## Index

accident risk, and household income 137–8  
acid rain 60  
Ackerman, B. 18  
Adamowicz, W. 233  
air pollution  
and income 121–2  
regional control 18–19  
studies 14–15  
sulphur, US 125  
transfrontier 59–60  
Alberini, A. 234  
altruism 320–22  
in contingent valuation 369–70, 378–9  
in public goods experiments 371  
Andreoni, J. 133, 338, 373, 377  
animal agriculture, North Carolina, impact analysis 258–9, 261–81  
Arrow, K.J. 158, 180, 342, 343  
attribute specification, complex environmental goods 290–91  
autarky, optimal environmental policies 68–72  
automobile accident risk, and household income 137–8  
bad news principle 343–4, 346, 356, 361  
Balestreri, E.G. 371  
Barrett, S. 98–9, 108–11, 117  
barrier control policy design 175  
BDM (Becker, DeGroot, Marschak mechanism) 376  
Becker, G. 234  
Becker, J.S. 190  
Becker, R. 16, 203  
Becker, DeGroot, Marschak mechanism 376  
benefit measurement, and GE responses 260–61  
Bergstrom, T. 380  
Bernanke, B. 343, 362  
Blamey, R.K. 234, 252  
Bowles, S. 189  
Boyle, K.J. 369  
Brander, J. 108  
Breffle, W. 289  
Bulte, E.H. 17  
Caballero, R.J. 343  
Camerer, C. 362  
Cameron, T.A. 283  
capital taxation, impact on transfrontier pollution 75–8  
cars  
accident risk, and household income 137–8  
emission standards 21  
Carson, R.T. 367–8, 369, 380  
Carter, J. 310  
Carter, R. 18  
categorical nesting, in contingent valuation 368  
centralization, environmental policy 1–27  
Cesario, F.J. 186  
Chao, H.-P. 96  
Chartier, D. 18  
Chaudhuri, S. 121–2  
child health, and mother’s home time 195  
Cicchetti, C.J. 362  
Clean Air Act Amendments, US 1, 12–13  
Clean Water Act, US 257  
Cluster Rule, pulp and paper industry 233  
competition, interjurisdictional 7–8  
competitive auction, private good values 375  
complex environmental goods, and heterogeneous preferences 286–306  
compound lottery effect 360
confusion, in public goods games 373
Conrad, J.M. 362
consumption, in international trade model 100–101
contingent valuation elicitation 340–61
hog production 265–81
and scope 366–70
cooperative behaviour and environmental policies 68–70
costs, oil and gas drilling 204–26
Cournot–Nash equilibrium 115
Cropper, M.L. 19, 21
CV see contingent valuation
Davis, M. 168
Dawson 143, 152, 153
Deacon, R.T. 203, 227–8
Decentralization Theorem 27–8
decentralization, environmental policy 1–27
decision error, in public goods games 373
Delaware River Basin Commission (DRBC) 17–18
democratic deficit 52–3
Dinan, T.M. 19, 21, 28
dioxin pollution, pulp and paper industries 232, 237–8
contingent valuation survey 238–53
direct use values, natural resources 158–9
Dixit, A.K. 163, 166, 345, 362
dollar merit value see paternalistic altruism
DRBC (Delaware River Basin Commission) 17–18
drilling costs, oil and gas 204–26
drinking water standards, US 19–20
ecological dumping, and international trade 98–9
economic altruism see altruism
ecosystems, attributes 290
Everglades 291–306
Ehrlich, I. 234
elections, and environmental lobbying 40
elicitation response valuation 340–61
embedding, in public goods experiments 370
emissions allocation, and population mobility 84–6
partial equilibrium model 34–43
taxes 63–8, 100–17
and transfrontier pollution 78–80
and trade liberalization 74–5
trading 21
and transfrontier pollution 61–8
employment effects of hog production on tourism 261–5
endogenous household shadow prices 195
endogenous risk and willingness to pay 234–7
endogenous transfrontier pollution 59–81
Engel, K.H. 17, 28
environmental cleanup investment 309–37
environmental compliance costs, US oil and gas industry 203–6
environmental federalism 1–27
environmental Kuznets curve 119–39
environmental lobby groups 35–7
environmental protection, voluntary approaches (VA) 142–54
environmental quality as local public good 3–4, 5–9
