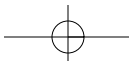




# Index

Note: An *f* following a page number refers to a figure; *t* refers to a table; *n* refers to a footnote.

- AA schedule*, 432–435, 435*f*, 472–473, 475*n*  
*DD schedule and*, 435–437  
 defined, 432  
 deriving, 434  
 factors that shift schedule, 434–435, 475*n*
- Abel, Andrew B., 441*n*, 459*n*
- Absolute advantage  
 comparative advantage and, 33  
 defined, 29  
 Ricardian model and, 37  
 trade dependence on, 45
- Absolute PPP, 387–388
- Abundance, 80
- Abundant factor, 91
- Accounting. *See* National income accounting
- Acemoglu, Daron, 655
- ACP countries, 248
- Activist trade policy, 272–279
- Ad valorem tariffs, 192
- Advanced nations. *See also* Industrial countries  
 denominating foreign debts in, 631  
 growth of NIEs and, 122–124  
 international trade organizations and, 239–240  
 trade policies of, 5–6
- Aggregate demand  
 defined, 422  
 determinants in open economy, 422–425  
 for domestic currency bonds, 498  
 equation of, 425–426  
 output and, 426*f*  
 real exchange rate and, 425  
 real income and, 360*f*; 425–426  
 real interest rate and, 478*n*
- Aggregate money demand  
 defined, 358–360  
 interest rate and, 359*f*  
 rise in real income and, 360*f*
- Agreement on Trade-Related Aspects of Intellectual Property (TRIPS), 240
- Agricultural products  
 subsidies to, 127, 244  
 in world trade, 17
- Agriculture  
 CAP and, 204–205  
 in developing countries, 624  
 protection from import competition, 233
- Airbus, subsidy to, 276–277, 276*t*
- Air pollution, 289
- Aizenman, Joshua, 492*n*
- Alang, India, 288, 289
- Aldonas, Grant, 67*n*
- Alesina, Alberto, 565*n*
- Aliber, Robert Z., 352*n*
- Allocation of resources, 88–89
- American International Group (AIG), 604
- Americanization, of culture, 284
- Anderson, Kym, 243*t*
- Antidumping, as protectionism, 179–180
- Antidumping duty, 178
- Anti-globalization movement, 5, 239, 241, 279–280
- Apparel industry. *See* Clothing industry
- Appreciation  
 defined, 322  
 exchange rate changes and, 322–323, 343  
 floating exchange rates and, 536  
 inflation targeting and, 376–377  
 rate of, 336  
 revaluation and, 475*n*
- Appropriability  
 defined, 259  
 as justification for infant industry protection, 258–259
- Arab world. *See* Oil shocks; specific countries
- Arbitrage, 326
- Argentina  
 currency board in, 644*n*  
 debt crisis in, 632  
 Mercosur and, 249  
 reforms in, 633–634
- Arndt, Sven W., 397*n*
- Asia and Asian economies  
 before crisis, 646  
 economic weaknesses in, 639–641  
 financial crisis in, 7, 641–642  
 growth of, 265–268  
 India, 267–268  
 industrial policy in, 266  
 nondeliverable forward exchange trading in, 330–331, 331*f*  
 terms of trade in, 123–124  
 trade and growth of, 165–168, 265*f*; 266*f*  
 trade policy in, 265–268
- Aspe Armella, Pedro, 635*n*
- Asset market equilibrium  
 with fixed exchange rate, 471*f*  
 output, exchange rate and, 432–434, 433*f*  
 in short run, 432–435
- Asset returns, 329–332, 334
- Assets. *See also* Asset returns;  
 International trade; Portfolio diversification  
 defined, 306  
 financial derivatives as, 311  
 gross foreign assets and liabilities of industrial countries, 609*t*  
 restrictions on bank, 596  
 of United States, 313–316, 315*f*
- Asymmetry  
 floating exchange rates and, 531  
 in Germany in 2000s, 575–577  
 regulatory, 594  
 reserve currency standard and, 484–486
- Atkeson, Andrew, 397*n*
- Automobile industry  
 equilibrium in, 167*f*  
 North American Auto Pact and, 171  
 voluntary export restraints and, 208–209
- Autonomy  
 floating exchange rates and, 530–531  
 monetary policy, 544–545
- Average cost, 158–159, 159*f*  
 defined, 158  
 market equilibrium and, 161–162
- Baillie, Richard T., 484*n*
- Bailouts, government-organized, 597
- Balance of payments, 6, 306–316, 511  
 in Brazil, 480–481  
 defined, 294, 313  
 money supply and, 468–469  
 net errors and omissions, 311–312  
 transactions recorded in, 306–307  
 in United States, 309*t*, 492
- Balance of payments crises, 476–479, 521  
 capital flight and, 476–479  
 defined, 477  
 timing of, 501, 502*f*
- Balance of payments equilibrium, 511
- Balance of payments identity, 308–309
- Balance sheet, of central bank, 465–469
- Balassa, Bela, 45, 262*n*, 402
- Balassa-Samuelson theory, 402, 407*n*, 413
- Baldwin, Richard, 574
- Baldwin, Robert, 99*t*, 231
- Baliño, Tomás J. T., 645*n*
- “Banana Protocol,” 248
- Bananas, trade preferences for, 248
- Bank bailouts, government-organized, 597
- Bank examination, 596, 598–599
- Bank finance, 630
- Bank of Canada, 379
- Bank of England, 516, 603, 604
- Bank of Japan, 452–453, 539
- Banks and banking. *See also* Central banks; Commercial banks  
 collapses and, 646  
 international banking, capital market, and, 647  
 in Japan, 539  
 regulation in Asia, 639–641  
 safeguards against failure, 595–597  
 strengthening, 649
- Barriers to trade  
 decline of, 591  
 elimination of, 243  
 in EU, 562  
 in Mexico, 261  
 nontradables and, 396–397  
 red-tape, 211  
 removal of, 5, 233  
 in United States, 14–16



## 686 Index

- Barter, money and, 355  
 Baseball, comparative advantage in, 33  
 Basel Committee, 600, 601, 605  
 Baum, L. Frank, 515  
 BEA. *See* Bureau of Economic Analysis (BEA)  
 Bean, Charles R., 567n  
 Beggar-thy-neighbor policies, 277, 517, 536  
 Belgium, 13, 561n  
 Benefits  
   of tariffs, 199–202  
   of Uruguay Round, 240–242  
 Bergsten, C. Fred, 72n  
 Bernanke, Ben S., 263n, 379n, 441n, 459n, 517n, 542nn, 595n  
 Bhagwati, Jagdish, 122, 403, 649, 649n  
 Bias, inflation, 441–442  
 Biased expansion of production  
   possibilities, 88–89  
 Biased growth, 120*f*  
   defined, 119  
   export- and import-based, 121  
 Big Mac standard, 398–400, 399*t*  
 Bilateral trade negotiations, 237  
 Bills, Mark, J., 373n  
 Bilson, John F. O., 613n  
 Bimetallic standard, 488  
 Bimetallic standard, in silver-gold system, 514  
 Binding, 237  
 Blanchard, Olivier Jean, 575n  
 Blinder, Alan, 20  
 Bloomfield, Arthur I., 513n  
 Boeing, Airbus subsidy and, 276–277, 276*t*  
 Bolivia  
   hyperinflation in, 374  
   macroeconomic data for, 375*t*  
 Bollywood, 151  
 Bonds  
   bond finance, 630  
   foreign exchange market equilibrium and, 481  
 Borders, as negative effect on trade, 14–15  
 Bordo, Michael, 526n  
 Borjas, George, 72n  
 Borrowing. *See also* International borrowing and lending  
   current account and, 301  
   by developing countries, 626–636  
 Bosworth, Barry P., 635n  
 Botswana, 623n  
 Bowen, Harry P., 99  
 Brander, James, 274  
 Brander-Spencer analysis, 274–276  
 Brazil  
   balance of payments crisis in, 480–481  
   bribery in, 625n  
   debt crisis in, 632, 634  
   foreign reserves, interest rates, and, 481*f*  
   Mercosur and, 249  
   trade liberalization in, 263–264, 264*t*  
   WTO decision about U.S. trade policy and, 243  
 Bretton Woods agreement, 504, 518–521.  
   *See also* Exchange rates; Fixed exchange rates; Floating exchange rates  
   decline and fall of system, 525–527  
   defined, 517  
   policy options under, 521–525  
   U.S. macroeconomic policy and, 526  
 Bribery. *See* Corruption index  
 Britain. *See* England (Britain)  
 British Columbia, trade with, 15, 15*t*, 16*f*  
 Brownfield foreign direct investment, 180  
 Brunner, Karl, 401n  
 Bruno, Michael, 375n  
 Bryan, William Jennings, 515  
 Buchanan, Patrick, 25  
 Budget, government deficit on, 304  
 Budget constraint, 64–65  
 Bundesbank (Germany), 7, 561, 563  
 Bureau of Economic Analysis (BEA), of  
   U.S. Department of Commerce, 313  
 Burns, Ken, 33  
 Burstein, Ariel, 397n  
 Bush, George W., 245, 437n  
 Button manufacturing, 147  
 Buy American Act (1933), 210  
  
