

Index

- accessibility approach 54–60
- accessibility value calculation 55–8
- achievement, trait of entrepreneurs 148
- advanced education
 - help to services and KIB firms 217
- advanced service economies, Denmark 86
- ageing population 2, 70, 88
- agglomeration economies 203, 207, 217–18, 234
 - importance for entrepreneurs 169
- agglomerations 52, 73, 86
- agricultural sector 116
 - convergence 122
- agriculture, forestry, manufacturing
 - decline in rural areas 9
- air connections 1
- airplane development
 - Linköping 145
 - SAAB AB Linköping 145
- ambition, career consciousness 150
- Amsterdam, new firms in
 - life durations of 12
- Amsterdam Research and Statistics Department (O&S) 228
- analysis
 - aggregate and disaggregate level 97
- analytical industries 337
- analytical knowledge base 342
- ‘angel investors’ paucity, Vienna region 428
- applied spatial economics 57
- artistic occupations 362
- Asia, China, R&D 1
- Association of University Technology Managers (AUTM) 414
- automobile industry 19
- autonomy, trait of entrepreneurs 148
- average values 313
- balanced regional development 89
- ‘Barca report’, European commission 71
- barriers, institutional, lack of support 419
- barriers questionnaire
 - to generating university spin-off companies
 - Vienna region 436–8
 - Vienna university 426–7
- barriers to spin-offs
 - lack of business skills 427
 - low tolerance for risk 427
 - paucity of private funding, Vienna 427–8
- beliefs
 - ‘financial pay-off’ 139
 - ‘social status’ 139
- beta-convergence hypothesis 97, 104–5
- big five model, hierarchical in nature 359
- biotechnology industry 411
- bohemians 366–8, 374
 - cultural sector 370
 - high share of self-employment 356
 - insecure working conditions 356
 - lower wages 356–7
 - in region 387–8
- border region benefits
 - access to dense population 54
 - cooperation partners in EU countries 346
 - differences in wages and unemployment rate 54
 - in economic theory 50–54
 - low level of border impediments 54
- border regions 330
 - densely populated 53
 - interface of domestic and foreign markets 48

- Sweden and Norway, municipals in 63
- British automobile producers 208
- broadband
 - business possibilities 11
 - establishment of new firms 11–12
 - new firm dynamics 165
- broadband Internet infrastructure 166
- broadband provision 171, 198
- budgetary process
 - for autonomy, Vienna university 423
- Bureau of Economic Analysis (BEA) 171
- Bureau of Labor Statistics (BLS) 171
- business
 - climate 361
 - closure identification 27
 - Swedish, large-scale 19–20
 - community and university cooperation 152
 - cycle unemployment rates 30
 - dynamics 3, 11
 - and industry, adaption need 77
 - business or consumer services 241
 - business possibilities of Internet 166
- Cambridge Econometrics (2012) 111
- Campus Norrköping, 1997 155
 - entrepreneurial activities 156
- capital and labor as growth drivers 89
- career opportunities 260
- Catholic cathedral, 12th century
 - Linköping 145
- causality checks 318
- causality direction 386, 390
- Census Bureau (CB) 170
- characteristics of firms
 - and business premises 241
- Chinese firms' imports increasingly upstream 281
- CIS, *see* Community Innovation Survey
- city diversity for new firm survival 208
- closure of manufacturing in
 - Norrköping 147
- closure process, definitions 28
- coefficients of firm size
 - influence on cooperation decisions 344
- commercialization, Vienna university 426
- common characteristics 137
- communication technology, Norrköping 148
- Community Innovation Survey (CIS)
 - Denmark 331
- Community Innovation Survey (European Commission 2012) 80
- commuting time 61–2, 66
- competence profile of immigrants 53
- competitiveness, regional and national 78
- competitors, horizontal cooperation 332
- computer industries 362
- conditional convergence 104–5
- conflicts between and within regions 357
- conformity/heterogeneity norms
 - entrepreneurism 149–50
- conformity restrictions 139–40
- conscientiousness 359
- conservative government 2006
 - emphasis on entrepreneurship 202
- construction sector 117–18
 - speed of convergence 116–17
- construction start-ups 241
- consumption, trade and growth 2
- convergence
 - between EU states, weakened 73
 - conditional 98–9
 - core area of research 96–7
 - debate in Europe 11
 - industry level 116
 - meta-analysis study 103
 - questions 121–2
 - speed 100, 116–18
 - stochastic (panel unit root) 103
 - studies on 99
- cooperation in innovation creation 330
- cooperation links between innovation actors 303
- cooperation partners choice, determination of 332
- cooperation with suppliers, (vertical) 332
- country sectoral level study
 - shift-share technique 102

