Index

ability, unobserved 56
academic new ventures, international or immature market targets 83
academic spin-offs
customer behavior changes 78
high-level knowledge and partnerships 81
money earning in international markets 81
specific and high-level knowledge need 65
“technology push” market entry 78
world leadership 80
academic spin-offs, aims
money earning in international markets 75
world leadership 75
academic spin-offs, growth and profit turnover increase 76
action to deal with stressor 155
active-optimistic framing approach 116, 129, 138
active-optimistic groups 131
active-strategic framing approach 116, 129, 138
active-strategic groups 131
threat and opportunity 134
adaptation of invention, importance of inventor 26
adverse selection problems 31
advertisement 133
age 97–8
and self-employment 106
increase and decrease 98
inverse U-shape 98
Alfa company study 185–90
marketing, 187–8
Multidiameter technology, 187
Offshore segment in first year 189
subsidiaries in Madrid, Latin America, Dubai 187
alliance building 82–3
international markets, targeting 80
ambitions of entrepreneurs 80
analyses 101–4
Anglo-American dominance in publishing 3
aptitude tests 56
arousal
and activation, coordination of 151
and energy-mobilization 153
assets of new firm variables and correlation matrix 48
attention and support for new business concepts 121
attention-challenging tasks 156
bankruptcy 35
baseline approach to framing 116
baseline statistics framing variables 128
behavioral costs 151
behavioral economics 151
behavior range 117
bivariate life table analysis 53–4
blame for disruptive event 154
born globals 179, 180, 183, 185
behaviour of entrepreneurs in internationalization in 190
brand equity 67
Bristow’s generalized wilcoxon test 50
business angels 22–3
business cycles 131
business financing opportunities, technology-based ventures 67
business knowledge 39
business MSc 160
business opportunity 44, 67
business plans, for funding agencies 163–4
business start-ups academic 65–85
entrepreneurship and the creation of small firms

non-academic 65–85
not uniform process 84
cable entries and seals, company 185–90
capital, restriction for start-up 150
case studies
importance of 72
on novice entrepreneurs 160–62
case study, academic spin-offs
cooperation opportunities through IT, 73
criteria 158
games on the Internet, 73
interaction opportunities for people, 73
causation and effectuation process 180, 182–3, 185
causation logic 191
challenge 154
changes and developments in external environment 119
cluster analysis 127, 131, 134
cognitive appraisal theory 151, 153
cognitive frames of top management 117
cognitive schemata, international opportunities 185
collective entrepreneurship, academic spin-offs 83
commercial exploitation of science and technology 91
commercialization mode, choice 19–21
external financing, 23
patents and 14–15, 17–23, 25
commercialization process 24
decisions, influence on renewal scheme 27
of university knowledge, Sweden 8
profit and 24
commercialized and non-commercialized patents 31
commercialized patents, comparison with renewed patents 28
common language 4
commonality or novelty, emphasis 117, 120, 125, 130
communication, mixed 137
competing technologies, threats 118
competition
for publication 4
risk of 24
with other companies 135
competitive environment, creation of 69
competitor deterrence 27
complementary assets from several founders 76
constructing industry, Alfa 190
constructive thinking 153
consulting services 74
control variables
county tenure, proxy for social network 49
education type 101
ethnic backgrounds 49
family net wealth measures 49
financial capital 100
gender and number of children 49
immigrants 100
industry profitability 49
industry size 49
population density 49
population growth 49
R&D intensity 49
receipt of taxable income 100
sex of individual 100
convenience-sampling approach 122
copportunity and networking 38
coping 152, 154
strategies
test-context-dependent factors 152
effort 152
emotion-focused 155
motivation 152
problem-focused 155
specific demands 155
entrepreneurship corporate 115–44
framing in 120
entrepreneurial corporate strategy 117
entrepreneurship business idea, beauty products for men, Sweden 161
Cox survival models 30
credibility establishment in investors, customers, suppliers 66
credit for disruptive event 154
credit from suppliers 68
criterion variables, correlation among 137
critical incident technique for goal-disruption 157
customer attraction 38, 68
data access in Sweden 5
Index

