implicit price deflator
alternatives to, 121n, 195n
in cyclical analysis of econometric model simulations, 244, 252, 255
as index of general price level, 121, 139–40
in 1969–70, 164
in policy simulations with econometric models, 264, 274ff, 277ff, 280–83, 283t, 285, 286t, 287–89, 289t, 291–92t, 293, 294, 297–301, 298t, 299t, 301t, 304–305t, 306
and price cycle chronology, 139, 140
for private sector, 154, 157t
rate of change in, 142t
timing relative to Consumer Price Index, 154, 157–58, 157t
Wharton and OBE econometric model forecasts of, 218, 219t, 221–22
See also Price cycle chronology; Prices
Goldberger, Arthur, 23n, 24, 196
Goldsmith, Raymond W., 11
Goodwin, R. M., 22n
Gordon, Robert Aaron, 13n, 14n, 17n
Gordon, Robert J., 233n
Government expenditures, forecasts of, 193, 209, 211t, 217
implications of data errors in, 198, 198n
Gramlich, Edward M., 29n
Green, George R., 26n, 27n, 239, 259n
Griliches, Zvi, 33n, 233n
Gross private domestic investment (GPDI), forecasts of, 193, 209, 210t, 217
Growth cycles, 127, 128–32t
amplitudes of, 79–80, 79n
and business cycles (Burns-Mitchell definition), 39–42, 44–45, 81, 82–83, 135
Index

chronology of, 73–75, 73n, 74n, 75t, 83–84
comparison according to deviation cycles and step cycles, 75–79, 76t, 77t
and computerized cycle dating, 42–43
concepts of, alternative, 44–46, 46–49
criteria for selecting indicators for, 49–53
deviation cycles and step cycles in indicators of, 41–42, 53, 65–71, 72t, 73
diffusion of, 80
in Germany, 40n, 42, 49, 78n
“growth recessions” and their social costs, 92, 132, 134, 135
and leading indicators, 82, 83, 84
low-rate and high-rate phases of, 42, 68–69, 83
in 1947–70, 76t, 77t
in 1951–52, 80–81
in 1969–70, 84
objections to concept of, 42
periods covered, 39n, 73n, 84
trend adjustments for identification of, 65–66, 126–34
See also Business cycle indicators; Business cycles; Growth rates

Growth rates
analysis of, and measurement errors, 69, 69n
of money stock, resulting from policy simulations, 295, 295t, 296
of output and employment, and the economy’s performance, 98–99
retardation of, in expansion before the 1969–70 recession, 124
of series from stochastic 100-quarter econometric model simulations, 243, 253
and stabilization policy, 9–10
tradeoff between inflation and growth, 93, 274–75
See also Growth cycles

Grunberg, Emile, 236
Gurley, John G., 7n
Guttenberg, Jack M., 11
Haberler, Gottfried, 12, 17n, 18n, 20n
Haitovsky, Yoel, 1, 4, 27, 37, 185, 235, 239, 261
Hansen, Alvin, 23n
Harkins, C., 121n
Hickman, Bert G., 2, 10n, 14n, 24n, 25n, 26, 27, 32, 241n, 259n, 262n, 264n, 298n
Hickman, W. Braddock, 11
Hicks, John R., 18n, 24n
Hinshaw, C. Elton, 184, 191n, 239
Hirsch, A. A., 26, 239, 259n
Holland, Daniel M., 12
Holzman, Franklyn D., 34n
Hours per man, 245t

Housing expenditure forecasts. See Residential construction forecasts

Housing starts, 245t
Howrey, E. Philip, 262n
Hultgren, Thor, 12, 12n, 14n, 137
Hymans, Saul H., 261n
Import prices and GNP, 120n
Income
distribution of, and changes in the price level, 119–20
Index

