

Index

- Aadhaar card, 236, 237
- Absolute purchasing power parity, 12, 13, 15
- Affordable Care Act (ACA), 288
- Aichi Bank, 212
- Akaike Information Criterion (AIC), 68
- Algorithm trading, 255–275
- Alibaba, 227, 228, 282
- AliPay, 228, 233, 236, 282
- Ant Financial, 285
 - Yu'E Bao, 286
- Application programming interfaces (APIs), 237
- Argentina
 - banking crisis, 129
- Artificial intelligence (AI)
 - in investment, 287–288
- ASEAN, 10
 - in FinTech, trends and prospects for, 243–245
- ASEAN-5
 - economic integration, 9–27
 - exchange rate integration, 9–27
- Asia, FinTech in, 299
 - fundamental support to development, 222–229
- Asian financial crisis (AFC), 52, 54, 63, 68, 74
- Asset-backed securities (ABS), 156, 230, 235
- Asset-management company (AMC), 128, 156, 157
- Asset Quality Review (AQR), 134, 152
- Asymmetric passthrough, 107–108
- ATM machines, 216
- Augmented Dickey–Fuller (ADF)
 - test, 17, 18, 139, 140
 - rolling-window, 140
 - supremum, 140, 142
 - unit root test, 36
- Autoregressive Integrated Moving Average (ARIMA) model, 15, 16
- Bad loans, 139–145
- Bangkok Bank, 196
- Banking crisis, 124–130
 - international, 128–130
 - macroeconomic determinants of, 127
 - resolution of, 150–153, 155–157
 - structural impediments and, 130–136
 - theoretical foundations of, 125–128
- Banking Regulation (Amendment) Bill, 152
- Banking Regulation Act of 1949, 154
- Bank investment company (BIC), 158
- Bank lending channel, 164, 189
- Bank of Japan, 285
 - negative interest rate policy, 210
 - quantitative easing policy, 194
 - regulatory changes to overseas business, 212
- Bank overlending, 138–139
- Basel Bank of International Settlements, 281
- Basel Capital Accords, 210–211
- Basel Committee on Banking Supervision, 146
- Basel III norms, 146

- BAT (Baidu, Alibaba, and Tencent), 235, 236
- Bayes' theorem, 104
- Bayes Factor (BF), 94, 95, 97, 99
- Bayesian information criteria (BIC), 205
- Behavior intention, 261
- Betterment, 286
- Big Mac prices, 12–14
- Bitcoin, 283
- BITX, 244
- Blockchain technology, 283
- Block exogeneity, 175–177
- Block exogeneity Wald test, 69
- Bombay Stock Exchange (BSE), 139
- Brexit vote (2016), 52–53, 67
- BRICS
 - bank loans, 124, 132
- Bualuang Securities Company
 - IProgram trade, 256–257
- Bubble-loans, 137–145
 - and credit deployment, 141, 142, 144
 - run-up, 137–138
- Bubble-period detection, date-stamping algorithm for, 142
- Buffet, Warren
 - Berkshire Hathaway Companies, 288
- Business cooperation, 195
- CAGR, 230, 234, 237
- Canada
 - loan puzzle in emerging markets, 165
- Capital adequacy ratios (CARs), 145–150
- CBRC, 232, 236
- Central Bank of China, 45
- Central Bank of India, 134
 - Banking Regulation (Amendment) Bill, 152
- Strategic Debt Restructuring, 151–152
- Chakravorty, Gaurav, 287–288
- Cheques, 216
- Chiba Bank, 197
- Chicago Board Option Exchange (CBOE), 281
 - Volatility (VIX) index, 53, 68–69, 73
- Chile
 - domestic monetary policy shock, effects of, 182
 - loan puzzle in emerging markets, 165
 - rolling spillover index, 173
 - US monetary policy shock, effects of, 183
- China, 1, 229–234
 - banking system, 2
 - Central Bank, 45
 - mobile banking, 243
 - online consumer lending in, 230–231
 - online insurance in, 234
 - online payments in, 233–234
 - peer-to-peer lending in, 231–233
 - RMB internationalization, overseas circulation of, 31–49
 - twenty-first century adaptation of financial market, 236
- Cholesky decomposition, 55
- Cholesky factorization, 174
- Codapay, 244
- Cognitive bias, 127–128
- Cognitive dissonance, 127–128, 131
- CoinPip, 244
- Cointegration tests, 15–16, 37, 53
 - Johansen, 36, 41
 - panel, 16, 17, 20–21, 24–27
- Collateralized debt obligations, 88