data collection for sampling 123
date source for study (LOUISE), Statistics Sweden 45
decision making 155
decision-making processes in effectuation theory, interactions with others 184
demand side and supply side 68
dependent variables 45
   entry into self-employment 99
   first 46
despair and fatigue, negative side effects 170
discovery and exploitation ability 37
discrete choice techniques, logit or probit 45
disillusionment with project 165
disruptive events, energy resources 155
doctoral dissertations, independent research works 5
dot-com bubble, Swedish IT firms equity financing 49
economic downturns, negative effect 35
economic logic 39
economic theories of human capital 36
Edison, Thomas, electric light 118
education 39
   and entrepreneurial performance, positive effect of higher education 40
   exploitation of opportunities 91
   length of 55, 96–7
   results of, 109
effectuation logic 171, 190
   insights in international entrepreneurship 191
effectuation models 180
effectuation principles
   affordable loss 185
   controlling unpredictable future 185
   exploitation of contingencies 185
   strategic alliances 185
effectuation theory of Sarasvarthy 179–203
   Alfa’s decision to internationalize 188
   principle of affordable loss, not expected returns 188
   strategic alliances, not competitive analysis 189
electric light, perception shaping by Thomas Edison 118
electronic industry, Alfa 189
emotional goals, personal well-being 152
emotional reaction 152, 153, 155
emotional support for failure 165
emotion-focused strategy
   acceptance 156
   denial 156
   disengagement 156
   restraint 156
   seeking emotional support 156
   suppression 156
emotion regulation under stress 169
emotions and energy 155
employee initiative 122
employment and self-employment 39
energetic resources of entrepreneurs 149–73
   depletion 150
   theoretical model 152
energy resource episodes 159
energy resources
   construct 160
   input regulation 155
   of entrepreneurs 162
   regulation 156
engineering MSc 160
engineering, university education in 92, 98
English language 3
entrepreneur
   employment of inventor 26
   in focus as effectuator 190–91
   stress levels early in venture-creation process 158
entrepreneurial experience 52, 57
   importance of, in human capital 105
   valuable to self-employment 94
entrepreneurial human capital 35–59
   entry, performance and continuation 36
entrepreneurial opportunities, exploitation 36
entrepreneurial orientation of firms 181
entrepreneurial parts, opportunities and individuals 181
entrepreneurial process under uncertainty 37–45
entrepreneurship
   career choice 35
<table>
<thead>
<tr>
<th>classes in universities</th>
<th>108</th>
</tr>
</thead>
<tbody>
<tr>
<td>cost of</td>
<td></td>
</tr>
<tr>
<td>for highly-earning</td>
<td>106</td>
</tr>
<tr>
<td>people</td>
<td></td>
</tr>
<tr>
<td>for highly-educated</td>
<td>106</td>
</tr>
<tr>
<td>people</td>
<td></td>
</tr>
<tr>
<td>prior experience</td>
<td>36</td>
</tr>
<tr>
<td>research in North</td>
<td>1</td>
</tr>
<tr>
<td>America</td>
<td></td>
</tr>
<tr>
<td>uncertainty as career</td>
<td></td>
</tr>
<tr>
<td>option</td>
<td></td>
</tr>
<tr>
<td>uncertainty</td>
<td>37</td>
</tr>
<tr>
<td>106, 107</td>
<td></td>
</tr>
<tr>
<td>viable option</td>
<td></td>
</tr>
<tr>
<td>young people leaving</td>
<td>108</td>
</tr>
<tr>
<td>university</td>
<td></td>
</tr>
<tr>
<td>entrepreneurs'</td>
<td>158</td>
</tr>
<tr>
<td>intentions and</td>
<td></td>
</tr>
<tr>
<td>interviews</td>
<td></td>
</tr>
<tr>
<td>entrepreneurs, proactive</td>
<td>69</td>
</tr>
<tr>
<td>and reactive</td>
<td></td>
</tr>
<tr>
<td>entry decision and</td>
<td>44</td>
</tr>
<tr>
<td>option to defer</td>
<td></td>
</tr>
<tr>
<td>entry strategies to</td>
<td></td>
</tr>
<tr>
<td>new ventures</td>
<td>65-85</td>
</tr>
<tr>
<td>entry strategy</td>
<td>71</td>
</tr>
<tr>
<td>environmental change</td>
<td>153</td>
</tr>
<tr>
<td>environmental conditions</td>
<td>131</td>
</tr>
<tr>
<td>environmental threat</td>
<td>135</td>
</tr>
<tr>
<td>mitigation of,</td>
<td>120</td>
</tr>
<tr>
<td>established corporations, new business in</td>
<td>115-44</td>
</tr>
<tr>
<td>established practices</td>
<td>117</td>
</tr>
<tr>
<td>ethnographic case studies</td>
<td>199</td>
</tr>
<tr>
<td>Euclidean distances</td>
<td>127</td>
</tr>