 Cagan, Phillip, 374n  
 Call option, 328  
 Calvo, Guillermo A., 649n  
 Campaign contributions, trade policy and, 232  
 Campbell, John Y., 380n  
 Canada  
   convertible currency in, 520  
   inflation in, 378, 379  
   NAFTA and, 5, 14–15, 261  
   North American Auto Pact and, 171  
   provinces and U.S. states trading with  
     British Columbia, 16*f*  
     U.S. dollar and, 322*f*, 322*t*, 323  
 CAP. *See* Common Agricultural Policy (CAP)  
 Cap-and-trade system, for greenhouse gases, 289  
 Capital  
   mobility of, 648–649  
   as specific factor, 52  
 Capital accounts, 310  
   Asian crisis and, 649  
   defined, 307  
 Capital controls, 560  
 Capital depreciation, 297  
 Capital flight  
   balance of payments crisis and, 476–479  
   defined, 478  
   money supply, interest rate, and, 477*f*  
 Capital flows  
   global, 653–656  
   speculative, 521  
 Capital gains, 357n  
 Capital inflow, 1, 600  
 Capitalism, in Eastern Europe, 642–643  
 Capital-labor ratios, 98  
 Capital market, 7–8. *See also* International capital market  
   imperfect, 259  
   international banking and, 7–8  
   linkages of, 1  
   structure of, 591–592  
 Capital migration, in EU, 577  
 Capital mobility, and trilemma of  
   exchange rate regime, 648  
 Capital movement, international  
   borrowing/ lending and, 127–130  
 Capital requirements, 596  
 Capital stock, changing, 302n  
 Carbon dioxide  
   limits on, 287  
   worldwide emissions of, 287, 288*f*  
 Carbon tariffs, 289–290  
 Cardoso, Eliana A., 629n  
 Carry trade, 344–346  
 Carter, Jimmy, 535, 594  
 Cassel, Gustav, 386  
 Cecchetti, Stephen, 379n  
 Central America, 248. *See also* Latin America  
 Central bank balance sheet, 465–469  
 Central banks  
   balance of payments crises and, 501  
   change in net worth of, 466n  
   defined, 312  
   dollar swap lines, 606–608  
   European system of, 565–566  
   exchange rate and, 469–472, 471*f*, 545  
   fixed exchange rate and, 470–472  
   foreign exchange and, 325  
   gold standard and, 487  
   interest rates, inflation, and, 378–379  
   in international capital markets, 591  
   money supply and, 465–469  
   reserve management by, 489–490, 524n  
   unconventional monetary policies, 453–454  
 Chenery, Hollis, 629n  
 “Chicken Tax,” 202  
 Chile, debt crisis in, 632, 634–635  
 China. *See also* Yuan (China)  
   antidumping suits against, 179  
   button manufacturing in, 147  
   carbon dioxide emissions by, 287, 288*f*  
   development in, 637–638  
   economic growth in, 541, 544, 636  
   exports from, 19  
   financial crisis in, 539  
   foreign assets of, 8  
   foreign direct investment and, 181  
   globalization and, 287  
   Hong Kong and, 265  
   in labor trade between rich and poor nations, 100  
   manufacturing costs, 146–147, 146*f*  
   rate of return and, 330–331, 331*f*  
   rebalancing economy in, 652*f*  
   Ricardian theory of comparative advantage and, 46  
   trade surplus in, 6  
   undervalued currency in, 651–653  
   U.S. quotas and, 219  
   vs. Germany (1995), 47*t*  
   wage rates in, 38  
 Chinn, Menzie D., 493n, 614n  
 Chips. *See* Semiconductor industry  
 Chiquita Banana Company, 248

- Choudri, Ehsan U., 517n  
 Churchill, Winston, 516  
 Clarida, Richard, 380, 493n  
 Clean air standards, 241  
 Clinton, Bill, on labor standards, 283  
 Clinton, Kevin, 352n  
 Closed economy, in India, 267  
 Cloth, 53–54  
   marginal product of labor in, 54f  
   production function for, 53f, 55f  
   relative prices and, 60  
 Clothing industry, protection of, 233–234, 234t  
 Clusters, of firms, 140, 150–152  
 Collective action, 231, 232  
 Collusive behavior, 159–160  
 Colonies, former, 655n  
 Commercial banks, 591, 597. *See also* Banks and banking  
   in foreign exchange market, 324–325  
 Common Agricultural Policy (CAP), 204–205, 205f, 239, 242  
 Common Market, 170. *See also* European Union (EU)  
 Communication, progress of, 16–17  
 Communications industry, decline of, 273–274, 274f  
 Comparative advantage, 278  
   absolute advantage and, 33  
   of China, 46  
   concept of, 25–26  
   defined, 26  
   economies of scale and, 168–169  
   external economies and, 145  
   intertemporal, 130  
   intra-industry trade and, 168–169  
   labor productivity and, 24–48  
   with many goods, 40–43  
   misconceptions about, 37–40  
   patterns of, 102f  
   relative price after trade and, 29–30  
   Ricardian model and, 37  
   trade dependence upon, 45–47  
 Comparative statistics method, 669  
 Competition  
   electoral, 229–230, 230f  
   imperfect, 137, 274–277  
   monopolistic, 159–164  
   protection from, 233–234  
   two-firm, 274–276, 275t, 276t  
 “Complex” FDI (foreign direct investment), 183n  
 Concentration, of industries, 150–152  
 Concordat, 600  
 Confidence problem, 526  
 Congress, U.S., trade policy voting by, 231, 231t  
 Consumer electronic products, 17  
 Consumer Price Index (CPI), 394n  
 Consumer surplus  
   defined, 198  
   derived from demand curve, 199f  
   geometry of, 199f  
 Consumption  
   defined, 298  
   GNP and, 295  
   price level measurement and, 397, 400  
 Consumption demand  
   determinants of, 422–423  
   intertemporal trade and, 458–459  
 Consumption distortion loss, 202  
 Consumption possibilities, expansion by trade, 34f, 91  
 Contagion, 647  
 Continental Illinois National Bank, failure of, 596n  
 Convergence, in per-capita income, 621  
 Convergence criteria, SGP and, 564–566  
 Convertible currency  
   defined, 520  
   under IMF, 520–521  
 Cooke, W.P., 600n  
 Cooper, Richard N., 488n, 513n  
*Core Principles for Effective Banking Supervision* (Basel Committee), 600  
 Corn Laws (England), 193  
 Corporations. *See also* Multinational firms  
   foreign exchange and, 325  
   in international capital market, 591  
   subsidiaries of, 8  
 Corruption index, 624n  
 Costs  
   average, 158–159  
   of tariffs, 199–202  
   of Uruguay Round, 240–242  
 Covered interest parity, forward exchange rates and, 351–353, 607  
 Cowan, Kevin, 635n  
 Crawling peg, 464n  
 Credibility theory of the EMS, 561  
 Credit  
   in balance of payments accounts, 306  
   domestic, 482n  
   price-specie-flow mechanism and, 511–512  
 Credit lines, enhancing, 649–650  
 Credit markets, instability in, 543  
 Croushore, Dean, 441n, 459n  
 Cuaresma, Jesús, 573n  
 Culture, globalization and, 283–284  
 Cumby, Robert E., 613n  
 Currency. *See also* Euro; Exchange rates;  
   Gold standard; specific currencies  
   in China, 651–653  
   depreciation and appreciation of, 322, 378–380  
   devaluation and revaluation of, 474–475  
   exchange rate quotations for, 322t  
   fluctuations in, 8  
   forward exchange rates and, 322t, 326–328, 351–353  
   movements of, 322f, 323  
   realignments in EMS, 560, 563  
   reserve, 484–486  
   self-fulfilling crises in, 478  
   vehicle, 326  
 Currency areas  
   decision to join, 570–572  
   optimum, 557–558, 566–567  
 Currency board  
   defined, 644  
   fixed exchange rates and, 464n, 644–645  
 Currency reform, 370  
 Current account, 295n, 425t  
   deficits in, 300, 301n, 304–306, 508, 540  
   determinants of, 423  
   disposable income and, 424–425  
   in European Union, 305  
   exchange rates and, 450–451, 451f  
   exports and imports in, 309–310  
   external balance and, 507–509  
   foreign indebtedness and, 300–302  
   gradual trade flow adjustment and, 447–451  
   macroeconomic policies and, 446–447, 447f  
   net foreign wealth position and, 302f  
   optimal level of, 507–509  
   real exchange rate and, 424  
   saving and, 302–303  
   surplus in, 300, 304–306, 508–509, 542, 544  
 Current account balance  
   defined, 300  
   foreign indebtedness and, 313  
   of oil exporters, developing countries, and industrial countries, 627t  
 Current account deficits, 508  
 Current asset prices, 361n  
 Current cost method, 314  
 Curves. *See* specific types  
 Customs union  
   defined, 246  
   of EU, 562  
   vs. free trade area, 246–247  
 Cyprus, 565, 579  
 Czech Republic, 642  
 DD-AA model, 435–437, 472–473  
 DD schedule, 472–473  
   defined, 429  
   deriving, 428, 439f  
   factors shifting, 429–432  
   government demand and position of, 431f  
 Debit, in balance of payments accounts, 306  
 Debt  
   denominating, 631  
   in developing countries, 626–636  
   farming, 515  
   repudiation of international, 517  
 Debt crises  
   in Argentina, 632  
   in Brazil, 632  
   in East Asia, 7  
   Euro zone crisis of 2010, 580–581  
   in Latin America, 7, 632  
   in Mexico, 7, 632  
   of 1980s, 632–633  
 Debt finance, 630  
 Debt forgiveness, 307, 308  
 Debt inflows, equity capital inflows and, 650  
 Debt instruments, 590  
 Default, 627–629  
 Deficit. *See also* Current account  
   government budget, 304  
   in Mexico, 635  
   in richer countries, 627