as pure public good 2–3
standards, decentralization 1–27
environmental regulation race to the bottom 5–9, 11–17, 22
and oligopoly 108–12
and trade 98–117
environmental taxes see taxation environmentally optimal emission tax 111
equilibria under voluntary agreements 143–54
Espinosa, J.A. 260
Everglades ecosystems restoration 290–306
exogenous population, and emission allocation 86–7
expertise, and standards decentralization 22
Index

Farber, D.A. 8
Farber, S. 282
Farell, A. 18
Farzin, Y.H. 174
federal environmental policy 38–40, 52–5
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) 13
federalism, environmental 1–27
Ferraro, P.F. 374
Fish and Wildlife Service plan, US 291
Fisher, A.C. 158, 342, 343, 362
flexible scenarios, pulp and paper industry 233–53
Florida, ecosystem restoration 290–306
Folmer, H. 16
Frederiksson, P.G. 15, 28
free boundary
private optimum 164–7
social optimum 169–70
Freeman, A.M. 362
free-riding 143, 153–4
Fries, E.E. 234
functional attributes, ecosystems 290
Gable, A.R. 234
game theory
environmental federalism 7
environmental governance 36–43
general equilibrium
and benefit measurement 260–61
and oligopoly 112–16
and regional economy 258
Georgiou, S. 369
Gerking, S. 14, 218, 226
Ginther, D. 199
global environmental governance 33–56
Goeree, J.K. 338, 373–4
Goklany, I.M. 12–13
Gordon, R. 29
Greene, W.H. 214
greenhouse gas emissions 59, 84–96
Greenstone, M. 203
Grossman, G. 119, 120, 122, 138
Grossman, M. 184
Hanemann, M. 248
Hanemann, W.M. 283, 362
Hanley, N. 305
Harbaugh, W. 121
Harberger, A.C. 260
Hazilla, M. 282
Heal, G. 179
health risks, pulp and paper industry 237–8
Henderson, J.V. 16, 203
Henry, C. 362
Herriges, J. 247
heterogeneous preferences and complex environmental goods 286–306
Hey, J.D. 352
Hoel, M. 95
hog industry, impact analysis 258–9, 261–81
Holden, S. 190
Holt, C. 352
home–work life separation 189–96
household environments, impact of neighbourhood conditions 182–98
Hubbard, R.G. 343
Hurwicz, L. 273
immission taxes 63–8
and transfrontier pollution 79–80
impact analysis, hog industry 258–9, 261–81
IMPLAN input–output model 262–5
income changes and benefit measurement 260
income effects of hog production on tourism 261–5
income–pollution relationship 119–39
indirect use values, natural resources 159
indoor air pollution, and income 121–2
industrial lobby groups, and environmental policy 35–6, 53–4
industry location, effect of environmental regulation 15–17
interjurisdictional competition, and environmental policy 7–8, 24–7
pollution 9–11
internal household environments, and neighbourhood conditions 182–98
international trade, and environmental regulation 98–117
investment decisions, pollution abatement 309–37
household, and neighbourhood influences 182–98
theory, and contingent value response 340–61
irreversible resource development, and benefit uncertainty 158–78
Isaac, M. 311, 313
Jaeger, W. 131–2
Jaffe, A.B. 15, 17, 202
Jencks, C. 199
Johal, S. 33–4, 57
John, A. 132
Johnson, F.R. 263
Jones, L.E. 131
Just, R. 282
Kahneman, D. 367, 369, 377
kindness, in public goods games 373
see also altruism; warm glow
Knetsch, J.L. 367, 369, 377
Kopp, R.J. 282
Kriström, B. 248
Krueger, A. 119, 120, 122, 138
Krupnick, A. 237, 247, 252
Kunce, M. 16, 211
Kuznets, S. 119
Kuznets curve, environmental 119–39
laboratory federalism 21
Laury, S. 338
Ledyard, J. 313
Levinson, A. 133, 202
Lind, R.C. 180, 342
List, J.A. 14, 16
lobbying
asymmetries 52–5
costs, effect on utilities 44–56
and environmental policy 35–7, 40–42
local public good, environmental quality 3–4, 5–9
local spillover effects 4–5, 9–11
locational preferences, population 91–2
long-run equilibrium under a voluntary agreement 143–54
Madariaga, B. 369
Manski, C.F. 199
Manuelli, R.E. 131
Mason, C.F. 16
Mayer, S. 199
McConnell, K.E. 283, 369
McConnell, V.D. 15
McDonald, S.L. 205
Mieszkowski, P. 6