<tr>
<td>European outlets, fewer</td>
<td>4</td>
</tr>
<tr>
<td>evaluation of events</td>
<td>153</td>
</tr>
<tr>
<td>event history</td>
<td>101</td>
</tr>
<tr>
<td>experience accumulation</td>
<td>105</td>
</tr>
<tr>
<td>experience from prior</td>
<td></td>
</tr>
<tr>
<td>start-up attempts</td>
<td>35</td>
</tr>
<tr>
<td>“experiential learning”</td>
<td>85</td>
</tr>
<tr>
<td>expired patents</td>
<td>30</td>
</tr>
<tr>
<td>exploitation of</td>
<td></td>
</tr>
<tr>
<td>opportunities</td>
<td>43</td>
</tr>
<tr>
<td>exploration of</td>
<td></td>
</tr>
<tr>
<td>contingencies,</td>
<td></td>
</tr>
<tr>
<td>competitive advantage</td>
<td></td>
</tr>
<tr>
<td>in products, Alfa</td>
<td>189</td>
</tr>
<tr>
<td>export activities of</td>
<td></td>
</tr>
<tr>
<td>international firms</td>
<td>180</td>
</tr>
<tr>
<td>external financing</td>
<td></td>
</tr>
<tr>
<td>high-tech companies</td>
<td>79</td>
</tr>
<tr>
<td>lack of and need for</td>
<td>15, 76</td>
</tr>
<tr>
<td>face-to-face</td>
<td>200</td>
</tr>
<tr>
<td>interviews</td>
<td></td>
</tr>
<tr>
<td>family types</td>
<td>101</td>
</tr>
<tr>
<td>fatigue</td>
<td>151, 155-6</td>
</tr>
<tr>
<td>finance obtaining</td>
<td>43, 68</td>
</tr>
<tr>
<td>financing from founder,</td>
<td></td>
</tr>
<tr>
<td>profits, bank</td>
<td>188</td>
</tr>
<tr>
<td>loans</td>
<td></td>
</tr>
<tr>
<td>firms and patents</td>
<td>17</td>
</tr>
<tr>
<td>firms, new</td>
<td>23</td>
</tr>
<tr>
<td>first-mover advantage</td>
<td>43</td>
</tr>
<tr>
<td>need for timing</td>
<td>81</td>
</tr>
<tr>
<td>first mover advantages</td>
<td>67</td>
</tr>
<tr>
<td>“follower strategy”</td>
<td>69</td>
</tr>
<tr>
<td>football watching on</td>
<td>161</td>
</tr>
<tr>
<td>cell phones</td>
<td></td>
</tr>
<tr>
<td>foreign markets,</td>
<td></td>
</tr>
<tr>
<td>increased competition</td>
<td>179</td>
</tr>
<tr>
<td>founder of Alfa,</td>
<td></td>
</tr>
<tr>
<td>experience in</td>
<td></td>
</tr>
<tr>
<td>international business</td>
<td>187</td>
</tr>
<tr>
<td>founders of venture,</td>
<td></td>
</tr>
<tr>
<td>benefits of team</td>
<td>67</td>
</tr>
<tr>
<td>framing activity,</td>
<td></td>
</tr>
<tr>
<td>absence of, passive</td>
<td>129</td>
</tr>
<tr>
<td>framing approaches</td>
<td>121</td>
</tr>
<tr>
<td>new business concepts</td>
<td>127-33</td>
</tr>
<tr>
<td>support for business</td>
<td>116-21, 124</td>
</tr>
<tr>
<td>concept</td>
<td></td>
</tr>
<tr>
<td>GARCH model of</td>
<td>47</td>
</tr>
<tr>
<td>uncertainty</td>
<td></td>
</tr>
<tr>
<td>GARCH volatility model</td>
<td>52</td>
</tr>
<tr>
<td>gestation as focus</td>
<td>158</td>
</tr>
<tr>
<td>period</td>
<td></td>
</tr>
<tr>
<td>global firms</td>
<td>179</td>
</tr>
<tr>
<td>global outlook in</td>
<td></td>
</tr>
<tr>
<td>Swedish research</td>
<td>6, 197</td>
</tr>
<tr>
<td>global research and</td>
<td></td>
</tr>
<tr>
<td>international</td>
<td></td>
</tr>
<tr>
<td>publication</td>
<td>3</td>
</tr>
<tr>
<td>communication</td>
<td></td>
</tr>
<tr>
<td>improvement</td>
<td>4</td>
</tr>
<tr>
<td>goal-disruption</td>
<td>151, 154, 156, 159</td>
</tr>
<tr>
<td>coping with</td>
<td></td>
</tr>
<tr>
<td>emotion-focused strategy</td>
<td>168</td>
</tr>
<tr>
<td>problem-focused</td>
<td></td>
</tr>
<tr>
<td>energy resources</td>
<td>157, 162</td>
</tr>
<tr>
<td>overcoming by</td>
<td></td>
</tr>
<tr>
<td>increased effort</td>
<td>170</td>
</tr>
<tr>
<td>threat or challenge</td>
<td></td>
</tr>
<tr>
<td>goal-disruptive events</td>
<td>150</td>
</tr>
<tr>
<td>appraisal of</td>
<td>153</td>
</tr>
<tr>
<td>goals and conflicting</td>
<td></td>
</tr>
<tr>
<td>demands</td>
<td>169</td>
</tr>
<tr>
<td>governing financing</td>
<td>14</td>
</tr>
<tr>
<td>in Sweden</td>
<td></td>
</tr>
<tr>
<td>government data</td>
<td>200</td>
</tr>
<tr>
<td>government financing</td>
<td></td>
</tr>
<tr>
<td>during R&amp;D phase</td>
<td>18, 22</td>
</tr>
<tr>
<td>government loans, soft</td>
<td>22</td>
</tr>
<tr>
<td>growth-oriented</td>
<td></td>
</tr>
<tr>
<td>trajectory</td>
<td>80</td>
</tr>
<tr>
<td>hazard function</td>
<td>17, 18</td>
</tr>
<tr>
<td>higher education,</td>
<td></td>
</tr>
<tr>
<td>positive effect</td>
<td>50</td>
</tr>
<tr>
<td>high-technology products</td>
<td>74</td>
</tr>
<tr>
<td>hindsight bias in</td>
<td></td>
</tr>
<tr>
<td>new business concept</td>
<td>124</td>
</tr>
</tbody>
</table>
Index