## 688 Index

- Deflation, 452  
 defined, 372  
 floating rates and, 531n  
 full employment and, 506  
 in interwar years 1929–1935, 517
- De Grauwe, Paul, 395n
- Delors, Jacques, 563
- Demand. *See also* Aggregate demand;  
 Intertemporal trade  
 derived, 42  
 for exports, 531–533  
 for foreign currency assets, 328–337  
 and foreign exchange market  
 equilibrium, 498–500  
 for international reserves, 489–493  
 and long-run real exchange rate,  
 405–408  
 money supply and, 357–358, 360–363  
 optimum tariff and, 253  
 relative output, 409–410  
 relative prices and, 113–116, 115n  
 and supply and trade in single industry,  
 193–195
- Demand curve, 407–408  
 import, 193, 194f  
 relative, 31
- Demonstrations, against global  
 organizations, 280
- Deng Xiaoping, 266
- Denmark, 563n
- Deposit insurance, 596
- Depreciation  
 defined, 297, 322  
 devaluation and, 475n  
 exchange rate changes as, 322–323,  
 339, 342, 343–344  
 inflation and, 544–545  
 money supply growth and, 393  
 rate of, 334–336  
 real, 405
- Derivatives, financial, 311
- Derived demand, 42
- Destabilizing speculation, floating  
 exchange rates and, 533
- Deutsche mark (DM), 538. *See also*  
 Exchange rates; Germany
- Devaluation, 474–476  
 defined, 474  
 of dollar, 526–527  
 dollarization and, 645  
 IMF and, 521  
 revaluation and, 521
- Developing countries, 619–656. *See also*  
 specific regions  
 Asian financial crises and, 641–642  
 borrowing and debt of, 626–636  
 current account balances of, 627t  
 defined, 19, 256  
 exports from, 280  
 financial inflows to, 626–627  
 fixed exchange rates and, 464  
 growth rate of reserves in, 491–492  
 import-substituting industrialization  
 in, 259  
 international reserves in, 637–638, 638f  
 lessons from crises in, 646–647  
 manufactured exports from, 279  
 money growth and inflation in Western  
 Hemisphere, 371f  
 protection of manufacturing in, 262t  
 structural features of, 623–626  
 terms of trade in, 123–124  
 trade growth in, 265f  
 trade liberalization in, 263–265, 265f  
 trade policy in, 256–268
- Diamond, Jared, 654
- Díaz-Alejandro, Carlos F., 635n
- Diminishing returns, 53, 54n
- Direct foreign investment, 630
- Disequilibrium  
 balance of payments as measure of, 313  
 devaluation and, 521
- Disposable income, current account and,  
 424–425
- Dispute settlement, WTO and, 241
- Distribution of income. *See* Income  
 distribution
- Diversification. *See* International portfolio  
 diversification; Portfolio diversification
- Dodd-Frank Act, 605
- Doha Round, 238, 243–247
- Dolan, Matthew, 203n
- Dollar (Australian), 344–346
- Dollar (Canadian), 322t
- Dollar/euro exchange rate, 338–339,  
 339t, 340f, 341f, 366–368, 367f,  
 368f, 419f
- Dollarization, 645
- Dollar rates of return, 332
- Dollar (U.S.). *See also* Dollar/euro  
 exchange rate  
 Chinese yuan and, 330–331, 331f  
 devaluation of, 526–527  
 effective exchange rate index, 535f  
 and euro, 338–339, 340f, 341f,  
 366–368, 367f, 368f, 493n  
 exchange rates and, 320, 322f, 323,  
 338–339, 366–368, 367f, 368f,  
 451, 451f  
 interest parity condition and, 337  
 interest rates and, 332, 342–343, 342f  
 money supply, exchange rate, and,  
 365–366  
 pound spot and forward exchange rates  
 and, 327f  
 rate of return and Euro deposits,  
 334–336, 335t  
 weakness in (1976–1979), 534–535  
 yen and, 395f
- Domestic absorption, 301n
- Domestic credit, 482n
- Domestic currency bonds, 498–499, 499f
- Domestic market failure  
 argument for tariff, 226–229, 227f  
 defined, 226
- Domestic prices, 321–323
- Domestic welfare, tariffs, and, 254–255
- Dominguez, Kathryn M., 484n
- Domino effect, as contagion, 647
- Dooley, Michael, 546n
- Dornbusch, Rudiger, 397n, 451n, 629n,  
 634n, 635n
- Dot-com crash, 539–542
- Downs, Anthony, 229n
- Dumping, 178–180  
 antidumping as protectionism and,  
 179–180  
 defined, 178
- Duty-free shops, in Scandinavia, 406–407
- Dynamic gains from free trade, 221n
- Dynamic increasing returns, 149–150
- East Asia, 623, 636–645. *See also* specific  
 countries  
 current account deficits in GDP, 639t  
 economic miracle in, 636, 638–639  
 economic weaknesses in, 639–641  
 export-oriented industrialization in,  
 265–268  
 financial crisis in, 7, 539, 641–642  
 reasons for economic success in, 640,  
 640t  
*The East Asian Miracle* study, 640  
 Eastern Europe, capitalism in, 642–643
- ECB. *See* European Central Bank (ECB)
- Economic and monetary union (EMU),  
 557, 565  
 future of, 578–579, 582  
 members of (2011), 558f
- Economic geography  
 defined, 152  
 interregional trade and, 150–152
- Economic growth  
 biased, 117, 120f  
 international effects of, 121–122, 124  
 production possibility frontier and, 117  
 in world economy, 620–623
- Economic integration  
 fixed exchange rate area and, 566–568  
 LL schedule and, 568–570
- Economic models. *See* specific models
- Economic policy, floating exchange  
 system and, 530
- Economic stability loss, 568
- Economic structure, similarity in, 577
- Economies of scale, 137. *See also* External  
 economies  
 comparative advantage and, 168–169  
 external, 139  
 from free trade, 221  
 internal, 139  
 international trade and, 138–139  
 market structure and, 139–140  
 Ricardian model and, 45
- Economy  
 categories of, 620  
 East Asian miracle and, 636, 638–639  
 German, 575–577  
 global, 17  
 immigration and, 71–73  
 production function in, 52f  
 theory of external, 140–143
- Ederington, Josh, 289n
- Education, of workers, 72, 99–100
- Edwards, Sebastian, 635n, 645n
- Effective rate of protection, 197
- Efficiency case for free trade, 220, 220f
- Efficiency loss, 201
- Égert, Balázs, 573n
- Eichengreen, Barry, 512n, 517n, 548n,  
 575, 631



- Elasticity. *See* Trade elasticities
- Electoral competition, voter preferences and, 229–230, 230*f*
- Elliott, Kimberly Ann, 283
- Embargo, on shipping, 36
- Emerging economies  
capital inflow to, 600  
wages and productivity on, 38–39
- Emerging markets, 7, 600. *See also* Developing countries
- Emissions. *See* Carbon dioxide
- Employment, 20*f*, 506. *See also* Unemployment  
U.S. manufacturing, 275*f*, 277
- EMS. *See* European Monetary System (EMS)
- EMU. *See* Economic and monetary union (EMU)
- Engel, Charles, 401n, 573, 614n
- Engerman, Stanley L., 655n
- England (Britain). *See also* European Union (EU)  
embargo against, 36  
gold standard in, 511–512, 516  
Maastricht Treaty and, 563n
- Enoch, Charles, 645n
- Entertainment, U.S. exports of, 151
- Entrepreneurs, free trade and, 221
- Environment  
globalization and, 283–284, 286–287  
trade negotiations and, 289–290  
WTO and, 284
- Environmental Kuznets curve, 286, 287*f*
- Equalization of factor prices, 97–98
- Equilibrium. *See also* Short-run equilibrium  
in automobile market, 167*f*  
in foreign exchange market, 337–341, 364*f*, 498–500  
interest rates, expectations, and, 341–346  
in money market, 360–362, 364*f*  
in monopolistically competitive market, 162*f*  
worldwide, 195*f*
- Equilibrium exchange rate, 339–341, 341*f*
- Equilibrium interest rate  
determination of, 361*f*  
money supply, demand, and, 360–363
- Equilibrium relative price, 118*f*
- Equilibrium relative wage, 43
- Equity capital inflows vs. debt inflows, 650
- Equity finance, 630
- Equity instruments, 590
- ERM 2 (revised exchange rate mechanism), 566
- ESCB. *See* European System of Central Banks (ESCB)
- Euro, 527n, 557. *See also* Dollar/euro exchange rate; Euro zone; Optimum currency areas  
dollar rates of return and, 334–336, 335*t*  
and economic policy, 564–566  
evolution of, 559–564  
exchange rate and, 338–339  
expected returns on, 364*f*, 365  
fixed exchange rate area and, 566–568  
managed float and, 464n  
rise in interest rate and, 343*f*  
U.S. money supply, exchange rate, and, 365–366  
value of, 6
- Eurobanks, 592
- Eurocurrencies, 592
- Eurocurrency trading, growth of, 593
- Eurodollar market, in London, 8
- Eurodollars, 592
- Euronyms, glossary of, 559*t*
- Europe. *See also* European Union (EU)  
economic and monetary union (EMU) in, 557, 558*f*, 563, 564  
economies of, 12*f*  
inflation rates in, 527*t*  
money supply and dollar/euro exchange rate in, 366–368, 368*f*  
as optimum currency area, 572–578  
U.S. trade with, 11, 12*f*, 13, 14
- European Central Bank (ECB), 564, 565, 575–577  
Fed swap lines and, 606–608
- European Commission, 223–224, 560
- import quota on dollar bananas and, 248
- European Community. *See* European Union (EU)
- European Currency Unit (ECU), 559n. *See also* Euro
- European Economic Community (EEC). *See* Common Market
- European Financial Stability Facility, 580–581
- European Monetary System (EMS), 539  
credibility theory of, 561  
defined, 560
- European Monetary Union (EMU). *See* Economic and monetary union (EMU)
- European single currency. *See* Euro
- European System of Central Banks (ESCB), 365, 560, 565–566, 579
- European Union (EU)  
Common Agricultural Policy in, 204–205, 205*f*  
deficit limits in, 305  
euro in, 557  
Exchange Rate Mechanism (ERM) of, 464  
exchange rates and, 464  
expansion of membership, 579  
1992 plan, 223–224, 563  
percentage of GNP, 305  
tariff protection and, 243  
trade preferences for bananas and, 248  
trade within, 573–574  
trade with U.S. (2003), 12*f*
- Euro zone, 558*f*, 574. *See also* Euro  
current account balances of, 577*t*  
debt crisis of 2010, 580–581  
divergent real interest rates in, 576*f*  
diversification in, 609  
economic policy and, 564–566  
expansion of, 579
- Excess returns, 274
- Exchange control, in developing countries, 649
- Exchange rate  
diagrammatic analysis, 471–472  
fixed, money market equilibrium and, 470–471  
nominal effective dollar index (2004–2010), 606*f*
- Exchange rate management, sterilized intervention in, 479–484
- Exchange Rate Mechanism (ERM), 464, 559, 560  
revised (ERM 2), 566
- Exchange rate overshooting, 377
- Exchange rate regimes, political economy of, 514–515
- Exchange rates, 320–321, 566–567. *See also* Bretton Woods agreement; Dollar/euro exchange rate; Fixed exchange rates; Gold standard  
adjustment to changes in, 476  
asset returns and, 334  
as automatic stabilizer, 529, 531–533, 546  
calculating, 326, 326n  
carry trade, 344–346  
central bank fixing of, 469–472, 471*f*  
changes under Bretton Woods, 524  
changing expectations and, 343–344  
current account and, 451, 451*f*  
DD and AA schedules and, 435–437  
decline in barriers to trade and, 591  
defined, 320  
demand, supply, and long-rate, 405–408  
determination, 6–7  
in developing countries, 624  
equilibrium, 339–340  
in Europe, 559n  
expected returns and, 338–339  
fiscal policy change and, 446  
fixed, 463–493, 566–568  
forward and covered interest parity, 351–353  
inflation and, 372–380  
interest rate changes and, 342–343, 342*f*, 343*f*, 375  
international transactions and, 321–324  
liquidity trap and, 451–454  
long-run model based on PPP, 388–394  
in Mexico, 635  
money, interest rates, and, 354–355  
and money in long run, 371–372  
money market and, 365–366, 366*f*  
money supply in short run and, 363–368  
nominal, 404, 408–410  
nominal and real effective dollar indexes (1975–2006), 535*f*  
oil shocks and (1975–1980), 533–537  
output, asset market equilibrium, and, 432–434, 433*f*  
pass-through, inflation, and, 449–451  
pegged, 464, 502, 517, 527n, 531, 571*f*  
permanent money supply changes and, 374–377  
price levels and, 373*f*, 384–385  
quotations for, 322*t*  
real, 404–405, 408–410  
relative prices and, 323–324, 327*f*  
trends and inflation differentials in, 545*f*  
U.S. national income and balance of payments and, 313

