

Index

- absorptive capacity 12–13, 45, 57
acquisition of knowledge 124–5
Acs, Z. 12, 41
Afuah, A. 7, 9, 10, 38, 83
agents (brokers) 75–7, 81, 82, 87, 88
Ahuja, G. 9, 10, 11, 12, 48, 109
Akerblom, M. 40
Alcácer, J. 46
Almeida, P. 16, 17, 19, 29, 55
Al-Osh, M.A. 115
alternative explanations and robustness
126–8
Alzaid, A.A. 115
Anderson, P.C. 106
Archibugi, D. 38, 40, 41, 110
architectural competence 44–5, 57, 58
Arrow, K. 12
Arundel, A. 40
asset-seeking (reverse
internationalization) 6, 16–19, 21,
49, 74, 108
asymmetric information 73
Audretsch, D.B. 12, 41
Aw, B.Y. 20, 27, 28, 94
- Baldwin, R. 25, 48
Baldwin, W. 11, 12
Banbury, C.M. 106
Barney, J. 8
Bartlett, C.A. 16
Bartlett, F.C. 76
Basberg, B.L. 40
Beamish, P.W. 27
Ben-David, D. 28, 43, 93
Benvignati, A. 26
Bernard, A. 20, 25, 27, 28, 43, 63
Bilkey, W.G. 37
biotechnology industry 18–19
Blasco, Eva 21
Blundell, R. 45, 70
Brainard, S.L. 25
Branstetter, L.G. 109
- Braun, E. 18
Braunerhjelm, P. 26
brokers 75–7, 81, 82, 87, 88
Buckley, P.J. 16, 46
Burt, R. 20, 76
Buxton, T. 27
- Cameron, A. 114, 115
Campa, J. 25, 27, 37, 76, 77, 83, 128
Cantwell, J. 18, 19, 29, 40
Carroll, G.R. 106
Casson, M. 16, 46
Caves, R.E. 16, 26, 46, 48, 49, 76
Cavusgil, S.T. 26
Chang, S.J. 16, 18, 29, 55
Chung, W. 46
Clark, K.B. 44, 106
Clerides, S.K. 18, 20, 27, 28, 42, 74
Cockburn, I. 11, 12, 13, 40, 44, 45, 57,
69, 110, 113, 114
Cohen, W.M. 9, 10, 12, 38, 40, 41, 44,
45, 48, 49, 57
Coleman, J.S. 73
Collins, B.E. 76
Comanor, W.S. 40, 41
complementary assets, innovation and
13, 14
component competence 44, 57
Cooper, R. 25, 26
Crook, J.N. 26, 27
- Daft, R. 76
Damanpour, F. 7
Dasgupta, P. 8
Delgado, M.A. 27, 28
dependent variables, study of learning
by exporting 38–42
innovation output 41–2
patents 38–41
descriptive statistics 119–23
developed countries 74–5, 82, 88, 93,
109

- developing countries 75, 93, 109
 Dichtl, E. 26, 27
 Dicken, P. 74
 Dierickx, I. 11
 direct exports 75–7
 Dosi, G. 106
 Doz, Y.L. 48
 Drazin, R. 109
 Drucker, P.F. 10
 Dunning, J. 25, 74
- economic growth, innovation and 11
 Edwards, S. 93
 European Patent Office (EPO) 38–9, 40
 Evanson, R. 21
 exchange rates 25
 exporting, *see* international trade
- Fayerweather, J. 48
 Feeney, J. 43, 93
 firms
 exporting decision and behavior 25–7
 innovation and 10, 11–14, 48
 Flyer, F. 17
 foreign direct investment (FDI) 4, 16–18, 21, 48, 55, 59, 64, 74, 108
 Frankel, J.A. 93
 free trade 93, 110
 Freeman, C. 20
 future research directions 107–11
- Gentzoglani, A. 49
 Ghoshal, S. 16
 Gilbert, R. 8, 12
 Gilovich, T. 76
 Gort, M. 44
 Granger, C. 128
 Granovetter, M. 73, 76
 Graves, S. 12, 113
 Greene, W.H. 112, 113, 115, 116, 117, 127, 128
 Greenhalgh, C. 27
 Grenzmann, C. 40
 Grief, S. 40
 Griliches, Z. 38, 40
 Grossman, G.M. 8, 20, 28, 29, 42, 55, 72, 74, 93, 110
 Gruber, W. 26
- Guetzkow, H. 76
 Guillén, M.F. 37, 76, 77, 83, 93
- Hall, B.H. 106
 Hamilton, B.H. 116, 117
 Hansen, M.T. 76, 77
 Harianto, F. 45
 Harrigan, J. 25
 Hausman, J.B. 113, 114, 115
 Hayek, F.A. 11, 17, 20, 73, 74
 Heckman, J. 128
 Helpman, E. 20, 24, 28, 29, 42, 55, 72, 74, 93, 110
 Henderson, R. 11, 12, 13, 40, 44, 45, 57, 69, 106, 110, 113, 114
 Huber, G. 76
 Hwang, A. 20, 27, 28, 94
 Hymer, S.H. 16, 48
- independent variables, study of
 learning by exporting 42–7
 exporting 42–3
 knowledge assimilation competences 44–6
 R&D index 46–7
 Industrial Organization (IO) 8, 49
 industry heterogeneity 92, 101, 104–5
 assessment 94–101
 spillover heterogeneity across industries 92–4
 information, *see* knowledge and information
 innovation 3, 5–6, 7, 13–14
 asset-seeking and 18–19
 exporting and 27–30
 firms that innovate 10, 11–14, 48
 knowledge and 10–11
 learning by exporting and, *see* learning by exporting
 output 41–2
 process innovation 7, 58, 65–6, 68, 83
 process of 8–10, 13
 product innovation 7, 58, 59, 62–3, 103, 104, 110
 knowledge assimilation competences and 66–8, 84–7
 spillover heterogeneity and 78–81