Income (Cont.)
in monetary analysis of business cycles, 28–29, 126
real, in policy simulations. See under GNP
Income tax collection, 6
Industrial capacity (Wharton), 1947–70, 133t
Industrial production index (Federal Reserve)
alternative measures of deviation from trend, 127, 130–131t, 132, 133t
in business cycle contractions since 1920, 100–107t, 111
deviation cycles and step cycles in, 72t, 86t
diffusion of components of, 108–109t, 111, 111n
forecasts of, 171, 178–79
in 1948–70, 94t
in 1969–70 recession and earlier episodes, 113, 114t, 115, 116t, 117
Inflation
diffusion of prices and costs in, 138, 163
and economic policies, 7, 31, 34
and measurement of aggregate economic activity, 118–21
and policy implications of growth cycle concept, 42
and recession, 37, 145
tradeoff with growth, 93, 274–75
Interest rates
and economic policies, 34
in expansion before 1969, 124
and monetary changes during business cycles, 7n, 29
role in policy simulations with econometric models, 271ff
turning-point dates, 72t, 114t
Inventory investment (net change in inventories)
and accelerator variables, 14, 14n, 22
in business cycle analysis of econometric model simulations, 245t
determination of, 14, 22
forecasts of, 193–94, 220t, 221
Investment in capital goods, 72t
and accelerator variables, 14, 14n
autonomous and induced, 22, 23
in business cycle analysis of econometric model simulations, 245t, 246t
decisions and realizations, lagged relationship of, 19, 21
in expansion before 1969–70 recession, 124
expectations and forecasts of plant and equipment expenditures, 194
as main "real" factor in business cycles, 30
and monetary changes during business cycles, 29
and profit variables, 14, 14n, 19, 23, 23n
Wharton and OBE econometric model forecasts of, 220t
See also Gross private domestic investment forecasts; Residential construction forecasts

Jenks, Elizabeth, 11n
Johnson, Harry G., 11n
Jordan, Jerry L., 32n
Juster, F. Thomas, 2, 11, 239

Kahn, C. Harry, 12
Kalchbrenner, John, 32, 33n
Kaldor, Nicholas, 21, 21n
Kalecki, Michal, 19, 19n, 20, 21 21n
Kareken, John, 255n
Kemp, Murray, 220
Kendrick, John W., 11, 14n
Index

Keynes, John Maynard, 8, 11n, 14, 15, 20, 21n
Kindahl, James K., 138, 154n
King, W. I., 11n
Klein, Lawrence R., 13n, 14n, 17n, 22n, 24n, 26, 29, 109, 196, 233, 239, 254n, 261n, 270n
Klein-Goldberger econometric model, 25, 242
Knauth, O. W., 11, 11n
Knowles, J. W., 127n
Koopmans, Tjalling, C., 13n
Korean War, 5, 145
Kravis, Irving B., 11, 137, 138
Kuh, Edwin, 14n, 23n, 29n
Kurihara, Kenneth K., 15
Kuznets, Simon, 11, 11n, 14n, 15, 15n, 126n
Labor costs per unit of output. See Costs of production
Lataneé, Henry A., 7n
Leads and lags. See Timing measures
Lempert, Leonard M., 41
Levitan, R. E., 246n
Liebenberg, Maurice, 26n, 239, 259
Lipsey, Robert E., 11, 137, 138
Liu, Ta-Chung, 221n
Long, Clarence D., 11
Lovell, Michael C., 15n
Lundberg, Erik, 6n, 10n, 40n, 46n
Macaulay, Frederick R., 11, 11n
McCarty, Michael D., 238n
McGraw-Hill Survey of Investment Intentions, 194
Mack, Ruth P., 12, 12n, 14n, 37n, 49n, 92, 92n
Maddison, Angus, 10n
Man-hours in nonagricultural industries, 72t, 95t, 100–107t, 114t, 116t
Manufacturing and trade sales, 95t, 100–107t, 114–15t, 116t
Meiselman, David, 28n
Metcalf, Lloyd, 22, 22n, 31n
Meyer, John R., 2
Michigan model
forecasts of percentage changes in real GNP, 180, 180n
See also under FRB-MIT-PENN model
Mills, Frederick C., 111, 137
Mincer, Jacob, 11, 120n, 168, 223
Minsky, Hyman P., 28n
Mintz, Ilse, 1, 3, 12n, 36, 37, 38, 39, 40, 52n, 78n, 92n, 109, 110, 113n, 126, 132, 133t
Mitchell, Wesley C., 1, 2n, 3n, 11n, 12, 12n, 16n, 18, 19n, 23, 30, 30n, 40, 41n, 42, 42n, 44, 44n, 68n, 90n, 99n, 121, 122n, 123, 126n, 134, 134n, 137, 139, 147, 163, 166
Models of business cycles. See Business cycles
Modigliani, Franco, 15, 15n, 29n, 172n, 220n
Monetary policy
and goals of combating inflation and unemployment, 9, 34
instruments for, 262–63, 263n, 271–72
relative effectiveness of, vs. fiscal policy, 9, 32–33, 262–65
role in the economy, 33–34, 33n, 235
rules for, 245, 260, 260t, 261
short-term vs. longer-term effects, 9, 34
simulation results, 281ff
Monetary policy (Cont.)