## 690 Index

- Exchange rates (*continued*)  
 U.S. net foreign debt and, 316  
 yen/dollar, 395*f*
- Exchange Stabilization Fund, 312
- Exchange trading, nondeliverable forward,  
 in Asia, 330–331, 331*f*
- Expansion. *See* Fiscal expansion
- Expansionary monetary policy, after gold  
 standard, 518
- Expectations, interest rates, equilibrium,  
 and, 341–346
- Expected returns  
 exchange rates and, 338–339  
 from money, 357–358
- Expenditure-changing policy, 524
- Expenditure-switching policy, 524
- Exploitation, by trade, 39–40
- Export-biased growth, 121
- Export credit subsidies, 210
- Export-oriented industrialization, in East  
 Asia, 265–268
- Export restraint  
 defined, 193  
 voluntary, 208–209
- Exports, 1, 2*f*. *See also* Exchange rates  
 balance of payments and, 309–310  
 comparisons of North-South, 102–104  
 decline of, in 2009, 1  
 developing country, 19, 19*f*  
 from East Asian economies, 266  
 of entertainment, 151  
 fall in demand for, 531–533, 532*f*  
 in Mexico, 261  
 as percentage of national income, 2*f*, 3*f*  
 productivity and, 46*f*  
 trade costs and, 176–178, 176*t*, 177*f*  
 in 2008, 17, 18*f*  
 values of, 17*f*  
 voluntary restraints, 208–209
- Export sector, entertainment as, 151
- Export subsidies, 124–127, 203–204, 210,  
 233, 243–244  
 defined, 124, 203  
 effects of, 126, 203*f*  
 EU's Common Agricultural Policy and,  
 204–205, 205*f*  
 foreign, 233
- Export supply curve, 193, 194*f*
- External balance  
 under Bretton Woods system,  
 523–524, 523*f*  
 crisis, 543–544  
 defined, 505  
 optimal level of current account, 507–509  
 policies for, 525*f*  
 U.S. problem with, 525–527, 540
- External economies  
 in Hollywood entertainment firms, 151  
 increasing returns and, 143–145  
 international trade and, 143–150  
 losses from trade and, 148*f*  
 market equilibrium and, 143, 143*f*  
 output and prices and, 143–145  
 pattern of trade and, 145–147  
 specialized suppliers, 140–141  
 theory of, 140–143  
 before trade, 144, 144*f*
- External economies of scale, 139
- Externalities  
 defined, 272  
 importance of, 272–273
- External prices, 125
- Factor abundance, 80, 91
- Factor content, of U.S. exports and  
 imports (1962), 99*t*
- Factor intensity, 80
- Factor movements, international  
 borrowing and lending and, 127–130
- Factor prices  
 defined, 85, 86  
 equalization of, 97–98  
 goods prices and, 86–88, 86*f*, 86*n*,  
 107–110  
 and input choices, 87*f*, 107–110
- Factor-proportions model, 661–684  
 basic equations in, 662–663  
 factor prices and costs, 661–663, 662*f*  
 factor supplies and outputs, 664  
 goods prices and factor prices, 663
- Factor-proportions theory, 80, 93. *See also*  
 Heckscher-Ohlin theory
- Factors, scarce, 91
- Factors of production. *See* Labor; Specific  
 factors
- Factor specificity. *See* Specific factors
- Factor substitution, 82, 82*n*, 83  
 production possibility frontier with, 84*f*  
 production possibility frontier  
 without, 83*f*
- Fallows, James, 278
- Federal Deposit Insurance Corporation  
 (FDIC), 596
- Federalism, fiscal, 577–578
- Federal Reserve System, 365  
 as global LLR for U.S. dollars, 606  
 LTCM rescue and, 601–602  
 money supplies and, 356*n*  
 swap lines, 606–608
- Feenstra, Robert C., 96*n*
- Fees, in service exports, 18
- Feldstein, Martin, 611, 637, 637*n*
- Film industry, U.S. entertainment exports  
 and, 151
- Financial account, 306, 310–311
- Financial crises. *See* Developing countries;  
 specific countries and regions
- Financial derivatives, 311, 328
- Financial flows, private, 520–521
- Financial inflows  
 alternate forms of, 629–631  
 to developing countries, 626–627  
 sudden stop in, 628
- Financial institutions, reforming world's  
 financial architecture and, 647–653
- Financial markets, in developing  
 countries, 624
- Firms. *See also* Corporations  
 clusters of, 140  
 foreign-controlled, 180  
 market size increases and, 174–175  
 outsourcing and, 185–186  
 responses to trade of, 172–175
- Fiscal expansion  
 under fixed exchange rate, 474*f*  
 permanent, 444–446, 445*f*
- Fiscal policy, 438–439, 473–474  
 adjustment to, 476  
 current account, protectionism, and, 538  
 defined, 437  
 global economy and, 2  
 permanent shift in, 442–446  
 temporary changes in, 437–441, 439*f*
- Fischer, Stanley, 451*n*, 649*n*, 653*n*
- Fisher, Irving, 391*n*
- Fisher effect, 391–394, 506*n*  
 defined, 391  
 flexible price-monetary approach and,  
 418–420
- Fixed exchange rate area  
 GG schedule and, 566–568  
 LL schedule and, 568–570, 571*f*
- Fixed exchange rates, 530. *See also*  
 Bretton Woods agreement; Exchange  
 rates; Floating exchange rates  
 asset market equilibrium with, 471*f*  
 balance of payments crisis and, 501  
 currency boards and, 644–645  
 diagrammatic analysis, 471–472  
 in EU, 547  
 fiscal expansion under, 473–474  
 foreign exchange intervention and,  
 463–493  
 foreign exchange market equilibrium  
 under, 469–470  
 IMF and, 519  
 importance of, 464–465  
 monetary expansion under, 473*f*  
 money market equilibrium under,  
 470–471  
 as option, 547–548  
 stabilization policies with, 472–476
- Fixed parties, Bretton Woods system  
 and, 526
- Flandreau, Marc, 512*n*
- Flexible price-monetary approach,  
 418–420
- Floating exchange rates, 464, 491–492,  
 501. *See also* Fixed exchange rates  
 capital flows across borders and,  
 592–594  
 case against, 530–533  
 destabilizing speculation and, 533  
 dollar devaluation and, 526–527  
 inflation and, 529–533  
 international trade and, 533, 546  
 investment and, 546  
 macroeconomic policy under, 529–533  
 managed, 463  
 money demand and, 532*f*  
 reform and, 547–548  
 stabilization through, 546  
 transition to, 529–533
- Flood, Robert P., 492*n*, 501*n*
- Folkerts-Landau, David, 546*n*
- Food  
 EU trade in, 223  
 input possibilities in production of, 85*f*  
 production function for, 54, 55*f*
- Ford, Whitey, 33

