

Index

- advantage loaves, 30, 35–36, 213, 378
 Allen, Robert, 297, 328, 361, 397
Almoezeniers Wĳeshuis (AWH), *see*
 Almoners' Orphanage
 Almoners' Orphanage of Amsterdam, 266,
 290
 crisis years, 298
 Annales school, 287
annona, 7–15, 262
 definition, 9
 Italian, 8
 Maltese, 13
 Papal Roman, 10, 13
 Roman, 7
 Spanish, 14
 Venetian, 12
 Anti-Corn Law League, 404, 422
 Ashley, Sir William, 4, 332
 assize, *see* bread price regulation
 Assize of Bread, 16, 22, 36, 233, 275,
 377–79, 487, 491, 501, 504, 506
 repealed, 443

Bäckpfunde, *see* advantage loaves
 baked grains
 preparation costs, 353
 baker's dozen, 96, 189
 bakeries
 capital costs of, 182
 density in other countries, 191
 density of, 190–93, 434
 earnings, 217, 220
 earnings after 1855, 433–34
 location of, 194–95
 oven capacity, 182, 200
 rural density of, 108
 scale of production, 194, 201
 size distribution of, 195–99
 specialized in wheat or rye, 210
 bakers
 as tax collectors, 188
 beneficiaries of regulation?, 221
 coinage problems of, 112
 credit practices, 113
 foreign-born, 344
 grain purchase strategies of, 99
 suppressing competition among, 97
 bakers' fee, 83, 180, 190, 195
 efforts to calculate, 183
 historical reflections on, 202
 removal of, 433
 wheat-rye differential,
 bakers' guilds, 65, 67, 73, 74
 as recipients of rents, 188
 concept of scale, 200
 baking trials, 72, 81, 82, 88, 178, 234
bakloon, *see* bakers' fee
bakproef, *see* baking trials
 Baltic grain trade, rise of, 42
 barebones food budget, 297, 361
 Batavian Republic, 410, 411, 413, 469
 food insecurity in, 261
 millers' fee policies, 178
 milling excise under, 416
 beer excise, 140–41
 Belgium, *see* Southern Netherlands
 Betuwe, *see* Gelderland river region
 Black Death, 40, 41
 boiled grains, 54–55, 138
 decline of, 331, 447
 preparation costs, 353
 bran, 82, 165, 172, 227
 Braudel, Fernand, 3, 331
 bread bundles, 355–58, 441
 bread consumption
 assumed level, 257
 in Holland, 475–77
 rural areas, 475
 bread factories, 432, 435
 bread grain availability, 307
 bread grain consumption
 after 1855, 446
 alternative forms of, 354–55
 by social class, 314