- county administration
 - Linköping 145
- creative class 354
 - concept 366
 - debate, five-factor model 355–63
 - definition 356
 - economic value through creativity 356
 - effects in Europe 360
 - high regional wage levels 360
 - literature four variables 374
 - members 368–9
 - two subgroups 356
 - vagueness of definition 388
 - versus individual creativity 354–91
- 'creative destruction' 21
- 'creative graduates and bohemians' 362
- creative individuals 354, 386
 - comparison with rest of workforce 380
 - higher in GDP per capita regions 366
 - urban, amenity-rich, open environment 366
- creative industries 354
- creative professionals
 - in knowledge-intensive industries, etc. 356
- crime 5
- critical mass of urban regions
 - creativity, public ad private R&D 8
- cross-border accessibility measures 48, 64, 66
 - to human capital 48–67
- cross-border innovation cooperation
 - patterns of firms 337
- cross-border innovation, Denmark 12–13, 330–49
- cross-border interaction barriers 51–2
- cross-border market integration, benefits 50–51
- cross-border mobility 337
- cross-border study
 - between Sweden and Norway 11
- cross-case analysis 148–57
- cross-sectional regression approach 107
- cultural attractions of urban regions 6
- cultural diversity
 - positive link with firm birth 168
- cultural heritage 6
- Danish 2010 CIS questionnaire
 - six categories 339
- Danish firms
 - cross border innovation cooperation 336, 346
 - firms investing in R&D 336
- Danish Global Entrepreneurship Monitor survey 81
- data and descriptive statistics 61
- data and empirical strategy 27–9
- data and estimation strategy 208–10
- data and variables 109–13
- databases
 - firms, employees, international trade 310
- data in empirical analysis 2010 CIS Denmark 342–3
- data items, relevant
 - cost of assembly, labour, materials 268
- data on business functions 268
- dataset, 'ideal'
 - information at product level', 268
- debt crisis in European Union 70
- definition of human capital
 - 'people with a bachelor's degree or higher' 359
- demographic and employment perspectives 87
- demographic development, Denmark 73
 - favouring larger cities 87
 - four principal types of city locations 82–3
- dense population 366
- Department Research and Statistics (O&S)
 - property database (Vastgoedbestand) 236
- dependent variables 310–11
 - location of innovation partners 338–9
- descriptive statistics 312–13
- developing countries
 - Mexico and China in global value chain 267

- development drivers 73
- digital connections 1
- dismissals, mass, Sweden 24
- displaced workers 19
 - definitions 28
 - men more than women 25
 - number of 31
 - re-employment rates 35
 - regional movement 20
 - Sweden 24–5
- displacement definitions, Sweden 44
- displacement rates 33
- displacements, definitions 27
- distance and transaction costs 53
- distance-sensitivity of industry
 - and position in global value chain 291
- divergence, increased
 - between Northern and Southern European countries 71
- diversity
 - human capital, firm growth rates 360
 - share of same sex couple households 359
- domestic and foreign markets interface 48
- domestic economic system alterations, Europe 77
- domestic labor force 53
- domestic or foreign partner 333
- double counting 265
 - in trade data 275–6
- downstream measures, highest
 - wood, electrical equipment, transport equipment 279
- downstream measures, location near final consumer 278
- duration for immigrant and native entrepreneurs 226–61
- Dutch manufacturing firms 208
- Dutch National Information System on Jobs and Business Establishments (LISA) 228
- Dutch regions, creative class concentration 360

- Eastern European countries
 - divergence then convergence 99
- economic base erosion, visible in Denmark 86
 - economic convergence trend among EU member states 71
 - economic crisis, current, Europe 77
 - economic environment, external effect on self-employment 206
 - economic geography literature 354–5
 - economic institutions, reforms' need 78
 - economic productivity in border regions 11
 - education, advanced 214, 215, 217
 - education as investment 206
 - electronic communication for information 8
 - electronic design, Norrköping 148
 - emotional stability 358
 - empirical evidence in Europe 72–3
 - empirical model for hypotheses 60–61
 - empirical strategy 313
 - employees (55–64)
 - lower incidence of employment 25
 - employers, concentrations of similar 26
 - employment and wage rises
 - in border regions 52
 - employment growth rates, Germany 361
 - employment in service sector
 - Denmark 87
 - endogenous growth models 21
 - energy and manufacturing sector convergence 122
 - entrepreneur characteristics 230–31
 - male overrepresentation 238
 - entrepreneur ethnicity 235–6, 257
 - survival chances 247
 - entrepreneurial activities 366, 372–3
 - strong barriers in some places 159
 - entrepreneurial pioneers
 - encouragement in Linköping 158
 - entrepreneurial skills, lack
 - Vienna university 424–6
 - entrepreneurs
 - economic growth and development 165
 - in Linköping 158
 - entrepreneurship 5
 - analysis of collected data 142–3
 - case studies 141
 - cross-case analysis 143
 - necessity-driven 82
 - new firm foundation 136