*See also* Economic policy; Economic policy simulations with econometric models; Fiscal policy

Money stock

autonomous changes in, 29
changes in composition of, 30–31
changes in, and economic fluctuations, 28, 30
effects on money income and spending, 28–29, 32, 32n, 33n
fluctuations in, and economic instability, 31
in policy simulations with FRB-MIT model, 279, 279n, 280

Moore, Geoffrey H., 1, 12, 12n, 14n, 16n, 19n, 26n, 36, 37n, 38, 46n, 50n, 52n, 57n, 59n, 61n, 62, 62n, 63, 65n, 89n, 92n, 109, 112n, 137, 184, 185, 196, 212, 212n, 239, 241n, 262n

Muench, T., 271n

Musgrave, John C., 53n

“Naive” models, 186, 199, 205–12, 204t, 207t, 210–11t, 214–22, 216t, 219–20t

*See also* Extrapolative models

National Bureau of Economic Research
business cycle research of. *See under* Business cycles
econometric model simulations, studies of, 25–27, 241n, 262n
economic forecasting, studies of, 16, 16n, 27–28, 183–85
price behavior, studies of, 137–38

National income accounting, 11, 11n, 16n, 24

Nerlove, Marc, 14, 24n

New orders, durable goods, 245t

Nourse, Edwin G., 127n

OBE (Office of Business Economics)
model, 26n, 185, 185n
accuracy of forecasts with, relative to judgmental forecasts, 223, 225, 226–27t, 227
in business cycle analysis of econometric model simulations, 242–44, 245–46t
ex ante and ex post forecasts with, 197, 197n, 198, 218–22, 219–20t
hundred-quarter *ex ante* simulations with, 253–56, 257t, 258
sample-period simulations with, 198–99, 249, 250t, 251–53, 253t
six-quarter simulations around business cycle turns, 247, 248t, 249

OBE-SEC investment anticipations, 188n, 194

Okun, Arthur M., 2, 184n, 188n, 239

Output
actual and potential, 46–47, 98, 124, 127, 127n
per man-hour, 158, 159t, 161, 165t, 166
*See also* GNP (gross national product)