Milgrom, P. 378, 379, 381
milk contamination, effect on demand 263
Miller, J.H. 338
Millimet, D.L. 14, 15, 28, 122
Mitchell, R.C. 367–8, 369, 380
Morey, E. 289
motor vehicles, emission standards 21
Munro, A. 305
neighbourhood conditions and household environments 182–98
New Mexico, oil and gas drilling costs 212–28
non-benefit taxation 6
non-cooperative environmental policy autarky 70–72
open economies 73–80
non-homogeneous populations, mobility, and emission allocation 92–5
non-paternalistic altruism 369–70, 378–9
non-use use values, natural resources 159
Norman, A. 168
North Carolina, hog industry, impact analysis 258–9, 261–81
North–South divide, and lobbying costs 54–5
NOx emissions 18–19
nuclear energy and transfrontier pollution 60
Oates, W.E. 24, 28, 202
oil and gas industry, production timing 202–28
drilling costs 204–26
environmental compliance costs, US 203–6
<table>
<thead>
<tr>
<th>Page Dimensions: 442.0x663.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>[60x582] oligopoly and environmental regulation 108–12</td>
</tr>
<tr>
<td>[60x562] open economies, non-cooperative environmental policy 73–80</td>
</tr>
<tr>
<td>[60x542] optimal resource development tax 174–6</td>
</tr>
<tr>
<td>[60x532] option value 341–4 and investment behaviour 344–61</td>
</tr>
<tr>
<td>[60x512] ordering effects, in contingent valuation 369</td>
</tr>
<tr>
<td>[60x492] Orme, C. 352</td>
</tr>
<tr>
<td>[60x482] other-regarding behaviour in public goods experiments 370–76 and scope test 365–70, 376–80</td>
</tr>
<tr>
<td>[60x452] ozone pollution control 18</td>
</tr>
<tr>
<td>[60x432] Palfrey, T.R. 373</td>
</tr>
<tr>
<td>[60x422] Parry, I.W.H. 29</td>
</tr>
<tr>
<td>[60x412] partial equilibrium analysis, environmental policy 34–43 and oligopoly 108–112</td>
</tr>
<tr>
<td>[60x382] paternalistic altruism 378 in contingent valuation 369–70</td>
</tr>
<tr>
<td>[60x362] Payne, J.W. 282</td>
</tr>
<tr>
<td>[60x352] Peccherino, R. 132</td>
</tr>
<tr>
<td>[60x332] Peck, S. 96</td>
</tr>
<tr>
<td>[60x322] perceived risk reduction 246–7</td>
</tr>
<tr>
<td>[60x312] Pesaran, M.H. 203, 210</td>
</tr>
<tr>
<td>[60x302] Pfaff, A. 121–2</td>
</tr>
<tr>
<td>[60x292] Pflüger, M. 116</td>
</tr>
<tr>
<td>[60x282] Pindyck, R.S. 163, 166, 203, 206, 226, 343, 362</td>
</tr>
<tr>
<td>[60x272] Poe 374</td>
</tr>
<tr>
<td>[60x262] political lobbying see lobbying pollution</td>
</tr>
<tr>
<td>[60x252] abatement investment 309–37 in partial equilibrium model 34–43</td>
</tr>
<tr>
<td>[60x242] pulp and paper industry 232–4 relationship with income 119–39</td>
</tr>
<tr>
<td>[60x232] transboundary 9–11, 43–55, 59–81</td>
</tr>
<tr>
<td>[60x222] population and emission allocation 86–7</td>
</tr>
<tr>
<td>[60x212] mobility effect on environmental concern 8–9 and emission allocation 89–95</td>
</tr>
<tr>
<td>[60x202] Portney, P.R. 19, 21</td>
</tr>
<tr>
<td>[60x192] pre-policy equilibrium, voluntary agreements 144–5</td>
</tr>
<tr>
<td>[60x182] Prisbey, J.E. 373</td>
</tr>
<tr>
<td>[60x172] private good values and other-regarding behaviour 370–72, 376–80</td>
</tr>
<tr>
<td>[60x162] private land, drilling costs 204–5</td>
</tr>
<tr>
<td>[60x152] privately-optimal resource development 162–7, 170–78</td>
</tr>
<tr>
<td>[60x142] producer bias in environmental policy 53–4</td>
</tr>
<tr>
<td>[60x132] production technology, and transfrontier pollution 61–8</td>
</tr>
<tr>
<td>[60x122] provision point mechanism (PPM) 374</td>
</tr>
<tr>
<td>[60x112] public good, pure, environmental quality 2–3</td>
</tr>
<tr>
<td>[60x102] public goods experiments and other-regarding behaviour 309–37, 370–80</td>
</tr>
<tr>
<td>[60x82] quantitative nesting, in contingent valuation 367 quasi-option value 342–3</td>
</tr>
<tr>
<td>[60x72] race to the bottom 5–9, 11–17, 22 random utility model and heterogeneous preferences 287–90 rate of time preference 189–91</td>