- Ford "Transit Connect," 203
- Foreign competition, myth of, 37–39
- Foreign-controlled firms, 180
- Foreign currencies, developing country debt in, 631
- Foreign currency assets, demand for, 328–337
- Foreign direct investment, 180, 180*f*.  
*See also* Direct foreign investment  
 firm's decisions regarding, 183–185  
 horizontal and vertical, 183  
 outsourcing and, 185–186  
 outward, for top 25 countries, 182*f*  
 patterns of, 180–181  
 proximity-concentration trade-off, 183, 184
- Foreign exchange instability, and central bank swap lines, 606–608
- Foreign exchange intervention  
 effects of, 468*t*  
 money supply and, 467  
 signaling effect of, 484  
 sterilized, 467–468
- Foreign exchange market, 324–328.  
*See also* Fisher effect  
 actors in, 324–325  
 after dollar devaluation, 527  
 carry trade, 344–346  
 characteristics of, 325–326  
 defined, 324  
 efficiency of, 611–615  
 exchange rates in, 531  
 futures, options, and, 328  
 money market and, 365  
 return, risk, and liquidity in, 336–337  
 spot rates, forward rates, and, 326–328  
 U.S. money market equilibrium and, 367–368
- Foreign exchange market equilibrium, 337–341, 364*f*, 498–500  
 under fixed exchange rate, 469–470  
 under imperfect asset substitutability, 481–482
- Foreign exchange option, 328
- Foreign exchange swaps, 328
- Foreign investment. *See* Direct foreign investment; Investment
- Foreign outsourcing, 185
- Foreign prices, 321–323
- Forward exchange rates, 326–328  
 covered interest parity and, 351–353  
 defined, 327  
 dollar and pound, 327*f*
- Forward exchange trading, nondeliverable, in Asia, 330–331, 331*f*
- Forward-falling supply curve, 143
- Forward premium, on euros against dollars, 352
- "Four zones of economic discomfort,"  
 external and internal balance and, 523*f*
- Frankel, Jeffrey A., 401*n*, 493*n*
- Frankfurt, foreign exchange trading in, 325
- Free competition, pricing to market and, 397
- Free trade, 21. *See also* Free trade area;  
 Infant industry argument  
 in automobiles (U.S.-Canada), 171  
 case for, 220–224, 221*t*  
 domestic market failure argument  
 against, 226–227  
 efficiency case for, 220, 220*f*  
 in Europe, 170  
 gains from, 221–222, 243*t*  
 international negotiations and, 234–243  
 interventionism and, 278  
 market failures and, 228–229  
 misconceptions about, 37  
 monopolist under, 215–218, 215*f*  
 national welfare arguments against, 224–229  
 political argument for, 222  
 terms of trade argument against, 224–229
- Free trade area  
 defined, 246  
 vs. customs union, 246–247  
 in Western Europe, 170
- Frieden, Jeffrey, 515
- Friedman, Milton, 374*n*
- Frisch, Max, 73
- Full employment, 506  
 after money-demand increase, 440*f*  
 maintaining, 439–441  
 price-level stability, and, 506  
 and world demand for domestic products, 440*f*
- Fundamental disequilibrium, 531, 533
- Futures contract, 328
- Gains from trade, 4–5, 34–35  
 defined, 4, 34  
 to domestic producers, 201  
 types of, 587–588, 588*f*
- Garber, Peter M., 286*nn*, 501*n*, 546*n*
- Gasoline imports  
 pollution and, 284  
 U.S.-Venezuela dispute over, 240–241
- GATT. *See* General Agreement on Tariffs and Trade (GATT)
- GDP. *See* Gross domestic product (GDP)
- Genberg, Hans, 395*n*
- General Agreement on Tariffs and Trade (GATT), 7, 231, 242, 518*n*  
 defined, 239–240  
 WTO and, 239–240
- General Agreement on Trade in Services (GATS), 240
- General equilibrium analysis  
 defined, 31  
 of theory of trade, 193
- Genoa, demonstrations at summit meeting in, 280
- Genoa Conference, 516
- Geography  
 economic, 150–152  
 global capital flows, global distribution of income, and, 653–656
- Germany. *See also* Deutsche mark (DM);  
 European Union (EU)  
 asymmetric shocks in, 575–577  
 average government nominal borrowing spreads, 581  
 banana imports and, 248  
 Bundesbank in, 7
- EMS credibility theory and, 561
- Euro zone debt crisis and, 580–581
- reunification of, 538, 561
- Volkswagen and, 202–203  
 vs. China, 47*t*
- GG-LL model, 570–573. *See also* LL schedule
- GG schedule, 566–568, 568*f*
- Ghosh, Atish, 629*n*
- Giavazzi, Francesco, 559*n*, 561*n*
- Gifts, of foreign assets, 301*n*
- Giovannini, Alberto, 559*n*
- Glaeser, Edward L., 656*n*
- Global imbalances  
 high-tech dot-coms and, 539–542  
 real interest rates and, 541*f*, 543–544
- Globalization, 5–6  
 anti-globalization movement and, 5, 241, 280  
 backlash against, 2  
 environment and, 286–287  
 Keynes on, 17  
 low-wage labor and, 279–280  
 shadow banking system, 594–595  
 trade, wages, and, 280–282
- GNP. *See* Gross national product (GNP)
- Goldberg, Linda S., 380*n*, 608*n*
- Goldberg, Pinelopi Koujianou, 394*n*, 397*n*
- Gold exchange standard, 489, 516
- Gold points, 487*n*
- Goldsmith, James, 38
- Gold standard, 486–493. *See also* Bretton Woods agreement  
 benefits and drawbacks of, 487–488  
 bimetallic standard and, 488–489  
 defined, 485  
 era of, 504  
 external balance under, 511  
 Great Depression and, 517–518  
 in interwar years (1918–1939), 516–518  
 macroeconomic policy under, 510  
 mechanics of, 486–487  
 origins of, 511  
 "rules of the game" for, 512–513  
 symmetric monetary adjustment under, 487  
 U.S. adoption of, 514–515
- Gold Standard Act (1900), 515
- Goods  
 in developing-country exports, 19, 19*f*  
 output, income, and, 296  
 trade in, 17–19  
 transport costs for, 43–44
- Goods and services, trade in, 4
- Goods prices, factor prices, input choices, and, 86–88, 87*f*, 107–110
- Gourinchas, Pierre-Olivier, 654*n*
- Government  
 as debtor in domestic economy, 506*n*  
 in developing countries, 623–624  
 of ESCB, 579  
 high-technology industries and, 273  
 institutions hypothesis and, 656  
 role of institutions of, 654  
 in Russia, 642–643
- Government budget deficit, 304
- Government-organized bank bailouts, 597

## 692 Index

- Government purchases, 239  
 defined, 299  
 GNP and, 295  
 Government saving, 303–304  
 Gravity model of trade, 11–13  
 anomalies in, 13  
 defined, 12  
 logic of, 11–12  
 Great Britain. *See* England (Britain)  
 Great Depression, gold standard and, 516, 517–518  
 Greece, 565  
 Euro zone debt crisis and, 580–581  
 Greenbacks, 514  
 Greenfield foreign direct investment, 180  
 Greenhouse gases, limiting, 287, 289  
 Greenpeace, Alang shipbreaking industry and, 289  
 Gregorio, José de, 635n  
 Grilli, Vittorio, 565n  
 Gross domestic product (GDP), 297–298  
 defined, 11, 297  
 foreign direct investment and, 182  
 gravity model of trade and, 11–12  
 imports and exports as share of, 2  
 per capita, 257*t*  
 world trade as share of, 17  
 Grossman, Gene M., 232n, 286n, 614n  
 Gross national product (GNP)  
 defined, 295  
 division of, 295–296  
 as real national income, 358  
 in United States, 296*f*  
 Group of Twenty (G20) nations, 547  
 Grove, Andy, 277  
 Growth. *See* Economic growth  
*Guns, Germs, and Steel* (Diamond), 654
- Haber, Stephen, 655n  
 Hamburger standard. *See* Big Mac standard  
 Hansen, Lars Peter, 613n  
 Hanson, Gordon, 72n, 96n  
 “Hat algebra,” 662  
 Hausmann, Ricardo, 631  
 Heckscher, Eli, 80  
 Heckscher-Ohlin theory, 91, 100, 111  
 defined, 80  
 empirical evidence on, 98–104  
 testing of, 100*t*  
 Heller, H. Robert, 490n  
 Helpman, Elhanan, 232n  
 Herbert, Bob, 39n  
 High-income economies, 620  
 High-performance Asian economies (HPAEs), 640  
 High-tech goods, 93. *See also* Dot-com crash  
 High-technology industries, government support for, 273  
 High-wage nations, trade with low-wage nations, 169n  
 Hodrick, Robert J., 613n  
 Hollywood, entertainment industry in, 151  
 Home mortgage market, in U.S., 543  
 Home prices, U.S. (2000–2010), 540*f*  
 Homogenization, of culture, 284
- Hong Kong, 539  
 economy in, 265, 636, 642  
 entertainment industry in, 151  
 exports from, 265–266  
 Horioka, Charles, 610, 611  
 Horizontal FDI (foreign direct investment), 183, 183n, 184  
 Howell, Kristy, 306n  
 HPAEs. *See* High-performance Asian economies (HPAEs)  
 Hsieh, Chang-Tai, 518n  
 Huber, Peter, 575n  
 Human resources, trade in, 21  
 Hume, David, 1, 2, 511–512, 514  
 Humpage, Owen F., 484n, 645n  
 Hungary, American buses made in, 210  
 Hybrid monetary system, 464  
 Hyperinflation, in Bolivia, 374
- ICT industries, decline of, 273–274, 274*f*  
 IMF. *See* International Monetary Fund (IMF)  
 Immigration. *See also* International labor mobility  
 mass migration and, 69–73  
 U.S. economy and, 71–73, 72*f*  
 Immiserizing growth, 122  
 Imperfect asset substitutability, 481–483, 524n  
 defined, 480  
 domestic bond supply and foreign exchange market risk premium under, 481  
 equilibrium in foreign exchange market with, 498–500  
 sterilized intervention and, 481–482, 483*f*  
 Imperfect capital markets  
 defined, 259  
 infant industry protection and, 259  
 Imperfect competition, 137  
 defined, 156  
 strategic trade policy and, 274–277  
 theory of, 156–164  
 Import-biased growth, 121  
 Import demand curve, 193, 194*f*  
 Import quota, 205–206  
 on automobiles, 228  
 on bananas, 248  
 defined, 193  
 grandfathering of, 237  
 in presence of monopoly, 215–218, 218*f*  
 Imports, 1, 2*f*. *See also* Exchange rates  
 balance of payments and, 309–310  
 decline of, in 2009, 1  
 education levels of origins, 99  
 limiting manufactured goods, 257  
 as percentage of national income, 2*f*, 3*f*  
 share of U.S. by industry, 102*f*, 103*f*  
 skill of work force and, 99–100, 103*f*  
 of sugar, 68  
 Import-substituting industrialization, 257–261  
 defined, 259  
 infant industry argument and, 258–259  
 in Mexico, 261
- promoting manufacturing through protection, 259–260  
 results of favoring manufacturing and, 262–263  
 Import tariffs, 124. *See also* Tariffs
- Income  
 on foreign investments in current account, 309–310  
 gains under Doha scenarios, 243*t*  
 from land, 52  
 protecting, 224  
 transfers of, 300n  
 in world economy, 620–623  
 Income distribution, 115n  
 within countries, 4  
 global, 653–656  
 North-South trade and inequality of, 92–96  
 political economy of trade and, 66, 68  
 relative prices and, 60–62, 61*f*; 78–79, 78*f*, 79*f*  
 in short run, 91–92  
 trade policy and, 229–234  
 trade politics and, 93–94  
 Income distribution effects on trade, 91–93  
 Income effects, 115  
 Income gap, 256, 620–621, 621*t*  
 narrowing of, 621–623  
 Income inequality, North-South trade and, 92–96  
 Increasing returns  
 dynamic, 149–150  
 external economies and, 143–145  
 trade with, 168*t*  
 trade without, 168*t*  
 Increasing returns to scale, external economies and, 145
- India, 656  
 Bollywood in, 151  
 economic boom in, 265, 267–268  
 foreign direct investment and, 181  
 import-substituting industrialization and, 262  
 pollution in, 287–289  
 shipbreaking industry in, 288–289  
 trade liberalization on, 263–264  
 wage rates in, 38  
 workers’ conditions in, 285
- Indifference curves, 114–115, 676–677  
 Indonesia, 539, 636, 640–642  
 Industrial concentration, 146  
 Industrial countries  
 current account balances of, 627*t*  
 exchange rate systems and, 591–592  
 floating exchange rates and, 546  
 gross foreign assets and liabilities of, 609*t*  
 growth rate of international reserves and, 491  
 Industrial districts, Marshall on, 140  
 Industrialization, import-substitution and, 257–261  
 Industrial policy, in Asian economies, 266  
 Industries  
 concentrations of, 150–152  
 protection from import competition and, 233–234  
 tradable and nontradable, 150, 150*t*