510 Index

- bread grain consumption (*cont.*)
 - charity distribution, 316
 - compared to other countries, 325–30
 - decline in, 364
 - from Holland tax data, 317–18
 - Holland before 1650, 319–21
 - in Friesland, 321
 - in Holland cities, 314–17
 - in Zeeland, 321
 - milling excise data, 310–21
 - national totals, 324
 - orphanage data, 308–9
 - place in pre-industrial diet, 288
 - regional differences, 311
- bread price commissioners, 65, 81, 84, 85, 93, 180, 184, 270
 - as creators of economic rents, 186
 - concept of modal bakery, 199
 - of Haarlem, 71
 - policy objectives of, 247
 - rye prices used by, 160
 - weekly price announcements, 228
- bread price regulation, 15–22
 - abolished, 425
 - Antwerp, 1588, 461
 - Brielle, 1530, 459
 - definition, 17
 - diffusion of new system, 375
 - effects of removal, 435
 - Geneva, 1458, 456
 - Groningen, 1404, 1589, 458
 - in Antwerp, 376
 - in Berlin, 379
 - in Cologne, 376
 - in Copenhagen, 377
 - in England, 377–79
 - in France, 379–82
 - in medieval England, 22
 - in medieval France, 22
 - in medieval Netherlands, 23
 - in rural areas, 107
 - invasive character of, 451
 - limited to maximum prices, 424
 - medieval origins, 16
 - movement to abolish, 424
 - new system in Deventer, 56
 - new system in Holland, 56
 - new system in Nijmegen, 56
 - new system origins, 55–60
 - new system rules, 65–68
 - old system rules, 23–26
 - pan-European, 1
 - social consequences of, 37
 - Utrecht, 1374, 456
- bread prices
 - announcement of, 67
 - Dutch compared to Europe, 406
 - evasion practices, 96
 - in Berlin, 393–95
 - in Britain beyond London, 401
 - in Cologne, 390
 - in Copenhagen, 392
 - in Europe, 387
 - in German cities, 395
 - in international perspective, 440
 - in London, 401–5
 - in Paris, 397–401
 - in Southern Netherlands, 387–90
 - maximum and minimum prices, 94
 - regional price structures, 245
 - rural differentials, 106
 - sensitivity to grain prices, 93–94
 - structure after 1855, 239, 426–29
 - structure before 1596, 239
 - structure of, 229–32, 236, 238, 451
 - structures abroad, 243
 - without regulation, 453
- bread quality
 - in France, 400
- bread riots, 19
- bread substitutes, 138
- bread yield, 225
 - disputes concerning, 78–81
 - Eversdijck estimates, 90
 - in Cologne, 391
 - in Copenhagen, 392
 - in England, 377
 - in new system regulations, 60, 66, 84
 - in old system regulations, 29, 38
- broodwegers*, *see* bread price commissioners
- broodzetters*, *see* bread price commissioners
- broodzetting*, *see* bread price regulation
- brottaxe*, *see* bread price regulation
- buckwheat
 - a food of the poor?, 286
 - a pseudo-grain, 54
 - decline of, 301, 449
 - in crisis of 1630, 265
 - lowest cost bread grain, 355
 - milling excise, 138, 474
 - price advantage lost, 429
- budget studies, 288, 301
- Burghers' Orphanage of Amsterdam,
 - crisis years, 299
 - nineteenth-century diet, 300
- Burghers' Orphanage of Utrecht,
 - 290
- calmiere*, *see* bread price regulation
- Cantillon, Lodewijk, 431
- capitalism, 2
- capitation tax, 119, 124
 - beyond Holland, 125, 128
- Charlemagne, 8

- circulation of money, 111
 coinage, Dutch, 110, 111
 Collins, E. J. T., 332
 Commelen, Casparus, 290
 common means, 62–65, 116, 139, 473
 Holland's review of, 116
 outside Holland, 125, 127
 proposals for reform, 277
 reform of 1680, 143
congiegeld, see grain export licences
 constant costs of baking, 81–83, 180
 consumer behavior, 135, 137, 139, 140,
 141–42, 371
 response to deregulation, 427
 consumer choice, 2, 306, 348–49, 352
 after deregulation, 448
 and standard of living, 361
 constrained by taxation, 333
 criticism of, 283
 of bread bundles, 358
 preference for wheat bread, 236
 consumer credit, 113–14
 consumer demand
 influence of bread price structure, 232
 consumer price index, 220
 consumer protection, 251
 consumer savings, 444
 Continental System, 161
 coordination failure, 18
 corn bounties, British, 404, 442
 Corn Laws, British, 404, 442
 cost of living, 220
 definition, 353
 counterfactual history, 453
 credit risk, 113
 crisis of 1596, 58–59
 crisis of 1629–31, 266, 463
 crisis of 1698–1700, 465–67
 crisis of 1708–10, 467
 crisis of 1747–48, 276–78, 407, 454
 crisis of 1789, 278–80
 crisis of 1795, 469
 crisis of 1845–47, 304, 422
 crisis of Napoleonic era, 470
 crisis periods, 254–60, 274, 453
 forced sale of grain, 263
 intervention in grain markets, 262–63
 price lowering strategies, 264–70
 prohibition of luxury baking, 263
 regional differences, 260
 cross-subsidization, 208–10, 221, 229,
 392, 393, 434, 441, 451
Cultuurstelsel, 443
 currency devaluation, 440
 in France, 400
 in Southern Netherlands, 389
 Dekker, Rudolf, 136
 Delamare, Nicolas, 380–81, 397
 demand elasticities for foodstuffs,
 284
 demand elasticity for beer, 140
 demand elasticity for bread, 37, 119, 124,
 134, 359
 deregulation
 effect on baking, 432–35
 effect on bread prices, 427
 effect on consumers, 443–49
 effect on milling, 429–32
 effect on wheat bread consumption,
 445
 macroeconomic effects, 435–39, 450
 removal of costs, 444
 Dutch bread types, 49–54
 relative price adjustments to, 233
 economies of scale, 441, 455
 in baking, 182, 434
 efficiency, of millers and bakers, 441
 elasticities of supply and demand, 436
 Engel's law, 223, 284, 358
 England
 bread consumption in, 328
 wheat bread revolution in, 332–33
 Eversdijck, Cornelis Françoiszoon, 85–91,
 93, 202, 245, 380
 expenditure patterns for food,
 BWH compared to AWH, 296
 BWH compared to civilians, 295–96
 nineteenth-century diet, 300–1
 post 1790, 298–300
 Fagel, Gaspar, Grand Pensionary of
 Holland, 118
 famine of 1693–94, 465
 fixed costs, 180, 182
 flour trade
 in other countries, 408
 prohibition of, 165, 175
 food hierarchies, 284–86
 food riots
 in Dutch Republic, 275
 in England, 274
 food systems, 286–87
 foodways, 282–83
 foundlings, 298
 France
 bread consumption in, 328
 wheat bread revolution in, 331
 French Empire
 controls on grain trade, 161
 Netherlands incorporated into, 413
 Friesland grain production region, 157