Pecuniary vs. real or deflated indicators, 48–49, 90–92, 113, 117, 118–21, 119n

Personal income, 72t, 94t, 102–107t, 114t, 116t, 245t

Phelps, Edmund S., 34n

Phillips, A. P., 277n

Phillips curve, 34
Index

Policy instruments. See Economic policy simulations with econometric models; Fiscal policy; Monetary policy
Price cycle chronology
and business cycle chronology, 138-39, 145-46t, 147
computerized and judgmental identification of turning points, 140
construction of, 139-43
measurement and smoothing of rates of change in indexes for, 141, 143, 143n
reference dates of, 143, 144t
seasonal adjustments used for, 140-41
Prices
behavior in inflation, 138
changes in comprehensive indexes during business cycles, 142t, 145, 146t
of commodities other than food (CPI), 149, 150t, 151t, 156t
of consumer finished goods (WPI), 152t, 155t, 156t
of consumer goods and services (CPI), 147, 148t
of crude materials (WPI), 152t, 154, 155t, 158, 164
decomposition into cost and profit components, 161-62, 162t
diffusion of changes in, 147, 148t
of food, 147, 149, 150t, 151t, 152t, 156t, 158, 164
of industrial commodities (WPI), 148t, 149, 152t, 154, 164
of industrial materials (spot market), 147, 148t, 152t, 154, 164
of intermediate materials (WPI), 152t, 155t, 158
leads and lags in, 149-58, 150t, 152t, 157t
of manufactured goods (WPI), 147, 148t, 149
manufacturers’ selling, diffusion index, 148t
of producers’ finished goods (WPI), 152t, 154, 155t
and production costs and profits, 158, 159t, 160t, 161, 162t, 163, 165, 165t, 166
of purchased materials, diffusion index, 148t
recent developments in, 117-18, 163-66, 165t
retailers’ selling, diffusion index, 148t
of services (CPI), 149, 150t, 151t, 158, 164
transaction index, 154n
See also Consumer Price Index; GNP implicit price deflator; Wholesale Price Index
Producers’ durable goods, forecasts of, 193, 193n
Profits, 72t, 245t
cyclical changes in, 14n, 19, 158-63, 160t, 162t, 165t
in expansion before the 1969-70 recession, 124, 165-66, 165t
inflation, margins of, 138, 163
and investment, 14, 14n, 19, 23, 23n
per unit of output, 158, 160t, 161, 162t, 163, 165, 165t
Random elements in econometric models, 262, 262n, 263, 265-69, 266n
See also Shocks, exogenous
Rasche, Robert H., 240
Recession of 1969-70
and antecedent developments, 122-25
Index

Recession of 1969—70 (Cont.)
and anti-inflationary policy, 92—93
and changes in business cycles, 134—37
compared with developments in
and conception of business cycles, 125—26
and criteria for identification of recessions, 89—92
indications of 1969 reference peak, 113, 114—15t
and measures of deviation from trend, alternative, 127—34, 128—31t, 133t
pecuniary and real activity indicators in, 118—21
and revised definitions of recession, 48, 126—27
viewed as low-rate phase of growth cycle, 83, 84
Recessions
and amplitudes of decline in economic activity, 110, 110n
changes in duration and intensity of, 5—7, 39—40
and changing distribution of income and wealth, 119—20
compared with low-rate phases of growth cycles, 45, 83
definitions of, 3, 48, 90—93, 99n, 126—27, 134—36
historical characteristics of, 99—112, 100—109t
of 1918—19 and 1926—27, 110—11
See also Contractions in economic activity
Rees, Albert, 11
Reference cycles. See Business cycles
Reference dates (chronologies). See Business cycles; Price cycle chronology
Research Seminar in Quantitative Economics, 196, 196n
Residential construction forecasts, 193, 193n, 209, 211n
Retail sales, 72t, 100—107t, 115t, 116t, 117
Saito, M., 26n, 238n
Samuelson, Paul A., 2, 4, 20, 20n, 21n, 22
Sauerlander, Owen H., 172n
Saulnier, Raymond J., 12
Schumpeter, Joseph A., 21, 21n
Schwartz, Anna Jacobson, 7n, 10n, 11, 12, 15, 28n, 29n, 30n, 36n, 45n, 67, 67n, 82n
Seltzer, Lawrence H., 11
Shapiro, Harold T., 224, 245n
Shaw, Edward S., 7n
Shay, Robert P., 11
Shiskin, Julius, 12, 16n, 50n, 52n, 53n, 57n, 59n, 63, 65, 65n, 109, 184
Shocks, exogenous
autocorrelated and nonautocorrelated, 26—27, 27n, 254—56, 254t, 257t, 558
autonomous, 21, 27, 251, 251n
and changes in business cycles, 5—6, 8
deviations of shocked from control series, 256
in downturns and recovery, 23, 23n
in econometric model simulations, 25—27, 234, 254—56, 257t, 258
Frisch hypothesis, 25, 251
interaction with endogenous factors, 17—18, 17n, 21, 23, 33
in mathematical models of business cycles, 21
monetary and other, 29—31, 32n
random "type I" and "type II," 25
wars as cause of, 5—6, 17
Index