- opportunity-driven 82
 - qualitative approach 140–41
 - within-case analysis 143
- entrepreneurship and informal institutions
 - local perspective 135
- entrepreneurship-oriented policies 202
- entrepreneurship research, embeddedness 135
- Ericsson plant, 1997, closure effects 26
- estimation issue with traditional approach 106–7
- ethnicity, ‘liability of foreignness’ 230
- European austerity policy 89
- European context 70
- European debt crisis 2010 72
- European regions, creative class members 360
- Eurostat Regio database 111
- evolutionary theory 415
- explanatory variables 311–12
- export aggregate 310
- export participation rate 266
- export products, new 306
 - average unit price 304
 - Sweden 300
- export sales 322
- exports of new products 300
- external experts 425–6
- external knowledge potential 316, 322
- extraversion (energy, enthusiasm) 358
 - sociability, activity, assertiveness, positive emotionality 359
- factors inhibiting university spin-offs, Vienna 430–31
- faculty researcher 419
- ‘family’ norms, entrepreneurship 149
- farming, fishing, forestry 62
- fashion in Paris 387
- Federal Communications Commission (FCC) 170
- female founders 212
 - exits likely 217
- female founders, minority 206
- financial capital
 - savings, social contacts, venture capital, banks 168
- financial crises 20
 - financial education, role of 259–60
 - financial incentives, Norrköping 155
 - firm age, ‘liability of newness’ 231
 - Firm and Establishment Dynamics database 208
 - firm characteristics 230, 231–3
 - export sales, ownership type 281
 - firm-level characteristics 334
 - firm-level evidence 279–81
 - firm location and knowledge sources 303–4
 - firm locations and partners 330
 - firm sector, market environment 232
 - firm size, ‘liability of smallness’, 232
 - firm success 204
 - in the Netherlands 226–7, 235
 - firm survival chances, explanations 205, 229–31
 - firm survival in Munich 235
 - firms, exiting, tracking of, for motivations 261
 - fiscal consolidation of Euro countries
 - effect on Denmark 88–9
 - five basic dimensions
 - extraversion, agreeableness, conscientiousness, neuroticism, openness to experience 358
 - five-factor model
 - concept from psychology 354
 - Flextronics, Norrköping 154
 - Florida, R.
 - ‘The Economic Geography of Talent’ 359
 - food industry 334
 - foreign direct investment (FDI) 51–2
 - foreign firms
 - lack of knowledge and experience 230
 - foreign innovation partners 330
 - foreign labour markets 48
 - foreign markets, proximity 52
 - foreign migrants in ethnic clusters 2
 - foreign value-added
 - intermediate value-added 277
 - foreign versus domestic value-added 270
 - foreigners 366, 388
 - foreigners’ choice
 - place choice where foreigners are 367

- founder of firm, development influence 205
- French food industry, greater knowledge 299
- gay or lesbian choices 367
- GDP per capita 378, 386
- gender role, mortality rate of firms 206
- general purpose technology (GPT) 165
- generation of university spin-offs
 - barriers, to, Vienna case study 411–32
- gentrification effect 357
- geographical proximity 337
- geographic extension, local labor market area 26
- geographic proximity need
 - for tacit knowledge transmission 333–4
- Geographically Weighted Regression, *see* GWR
- geography of creativity 355
- geography of cultural change,
 - employment and productivity 10
- geography of entrepreneurship 11
 - and business dynamics 3, 10
- geography of innovations 12
 - cooperation and growth 3, 10
- geography of structural change
 - employment and productivity 2
- geography of the creative class and creativity
 - empirical results 359–63
- German Socio-Economic Panel (SOEP)
 - micro-data for Germany 363
- Germany
 - urbanity, diversity, public provision, health care supply 360–61
- ghost towns in United States 86
- global financial crisis 2008 72
- global financial crisis, Swedish
 - economy shrunk 30
- global knowledge networks 336–7
- global value chain 267
 - in bilateral trade 12
 - evidence for Sweden 265–91
- globalization 70
- GMM or instrument variable
 - estimation 106–7
- GMM procedure 114, 116
- Goodyear tyre manufacturing, closure Norrköping 147
- government contracts 168
- government investment 168
- government spending 174
 - mixed effects 168
- graphical analysis 111–13
- gravity equation, estimation technique 281
- gross pay 61, 66–7
 - dependent variable 65
 - earned by foreign labour 60
- gross pay generation 64
- gross-pay in municipality 59
- group specific informal institutions 137
- growth drivers, non-linear 78, 89–90
- growth model, Solow–Swan 104
- growth rates of productivity 111
- GVA per capita 108
- GWR models 166, 170
- heterogeneity 139
- high-performance urban regions 7
- high school in Linköping 145
- high-tech industries 70, 116
- high-tech manufacturing 370, 386
- Hollywood film industry 387
- home-based businesses 233
- homogeneous model results 114–16
- horizontal versus vertical policies 9–10
- hospitals, relocation of, to largest cities 87
- human and social capital
 - effect on business success 231
- human capital 51, 123
 - depreciation 24
 - development 71
 - experience and education 205–6
 - focus 85
 - increase 301
 - in municipality 59
 - people with university schooling 59
 - persons with further education than high school 61
 - for regional productivity 58
 - school, tertiary education, worker experience 302
- human capital, accessibility to
 - positive impact on productivity 60

- human capital measures
 - high regional income levels 360
- 'human capital theory' 231
 - on survival chances 205
- human capital (university degree) 367
- human resources
 - most important factor for change 79
- hypotheses 60
 - and empirical models for sub-population 59–61
- ICT, *see* information and communication technology
- identification numbers
 - of individuals or establishments 27
- immigrant entrepreneurs 206
 - Amsterdam, high 228
 - less work experience 238
 - younger than Dutch counterparts 238
- immigrant firms
 - Netherlands or Portugal, Italy 230
- immigrant founders
 - capital and knowledge, worse off 217
 - language barriers, financial restrictions 214
- immigrants
 - higher, entering self-employment 25
- imports for upstream industries
 - and downstream industries 288–9
- income growth and new firm births 167
- increased demand for products or services 234
- incubator hypothesis 207
- independent variables 339–42
- individual characteristics
 - gender, age, educational level 24
 - and regional agglomeration 202–19
- industrial city of Norrköping, clothes production 146
- industrial towns, low share of highly educated 157
- industry-based definitions 354
- industry heterogeneity 212
- industry level analysis 281
- industry level convergence of labour productivity 101–3
- industry specific 116, 334, 354
- industry-specific competence
 - difficulty of re-employment 38
- inference problems, creative class literature 365
- informal institutions 266
 - differences across nations 136
 - local differences 11
 - social interaction, unwritten 137
- informal institutions and movements 137–8
- information and communication technologies (ICT) 77–9
 - access to 79
 - developments 234
 - Vienna 422
- information networks 166
- information on text messages, transferable 333–4
- infrastructure, location factor 51
- infrastructure provision 78, 165
- initial level of productivity 111
- innovation
 - cooperation 332
 - core priority 71
 - ecosystems, weakness in Vienna 430
 - entrepreneurship 81
 - focus 85
 - higher education 8
 - knowledge creation 71
 - performance 80–91
- innovation and growth 3
- innovation ecosystem, Vienna
 - strength in scientific talent 431
- innovation partners in Denmark
 - independent from choosing a partner abroad 347
- innovation processes of firms 336
- innovative ecosystems, definition 416–18
- innovative entry 21
- input–output structure
 - of global production 268, 273
- Institute of Technology, Linköping 145
- institutional foundations 138
 - and entrepreneurship 139–41
- institutional reforms 77
- institutional set up role 81
- integration partners 51
- intellectual property 414