hippocampus 151
horse brushes
  business idea 161-2
  licensing idea 166
host corporations, survival 136
human capital 7, 35, 36, 39
  cost of switching careers 106
  non-transferability in occupations 98
  occupational choice 92
  older people 98
  relevant types 39
  role in entrepreneurship 39, 40
  self-employment 104
human capital and self-employment 91-110, 93-4
idea formulation, prior knowledge and experience 66
identification of cluster solutions
  judgmental decisions 138
identification problem 27
incentives for entrepreneurship and potential value of business
  opportunity 93-4
incentives for self-employment, poor salary 97
income 97
  from wage-work versus from self-employment 99
  gross earned per year 100
  incentive for entering self-employment 105
  optimizing by affluent people 49
  reluctance to reveal 109
incorporation 46
independent distributors 189
independent variables of
  education, years of 46-9
  irreversibility hypothesis 47
  prior experience from entrepreneurship 46
  uncertainty 47
independent variables of human capital age and self-employment 99
  length of education 99
  personal income 99
  prior experience 99
individual agents, importance of
  enterprising activities 42
  individual managers 185
individual motivation and inner drive 67
industries
  excluded 45
  high and low leverage investment reversibility 49
  in sample 58-9
industry-specific
  experiences, value of 55
  skills 41
  uncertainty 47
industry’s pre-tax result 49
industry subfield, new entry 43
industry types
  finance obtaining 101
  healthcare 101
  high-technology manufacturing 101
  research and development 101
  technology consultants 101
  trade 101
influence, one-sidedness of 4
informant bias 123
information
  and communication technology 3
  and prior experience, influence of 69
  distribution in society 69
innovation 69
input regulation of energy resources,
  mental problem solving 155
intelligence tests 56
internal funding, non-academic ventures 84
international entrepreneurship 179-203
  definition 181
internationalization
  increasing experiential knowledge 180
  Sweden 9
international markets 70, 75
international new ventures 179
international research scene in 1990s 1
Internet business idea, venture ideas from students 161
invention and innovation, separate stages 26
inventions and patents, secret information 16
inventors 20, 21
  and entrepreneur cooperation 24
  as transmitter of knowledge 26
  of patent, involvement of 15
Entrepreneurship and the Creation of Small Firms