- strategy and 8, 72, 89–90, 104, 109
 assessing spillover heterogeneity 77–84
 moderating impact of knowledge assimilation competences 84–9
 spillover heterogeneity among export strategies 72–7
- input/output model of innovation 9
- intermediaries (brokers) 75–7, 81, 82, 87, 88
- internalization, *see* asset-seeking
- international trade 3, 23, 30–31
 export strategy and innovation 72, 89–90, 104, 109
 assessing spillover heterogeneity 77–84
 moderating impact of knowledge assimilation competences 84–9
 spillover heterogeneity among export strategies 72–7
- exporting decision and behavior 24–7
 external market characteristics 25
 firm characteristics 25–7
 free trade 93, 110
 innovation and 27–30
 knowledge sourcing and 19–21
 learning by exporting and, *see* learning by exporting
 productivity and 28–30
 restrictions on 25
 theory 24
- investment 3
 foreign direct investment (FDI) 16–18, 21, 48, 55, 59, 64, 74, 108
- Italy, foreign investment in 19
- Ito, K. 26
- Jaccard, J. 47, 94
- Japan
 innovation in 13
 joint ventures 18
- Jensen, J.B. 20, 25, 27, 28, 43, 63
- Johanson, J. 37
- Johnson, N. 114
- joint ventures 18, 109
- Kamien, M.I. 9, 10, 49
- Keller, W. 109
- Kennedy, P. 112, 114, 115, 116
- Kleinschmidt, E. 25, 26
- Klepper, S. 106
- Kmenta, J. 112
- knowledge and information
 absorptive capacity 12–13, 45, 57
 acquisition 124–5
 assimilation competences 44–6, 57, 66–70, 84–9, 104
 asymmetric 73
 foreign direct investment (FDI) and 16–18, 21, 55
 innovation and 10–11, 13, 14, 16
 intermediaries (brokers) 75–7, 81, 82, 87, 88
 international trade and 28
 learning by exporting, *see* learning by exporting
 sources of 7, 10–11, 19–21
 spatial bounded 17
 spillovers from, *see* spillovers
 variability 74–5
- Kogut, B. 16, 17, 18, 20, 29, 55, 72, 73
- Kotabe, M. 109
- Kotz, S. 114
- Kravis, I. 23, 24, 26
- Krugman, P. 24, 25
- Lane, P.J. 45
- Langowitz, N. 12, 113
- language skills 26–7
- learning by exporting 28, 29, 30–31, 35, 55, 70, 111
 alternative explanations and robustness 126–8
 control variables in study 48–51
 dependent variables in study 38–42
 innovation output 41–2
 patents 38–41
 descriptive statistics and product moment correlations 119–23
 export strategy and innovation 72, 89–90, 104, 109
 assessing spillover heterogeneity 77–84
 moderating impact of knowledge assimilation competences 84–9
 spillover heterogeneity among export strategies 72–7
 foreign market contact 55–8

- future research directions 107–11
 independent variables in study 42–7
 exporting 42–3
 knowledge assimilation
 competences 44–6
 R&D index 46–7
 industry heterogeneity and 92, 101,
 104–5
 assessing industry heterogeneity
 94–101
 spillover heterogeneity across
 industries 92–4
 limitations of study 105–7
 regression analysis 58–70
 exporting and innovation 59–66
 knowledge assimilation
 capabilities 66–70
 statistical method of study 51–2,
 112–17
 study sample 35–7
 summary of findings 103–5
 Leonidou, L.C. 23, 26, 27, 107
 Levin, R.C. 9, 10, 12, 38, 40, 41, 42, 48,
 49
 Levinthal, D.A. 12, 44, 45, 57
 licensing technology 49, 59
 Lipsey, R. 23, 24, 26
 Loewy, M.B. 43, 93
 Lu, J.W. 27
 Lubatkin, M. 45