- intellectual property protection 419
- inter- and intra-regional balance 70–92
 - change and development drivers of economic growth 71
 - in Europe 11
- interaction 5, 24
- interconnected industries 203
- inter-firm relationships across borders 268
- inter-industry knowledge spillover 207
- intermediate regions 86
- internal and external knowledge
 - conjunction
 - for new export products 304–5
- internal knowledge
 - developing and exploiting 301
 - effect on absorptive capacity 302
- internal knowledge fund of a firm 302
- internal knowledge, importance 301
- internal knowledge of firm 299, 321
- international airports, closeness to 348
- international cooperation on R&D and innovation 333
- international disparities
 - between metropolitan and less urbanized parts 71
- international financial crisis 72
 - in OECD 70
- international innovation cooperation 334
- international migration role 2
- international mobility via airports 337
- international outsourcing 266, 274
 - evidence for Sweden 265–91
- international production
 - fragmentation 288
- international production system 70
 - alterations 71
- international specialization 86
- international trade 265
 - total share of firms 266
- Internet, important infrastructure 165
- inter-regional accessibility
 - weak positive* effect 59–60
- inter-regional convergence 72
- inter-regional interaction
 - extra-regional interaction 56–7
- inter-university cooperation
 - lack of for spin-offs 426
- interview conducting, entrepreneurship 141–2
- intra-industry knowledge spillovers 208
- intra-mediate inputs 265
- intra-national development 82, 88
- intra-regional accessibility 59, 64
- intra-regional convergence 72
- invention
 - with commercialization potential 419
- iPhone 4
 - Chinese value-added overstatement 266
 - factory gate price 266
 - production in China 266
 - value of assembly in China 266
- IT bubble, 2001 30
- IT increasing importance 157
- IT sector emerging
 - companies related to 153
- Jacobs' externalities 207–8
- job availability 357
- job displacement 19
- job provision by SAAB 145
- joblessness 20
- key variables and methods
 - firm survival, ethnicity 237
- KIBS, *see* Knowledge-Intensive Business Service
- knowledge
 - codified 333
 - creation 303
 - dynamic 81
 - external 302
 - internal of firms 299, 302
 - learning and dissemination
 - central factor of regional development 79
 - potential 311, 313–14
 - production 2
 - sources 321
 - specialized in urban regions 5
 - spillovers 23–4, 332
 - supply 299
 - transfers 5
- knowledge absorption
 - capacities of firms 12–13, 300, 313

- in development of export products 299
- knowledge accumulation factor
 - sustainable growth 49
- knowledge and regions 50
- knowledge assets
 - institutional conditions of Vienna 420–22
- knowledge bases 333–6, 342, 349, 361
- knowledge commercialization, activities 411–12
- knowledge-driven and innovative production systems 71
- knowledge-driven and innovative products 88
- knowledge environment for firm 300
- knowledge flows
 - partly invisible 303
 - spatial bounded 64
- knowledge inputs 203
- knowledge intensity 311, 316
 - in manufacturing firms 306
- knowledge-intensive business focus 85
- Knowledge-Intensive Business Service (KIBS) 334, 216, 299
 - activities 304
 - industries 215
 - sector 216–17
- knowledge-intensive services 70
- knowledge mechanisms
 - new export products 299–323
- knowledge spillovers
 - and economic growth 49–50
 - within-industry 207
- labor demand, decreasing 2
- labor market (LM) 52
 - characteristics 24
 - development in border regions 51
 - effects of integration 53
 - Statistics Sweden 29
- labor mobility 21–2
 - and industrial dynamics 21–2
 - in receiving region 53
 - wage and unemployment differentials 53
- labor mobility, positive effects 23
- labor movement
 - becoming caretakers 151
 - family loyalty and conformity 158
 - in industrial towns 138
- labor productivity
 - convergence process 96–7, 101
 - aggregate and sectoral labor 102–3
 - country, regional, national levels 11
 - data sets 109–11
 - EU KLEMS 103
 - in region 61
 - for European regions 101
 - growth 102
 - and structural changes 96–124
- labor union
 - strong connection with social democrats, Norrköping 155
- labor union members, Norrköping 157
- lack of interest
 - in commercialization potential 419
- 'liability of adolescence' 226, 229, 231, 257
- 'liability of foreignness' for immigrants 227
- 'liability of newness' 226, 229, 250
 - vulnerability 228
- liberal norms, Western world
 - freedom, right to vote 138–9
- life duration of firms 226
- life science industry case study 336–7
- limitations and sensitivity 347
- Linköping
 - airplane development 145
 - economic and population growth 158
 - Norrköping campus of 148
 - Linköping University (LiU)
 - ties between private industry and university 145–6
- Lisbon agenda, European Union, 2000 202
- Lisbon goal, of European Union 412
- local centres, determination of 54
- local employment, America 23
- local institutions in economic activities 136
- localized density 203
- local labor market regions
 - Norway and Sweden 55, 61