investment decision, uncertainty and irreversibility 43
investment, potentially profitable exploration necessary 42
return on 41
investments from venture capitalists 82
specific, limitation of commitment 42 under uncertainty, 36–45, 55–6
‘investment under uncertainty’ perspective 36
irreversibility (duration time) 43
irreversibility focus 42, 43–4
irreversibility of investment in new venture 42
“issue entrepreneurs” 118
issue-sellers in organizations, selling to top management 118

Jansson, Torsten
New Wave group 35
Swedish ‘Entrepreneur of the Year’ award 35
job mobility and self-employment, positive association with entrepreneurship 105
job-switching, positive and negative aspects 95

Johannisson, Bengt, FSF-Nutek International Award for Entrepreneurship 2
joint-stock company 81

Kaplan-Meier survival graphs 53
on exit from entrepreneurship 54
knowledge acquisition and protection via patenting 96
knowledge-based products and services 74
management team, need for 79
knowledge codification 24
Knowledge gaining and funding 168
knowledge intensity 8, 74, 81, 82
knowledge, new combinations of 68
knowledge, ‘tacit’ 15

labor-market experience 39, 95–6
decrease in probability of self-employment 96
negative for self-employment 105

labor market laws, Sweden 108
laissez-faire strategy 164–5
language and cultural differences, international experience 188
learning of new skills 156
leisure and company clothing 35
licensed patents 21–4, 30
life-situations 169
life-table analysis, survival of new business concepts 131–2
life-table method (actuarial method) 29
limitations of the findings 136–8
limited companies 79
limited liability companies 99
linear planning approach 184
linguistic labels and new information 117
liquidation of fixed assets, difficult, in adverse performance 48
logistic regression 101
model, results 50
logit models on entry into entrepreneurship 51
longitudinal data on individuals’ behaviors 201
long-term investments 79

management research 66, 185
management teams (many founders) 79
managerial discretion focus 42
manufacturing and marketing 14
manufacturing companies, case-study criteria 72
manufacturing subsidiaries of international firms 180
market channel strategy, franchising contracts 185
joint ventures 185
market characteristics 71, 75
market choices in born globals 191
market entry mode decisions, effectuation logic use 191
market entry strategy of Alfa 190
market exit 35
market imbalance 68
market needs, unfilled 69
known products, 74–5
market opportunities, creation exploitation 41, 68, 79, 132
market opportunity, new 132
Index