512 Index

- Gelderland river region grain production, 156
gemaal, het, impost of, *see* milling excise
gemene middelen, *see* common means
 Germany
 bread consumption in, 328
 bread taxes in, 383
 Godewijcx, Peter van, 324
 Gogel, Isaac, 410, 412
 grain
 re-export of, 149
 Grain Exchange of Amsterdam, 149
 grain export licences, 43
 grain markets
 rye price integration, 160
 speculation, 46
 wheat price integration, 162, 163–64
 grain mills
 horse-powered, 170
 steam-powered, 430
 grain price differentials, 225
 grain prices
 determination of, 68–72
 grain production, domestic, 154–58, 162
 grain re-exports, 161
 grain storage, 47, 99
 grain trade
 Baltic supplies, 41, 58, 69, 147, 152, 279
 Baltic wheat, 161
 English supplies, 153
 German supplies, 154
 intervention in, 262
 medieval, 40–42
 Southern Netherlands supplies, 153
 state intervention, 44, 280, 466
 with Italy, 44
 grain turners, 149
 Granary of Europe, Amsterdam, 148
 Graswinckel, Dirk, 45–48
 Great Northern War, 152
 Griffiths, Richard, 436
 Groningen grain production region, 157
 Gross Domestic Product (GDP), 450
 in Britain, 369
 in the Netherlands, 370
 methods of measurement, 368
 guilds
 abolition of, 410
 theories of, 187–88
 Habsburg Empire, 43, 262
 Hall, Floris van, Minister of Finance, 423
 Harberger triangle, 134
 height of Netherlands, 306
 Heldring, O. G., 423
herengeld (Gentleman's tax), 117
 home baking, 108, 193
 household expenditures for bread, 350–52, 448
 long-term changes, 355
 household income, 365–71
 based on GDP, 367–70
 consumption-based approach, 365
 household labor, 360
 Huguenot refugees, 96
 incentive goods, 359
 income inequality, 364
 industrial structure
 baking, 200–1
 milling after 1855, 432
 milling in north and south, 167
 milling in Prussia, 167
 milling, influence of tax policy on, 165
 industrious revolution, 3, 359–60, 371
 agent of market deepening, 360
 information asymmetry, 185
 institutionalized populations, 288
 just price, 9–10, 18, 31, 84
 Kaplan, Steven L., 379, 382
 Kemper, J. de Bosch, 423, 436
 King, Gregory, 332
 Knibbe, Merriijn, 446
koekbakkers, *see* pastry bakers
 Kops, J. L. de Bruyn, 423, 436
Korenbeurs, *see* Grain Exchange of Amsterdam
korfstok, *see* tally stick
 labor costs
 wheat vs. rye, 201–3
 law of one price, 162
Le Grand Hiver 1708–09, 467
 Lesger, Clé, 195
 liberal constitution of 1848, 424
 little divergence, within Netherlands, 347
 location theory, 194
 Louis Bonaparte, King of Holland, 411, 430, 439
 Luzac, Elie, 409
maalloon, *see* millers' fee
 market integration
 impediments to, 334
Marktzwang, 8
 Marx, Karl, 195
 McCants, Anne, 295