- Commercial and industrial loans
(C&I), 164–166, 170, 171,
176–178, 180, 182,
186–189
- CommonBond, 284–285
- Companies Act of 2016, 158
- Competition laws, 106
- Consumer credit penetration,
224–227
- Consumer loans (Cns), 164,
170, 171, 177, 178, 182,
186–188
- Consumer price index (CPI), 23, 35,
36, 40, 41, 186
- Contemporaneous causality analysis,
41–44
- Corporate misconduct, 132
- Corporate Restructuring Companies
(CRCs), 156
- Costs, 241
- Credit, 283–285
- Credit Cards, 216
- Credit lending, 137
- Credit-to-GDP ratio gap, 134
- Cross-market correlation coefficients,
53
- Cross-sectional Im-Pesaran-Shin
(CIPS) test, 20, 23
- Cross-section augmented
Dickey-Fuller (CADF)
test, 20
- Crypto-currency, 283
- Currency internationalization. *See*
RMB internationalization,
overseas circulation of
- CUSUM test, 37
- Daishi Bank, 202
- Debt-ceiling crisis (2011), 67, 68
- Deposit Insurance and Credit
Guarantee Corporation
(DICGC), 127
- Deposit penetration, 227–228
- Deposit rate asymmetry, after Hong
Kong's interest rate
deregulation, 107–111,
114–119
- Deregulation, interest rate (Hong
Kong), 105–119
deposit rate asymmetry after,
107–111, 114–119
Edgeworth cycles after, 111–119
- Deviance information criterion
(DIC), 94, 95, 99, 104
- Digital banking, 242–243
- Digital leap, 236–238
- Directed acyclic graph (DAG)
analysis
of financial contagion, 87
RMB internationalization,
overseas circulation of,
34, 40–44, 48
- Directional spillovers, 56–57
- Disaster myopia, 127
- East Asian crisis of 1997, 125, 130,
132
- Economic distance, 93
- Economic integration, 9–27
and exchange rate integration,
relationship between
level of exchange rate
integration, measurement
of, 25–26
panel cointegration tests, 26
testing methods, 21–22
purchasing power parity and,
10–17, 20, 23, 24, 27
testing methods, development of,
14–16
- Economic policy uncertainty (EPU),
53, 54, 69–71, 72
- Economic Survey (2016–2017), 132
- Edgeworth cycles, after Hong Kong's
interest rate deregulation,
111–119

- Emerging Asian equity markets,
 dynamic connectedness in,
 51–74
 equity market returns and
 volatility spillovers
 and volatility data, 57–58
 connectedness measurement,
 55–57
 full-sample analysis, 58–63
 rolling-sample analysis,
 63–66
 uncertainty, role of, 67–73,
 79–84
 empirical findings, 69–73
 empirical model and data,
 67–69
- EPU index, 68
- Equity investment, 286–287
- Equity market returns
 and volatility data, 57–58
 and volatility spillovers, 55–57
- Equity market spillovers, 53
- European Central Bank, 285
- Eurozone debt crisis (2009), 67
- Exchange rate integration, 9–27
 and economic integration,
 relationship between
 level of exchange rate
 integration, measurement
 of, 25–26
 panel cointegration tests, 26
 testing methods, 21–22
 panel cointegration test for, 16,
 17, 20–21, 24–27
 panel unit root tests for, 12,
 16–20, 23–24, 27
 purchasing power parity and,
 10–17, 20, 23,
 24, 27
 testing methods, development of,
 14–16
- Exchange Rate Mechanism (ERM)
 crisis of 1992, 86
- Fastcash, 244
- Federal Deposit Insurance
 Corporation (FDIC), 127
- Federal Funds, 173
- Federal Reserve, 166, 184
- Federal Reserve Act
 Section 13(3), 184
- Federal Reserve Bank
 Zero Interest Rate Policy, 285
- Federal Reserve Report, 284
- Federal Reserve System (US), 286
- Fees, 241
- FIDEA Holdings, 202–203
- Financial contagion, 86
- Financial crisis of 2008, 132
- Financial distress, 126–127
- Financial Institutions (FIs), 219,
 220–221
- Financial Services Agency (FSA),
 210–211
- FinTech, 216, 219–222, 280–281,
 284–289
 ASEAN in, trends and prospects
 for, 243–245
 in Asia, 299
 fundamental support to
 development, 222–229
 development in China, 229–234
 FI revenues, 234–236
- Fisher's Z statistic analysis, 40, 42
- Fisher-type test. *See* MW test
- 5/25 Infrastructure Refinancing
 Scheme, 151
- Fixed income investment, 286–287
- “Follow-the-customer” hypothesis,
 195
- Foreign direct investment (FDI), 93,
 94, 97, 99
- Freecharge, 239
- Fukui Bank, 202–203, 204
- Fukuoka Bank, 202, 203
- Full information maximum likelihood
 estimation (FIMLE), 44