- local norms
 - encouraging ambition 148
 - encouraging conformity/
 - heterogeneity 148
 - encouraging loyalty 148
- local or regional market size 234
- locational factors 348
- location choice, importance 260
- location in Denmark, categories for
 - other EU countries USA, China/
 - India (Asia) 339
- locations, new
 - and labor force 72
- location theories, traditional 51
- lock-in problem 23
- London, weak position
 - innovation performance 81
- long distance cooperation 338
- longitudinal analysis of new firms 229
- longitudinal research format 237
- long-term economic growth
 - roles of 165
- low socio-economic status
 - of new firms 241
- loyalty in Linköping 150–51
- loyalty norm groups 150
 - social networks 148–9
- LSDV (least square dummy variable)
 - 98
- LSDV estimator 106
- macroeconomic conditions 420
- macro economy, Europe 77
- macro-level information
 - at neighbourhood level 236
- manufacturing companies
 - closure in Norrköping 154
- manufacturing firms
 - new export products 306, 308
- manufacturing industries in
 - Norrköping
 - river location near Baltic Sea 146–7
- manufacturing industry, outdated
 - visions 158
- manufacturing sector 116, 117–18
 - exits 212
- manufacturing sector in US 23
- market context 234
- market structure 233
- Marshallian externalities 208, 215
- matching procedure
 - Utrecht University data set (UU
 - data set) 236
- media industry, southern Sweden 336
- media technology, Norrköping 148
- meetings in urban regions 8
- metal and paper industry, Norrköping
 - 146
- micro-level information on firms
 - (2005–08) 236
- migration 50, 52
- migration patterns across regions 38
- migration theory 51
- mining, basic metals, electronics
 - greatest share of foreign value-added
 - 274
- Ministry of Science, Vienna university
 - 423
- Missouri Census Data Center
 - (MCDC) 171
- ‘mixed embeddedness’
 - immigrant entrepreneurs 235
- movements, definition 138
- movements, informal institutions and
 - location 138
- multi-disciplinary approach 257
- multi-level approach
 - to geography of creativity 354–91
- multilevel governance 77
- multi-level logistic regression 364–6
- multi-level perspective 366
- multi-level regression analysis 365
- multi-level regression models 380–86
- multi-location firm 310
- multinational company 321
- multinational firms 1
- multiple regression model 169
- multivariate analysis
 - role of entrepreneur ethnicity 250
- multivariate probit model 347
- municipal areas
 - Norway and Sweden 64
- Municipality of Amsterdam Research
 - and Statistics Department 228
- NACE codes 209
- National Board for Industrial
 - and Technical Development
 - (NUTEK)
 - Sweden, 1991 202

- national borders
 - and knowledge bases 330–49
- national cultural values 136
- national frontiers, impediments 54
- national government, support from 147
- National Information System of Employment register (Landelijk Informatiesysteem Arbeidsmarkt (LISA)) 236
- National Police Board 147
- native entrepreneurs, more survivors 247
- NEG, *see* New Economic Geography
- negative emotionality 359
- negative impact of age 217
- negative influence of ethnicity 258
- neighbourhood context
 - immigrant entrepreneurship 260
- neighbourhood effects' role
 - immigrant firms 227
- neighbourhood features 233–4
- network creation 152
- networks 136
- neuroticism 358, 359
- new Amsterdam firms
 - life duration of firms 227
- new economic geography 77
- New Economic Geography (NEG)
 - location theory 51
 - models 50, 52
- new economic growth theory 71, 73
- New Economic Growth theory
 - innovation, entrepreneurship 77–8
- new export products 300
 - increase with knowledge intensity 315
- new export varieties 300
- new firm formation
 - broadband in US 165
- new firm life, variations in 226–61
 - negative effects 257
- new firms, composition, Amsterdam 238
- new Greek manufacturing firms 234
- new market economies after 1989 72
- new native and immigrant firms
 - comparison, Amsterdam 238
- newness
 - for firms and entrepreneurs 7–8
- new urban–rural divide, Denmark 83–4
- Nokia case 272
- Nokia mobile phones
 - international outsourcing 268
- Nomenclature of Units for Territorial Statistics (NUTS) 97
- non-metropolitan regions
 - implications for 70
- non-urban areas, decline of 70
- non-western immigrant start-ups
 - relatively poor performance 257
- non-western immigrants
 - survival chances, negative effect 259
- Nordic countries
 - support for soft location factors 360
- norms encouraging compliance 143
- norms encouraging conformity 143
- norms encouraging loyalty 143
- Norrköping
 - industrial town 147–8, 154
 - no entrepreneurial interest 158
 - typical industrial town 158
- Norrköping-Package
 - two years' education 157
 - year's salary 157
- North America Free Trade Agreement (NAFTA) 273
- North American Industry Classification System (NAICS) 170
- North–South growth divide, Europe 72
- Norwegian and Swedish border regions 48
- novelties, monitoring in market
 - imitating and adopting 301
- 'nursery cities' model 207, 215
- NUTS2 level, 1991–2009 115
- occupational level specializations 8
- occupation-based definitions 354
- occupation characteristics 354
- offshoring 86
 - government investment 168
- Ohio negative relationship
 - unemployment rate and new firm births 175
- older founders, greater exits 212
- openness 354–5