- Infant industry argument, 150, 258–259
- Inflation, 372–380, 506. *See also* Fisher effect  
 balance of payments crises and, 501  
 central bank interest rates and, 378–379  
 convergence for six original EMS members, 562*f*  
 currency appreciation and, 376–377  
 defined, 372  
 depreciation and, 545–546  
 in EU, 575–576  
 exchange rate pass-through, 449–451  
 expectations of, 374  
 floating exchange rates and, 529–533  
 full employment and, 506  
 in Germany, 561  
 in industrialized countries, 539  
 interest parity, PPP, and, 390–391  
 in Latin America, 371  
 in Mexico, 636  
 monetary policy and, 544–545, 554*f*  
 and real output growth in Russia and Poland, 643*t*  
 in 1960s, 526  
 sterilized intervention and, 479
- Inflation bias, 441–442
- Information flow. *See* Knowledge spillovers
- Information goods, U.S. trade balance in, 274*f*
- Information industry, decline of, 273–274, 274*f*
- Input choices  
 factor prices, goods prices, and, 86–88, 86*n*, 107–110  
 from goods prices to, 87*f*
- Input possibilities, in food production, 85*f*
- Inputs  
 output and, 138*t*  
 production, 639  
 in two-factor economy, 84–86
- Institutions hypothesis, 654–656
- Integer constraint problems, 164*n*
- Intel, 183, 277
- Intensity, 80
- Interbank trading, 324–325
- Interest parity  
 basic equilibrium condition and, 337–338  
 condition, 337  
 foreign exchange market efficiency and, 612–613  
 inflation, PPP, and, 390–391
- Interest rate, 332–333. *See also* Equilibrium interest rate; Fisher effect  
 aggregate money demand and, 358, 359*f*  
 capital flight, money supply, and, 477*f*  
 current exchange rate and, 342–343  
 defined, 332  
 exchange rate management and, 376  
 flexible price-monetary approach and, 418–420  
 international differences and real exchange rate, 410–412  
 liquidity trap and, 451–454  
 long-run effects on exchange rate of changes in, 389  
 monetary policy and, 376–377
- money, exchange rates, and, 354–355  
 money demand and, 357  
 money supply and, 362, 362*f*  
 nominal, 333*n*  
 output and, 363  
 real, 129, 333*n*  
 real income and, 363*f*  
 U.S. mortgage market and, 539, 543
- Intermediate materials/goods, 296, 297
- Internal balance  
 under Bretton Woods, 521–523, 523*f*  
 defined, 505  
 full employment, price-level stability, and, 506  
 under gold standard, 513  
 policies for, 521*f*
- Internal economies of scale, 139
- Internalization motive, 185
- Internal prices, 125
- International banking. *See also* Banks and banking  
 and international capital market, 590–595  
 regulation of, 595–597
- International borrowing and lending, 4, 127–130  
 intertemporal comparative advantage, 130  
 intertemporal production possibilities, trade, and, 128  
 real interest rate and, 129
- International capital market, 7–8. *See also* Capital market  
 banking regulation and, 595–597  
 defined, 586  
 gains from trade and, 587–590  
 growth of, 591–592  
 international banking and, 590–595  
 performance of, 608–615  
 stability of, 629
- International distribution of income. *See* Income distribution
- International economics, subject matter of, 3–8
- International gold standard. *See* Gold standard
- International investment. *See* Investment
- International labor mobility, 52–53, 69–73, 69*f*
- International Ladies' Garment Worker's Union, 233
- International macroeconomics. *See* Macroeconomic policies; Macroeconomics
- International Monetary Fund (IMF), 237, 464*n*  
 aid to Asia, 642  
 Bretton Woods system and, 518–521  
 debt crises and, 600–601  
 default crises and, 600–601  
 defined, 518  
 demonstrations against, 280  
 goals and structure of, 519–520  
 member country classification for monetary policy and exchange rate systems, 379*n*  
 role and policies of, in financial crisis, 650  
 Russia and, 643
- International monetary system, 504–548  
 classification of, 509–510, 510*f*  
 reserve currencies in, 484–486, 489–493
- International money, study of, 8
- International negotiations  
 advantages of, 235–236  
 defined, 235  
 trade liberalization and, 233–235, 237–239, 243–244  
 trade policy and, 234–243  
 Uruguay Round and, 238
- International policy coordination. *See* Policy coordination
- International portfolio diversification, 675–681  
 analytical derivation of optimal portfolio, 675–676  
 changing rates of return and, 679–681, 680*f*  
 diagrammatic derivation of optimal portfolio, 676–679, 677*f*, 678*f*
- International reserves  
 demand for, 489–493  
 growth rate of, 491*f*
- International trade, 1. *See also* Exchange rates; Patterns of trade; Trade agreements; Specific factors model  
 access to, 654  
 beneficial nature of, 25  
 costs of, and export decisions, 176–178, 176*t*, 177*f*  
 economies of scale and, 138–139  
 effect on distribution of income, 4–5, 50, 60–65  
 equalization of factor prices in, 97  
 expansion of choice and, 65  
 as exploitation, 39–40  
 external economies and, 143–150  
 floating exchange rates and, 533, 546  
 income distribution and gains from, 4–5, 63–65, 64*f*  
 interregional trade and, 150–152  
 intra-industry, 169–171, 169*t*  
 North-South, 92–96  
 political economy of, 65–66  
 reasons for, 24  
 study of, 8  
 two-factor economies and, 89–98  
 unemployment and, 66–68, 67*f*  
 volume of, 5–6
- International Trade Organization (ITO), 237, 518*n*
- International transfers, 297
- International wage rates, comparative, 97*t*
- Internet, communication via, 16
- Interregional trade  
 defined, 150  
 economic geography and, 150–152  
 in United States, 573
- Intertemporal comparative advantage, 130
- Intertemporal production possibility frontier, 128, 128*f*
- Intertemporal trade, 134–136, 301, 303, 508, 587–588  
 consumption demand and, 458–459  
 defined, 127

## 694 Index

- Intertemporal trade (*continued*)  
 determining intertemporal consumption pattern, 135*f*, 136*f*  
 determining intertemporal production pattern, 134*f*, 136*f*  
 developing-country borrowing and, 627  
 extent of, 610–611
- Interventionism, in Japan, 278
- Interwar period (1918–1939), international monetary system during, 504, 516–518
- Intra-EU trade, 573–574, 574*f*
- Intra-industry trade, 169  
 importance of, 169–170  
 indexes for U.S. industries (1993), 169*t*  
 North American Auto Pact (1964) as, 171  
 significance of, 169–171
- Investment, 298. *See also* specific countries  
 defined, 298  
 in East Asia, 639–641  
 floating exchange rates and, 546  
 GNP and, 295  
 international position of U.S. (2005 and 2006), 314*t*  
 rates for 24 countries, 610*f*  
 in U.S., 540
- Iran, assets in U.S. banks, 594
- Iraq, assets in U.S. banks, 594
- Ireland, U.S. trade with, 13
- Irwin, Douglas, 36
- Isard, Peter, 394n
- IS-LM* model, capital flight and, 478n
- Iso-cost lines, 107
- Isovalue lines, 113–115, 114*f*
- Janssens, Marc, 395n
- Japan, 539. *See also* Yen (Japan)  
 auto and truck manufacturing, 203, 208–209  
 economy in, 636, 642  
 foreign assets of, 8  
 investments in U.S. by, 8  
 liquidity trap of 1990s, 452–453  
 protection in, 235–236  
 rice import policy, 51  
 rice tariff by, 233  
 semiconductor industry in, 278–279  
 voluntary export restraints and, 208–209
- J-curve, 447–449, 448*f*, 449, 450
- Jeanne, Olivier, D., 654n
- Jefferson, Thomas, 36
- Jensen, J. Bradford, 150n
- Johnson, Lyndon B., 202
- Johnson, Simon, 655
- Jones, Ronald, 51
- Kaminsky, Graciela L., 629n
- Katz, Lawrence F., 575n
- Kennedy, Craig, 608n
- Kennedy, Paul, 37n
- Kennedy Round, 238
- Keynes, John Maynard  
 on globalization, 17  
 on gold standard, 488, 512
- Klein, Michael W., 380n
- Klenow, Peter J., 373n
- Kletzer, Lori G., 67n, 150n
- Knetter, Michael M., 394n, 397n
- Knowledge spillovers, 140, 142
- Kochin, Levis A., 517n
- Korea, 539. *See also* South Korea
- Kravis, Irving B., 394n, 403
- Krone. *See* Norway
- Krueger, Alan, 286n
- Krugman, Paul R., 395n, 397n, 451n, 453n, 501n
- Kuznets curve, environmental, 286, 287*f*
- Labán, Raúl, 635n
- Labor  
 allocation of, 88–89  
 demand for, 373–374  
 home and foreign unit requirements, 40–42, 41*t*  
 marginal product of, 53, 54*f*  
 migration of, 577  
 as mobile factor, 51  
 mobility of workers, 52–53  
 productivity of, 24  
 in specific factors model, 56–57, 57*f*  
 trade in, 4, 100  
 unit requirements for, 28–29
- Labor force  
 comparisons of Southern and Northern exports and, 102–104  
 immigration and, 71–73, 72*f*  
 mobility of European, 575–577
- Labor market pooling, 141–142
- Labor markets, in EU, 578
- Labor productivity, comparative advantage and, 24–48
- Labor standards, trade negotiations and, 282–283
- Land  
 allocation of, 88–89  
 as specific factor, 52
- Land-capital ratio, choosing optimal, 107*f*
- Lane, Philip R., 609n
- LaPorta, Rafael, 656n
- Lardy, Nicholas P., 653n
- Latin America, 7. *See also* specific countries  
 debt crisis in, 7–8, 632  
 economies in, 639  
 import substitution and, 260, 262  
 inflation and money-supply growth in, 371  
 reforms and capital inflows in, 633–636  
 Spanish-language television programs for, 151  
 trade liberalization in, 263–265
- Law of one price, 385–386, 398, 399*t*  
 defined, 385  
 purchasing power parity and, 386–387  
 sticky prices and, 406–407
- Lawrence, Robert, 67n, 93n
- Laws, Asian economies and, 641
- LDCs. *See* Less-developed countries (LDCs)
- Leamer, Edward E., 99
- Learning curve, 149, 149*f*
- Lee, Jaewoo, 492n
- Lehman Brothers, 604, 607
- Leliaert, Hilde, 395n
- Lender of last resort (LLR), 596–597, 599
- Lending, official, 630. *See also*  
 International borrowing and lending
- Leontief, Wassily, 98n
- Leontief paradox, 98, 99, 99*t*
- Lerner, Abba, 460
- Less-developed countries (LDCs), 256n.  
*See also* Developing countries
- Levinson, Arik, 289n
- Lewis, Karen, 614n
- Liabilities  
 gross foreign assets and liabilities of industrial countries, 609*t*  
 of United States, 313–316, 315*f*
- Lindert, Peter H., 629n
- Lipsey, Robert E., 394n, 403
- Liquidity  
 defined, 332  
 foreign exchange instability and, 606  
 in foreign exchange market, 336–337  
 of money, 356  
 money demand and, 357, 358
- Liquidity trap, 451–454, 453*f*
- LLR. *See* Lender of last resort (LLR)
- LL schedule, 568–570, 571*f*  
 GG schedule and, 570–572
- Lobbying, for trade policy, 231
- Local content requirement, 209
- Location motive, 185
- London, foreign exchange trading in, 325
- London Eurodollar market, 8
- Long run  
 defined, 363  
 demand, supply, and real exchange rate, 405  
 exchange rate model based on PPP, 388–394  
 increase on U.S. money supply and, 376*f*  
 money and exchange rate in, 368–372  
 money supply changes in, 369–370  
 PPP in, 400–401  
 price flexibility in, 372–374  
 price levels and exchange rate in, 384–413
- Long-run equilibrium  
 defined, 368  
 fiscal policy change and, 446  
 nominal and real exchange rates in, 408–410
- Long-run equilibrium price level, 369
- Long-run exchange rates  
 model of, 403–410  
 real exchange rate, 408*f*
- Long-run neutrality of money, 369n
- Long Term Capital Management (LTCM), near-collapse of, 601–602
- Lopez-de-Silanes, Florencio, 656n
- Losses, from nontrade, 36
- Lower middle-income economies, 620
- Low-income economies, 620
- Low-skilled workers, in United States, 92
- Low-tech goods, 93
- Low-wage labor, globalization and, 279–280
- Low-wage nations, trade with high-wage nations, 169n
- LTCM. *See* Long Term Capital Management (LTCM)