- Fully Modified Ordinary Least Squares (FMOLS), 20–21
- Gap Estimation approach, 34–35
- GARCH
 - stock market contagion, 87
- GEICO, 288
- Generalized linear regression model (GLM)
 - using logit, 267–268, 272–273
- Generalized VAR (GVAR) approach
 - equity market returns, 55
 - loan puzzle in emerging markets, 169–170
- Geographical distance, 93
- Gibb's estimator, 103, 104
- Global Big Data Investment, 281
- Global financial crisis (GFC), 52, 54, 63, 65, 66, 74
 - of 2008, 165
- Global identification, 174–177
- Goldman Sachs Group Inc., 285
- Goods and services tax (GST), 236, 237
- Grameen Bank, 284
- Granger Causality, 69, 71
- Great Financial Crisis (GFC) of 2008, 124
- Great Recession of 2007–2009, 164, 284
- Greenspan, Alan, 131
- Gross domestic product (GDP), 93, 97–99, 130, 227
- Gross nonperforming assets (GNPAs), 124, 130, 132–134, 136, 153
- Hachijuni Bank, 198
- Half logarithm model of money demand, 35–36
- HDFC, 237
- Herd behavior, 127, 137
- HFCs, 240
- Hierarchical clustering, 205
- Hokuetsu Bank, 204
- Hokuhoku Financial Group, 203
- Hong Kong
 - gross nonperforming assets, 132, 133
 - interest rate deregulation, 105–119
 - deposit rate asymmetry after, 107–111, 114–119
 - Edgeworth cycles after, 111–119
 - empirical evidence, 114–119
- Hong Kong Association of Banks (HKAB), 107
 - interest rate rules, 106, 108
- Hong Kong Consumer Council (HKCC), 106
- Hong Kong inter-bank offered rates (Hibors), 109
- Hong Kong Monetary Authority (HKMA), 106
- Hyakugo Bank, 202, 203
- Hyakujushi Bank, 202, 203
- Income elasticity, 37
- India, 1
 - bad loan conundrum, 123–158
 - banking crisis, 124–136
 - Bombay Stock Exchange, 139
 - bubble-loans, 137–145
 - Central Bank of India, 133, 151, 152, 241
 - digital leap, 236–238
 - digital payments, lagging of, 238–240
 - HFCs, 240
 - Ministry of Finance (MoF), 136
 - mobile banking, 242–243
 - National Stock Exchange, 139
 - NBFCs, 240, 242
 - regulatory landscape, 241