- liberal values 362
- three questions 363
- to experience 359
- opportunity generation 9
- Organisation for Economic Co-operation and Development (OECD)
 - cross-country comparison 19
 - rise in urbanization level 4
- outsourcing 86
- ownership objectives 204
- panel data model
 - convergence of economies 99–100
- panel data techniques 98–9
- panel unit root testing 107–8
 - results of convergence 98, 120–21
- paper and pulp industry, 1969 closure 25–6
- partner selection 330, 330–49
 - Denmark 12–13
- partners, choice of 337–8
- partners, types of
 - customers versus suppliers 349
- passenger and freight transport
 - accessibility 8
- patent-citation frequencies
 - influence of distance 303
- patenting of recombinant DNA 411
- path dependence 32, 33
- patriarchal culture in Norrköping
 - in 1850s 151, 152
- ‘people climate’, not ‘business climate’ 357
- personal identification of
 - entrepreneurs 236–7
- Personality, the big five model
 - five-factor model 358
- personality descriptions, five basic 354
- personality features of entrepreneurs (traits) 260
- personality profiles, distinct 362–3
- personality questionnaires 358
- personality theory 358
- personality traits 358
- Pharmacia plant, Uppsala, 1995
 - closure effects 26
- physical and virtual networks
 - influence of, for entrepreneurs 166–7
- physical capital holdings 316
- physical distance, trade barrier 267
- ‘PIIGS’ states
 - Portugal, Italy Ireland, Greece, Spain 73
- ‘plug and play community’ 149
- policymakers’ focus, support creation 218
- political science 77
- pollution 5
- population decline, income decline 9
- population density 53
- population density, regional 234, 375
- population development
 - stagnation in Norrköping 151
- population growth
 - influence of, for entrepreneurs 167
 - percentage change 171
- population of Norway 62
- positive and negative externalities
 - of urban regions 6
- positive ratios 212
- potential barriers
 - to university spin-offs 418–19
- potential heterogeneity
 - in innovation cooperation 330
- ‘power houses’ international 2
- private motives as reason to move 357
- private venture capital
 - Vienna university 426
- process and product innovation 80
- product codes
 - Combined Nomenclature (CN), 2000–08 306
- production, innovation
 - renewal and growth 1
- production for a single product
 - i-Phone 4 266
- production fragmentation
 - measurement 268, 270
 - trade costs magnified 266
- productivity 48, 103
 - gross pay per employee 59
 - in Swedish/Norwegian border regions 59
- productivity, positive impact on 65
- productivity convergence 97
- profit
 - ‘the criteria of natural selection’ 204–5
- psycho-lexical studies 358

- public organizations 136
- public sector
 - as framework setter 78
- purchasing power 51
 - lower 2
- push or pull motives
 - for entrepreneurs 229
- qualitative research 390
- qualitative research designs 141
- quality, high, for competition 7
- questionnaire results
 - Vienna university 439–41
- R&D (research and development)
 - expenditure, Vienna university 421
 - institutions 79
 - intensity 339
 - coefficients 344
 - positive impact on innovation cooperation 334
 - investments
 - regional economic growth 58
- random growth theory 204
- re-employment 22
 - American studies 22–3
- re-employment ability 29
- re-employment conditions 20
- re-employment of Swedish displaced workers 25
- re-employment rates
 - persistently high 35
 - persistently low 35
- region growth
 - knowledge, technology, organization and location 49
- regional and municipality reforms
 - Denmark 88
- regional characteristics 355, 362
- regional convergence 116
- regional definition, importance 29
- regional differences
 - absorbing displacements 19–40
- regional differences in displacements 29
- regional disparities in Europe 77
- regional displacements 22–4
- regional diversity 207
- regional economic development
 - concentration of creative class 357
 - entrepreneurship 378
 - regional effects of business closures 20–21
- regional entrepreneurial activities 371
 - creative class members 387
- regional environment of university
 - source of resources 420
- regional growth model 106
- regional growth rates
 - freelance artists, Germany 361
- regional income differences 52
- regional innovation
 - new exports 12
- regional labor demand 24
- regional labor mobility 21
- regional level 100–101
- regional number of displacements
 - calculation of 29
- regional polarization 71
- regional population density 234
- regional productivity 66
- regional prosperity
 - of creative individuals 366
- regional resilience 20
- regional size and density
 - importance for knowledge flows 50
- regional specialization 204
- regional trade agreements increase
 - EU countries 287
- regional wage sum data 61
- regions in knowledge creation
 - importance 203–4
- register data
 - Algemeen Bedrijven Register (ABR) 236
- regression analysis
 - agriculture, industry, services 101–2
- regression results 63–5, 316
 - and analysis 314–15
- remaining municipalities,
 - determination of 54
- rent or owner occupied
 - home-based businesses 233
- research and specializations
 - Vienna university 421
- research and specializations, life sciences 421
- research cooperation 332
- research design and data 169
- research gaps and hypotheses 366–7