- meat, place in diet, 296
 migration to Amsterdam, 343
 migration to Republic, 59, 204, 342
 migration within Republic, 342, 347
 influence of cost of living on, 352
 Miller, Judith A., 380
 millers
 earnings of, 175–79
 official suspicions of, 171
 restrictions on, 165
 millers' cartel, 430
 millers' fee, 30, 165
 in England, 174, 179
 in France, 175
 in kind, 172
 monetized, 173
 setting the level of, 171–74
 under Batavian Republic, 178
 millers' guilds, 167, 169, 178
 milling
 entrepreneurial character of, 175, 430
 large-scale milling, 430
 large-scale milling in England, 431
 productivity of, 166
 rural regulation of, 104–5
 technology of, 170
 milling excise, 82, 165, 451
 abolition, 425
 after unification of rates, 412
 as cause of high wage rates, 436
 basis for consumption estimates, 472
 conversion to capitation, 119–22
 differential rates per grain, 138
 example of optimal tax, 144
 growing dissatisfaction, 407
 in Copenhagen, 384
 in Germany, 383
 in Rome, 384
 on brewers' grain, 474
 outside Holland, 125–28
 rates charged, 63
 reform of 1680, 117, 144, 407, 428, 474
 restoration in 1750, 278
 revenue from, 129–32
 role in crisis periods, 271
 rural enforcement, 104, 107, 119
 suspension of 1748, 276
 suspension of 1817, 414
 suspension of 1830, 414
 under Kingdom of the Netherlands,
 414–15
 uniform rates introduced, 412
 wheat-rye differentials, 437
 without price regulation, 454
 milling excise revenue
 in 1849, 420
 regional tax burden, 413, 420
 Mokyr, Joel, 436
 Montanari, Massimo, 282
 moral economy, 2, 19, 21, 135, 274–75
 municipal surcharges, 414–16, 417–22,
 436, 438
 uneven incidence of, 418
Nahrungsprinzip, 19
 Netherlands, Kingdom of, 413
 food insecurity in, 261
 milling excise under, 416
 new system introduction, 57, 76
 numeracy, 92, 451
 nutritional value of grains, 226
 Ogilvie, Sheilagh, 187
 optimal tax theory, 133–37, 139, 437,
 452
 orphanage diets
 place of wheat in, 309, 324
 representativeness of, 288–89
 orphanages, 288–89
overbroden, *see* advantage loaves
 P. J. Meertens Instituut, 109
 pastry bakers, 176, 191–93
 path dependence, 439
 Patriot Revolution, 270, 278, 410
 Patriots, 281
 penalty of the pioneer, 4, 432
Personele Quotisatie, 177, 191, 195, 217
 Petersen, Christian, 332
 Polanyi, Karl, 1
 political legitimacy
 role of bread price controls, 454
 role of grain policy, 281
 poor relief, 266
 Posthumus, N. W., 251
 potato famine, 262
 potatoes, 139, 429
 a bread substitute?, 301, 305
 complement or substitute?, 286
 consumption levels, 304
 relative price of, 285, 302–4
 source of vitamin C, 295
 pound for pound rule, 25, 28
 price control by fiat, 267
 price control by self-financing, 269–70
 price revolution, 58
 price smoothing, 269, 468
 prices
 Danzig–Amsterdam grain price gap, 385
 of grain in Europe, 385–86

514 Index

- production costs of bread types, 225–28
- provisionment policies, 8, 46, 103
- Prussian granaries, 14
- public debt, 422
- public disorder, fear of, 275–81
- public granaries, 13
- public subsidy of bread prices, 264
- purchasing power, 254