- Lucas, Robert E. Jr., 654n  
 Lula da Silva, Ignacio, 634  
 Lustig, Nora, 635n  
 Luxembourg, 561n
- M1, 356  
 M2, 356n  
 M3, 356n  
 Maastricht Treaty, 563, 563n, 564.  
*See also* Euro; Euro Zone  
 convergence criteria and stability and  
 growth pact, 564–565  
 defined, 563
- MacDougall, G.D.A., 45n  
 Macroeconomic policies  
 current account and, 446–447, 447f  
 and floating exchange rates, 529–533  
 under gold standard, 510  
 in open economy, 505–515
- Macroeconomics  
 data for Bolivia, 375t  
 data for key industrial regions  
 (1963–2006), 534t  
 defined, 293  
 interdependence between large  
 countries, 537–538  
 money, price level, and, 294  
 saving and, 294  
 trade imbalances and, 294  
 unemployment and, 294
- Magee, Christopher, 231  
 Malaysia, 539, 636, 641, 642  
 Malta, 565, 579  
 Managed floating exchange rates, 464  
 defined, 463  
 sterilized intervention and, 479–484
- Manufactured goods  
 as exports, 279  
 as percent of merchandise trade, 18t  
 price elasticities for trade in, 462t  
 in world trade, 17–19
- Manufacturing  
 in developing countries, 262t  
 employment and, 275f  
 protection of, 258, 259–260  
 trade policy and, 256–257
- Manying, Bai, 47n  
 Maquiladoras, 280–282  
 Marginal cost, 158–159, 159f  
 Marginal product curve, finding total  
 output from, 77–78, 77f  
 Marginal product of labor, 53, 54f  
 Marginal revenue  
 defined, 157  
 determining, 191  
 monopoly and, 157–159  
 price and, 157–159, 158f  
 Marginal social benefit, 226  
 Marginal utility of consumption,  
 675–676
- Marion, Nancy, 492n  
 Maris, Roger, 33  
 Mark, Nelson C., 614n  
 Market equilibrium  
 external economies and, 143, 143f  
 monopolistic competition and, 161–166  
 output, in short run, 428–432
- Market failure argument, 227–229, 262  
 for infant industry protection, 258–259  
 labor standards, trade negotiations, and,  
 282–283
- Market integration, gains from, 168t  
 Markets, emerging, 600. *See also*  
 International capital market
- Market size, monopolistic competition,  
 trade, and, 164–166, 165f  
 Market structure, economies of scale and,  
 139–140
- Market value method, 314  
 Marrakesh, Morocco, trade agreement  
 in, 238
- Marshall, Alfred, 140, 142, 460  
 Marshall-Lerner condition, 424n,  
 460–462
- Marston, Richard C., 613n  
 Martin, Will, 243t  
 Masciandaro, Donato, 565n  
 Maskus, Keith E., 99n  
 Mass migration. *See* International labor  
 mobility
- McCormick, Frank, 352n  
 McGuire, Patrick, 608n  
 McIntire, Jean M., 645n  
 McKinley, William, 515  
 McKinnon, Ronald, 453n, 545, 545n  
 Median voter, 229
- Medium of exchange, money as, 355  
 Meese, Richard A., 614, 614n  
 Meltzer, Allan H., 401n  
 Mercantilists, Hume and, 514  
 Mercosur, 249
- Mexico  
 debt crisis in, 7, 632, 635–636  
 import substituting industrialization  
 and, 261  
 maquiladoras in, 280–282  
 NAFTA and, 5, 14–15, 247, 261, 635
- MFA. *See* Multi-Fiber Arrangement  
 MFN. *See* Most favored nation (MFN)
- Microeconomics, 293
- Migration. *See also* International labor  
 mobility  
 as trade, 4  
 wage convergence and, 70–71
- Milesi-Ferretti, Gian Maria, 609n  
 Mineral products, in world trade, 17  
 Minier, Jenny, 289n  
 Misalignments, 547  
 Mishkin, Frederic S., 356n, 467n  
 Miu, Jason, 608n  
 Mobile factor, 51
- Mobility. *See* International labor mobility;  
 Migration
- Models. *See* specific models
- Monetary analysis. *See* International  
 money
- Monetary approach to exchange rate  
 defined, 388  
 PPP and, 388–390
- Monetary efficiency gain, 567
- Monetary expansion  
 current account balance and, 447  
 under fixed exchange rate, 473f
- Monetary growth, in United States, 419n
- Monetary policy, 437, 438, 472–473, 538.  
*See also* Exchange rates; Floating  
 exchange rates  
 autonomy of, 530–531, 544–545  
 defined, 437  
 global economy and, 2  
 interest role in, 376  
 payoff matrix for, 555f  
 permanent shift in, 442–446  
 temporary changes in, 437–441
- Monetary standard, conflict over, 514–515
- Monetary systems. *See* International  
 monetary system
- Monetary union. *See* Economic and  
 monetary union (EMU)
- Money. *See also* Money supply  
 aggregate demand and, 358–360  
 demand for, 357–358, 532f  
 exchange in long run and, 368–372  
 exchange rate and, 364–365  
 interest rates and, 354–355, 364–365  
 as medium of exchange, 355  
 money prices and, 369  
 price level and, 294, 368–372  
 as store of value, 356  
 as unit of account, 355–356
- Money market  
 effects on long-run nominal dollar/euro  
 exchange rate, 411t  
 equilibrium in, 360–362, 364f, 367n,  
 470–471  
 exchange rate and, 365–366, 366f  
 foreign exchange market and, 365
- Money supply. *See also* Money  
 balance of payments and, 468–469  
 capital flight, interest rate, and, 477f  
 central bank and, 465–469  
 defined, 356  
 demand and, 360–363  
 determination of, 356, 365–366  
 dollar/euro exchange rate and,  
 366–368, 367f  
 economic variables after increase in  
 growth rate of, 393f  
 empirical evidence on, 370–371  
 exchange rate in short run and, 363–368  
 foreign exchange intervention and, 467  
 gold export and, 487n  
 growth rates, 409  
 interest rates and, 362, 362f  
 in Latin America, 371  
 long-run effects on exchange rate of  
 changes in, 389  
 permanent changes and exchange rate,  
 374–377  
 price levels and, 370–371  
 shift in relative levels of, 409  
 short-run effects of changes in,  
 376f, 443f  
 temporary changes in, 438f  
 time paths of variables after permanent  
 increase in U.S., 377f  
 upward trends of, 393n
- Monopolistic competition, 159–164,  
 673–674  
 defined, 159  
 equilibrium and, 162f