 MacDonald, S. 18
 Maddala, G. 113, 115
 management 26–7
 March, J. 76, 106
 Mariotti, S. 18
 marketing 26
 markets
 innovation and market structure 12,
 49
 learning by exporting and foreign
 market contact 55–8
 market knowledge 10
 Marshall, A. 17, 29, 74
 Martin, X. 63, 72
 Mas-Colell, A. 17
 Masten, S.E. 116
 Medin, D.L. 76
 Miller, J.G. 76
 Mitchell, W. 63, 106

 Morck, R. 16, 48
 Mowery, D.C. 44, 109
 multinational corporations (MNCs)
 48–9

 Nadler, D. 20
 Naor, J. 26
 Nelson, R. 9, 10, 17, 73, 106
 Nevin, J. 26
 Newbery, D. 8, 12
 Nicholls-Nixon, C. 45
 Nickerson, J.A. 116, 117

 oligopoly, innovation and 12
 Olsen, J.P. 106
 open economies 93, 110
 Organization for Economic Co-
 operation and Development
 (OECD) 74–5

 patents 38–41, 63–5, 67, 81–2, 87, 106,
 110
 Pavitt, K. 41
 Penner-Hahn, J. 13, 17, 19, 45, 46, 55,
 57
 Pennings, J.M. 45
 Penrose, E. 7, 8
 pharmaceuticals industry, innovation
 in 12, 13
 Phelps, C.C. 73
 Pianta, M. 38, 40, 41, 110
 Piscitello, L. 18, 19
 Polanyi, M. 10
 Porter, M.E. 17, 94
 Portes, A. 73
 Prahalad, C.K. 48
 process innovation 7, 58, 65–6, 68, 83
 product innovation 7, 58, 59, 62–3,
 103, 104, 110
 knowledge assimilation competences
 and 66–8, 84–7
 spillover heterogeneity and 78–81
 product moment correlations 119–23
 productivity, international trade and
 28–30
 protectionism 110
 Pucik, V. 26

 regression analysis 58–70
 exporting and innovation 59–66

- knowledge assimilation capabilities 66–70
- Reid, S.D. 26
- research and development (R&D) 18, 19, 26
 - innovation and 8, 10, 48, 67–8
 - in study of learning by exporting 46–7
- restrictions on trade 25
- reverse engineering 20, 58
- reverse internationalization (asset-seeking) 6, 16–19, 21, 49, 74, 108
- Roberts, M. 25
- Romer, D. 93
- Root, F.J. 76
- Rosenberg, N. 10, 56
- Ross, D. 12
- Rugman, A.M. 49

- Sachs, J. 28
- Salas, E. 39
- Salomon, R. 24, 27, 72, 74, 116
- Scherer, F.M. 12, 40, 41
- Schilling, M.A. 73
- Schlegelmilch, B.B. 26, 27
- Schoonhoven, C.B. 109
- Schumpeter, J.A. 7, 8, 11–12, 48, 105–6
- Schwartz, N.L. 9, 10, 49
- Scott, J.T. 11, 12, 48
- Shan, W. 18
- Shapiro, C. 8
- Shaver, J.M. 13, 17, 19, 24, 27, 45, 46, 55, 58, 74, 116
- Silverman, B. 8
- Simon, H. 76
- Simons, K.L. 106
- Siotis, G. 29
- Slaughter, M.J. 93
- Smith, K. 40
- Song, J. 18
- Spain 5, 109
 - study of learning by exporting 35
 - control variables in study 48–51
 - dependent variables 38–42
 - independent variables 42–7
 - innovation output 41–2
 - patents 38–41
- spillovers 4, 14, 19, 20, 43
 - heterogeneity
 - across industries 92–4
 - among export strategies 72–7
 - assessing industry heterogeneity 94–101
 - assessing spillover heterogeneity 77–84
- statistical method of study 51–2, 112–17
- Stiglitz, J. 8
- strategy 8
 - export strategy and innovation 72, 89–90, 104, 109
 - assessing spillover heterogeneity 77–84
 - moderating impact of knowledge assimilation competences 84–9
 - spillover heterogeneity among export strategies 72–7
- Szulanski, G. 72

- takeovers 18
- technology
 - buying 49
 - foreign market contact and 56
 - licensing 49, 59
 - technological knowledge 10
- Teece, D.J. 13
- Teo, A.C. 106
- Terpstra, V. 76
- Tesar, G. 37
- Tirole, J. 8, 12, 17, 106
- trade, *see* international trade
- trade secrets 40
- Trefler, D. 25
- Trivedi, P. 114, 115
- Tushman, M.L. 20, 106
- Tybout, J. 25

- Ulloa, G. 39
- uncertainty 106
- Uzzi, B. 76

- Vahlne, J.E. 37
- Van de Ven, A. 9
- Vernon, R. 29, 56, 75, 105
- von Hippel, E. 10, 11, 18, 55, 74

- Wakelin, K. 27
- Walker, R.D. 38
- Warner, A. 28

- Westphal, L. 21
Wiedersheim-Paul, F. 26
Williamson, O.E. 76
Winter, S.G. 9, 10, 106
World Bank 21
- Yamawaki, H. 25
Yeung, B. 16, 48
- Zahra, S.A. 73
Zander, U. 72