</tr>
<tr>
<td>[60x62] Raufer, R. 18</td>
</tr>
<tr>
<td>[60x52] Rauscher, M. 59, 98–9, 100, 105 Reagan Administration and environmental policy 14–15 resource development, irreversible, and uncertainty 158–78</td>
</tr>
<tr>
<td>[60x42] Revelt, D. 289</td>
</tr>
<tr>
<td>[60x32] Revesz, R.L. 10</td>
</tr>
<tr>
<td>[60x22] risk perception, pulp and paper industry 238–43 and willingness to pay 234–7 risk reduction, pulp and paper industry cluster rule 237–8 mechanisms (RRM) 244–6 perceived 246–7 willingness to pay 247–52 river pollution, transfrontier 60 Rivlin, A.M. 22 Roemer, J. 56</td>
</tr>
<tr>
<td>[60x12] Safe Drinking Water Act (SDWA), US 19–20</td>
</tr>
</tbody>
</table>
Scheinkman, J.A. 178
Schmalensee, R. 362
Schulze, W.D. 366, 369
Schuman, H. 380
Schwab, R.M. 15, 24, 28
scope test, and other-regarding
behaviour 365–80
Segerson 143, 152, 153
sequencing effects, in contingent
valuation 368–9
Shapiro, M. 95
Shogren, J.F. 17, 234, 247
short-run equilibrium under a
voluntary agreement 143, 146–7, 152–4
Smith, M.E. 263
Smith public good auction 375
Smith, V.K. 260, 283, 362
smokestacks, and environmental policy
69–72
SO₂ pollution–income pattern 123–5, 129
socially-optimal resource development
167–70, 170–78
Solimano, A. 343
South Florida ecosystem restoration
290–306
Spencer, B. 108
Stackelberg equilibrium 115–16
standards
decentralization 1–27
water quality 19–20, 257–81
see also environmental regulation
Starmer, C. 352
state environmental policy 37–8
Stengos, T. 122
Stokey, N.L. 131, 132
strategic behaviour, and international
trade 98–9
Strauss, J. 196
structural attributes, ecosystems 290
sucrose octa acetate studies 375
Sugden, R. 352
sulphur dioxide pollution–income
pattern 123–5, 129
supranational environmental agencies
33–4
Tannenwald, R. 202
Tawil, N. 28
taxation
and international trade 100–117
non-benefit 6
oil and gas production 207–8, 226–8
optimal resource development
174–6
and transfrontier pollution 63–8, 75–80
Thomas, D. 196
Tiebout, C.M. 182
time preference rate 189–91
timeless analysis, option value 342
Tobey, J.A. 15
Tomes, N. 190
total maximum daily load (TMDL),
Clean Water Act 257, 280
tourism, effect of hog production
261–5
Toxic Substances Control Act (TSCA) 13
trade
effect of environmental regulation
98–117
liberalization, impact on emissions
74–5
Train, K. 289
transfrontier pollution 43–55, 59–81
transportation accident risk, and
household income 137–8
Uhler, R. 210
Ulph, A.M. 28, 33–4, 57, 101, 110, 111
uncertainty
household prospects 192–4
and irreversible development of
natural resources 158–78
unilateral spillover effects 10
US
air quality management 11–13
drinking water standards 19–20
Environmental Protection Agency 1
federal property, drilling costs
203–6, 211–18
Fish and Wildlife Service 291
oil and gas industry, environmental
compliance costs 203–6
sulphur pollution 125, 129
water quality policy 257–81
Uzawa, H. 273
<table>
<thead>
<tr>
<th>Index</th>
<th>391</th>
</tr>
</thead>
<tbody>
<tr>
<td>vehicles, emission standards 21</td>
<td>Wildasin, D. 6</td>
</tr>
<tr>
<td>Viscusi, W.K. 235</td>
<td>willingness to pay</td>
</tr>
<tr>
<td>voluntary approaches to environmental protection 142–54</td>
<td>regulation of hog farms 259, 265–81</td>
</tr>
<tr>
<td>Voluntary Contributions Mechanism (VCM) 372–4</td>
<td>and risk perception 234–7</td>
</tr>
<tr>
<td>Walker, J. 311</td>
<td>for risk reduction 247–51</td>
</tr>
<tr>
<td>warm glow 365, 367</td>
<td>Wilson, J.D. 6, 7, 28, 202</td>
</tr>
<tr>
<td>and scope test 376–8, 379</td>
<td>Wyoming, oil and gas drilling costs 212–28</td>
</tr>
<tr>
<td>Weisbrod, B.A. 341–2</td>
<td>Yücel, M. 203</td>
</tr>
<tr>
<td>Weitzman, M. 168</td>
<td>Zariphopoulou, T. 178</td>
</tr>
<tr>
<td>Wellisch, D. 7, 28</td>
<td>Zodrow, G. 6</td>
</tr>
</tbody>
</table>