- research institutes 81
- research on entrepreneurialism 160
- research on personalities across countries 362
- research universities
 - basic research 411
 - human capital development (teaching) 411
- researcher networks 1
- resource base
 - industrial structure 9
 - labour skills 9
 - natural resources 9
- resource-based view (RBV)
 - firm-level resources 205
 - from management science field 415
- resource-dependency theories 415
- 'revolving door regimes'
 - 'last in–first out' 229
- risk and uncertainty of entrepreneurship 135
- risk sharing 332
- risk-taking
 - trait of entrepreneurs 148
- rural Denmark 83
- rural small town, Linköping 145
- rural–urban continuum
 - United States Department of Agriculture (USDA) 171
- SAAB, Sweden
 - technological company 145
- same-sex marriages, tolerance 366, 388
- same-sex relationship 386
- Scandinavian Housing and Planning Research 1992
 - move to Norrköping 147
- Science Park, Sweden 154
- scientific and engineering industries 349
- scientific and medical research
 - Vienna 421–2
- scientific personnel
 - of Vienna university 421
- sectoral analyses 172
- sectoral dummies
 - high-tech manufacturing 364
- security threats 5
- seedbed conditions, diversity of 8
- self-driven people, Linköping 156
- self-employed firms 12
 - survival of 202
- self-employed individuals 371
- self-employment 25
 - importance for immigrants 206
- service providers
 - in each zip code 171
- service sector industries
 - high displacement rates 33
- services sectors
 - market services, financial services, non-market services 117–18
- shipyard closure, Oskarshamn, 1960s 26
- shipyard industry 19
- shop closures
 - aging communities 86
- sick leave data 62
- Silicon Valley example 357
- single establishments 310
- single industry domination 26
- skill abundance 291
- skill intensity 291
- small and medium-sized regions (SMRs)
 - opportunities, challenges 9–10
- small firms
 - close vicinity partners 334
- small into large firms 146
- social aspects, family and friends 136
- social degradation 5
- social democratic party
 - Norrköping 152
- social dimension
 - of entrepreneurship 135
- social inequality in developing world 70
- social science
 - 'institutional turn' 136
- Social Security Insurance for Artists and Writers
 - share of bohemians 364
- social ties, forming 207
- socialist parties for workers, Sweden 151

- socio-economic and political environments 258
- socio-economic status of members of three Ts 356
- soft location factors 357, 374
 - openness and tolerance 389
- software industry
 - in Great Beijing (China) and Pune (India) 337
- Southern Denmark growth drivers 85, 86
- spatial autocorrelation 57
- spatial discounting procedure
 - accessibility 57
- spatial heterogeneity 169
 - broadband Internet 195
 - GWR models 175
- spatial levels
 - local, intra-regional, inter-regional 61
- spatial proximity 5, 57
 - to national border 51–2
- spatial specialization 73
- spatial structure of knowledge flows 50
- spatial structures, important role 168
- specializations, different
 - among firms 8
- specific coaching
 - and information exchange for immigrant entrepreneurs 260
- specific entry barriers 233
- speed of convergence 115, 122
- spillover effects 21
- spillovers 5
- spin-off process
 - formation of firm 413
- sports clubs, theatre clubs 137
- start-up cohorts 237
- start-up location
 - type of neighbourhood 241
- start-ups of entrepreneurs
 - beginning in homes 241
- Statistics Netherlands (CBS) 228, 236
- Statistics Sweden (SCB) 208
 - data on firm's imports and export 273
 - Micro Data Online Access (MONA) database 27
- stochastic convergence approach 107–8
- Strand Interconnect, Norrköping 154
- strategic management perspective 204
- Structural Business Statistics
 - Statistics Sweden 202
- structural change
 - labour productivity at macro (country), regional and industry levels 121
- structural change and measurement 108–9
- structural change, role of 122
- structural changes 102
 - important role in convergence process 97
- student entrepreneurs
 - in Norrköping 155–6
- studies in different languages
 - Japanese, Chinese, German 358
- success of immigrants' firms 234–6
- Super-Creative Core
 - scientists, engineers, etc. 356
- surgency 358
- survival analysis methodology 203
 - for firm failure 209
- survival capabilities
 - internal and external factors 217
- survival chances of new firms
 - different ethnic groups 259
- survival of Milanese entrepreneurs 235
- survival rate factors
 - age, gender, immigration status, education 203
- survival rates of firms 226
- synthetic knowledge base 342
- Sweden
 - research on displacements 24–6
- Sweden and UK, comparison capitalist regimes differences 360
- Swedish Agency for Growth Policy Analysis (2015) 267
- Swedish aviation capital
 - Linköping 141, 145
- Swedish exports and imports
 - at firm level 291
- Swedish exports' share
 - international outsourcing 274
- Swedish exports' value
 - imports from abroad, 30 per cent 267

- Swedish Industrial Classification (SNI) 305
- Swedish industries
 - downstream in global value chain 267, 276, 277
- Swedish manufacturing industry 306
 - agglomeration advantage 299
- Swedish Meteorological and Hydrological Institute 147
- Swedish Railroad Shop (ASJ) 145
- Swedish Social Insurance Agency 147
- Swedish SPIN classification
 - data recording 273
- Swedish trade evolution
 - using inter-country input–output tables 290
 - in value-added 290
- Swedish Transport Agency 147
- symbolic knowledge base 342