- quality of bread, 97
 - in England, 403

- Ramsey, F. P., 133
- rantsoenpenning*
 - charge on tax farm receipts, 473
- real wages, 348
 - regional differences, 345–46
 - reversal of fortunes, 347
- regional tax burdens, 129, 437
- regulatory capture, 185–87, 190, 220
- respectable food budget, 297, 361
- revealed preferences, 350
 - revealed by migration, 352
- revenue
 - baking sector,
 - as portion of GDP, 222
 - milling sector, 176
- Revolt of the Belgians, 414
- Revolutions of 1848, 424
- Ricardo, David, 405, 409
- Riel, Arthur van, 446
- rosmolens*, *see* grain mills, horse-powered
- rural bakers
 - competition from, 103
 - toleration of, 103–4
- rye bread
 - bakers' earnings, 221
 - place in the diet, 49
 - production costs, 201–3
 - setting bakers' fee, 203–5
 - varieties of, 50, 229
- rye bread consumption
 - after 1855, 447, 449
 - before 1640, 323
 - in Burghers' Orphanage, 309
 - regional divergence, 346–48
- rye bread price
 - based on Amsterdam market, 69
 - based on old and new systems, 60
 - frequency of change, 93
 - subsidized by wheat bread consumers, 209
- rye bread, place in diet, 49–51
- rye prices
 - in northern Europe, 385
 - influence of Baltic supplies, 160
 - regional variation of, 160
 - relative to potato prices, 303
 - relative to wheat prices, 225
 - rye–wheat boundary, 283

- Sarphati, Samuel, 431
- scale of milling, 169
 - in England and France, 170
- small coin problem, 32, 78, 109–11
- Smith, Adam, 47, 409, 413, 436, 442
- Smith, Charles, 332
- Sound Toll Registers, 149
- Southern Netherlands, 87, 103, 153, 161, 167, 170, 387
 - bread consumption in, 328
 - within Kingdom of the Netherlands, 414
- speculation in grain, 98–100
- Spiegel, Laurens van der, 409
- St. Nicholas celebrations, 263
- standard of living, 348–49
 - influence of consumer choice, 349, 361–63
- state capacity, 2, 452
- state formation
 - puzzle of Dutch Republic, 273
 - role of bread price regulation in, 273, 452
 - theory of, 20, 272–74
- States Flanders, 276
 - grain production, 156
 - wheat shipments from, 161
- stranded assets, 169
- subsidy schemes, 11
- subsistence crises, 58

- tally stick, 113
- tax du pain*, *see* bread price regulation
- tax evasion, 119, 122, 128, 165, 311, 412, 474
- tax farmers, 121, 122, 135, 166, 317, 472
 - abolition, 277
 - collection costs of, 472
- tax reforms proposed, 454
- tax revenues
 - central government, 412
 - rural under-collection, 105
- tax riots, 136
- taxation of bread
 - defenders of, 423
 - elsewhere in Europe, 383–85
 - Liberal critique of, 422–23
 - views of Classical economists, 408–9
 - views of Patriots, 409–10

- taxation, seasonal, 189
 tea and coffee, 140, 296
tiende verhoging (10-percent surcharge),
 117, 124
 Tillet, Mathieu, 382
 Tilly, Charles, 273
 trade barriers
 erected by milling excise, 416–17
- Unger, Richard, 327
 Union of Utrecht, 63, 64
 unitary tax system, 410
 urban graveyard, 344
 urbanization
 of eastern provinces, 158
 regional differences, 337
- value added, 355, 369
 Vandenbroeke, Christiaan, 328
verschietsters, *see* grain turners
 Voskuil, J. J., 283, 323
- wage gaps, regional, 344
 wage good, 2, 442
 wage rates, 254, 363
 and household earnings, 365
 effect of milling excise on, 436
 in England, 338
 in western Europe, 340
 regional differences, 335–37
 warfare, 116
 weights and measures, 85
 monitoring,
 weight-variable system, 31–35,
 110
 algebraic problem, 32
 reasons for, 32
 welfare ratios, 361
- wet nurses, 298
 wheat bread
 as incentive good, 359
 place in diet, 51
 varieties of, 52–54, 229
 wheat bread consumption
 after 1855, 447
 before 1650, 318
 contemporary observers on, 323–24
 in England, 332
 in face of rising cost, 352
 regional differences, 349
 relative to rye, 310, 439
 wheat bread prices
 based on Rotterdam market, 70
 frequency of changes, 94
 price differentials, 232–33
 wheat bread revolution, 3, 331–33, 353,
 371, 449, 451
 resumed, 428
 wheat imports, 160, 307, 325
 wheat prices
 regional variation of, 164
 wheat, varieties of, 162, 163
 white bread
 consumer preferences for, 236
 medical opinion of, 286
 premium prices for, 244
 Willem I, King of the Netherlands,
 416
 wine and brandy excise, 117
 work year
 length of, 257, 365
- yield rate, *see* bread yield
- Zanden, Jan Luiten van, 184, 188
 Zeeland grain production, 154