- Reserve Bank of India. *See*
Reserve Bank of India
(RBI)
return on total assets, 240–241
- Indonesia, 1
banking crisis, 126
FinTech landscape in, 246
gross nonperforming assets, 132,
133
- INDRADHANUSH, 151–152, 154,
158
- Insolvency and Bankruptcy Code
2016 (IBC 2016), 152, 154
- Institutional memory hypothesis, 128
- Insurance, 288–289
- Interest rate margin, 115, 118
- Interest rate rules (IRRs), 106, 108
- International banking crisis, 128–130
- International Monetary Fund (IMF),
32, 34
- International Symposia in Economic
Theory and Econometrics
(ISETE)
Banking and Finance Issues in
Emerging Markets, 2
- Investment, 285
artificial intelligence in, 287–288
equity, 286–287
fixed income, 286–287
money markets, 286
- IPS test, 19, 23
- Irrational exuberance phenomenon,
131, 137, 153
- Iwate Bank, 197
- Jan Dhan Scheme, 236, 237
- Japan
banking crisis, 129
regional banks' overseas business
in emerging markets,
193–213
current situation, 202–203
data, 200
estimation result, 208–209
overall changes, 202–203
recent changes, characteristics
of, 203–204
regulatory changes, 209–211
regulatory changes, effects of,
211–212
related literature, 198–200
X-means clustering, 204–208
- Johansen cointegration test, 36, 41
- Kasikorn Bank, 196
- Keynes's theory of money demand,
35, 37
- KGI Securities Company
Bridge service, 257
- K-means clustering, 205
- Korea Asset Management
Corporation (KAMCO),
155–157
- Kotak, 237
- Kyusyu Financial Group, 202, 203
- Law of one price. *See* Absolute
purchasing power parity
- Lehman Brothers Collapse (2007), 67,
68, 89, 201
- Lending
overlending, 138–139
procyclical, 127, 128, 132
- Lending Club, 228, 284
- Liberalization, Privatization, or
Globalization (LPG), 130,
138
- Linear regression model
monetary approach, 14–15
stock market contagion, 92
- Liquidity, open-ended, 128
- LLC test, 17–19, 23
- Loan(s), 283–285
bad, 139–145
bubble, 137–145
commercial and industrial,
164–166, 170, 171,

- 176–178, 180, 182,
186–189
- consumer, 164, 170, 171, 177,
178, 182, 186–188
- puzzle in emerging markets,
international perspective
on, 163–189
- domestic monetary policy,
180–188
- structural investigation of,
173–180
- US monetary spillovers to
emerging markets,
167–173
- sharks, 284
- Malaysia
 - banking crisis, 126
 - FinTech industry, 244–245
 - FinTech landscape in, 247
 - gross nonperforming assets, 132,
133
- Marcus (Mosaic), 285
- Market optimism, 137
- Markov chain Monte Carlo
(MCMC) iterations,
94–95, 96
- Markov switching model, 89
 - high volatility regime,
probabilities of, 90
 - stock market contagion, 87
- Mastercard, 236
- Maximum likelihood estimation
(MLE), 34
- Merchant discount rate (MDR),
238–239
- Mexico
 - domestic monetary policy shock,
effects of, 180
 - loan puzzle in emerging markets,
165
 - peso crisis of 1994, 86
 - rolling spillover index, 172
 - short-term bonds, 167
 - US monetary policy shock,
effects of, 181
- Michinoku Bank, 204
- Microcredit model, 284
- Ministry of Finance of Germany, 283
- Minsky moment, 139
- Miyazaki Bank, 204
- MobiKwik, 239
- Mobile Internet, 216, 218
- Mobile wallets (m-wallets), 239, 242
- Modern Portfolio Theory, 286
- Modigliani–Miller (M&M) theorem,
145
- Monetary internationalization. *See*
RMB internationalization,
overseas circulation of
- Monetary policy, 164–167, 170,
173–178, 180, 182, 184,
185, 187–189
- MoneyGram, 220
- Money markets, 286
- Money remittances inflow, 219–220
- Moral hazard, 145–150
- Mortgage-backed securities, 88
- Mortgage penetration, 223
- Moven, 228
- MSMEs, 237, 240
- Multivariate ARCH, 53
- Multivariate GARCH (M-GARCH),
21, 25, 26, 53
- Mutual fund industry, 228
- MW test, 19, 23
- Nagoya Bank, 211–212
- Nanto Bank, 202
- National Bureau of Statistics of
China, 36
- National Stock Exchange (NSE), 139
- Nayak Committee, 158
- NBFCs, 240, 242
- Net interest income (NII), 240–241
- Net spillovers, 57
- NIKKEI, 211