"market-opportunity seeking behavior" 68
market research knowledge 67-8
market testing 38
material coding for tests 159
measurement error 109
medicine, university education in 92, 98
mental effort and performance stability 155, 169
micro companies 20
monetary value expectation 38
“monopoly profits” 69
moods and fatigue 169
moral hazard problems 15, 31
motivation and drive 149
motives of entrepreneurs 80
Multidiameter technology 187
in rubber, company, 185–90
multi-faceted research on start-up and growth 197
multinational firms 16, 179
multiple goals 162–3
multiple stakeholders 159
national laws and regulations 85
negative emotions 153, 156
negative evaluation, seen as threat or challenge 153
networks and alliances 68, 183, 188
international markets, targeting 80
versus stand-alone-company opportunities 70
networks, social or work-related 66
new business concepts 9
framing of 115–44
in established corporations 119
survival 132
new market ventures 35
non-academic ventures 81
government subsidies 76
local or regional market targets 80
market demands, existing 78
“market pull” entry 79
personal savings to start 76
products known to market 77
single founders 76
turnover increase 77
non-academic ventures, aims, local or national market for living wage 75
normal science idea 201
novelty 116–18, 125, 130
and commonality 118, 121, 134
and organizational change 118
downplaying 133
of new business concept, 135
novice entrepreneurs 150
NVIVO software for analysis 159
observation units 202
occupational choice 92
openness in research methods, Swedish 197–8
opportunities and new knowledge 91, 107, 116–18, 125
opportunity cost of entrepreneurship 37, 106–7
opportunity over threat, emphasis 127
opportunity recognition 69
opportunity seeking 182
optimal states of body 154
option of growth 44
option to defer 43
option to grow 43
organizational action 117
output measures 47
owner/inventors
commercialization of patents 13
start-up firms 13
Panel Study of Entrepreneurial Dynamics 201
partnerships 46, 99
passion as a driver 149
passion, put to the test, hardships 150
passive framing approach 116, 129, 138
passive groups 131
patent for horse brushes 164
patent holders
basic theory 14–15
Swedish 13–34
patent holdings 67
patent, licensing or selling of 26
patent renewal 26–31
patent validity and profit 28
patent value depreciation 26
patenting, protection via 96
patents 7
commercialization of 13
in new start-up firms 13–34
defensive 25
Entrepreneurship and the Creation of Small Firms