Sills, David L., 136n
Slutsky, Eugen, 26
Speculative booms, causes of, 23
Spencer curve, 54, 54n, 55
Stabilization policies. See Economic policy; Fiscal policy; Monetary policy
Stanback, Thomas M., Jr., 12n, 14
Stein, Herbert, 2
Stekler, Herman O., 168, 224
Stigler, George J., 11, 137, 138, 154n
Stochastic simulations. See Business cycle analysis of econometric model simulations; Economic policy simulations with econometric models
Stock market, 23, 124
Su, Josephine, 25n, 241n
Su, Vincent, 239
Subcycles, 37n, 49, 92
Suits, Daniel, 14n, 29n, 184, 196, 240
Supel, T., 271n

Theil, Henri, 184, 188, 240

Timing measures
of composite and diffusion indexes at business cycle turns, 57–65, 58t, 64t
at growth cycle turns, 74–75, 75t
of rates of change of various price indexes at CPI turns, 149, 150t, 152–53t, 154, 157t, 157–58
of sample period simulations for four econometric models at business cycle turns, 252–53, 253t
of six-quarter simulations for three models at business cycle turns, 247, 248t, 249
of stochastic 100-quarter simulations for three models at turns in cumulated diffusion indexes, 256, 257t, 258

Tinbergen, Jan, 14, 20, 21n, 23, 23n, 24, 24n, 242n
Tintner, Gerhard, 126n
Transfer payments, 6
Treasury bill rate, 72t, 114t
Treyz, George I., 27, 169, 223
Trueblood, Norman, 51n, 58n, 59n, 61n, 62, 62n, 63
Turning points
computerized selection in business cycle indicators, 54–55
See also Bry-Boschan computer program for cycle dating in deviation cycles and step cycles for selected indicators, 71, 72t, 73
in reference cycles, identification by diffusion and composite indexes, 55–57, 56t
in six-quarter econometric model simulations, 244, 247, 248t, 249
See also Business cycles; Growth cycles; Price cycle chronology

Unemployment rate, 66n, 72t, 100–107t, 114t, 116t, 245t, 281
and definition of recession, 127, 127n
and economic policies, 6, 7, 34
in expansion before 1969–70 recession, 124
in 1948–70, 97t
Wharton and OBE econometric model forecasts of, 218, 220t, 221–22
Unfilled jobs, 66n, 72t
Unfilled orders, of manufacturers, 114t, 245t
U.S. Department of Commerce, 244

Vietnam War, 5
Vining, Rutledge, 13
Wages and salaries, 72t, 114t
Wages, real, in inflation, 138
Wage-price spirals, 23
Wallace, Neil, 1, 4, 37, 235, 261, 271n
Wallich, Henry C., 2
Wars, as cause of shocks to economy, 5–6, 17
Wartime cycles, 6, 6n
Weather cycle, 17
Wharton estimate of industrial capacity, 130–31t, 132
Wharton model, 24n, 26n, 185, 185n
accuracy of forecasts of, relative to judgmental forecasts, 223, 224–25t, 225, 227
in business cycle analysis of econometric model simulations, 242–44, 245–46t
ex ante and ex post forecasts with, 197, 197n, 198, 218–22, 219–20t
hundred-quarter ex ante simulations with, 253–56, 257t, 258
sample-period simulations with, 198, 198n, 199, 249, 250, 251–53, 253t
six-quarter simulations around business cycle turns with, 247, 248t, 249
in study of policy simulations, 261, 261n, 269–71, 273, 307
Wholesale Price Index, 72t, 115t
diffusion of changes in, 147, 148t forecasts of, 195, 195n
leads and lags in rates of change of major components of, 149, 152–53t, 154
leads and lags relative to CPI, 149, 152–53t, 154, 156t
rates of change in comprehensive price indexes and, 142t
rates of change, by stage of process, 155t
recent developments, 164
See also Price cycle chronology; Prices
Wholesale sales, 114t
Wicksell, Knut, 26
Wolman, Leo, 11
Yields, average, on commercial paper and bonds, 114t, 246t
Young, Allan H., 53n, 121n
Zarnowitz, Victor, 1, 14, 14n, 16n, 25n, 26, 26n, 27n, 28n, 46n, 61n, 62, 62n, 183, 184, 185, 189n, 199n, 202n, 239, 240, 241, 262n