- Nonhierarchical clustering, 205
- Nonlinear single equations analysis,
 - using GLM with logit, 267–268, 272–273
- Nonparametric density estimation method, 94
- Nonperforming assets (NPAs), 127, 130–132, 137–139, 145–150
 - gross, 124, 130, 132–134, 136, 153
- Norming, 146
- Online consumer lending, in China, 230–231
- Online insurance, in China, 234
- Online payments, in China, 233–234
- Ordinary least square (OLS) method, 37, 93, 103
- Oscar Health, 288
- OTT providers, 244
- Overcutting cycle of deposit rate, 113, 117
- Overseas investments, 197–198
- Pairwise correlation approach, 53
- Panel cointegration test
 - for economic and exchange rate integration relationship, 26
 - for exchange rate integration, 16, 17, 20–21, 24–27
 - empirical results, 24–25
- Panel unit root test, for exchange rate integration, 12, 16–20, 23–24, 27
 - cross-sectional dependence, 20
 - cross-sectional independence, 17–19
 - empirical results, 23–24
- Payment, 281–283
- Paypal, 228, 282, 283
 - Money Market Fund, 286
- Paytm, 228, 239, 282
- PBOC, 234
- PC algorithm, 40, 41
- Peer-to-peer (P2P) lending,
 - 220, 285
 - in China, 231–233
- Perceived behavior control (PBC), 260
- Perceived usefulness of online/algorithm trading, 259
- Philippines
 - banking crisis, 126
 - FinTech industry, 245
 - FinTech landscape in, 248
- Ping An, 228, 288
- Point of Sale (POS), 238, 239
- Policy-logjam, 131
- Post-Bretton Woods era, banking crisis in, 128
- Prepaid payment Instruments (PPI), 241
- Price stability, 48
- Principal-agent problem, 128, 131
- Private Asset Reconstruction Companies, 151
- Procyclical lending, 127, 128, 132
- Proof-of-work (PoW), 283
- Public-sector banks (PSBs), 125, 131, 134, 147, 152
 - recapitalization, 152, 154
- Purchasing power parity (PPP),
 - 10–17, 20, 23, 24, 27
 - absolute, 12, 13, 15
 - relative, 13
 - theory of, 43
- Qplum, 287–288
- Ratio of nominal interest rate, 15
- Ratio of nominal money, 15
- Ratio of real income, 15
- Real interest rate, 35
- Recap bonds, 154
- Regional banks' overseas business, 194–198

- business cooperation, 195
- Japanese, 193–213
- overseas investments, 197–198
- representative office, 195–197
- Regulatory changes to regional
 - banks' overseas business, 209–211
 - effects of, 211–212
- Regulatory landscape, 241–242
- Relative purchasing power parity, 13
- Relenting cycle of deposit rate, 113, 116, 117
- Representative office, 195–197
- Reserve Bank of India (RBI), 139, 149, 154
 - Financial Stability Report (FSR), 134, 136, 153
 - m-wallets, 242
 - regulatory landscape, 241–242
 - savings account rates, deregulation of, 241
- Retail distribution digitalization, 217
- Return of stock markets, annualized rates of, 90–91
- Return on total assets (ROA), 136, 240–241
- Ria, 220
- Risk-taking behavior, 132
- RMB internationalization, overseas
 - circulation of, 31–49
 - circulation scale from 1997 to 2015, estimation of, 34–39
 - impact on China's macroeconomy
 - contemporaneous causality analysis, 41–44
 - dynamic relationship, 44–47
 - empirical approach and data, 39–41
 - literature review, 32–34
- Robo-Advisors, 286, 287
- Rolling-window ADF (RADF) test, 140
- Rothenberg's criterion, 175
- Run-up bubble-loans, 137–138
- S&P 500 index, 68, 287
- San-in Godo Bank, 203, 204
- SARFAESI Act of 2002, 151
- SEBI, 154
- Senshu Ikeda Bank, 197
- Sesame Credit, 285
- SFFR, 173
- Shift contagion, 86
- Shikoku Bank, 202, 203
- Shizuoka Bank, 197, 198, 210
- Short-sightedness, 127
- Short-term bonds, 167
- Singapore
 - banking crisis, 126
 - FinTech industry, 244, 245
 - FinTech landscape in, 249–250
 - gross nonperforming assets, 132, 133
- Small and medium enterprises (SMEs), 195, 196, 227
- South East Asian financial crisis of 1997, 86
- South Korea, banking crisis, 126
- Sovereign debt
 - crisis, 86
 - interest rates of, 166
- Spatial Autoregressive Model (SAR), 91, 92, 94–96, 98, 99, 103
- Spatial Durbin Model, 91*n*4
- Spatial econometrics, of stock market
 - contagion, 85–100, 103–104
 - background of, 88–91
 - empirical findings, 95–99
 - spatial framework, 91–95
- Spatial Error Model (SEM), 91, 92, 94–96, 98, 99, 103–104
- Special Drawing Rights (SDR), 32