- tacit knowledge 333
- team start-ups
 - advantage over solo ventures 232
- technological and organizational innovations
 - temporary monopolies 301
- technological complexity 233
- technological innovation 80
- technological innovativeness 348
- technological knowledge 208
- technological progress 116
- technology
 - high-tech companies 356
- technology development 423
- technology enhancement 96
- technology gap 99
- technology innovation 412
- technology transfer office (TTO)
 - Directors
 - no active supporting, Vienna 422–3
 - Vienna underfunded 425
- telecom industry 19
- territorial policy, Europe 77
- textile and paper industries decline
- Norrköping 151
- textile industry crisis
 - 1950s, 1960s 147
 - move to Finland, Portugal, then Asia 147
- textile production
 - mechanization of 146
- TFP convergence 102–3
 - country level 99–100
- three or more countries
 - value-added trade 272
- time distances 57
- time frame, flexible
 - for closure process 27–8
- time-series datasets
 - with CIS data 347
- tolerance
 - urban and tolerant climate 356
- tolerance, talents and technology
- three Ts 356
- trade
 - internationalization of labor markets 52
- trade and growth 50
- trade costs, effect of
 - on pattern of trade in global value chains 291
- trade costs, falling
 - growth in production fragmentation 291
- trade flow measurement 265
- trade theory 51
- trade theory, classical 52–3
- traditional businesses
 - Walmart, Toys R Us, Walgreens 166
- traditional convergence approach 104–7
- transaction costs 204
- transaction costs analysis 332
- transport and communications systems 6
- transport costs 54
 - inter-regional 52
- transport links improvement 58
- transport, Norrköping 148
- transportation infrastructure 167
- trike breakers, Norrköping 155–6
- TTO, *see* technology transfer office
- two-country case
 - goods for consumer demand 270–72
- unemployment
 - conversion into jobs or self-employment 202

- unemployment durations
 - in the Netherlands 24
- unemployment effect
 - higher firm births 167–8
- unemployment increase
 - Norrköping 147
- unemployment rates 19, 171, 234
- union density in Sweden 151
- union membership expectation 151
- United Kingdom
 - creative class concentration 360
 - tolerance and openness 360
- unit root tests 107
- universities, local 3
- university
 - Linköping 145
- university employee
 - active role in spin-off 414
- university environment
 - entrepreneur-friendly 154
- university partnering
 - high technology industries 333
 - research facilities 333
- university role in Linköping 152
- university schooling 48
- university spin-off creation
 - entrepreneurial activities 414
- university spin-off definitions
 - 412–14
- university spin-offs 3–4
 - barriers and challenges 3, 10, 13
 - European Union recognition 412
 - investor in new firm 413
 - Linköping 146
 - perceived barriers, Vienna 422
- university start-ups
 - reasons for generating 415–16
- university technology 414
- upgrading 8
- upstream in value chain
 - location in global South 276
- upstream input 275, 277
- upstream measures
 - food, beverage and textile industries 278
- urban growth
 - negative externalities 5
- urbanity influence 387
- urbanization 204, 215
 - externalities, size of region 207
 - or size of market 207
 - rapid in Europe, challenge 11
- urbanized areas, most innovative 88
- urban regions
 - growth engines 4–5
 - high-performance 7, 8
 - importance 1
 - removal to 4
 - successful 7–9
 - under-performing 7
- urban–rural divide, Denmark 82–8
- urban–rural divide, increase 71
- urban/rural divide, intensification 73
- United States metropolitan standard areas (MSA) 359
- Utrecht University dataset
 - year-on-year comparisons on businesses 236
- ‘valley of death’ 226
 - first years of firm 229
- value-added trade 272–3
- value chain position 274
 - and participation 276, 288
 - trade costs 281
- value creation 332
- values
 - ‘need for achievement’ 139
 - ‘need for autonomy’ 139
- Van Ark Procedure (1997) 108
- variables, explanatory
 - size of labor, physical capital 321
- variation of displaced workers
 - in business cycle 30
- venture capital scarcity
 - Norrköping 152
 - Vienna university 431
- venture money, Vienna university
 - 425
- vertical specialization 268–70
- vice-rectors for research
 - Vienna 423–4
- Vienna
 - local innovation ecosystem 13
 - Vienna, Austria case study 412, 418
 - Vienna’s population 420
- virtual presence
 - strategic necessity 166
- voluntary sharing of knowledge
 - 332

- wage sum 62
- web-based strategies
 - for sales and services 166
- welfare payments 168
- welfare securing
 - challenge 70
- Western market economies 70
- West German start-ups 1983 to 2000
 - on impact of regional features 234
- women
 - decreases in earnings 25
 - leaving labor force 25
- work experience, limited 257–8
- work experience, limited, non-western immigrants
 - business failure 250
- worker pooling
 - from both sides of border 48
- workers, older, female, less educated 20
- workers, younger, American 23
- working population 70
- world economy transformation 1, 4
- World Input–Output Database (WIOD) 268
 - 40 countries 273
 - data on national income, labour compensation
 - capital compensation 273
- younger employees
 - high incidence of displacement 25
- younger generation
 - challenge for entrepreneurial activities 159
- youth, non-western immigrants
 - business failure 250
- Zip Code Tabulation Area (ZCTA) 171