keeping for strategic reasons
frequent among multinational firms 28
non-commercialized 27
related 15
selling 23
specific technological knowledge 27
perceptions of goal-disruption 167
perseverance 150
personal earnings of self-employed
entrepreneurs 57
personal interviews for case study 73–4
person–environment relationship
influence on emotions 152
physiological costs 151
“pioneering strategy” 69
population study 45
postgraduate training, human capital 96
postgraduate versus undergraduate
education 100
predictive accuracy, low 46
primary appraisal 153
goals relating to performance 153–4
primary education 39
prior experience 99–100
prioritization, lack of, for venture
failure of venture 165
private venture capital in Sweden 14, 15,
22, 23
private venture capital (PVC) 15
problem-driven research, decreased focus
4
problem solving 155
product characteristics 71
academic research 74–5
in non-academic ventures 74
product development, innovative 79
product, significantly new 122
professional board of directors 79
academic spin-off companies 83
profit from sale of patent 14
profit increase opportunity 132
profit performance of patents 13
profitability of commercialization 24
projects, prior successful 133
proportional hazard model 50
prototype for horse brush 164–5
psychic distance of markets
culture differences 180
education levels 180
language difference 180
levels of industrial development 180
political systems, difference 180
psychological processing 151
psychological stress, managing 155
psychological value expectation 38
public policy and entrepreneurship
research 6
R&D and preference for novelty 133
R&D phase and financial resources 14
Ramström, Dick, Umeå University 1
rate of progress 156
reality construction 117
real option heuristic 36, 42–4
company value from assets in place 43
opportunities to purchase real assets
43
reappraisal process 156–7
recruitment from international sources
international experience 188
regions of birth variables 49
relationship between framing and success
of business 139
relevance of research 201
renewal fees for patents 26
renewal of patents
across commercialization modes 30
renewal scheme of patents
time periods of renewal 25
research design 157–60
research, high-quality 197
research streams in entrepreneurship
research 68
research training 96
researcher mobility 4
resource attraction 38
resource configuration, 70–77
resources-based theory of firm 71, 183
response biases 109
risk of increased competition 24
rubber industry as suppliers to other
industries, Alfa 189–90
rural clothing company 35
sales company, collaboration with 80
sales subsidiaries 189
sample and data collection, new business
concepts in established corporations
122–4
<table>
<thead>
<tr>
<th>Sampling in Swedish industries</th>
<th>123</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive vehicles</td>
<td>123</td>
</tr>
<tr>
<td>Electro-technical equipment</td>
<td>123</td>
</tr>
<tr>
<td>IT and telecommunications</td>
<td>123</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>123</td>
</tr>
<tr>
<td>Pulp and paper</td>
<td>123</td>
</tr>
<tr>
<td>Steel</td>
<td>123</td>
</tr>
<tr>
<td>Sampling process, new business concepts in established corporations</td>
<td>122</td>
</tr>
<tr>
<td>Science and technology labor force</td>
<td>91-110</td>
</tr>
<tr>
<td>Engagement in entrepreneurship</td>
<td>92</td>
</tr>
<tr>
<td>Importance to economic wellbeing</td>
<td>109-10</td>
</tr>
<tr>
<td>Influence of education</td>
<td>108</td>
</tr>
<tr>
<td>Science and technology labor force, Sweden</td>
<td>108</td>
</tr>
<tr>
<td>Science, university education</td>
<td>92, 98</td>
</tr>
<tr>
<td>Secondary appraisal</td>
<td>153</td>
</tr>
<tr>
<td>Options for coping</td>
<td>154</td>
</tr>
<tr>
<td>Secondary data, avoidance of response biases</td>
<td>109</td>
</tr>
<tr>
<td>Second-mover advantage</td>
<td>43</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>153</td>
</tr>
<tr>
<td>Self-employed entrepreneurs</td>
<td>45, 46</td>
</tr>
<tr>
<td>Self-employment</td>
<td>97</td>
</tr>
<tr>
<td>As sideline</td>
<td>105</td>
</tr>
<tr>
<td>Descriptive statistics</td>
<td>102, 103</td>
</tr>
<tr>
<td>Increase in postgraduates</td>
<td>96</td>
</tr>
<tr>
<td>Of any length, seen as human capital, 105 probability</td>
<td>102-4</td>
</tr>
<tr>
<td>Increase with many job changes</td>
<td>95</td>
</tr>
<tr>
<td>Self-employment analysis in science and technology labor force, Sweden</td>
<td>92</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>170</td>
</tr>
<tr>
<td>Self-regulated action and energy</td>
<td>155</td>
</tr>
<tr>
<td>Service companies, case study criteria</td>
<td>72</td>
</tr>
<tr>
<td>Sidelines to regular employment</td>
<td>99</td>
</tr>
<tr>
<td>Sleep loss</td>
<td>155</td>
</tr>
<tr>
<td>Small and medium-sized firms (SMEs)</td>
<td>16, 20, 22, 181</td>
</tr>
<tr>
<td>Small business management, Sweden</td>
<td>2</td>
</tr>
<tr>
<td>Small firms, local or regional market targets</td>
<td>83</td>
</tr>
<tr>
<td>Snowball sampling</td>
<td>122</td>
</tr>
<tr>
<td>Social benefits in Sweden, few for self-employed</td>
<td>108</td>
</tr>
<tr>
<td>Sold patents</td>
<td>22, 30</td>
</tr>
<tr>
<td>Sole proprietorships</td>
<td>46, 99</td>
</tr>
<tr>
<td>Stand-alone-company opportunities versus networks' opportunities</td>
<td>69</td>
</tr>
<tr>
<td>Standardization of language</td>
<td>3</td>
</tr>
<tr>
<td>Start-up firms</td>
<td>8, 13-34, 66-8, 83</td>
</tr>
<tr>
<td>Academic spin-offs</td>
<td>81</td>
</tr>
<tr>
<td>Non-academic spin-offs</td>
<td>81</td>
</tr>
<tr>
<td>Start-up processes of entrepreneurs</td>
<td>149-73</td>
</tr>
<tr>
<td>Of academic and non-academic contrasting</td>
<td>78</td>
</tr>
<tr>
<td>Of new venture, model</td>
<td>71</td>
</tr>
<tr>
<td>Of non-academic company</td>
<td>65</td>
</tr>
<tr>
<td>State-based sampling</td>
<td>45, 46</td>
</tr>
<tr>
<td>Statistical analyses</td>
<td>50-51</td>
</tr>
<tr>
<td>Statistical methods, judgmental decisions</td>
<td>137-8</td>
</tr>
<tr>
<td>Statistics Sweden data registers, personal numbers (social security numbers)</td>
<td>99</td>
</tr>
<tr>
<td>Strategic alliances for international markets</td>
<td>70</td>
</tr>
<tr>
<td>Stress</td>
<td>151-4</td>
</tr>
<tr>
<td>Studies of large populations</td>
<td>197</td>
</tr>
<tr>
<td>Sunk costs</td>
<td>43</td>
</tr>
<tr>
<td>Sun Microsystems</td>
<td>75</td>
</tr>
<tr>
<td>Cooperation with</td>
<td>80</td>
</tr>
<tr>
<td>Support, lack of for venture</td>
<td>164</td>
</tr>
<tr>
<td>Support, lack of from other people failure of venture</td>
<td>165-6</td>
</tr>
<tr>
<td>Survey research</td>
<td>200</td>
</tr>
<tr>
<td>Survival and hazard functions</td>
<td>29, 30</td>
</tr>
<tr>
<td>Survival function</td>
<td>53, 54</td>
</tr>
<tr>
<td>For commercialization</td>
<td>18</td>
</tr>
<tr>
<td>Survival in host corporations</td>
<td>131-3</td>
</tr>
<tr>
<td>Survival of new business concept</td>
<td>125-6</td>
</tr>
<tr>
<td>Survival of three years, case study</td>
<td>72</td>
</tr>
<tr>
<td>Sweden and international business</td>
<td>179</td>
</tr>
<tr>
<td>Swedish companies</td>
<td>122</td>
</tr>
<tr>
<td>Swedish economy, 1870s to 1970s</td>
<td>2, 3</td>
</tr>
<tr>
<td>Swedish entrepreneurship research, 1, 2, 5, 197-203 globalization and mainstreaming</td>
<td>3</td>
</tr>
<tr>
<td>Swedish firms, established, sample and data collection</td>
<td>138</td>
</tr>
<tr>
<td>Swedish Football Association, no testing</td>
<td>163</td>
</tr>
<tr>
<td>Swedish international companies</td>
<td>179</td>
</tr>
<tr>
<td>Swedish Patent and Registration Office (PRV)</td>
<td>16</td>
</tr>
</tbody>
</table>
Swedish patent holders, start-up firms 7
Swedish patents
  commercialization of patents 16
twenty years statutory period 26
Swedish research in international mainstream 6
Swedish Soccer League, no testing 163
Swedish tradition of tolerance and variety 198