- Spillovers
 - directional, 56–57
 - to emerging markets, 164–174, 176, 188
 - equity market, 53
 - net, 57
 - total, 56
 - volatility, equity market returns and
 - and volatility data, 57–58
 - connectedness measurement, 55–57
 - full-sample analysis, 58–63
 - rolling-sample analysis, 63–66
- Stock Exchange of Thailand (SET), 256–257
- Stock market contagion, spatial
 - econometrics of, 85–100, 103–104
 - background of, 88–91
 - empirical findings, 95–99
 - spatial framework, 91–95
- Strategic Debt Restructuring (SDR), 151–152
- Structural equations model (SEM)
 - system linear equations analysis using, 263–267, 268–272
- Structural impediments, and banking crisis, 130–136
 - resolution, 134–136
- Structural investigation, of loan puzzle in emerging markets, 173–180
 - empirical framework, 174–177
 - results, 177–180
- Structural vector auto regression (SVAR) model, 33, 34, 39–41, 43, 44
- Subjective norm, 260–261
- Subprime financial crisis of 2007, 86, 90
- Sumitomo Mitsui Banking Corporation (SMBC), 198
- Supremum-ADF (SADF) test, 140, 142
- Sustainable Structuring of Stressed Assets (S4A), 152
- Sweden, banking crisis, 129
- Swiss National Bank, 285
- Systemic banking crisis, 126, 128, 130
- System linear equations analysis, using structural equations model, 263–267, 268–272
- Technology, impact in banking industry, 216–229
- Technology acceptance model (TAM), 258–259
- Tenpay, 233
- Thailand, 1
 - banking crisis, 130
 - financial technology, acceptance of, 255–275
 - attitude toward online/algorithm trading, 259–260
 - behavior intention, 261
 - data analysis, 263–268
 - empirical results, 268–273
 - perceived behavior control, 260
 - perceived usefulness of online/algorithm trading, 259
 - sample and data analysis methods, 262
 - subjective norm, 260–261
 - technology acceptance model, 258–259
 - theory of planned behavior, 258
 - theory of reasoned action, 257–258
 - usage behavior, 261
- FinTech industry, 244, 245
- FinTech landscape in, 248–249

- gross nonperforming assets, 132, 133
- Stock Exchange of Thailand, 256–257
- Theory of planned behavior (TPB), 258
- Theory of reasoned action (TRA), 257–258
- “This Time is Different”, 153
- 3G Mobile Broadband Global Coverage, 216, 218
- Time series analysis, 10
- Tohoku Bank, 204
- Total spillovers, 56
- Trading strategy, 257, 271, 274, 275
- “Triffin dilemma” problem, 33
- Trump, Donald, 197
- Turkey
 - domestic monetary policy shock, effects of, 178
 - loan puzzle in emerging markets, 165
 - rolling spillover index, 171
 - US monetary policy shock, effects of, 179
- “Twin-balance-sheet” problem, 144
- 2C2P, 244
- Uncertainty on dynamic
 - connectedness, role of, 67–73
- Undirected complete graph, 44
- United States of America (USA), 1
 - banking crisis, 129
 - debt-ceiling crisis (2011), 67, 68
 - exchange rate and relative price of, 13, 14
 - Federal Reserve System, 286
 - monetary spillovers to emerging markets, 165, 167–184
 - Treasury, 197
- Unit root tests, 15, 16
 - panel, 17–20
- Usage behavior, 261
- Vector Autoregressive (VAR) model
 - emerging Asian equity markets, dynamic connectedness in, 53–58, 68
 - financial contagion, 87
 - generalized, 55, 169–170
 - loan puzzle in emerging markets, 165, 167–171, 174–188
- Vietnam
 - FinTech industry, 245
- Wealthfront, 286–287
- Western Union, 219
- Wilcoxon test, 204
- Wire Transfers, 216
- Worldcom Fraud, 68
- World Federation of Exchanges (WFE) database
 - Stock Market Indices, 89
- X-means clustering, 204–208, 213
- Yamanashi Chuo Bank, 204
- Yu’E Bao, 286
- Yunus, Muhammad, 284
- Zero Interest Rate Policy (ZIRP), 285
- Zhong An Insurance, 288–289