target markets, entering 79
tax sheltering effects 49
technical knowledge of invention 24
technological development 179
technological knowledge about patent 15
technology-based ventures 82
technology knowledge 66
  "technology push" 78, 79
  resource needs 81–2
tenure system, none in Sweden 5
threat 116
  and negative outcomes 118
  and opportunity 120, 121, 129, 131
  and potential loss 118
  and uncontrollable situations 118
threat-emphasizing framing approaches 135
threat-rigidity hypothesis 120
threat to company 125
time pressure 156
timing for entry to market 67
timing, need for good 81
top manager control 120
track records of venture, for credibility 66
trade barriers 179
trade-offs 121
uncertainty and non-monotonic effect 44
uncertainty focus 42
uncertainty, industry-specific 52
uncertainty-reducing strategies 38
uncertainty-sharing strategies, pursuance of unprofitable opportunities 38
uncertainty (volatility) 43

university business labs, choosing entrepreneurs 158
university research for academic spin-offs 77
university studies in company-starting 108
Uppsala Model of international entrepreneurship 180
criticism of 181.
Uppsala University research 3
US Academy of Management 4
value of growth options 43
value of patent, high or low 27
variance about trends 47
variance, non-constancy of 47
venture capitalists, investment returns 188
venture capital, long-term, external for academic spin-offs 84
venture creation 65
venture creation and effectuation 170
venture creation process 71
  drive and energy 149
ventures, non-academic
designed products 73
kiosk products of good quality 73
software to increase computer performance 73
wage experience returns 92, 95, 108
  higher in wage work than self-employment 105
Ward’s method of cluster analysis 127
wealth creation in Sweden 2, 3
web shop idea 166
Weibull distribution 101
work alternatives other than self-employment 93
work experience, exploitation of opportunities 91
work experience, knowledge gaining 96
workload and energy 154
world as market 188