## 696 Index

- Monopolistic competition (*continued*)  
 limitations of, 161–163  
 market equilibrium and, 161–166  
 trade and, 164–171
- Monopolistic firm, pricing and production decisions, 157*f*
- Monopoly, 157–159, 215–218
- Moore's Law, 278
- Morales, Juan-Antonio, 375n
- Moral hazard, 597, 640
- Mortgage-backed securities, foreign investment in, 606
- Mortgage market, crisis in, 543, 603
- Morton, Peter J., 629n
- Most favored nation (MFN), 245
- Movies. *See* Film industry, U.S. entertainment exports and
- Multi-Fiber Arrangement, 208, 233, 239
- Multigood model  
 comparative advantage with, 40–43  
 relative wage in, 42–43
- Multilateral agreements, trade rounds as, 237
- Multinational firms  
 outsourcing and, 180–187  
 in world trade, 13
- Mun, Thomas, 514
- Mundell, Robert A., 488n, 566n
- Mussa, Michael, 401n
- Mutual benefit, from trade, 4, 34–35, 138–139
- NAFTA. *See* North American Free Trade Agreement (NAFTA)
- National disposable income, 297n
- National income, 295, 296–297  
 defined, 296  
 exports and imports as percentages of (2005), 2*f*, 3*f*
- National income accounting, 295–298  
 balance of payments accounts and, 293–295  
 components of, 295–298  
 defined, 294  
 GNP and, 295–296  
 for open economy, 298–306, 300*t*
- National income identity, 299, 303, 304
- National procurement, 210
- National product, national income and, 296–297
- National saving, 302. *See also* Saving
- National sovereignty, WTO and, 284
- National welfare, free trade and, 224–229, 231, 234*t*
- Natural resources, in developing countries, 624. *See also* Resources
- Negative externality, pollution as, 288–289
- Negotiation. *See* International negotiations; Trade negotiations
- Net foreign investment, 303
- Net foreign wealth  
 current account balance and, 301  
 of United States, 313–316, 314*t*  
 U.S. current account and, 302*f*
- Netherlands, U.S. trade with, 13
- Net national product (NNP), 297
- Net taxes, 303n
- Newly industrializing economies (NIEs), 92  
 exports of manufactured goods from, 92  
 impact of growth on advanced nations, 122–124  
 income inequality and, 92–96
- New York  
 foreign exchange trading in, 325  
 investment banking industry in, 140
- New Zealand, 642
- NIEs. *See* Newly industrializing economies (NIEs)
- Nikkei stock price index, 539
- 1992 plan (EU), 563
- Nixon, Richard, 489, 526n
- NNP. *See* Net national product (NNP)
- Nominal and real effective exchange rate indexes, 535, 535*f*
- Nominal exchange rates  
 defined, 404  
 in long-run equilibrium, 408–410
- Nominal interest rates, 333n, 412
- Nonbank financial institutions, 325, 591
- Nonmarket economy, in China, 180
- Nonprime mortgages, 543
- Nontariff barriers, 193
- Nontradable industries, 150, 150*t*
- Nontradables, 396–397, 404n
- Nontrade, losses from, 36
- Nontraded goods  
 defined, 44  
 transport costs and, 43–44
- North American Auto Pact (1964), 171
- North American Free Trade Agreement (NAFTA), 5, 14–15, 231. *See also* Canada, NAFTA and; Mexico, NAFTA and  
 maquiladoras and, 280–281  
 wage inequality and, 96
- North-South trade, 92–96  
 comparisons of exports in, 102–104  
 income inequality and, 92–96  
 NIEs and prosperity of advanced nations, 122–124  
 wage gap, 93–94, 94*f*
- Norway, euro and, 567–569, 569n
- Obstfeld, Maurice, 492n, 501n, 548n, 575n, 608n, 613n
- O'Connell, Paul J.G., 401n
- Official foreign exchange intervention, 312
- Official international reserves, 312
- Official reserve transactions, 312–313
- Official settlements balance, 313
- Offshore banking  
 defined, 592  
 offshore currency trading and, 592–593  
 onshore differentials with, 611
- Offshore currency trading  
 defined, 592  
 offshore banking and, 592–593
- Offshoring, 185, 186
- "Of the Balance of Trade" (Hume), 1
- Ohlin, Bertil, 80
- Ohno, Kenichi, 453n
- Oil exporters  
 current account balances of, 627*t*  
 tariffs and, 225
- Oil shocks  
 exchange rates between (1973–1980), 533–537  
 first (1973–1975), 533–535  
 second (1979–1980), 536
- Oligopoly  
 collusive behavior in, 159–160  
 defined, 159  
 strategic behavior and, 159
- Olson, Mancur, 230, 232
- One-factor economy, 26–36
- One-factor model, 36. *See also* Ricardian model
- Onshore-offshore interest differentials, 611, 612*f*
- OPEC. *See* Organization of Petroleum Exporting Countries (OPEC)
- Open economy  
 imaginary, 299–300  
 macroeconomic policy goals in, 505–515  
 national income accounting for, 298–306  
 policy trilemma for, 648–649  
 saving in, 303  
 trilemma, 509–510, 510*f*
- Opportunity cost, 25, 28, 358
- Optimum currency areas, 557–558, 566–578. *See also* GG-LL model  
 defined, 566  
 Europe as, 572–578  
 intra-European trade and, 572–578
- Optimum tariff, 225*f*  
 defined, 225  
 proving positive nature of, 253–255
- Options, 328
- Organization for Economic Cooperation and Development, 241, 635
- Organization of Petroleum Exporting Countries (OPEC), 534, 594. *See also* Oil shocks
- Original sin, 631–632
- Orphanides, Athanasios, 526n
- Osterberg, William P., 484n
- Output  
 aggregate demand and, 426*f*  
 currency depreciation with fixed output prices and, 428*f*  
 demand for, 373–374  
 exchange rate, asset market equilibrium, and, 432–434, 433*f*  
 exchange rate in short run and, 421–454  
 growth of, 421  
 income and, 296  
 increase from international trade, 25–26  
 input and, 138, 138*t*  
 interest rate and, 363  
 intertemporal trade, consumption demand, and, 458*f*  
 per capita, 622*t*  
 relative prices and, 113*f*  
 in Russia, 643  
 in short run, 426–427, 427*f*  
 in two-factor economy, 88–89
- Output levels, long-run effects on  
 exchange rate of changes in, 389



- Output market  
 effects of changes on long-run nominal dollar/euro exchange rate, 411*t*  
 variability in, 572*f*
- Output market equilibrium, in short run, 428–432
- Outsourcing, 185–187, 185*n*  
 multinational firms and, 180–187  
 of services, 19  
 wage inequality and, 96
- Overemployment, 506
- Overshooting phenomenon, 444
- Overvaluation, 398, 400
- Pagano, Marco, 561*n*
- Paired transactions, 307–308
- Panagariya, Arvind, 268*n*
- Papandreou, George, 580
- Paper currency, 514
- Paraguay, Mercosur and, 249
- Partial equilibrium analysis, 144*n*  
 defined, 30  
 of trade policy, 193
- Pass-through  
 defined, 449  
 exchange rate, 449–451
- Patterns of trade, 5, 145–147
- Pauper labor argument, 37
- Pegged exchange rates, 464, 502, 517, 527*n*, 531, 571*f*. *See also* Currency crawling peg as, 464*n*
- Per-capita GDP, in developing and industrial countries, 624–625, 624*n*
- Per-capita income, income gap and, 620–621
- Per capita output, 622, 622*t*
- Perfect asset substitutability  
 defined, 480  
 and sterilized intervention, 479–481
- Performance, in global capital market, 587–590
- Peri, Giovanni, 575*n*
- Perot, Ross, 38
- Poland  
 debt in, 632  
 real output growth and inflation in, 643*t*
- Policy. *See* specific types
- Policy, in global capital market, 587–590
- Policy coordination, 7  
 failures in, 554–556, 554*f*, 555*f*  
 floating exchange rates and, 547
- Policy trilemma, for open economies, 648–649
- Political argument for free trade, 222
- Political competition, 229–230
- Political economy  
 of exchange rate regimes, 514–515  
 of trade, 65–66, 219–247
- Political parties, competition among, 229–230, 230*f*
- Politics  
 campaign contributions and trade policy, 232  
 free trade and, 222  
 modeling of, 232  
 of trade, 93–94
- Pollution, as negative externality, 288–289
- Pollution havens, 287–289
- Poor, gap with rich, 620–621
- Poor countries, price levels in, 401–403
- Population, immigration and, 71–73, 72*f*
- Portes, Richard, 326*n*
- Portfolio diversification. *See also* International portfolio diversification  
 defined, 589  
 extent of international, 608–610  
 international asset trade and, 589–590
- Portfolio investment, in ownership forms, 630
- Posen, Adam, 565*n*
- Potsdam, trade meeting in, 245
- Pound (Britain), and dollar spot for forward exchange rates, 327*f*
- Poverty, income gap and, 620–621
- PPP. *See* Purchasing power parity (PPP)
- Preferential trading agreements, 245–247
- Price elasticities, for international trade in manufactured goods, 462*t*
- Price levels  
 aggregate money demand and, 261  
 consumption patterns and, 397, 400  
 defined, 358  
 effect on internal and external balance of, 528*f*  
 empirical evidence on, 370–371  
 in long run, 384–385  
 money and, 294  
 in poorer countries, 401–403
- Prices. *See also* Exchange rates  
 consumption effects of change in, 667*f*  
 current asset, 361*n*  
 domestic and foreign, 321–323  
 equal-proportional change in, 58–59, 59*f*  
 of factors, 86  
 internal and external, 125  
 international trade and, 63  
 marginal revenue and, 157–158  
 market equilibrium and, 161  
 production possibility frontier and, 28  
 relative, 90–91, 115–116  
 rigidity in short run, 372–374  
 rise in, 110*f*  
 in specific factors model, 58–59  
 tariffs, subsidies, and, 124–127, 253–254  
 in two-factor economy, 81–84, 84*f*
- Price-specie-flow mechanism, 511–512, 514
- Pricing to market, 397
- Primary income payments, 297*n*
- Principles of Political Economy and Taxation* (Ricardo), 26*n*
- Prisoner's dilemma, 236
- Private financial flows, 520–521
- Private saving, 303–304
- Privatization, 630
- Procurement, government, 239
- Producers, performance differences across, 172–174, 173*f*
- Producer surplus  
 defined, 198  
 geometry of, 200*f*
- Production  
 cross-shipping of components of, 17  
 gains from trade and, 587  
 hypothetical changes in, 26*t*  
 import restrictions and, 263  
 resource allocation and, 88–89, 89*f*  
 in two-factor economy, 81–84, 84*f*  
 “vertical disintegration” of, 17
- Production distortion loss, 202
- Production function, 52, 52*f*
- Production possibilities, 27–28, 112*n*  
 marginal product of labor, 54*f*  
 production function for cloth, 53*f*  
 relative supply and, 112–113  
 resources and, 88–89, 89*f*  
 in specific factors model, 53–58, 55*f*, 58*f*
- Production possibility frontier, 27*f*, 30*f*, 83  
 defined, 27  
 with factor substitution, 84*f*  
 intertemporal, 128*f*  
 prices and, 28  
 without factor substitution, 83*f*
- Productivity  
 British vs. American, 45  
 in East Asia, 639  
 exports and, 46*f*  
 labor, 24  
 Ricardian model and, 46  
 wages as reflection of, 38–39, 39*f*
- Profits, economic vs. accounting definition of, 159*n*
- Prohibitive tariff, 216*n*
- Protection  
 domestic market failure justification of, 228  
 in East Asian economies, 266  
 effects in United States, 233–234, 234*t*  
 of Japanese market, 278  
 of manufacturing, 258, 259–260  
 sugar quotas and, 207  
 from tariffs, 196–198
- Protectionism, 5, 21. *See also* Barriers to trade; Tariffs  
 fiscal policies, current account, and, 538  
 import substitution and, 259–260  
 world trade and, 17, 546
- Proximity-concentration trade-off for FDI, 183, 184
- “Pseudoinfant industry,” 258
- Public goods, politics as, 231
- Purchasing power parity (PPP), 386–388  
 defined, 384  
 empirical evidence on, 394–395  
 inflation, interest parity, and, 390–391  
 insulation against foreign inflation and, 530  
 law of one price and, 386–387, 394–395  
 long-run exchange rate model and, 388–394  
 monetary policy autonomy and, 544  
 problems with, 395–403  
 in short and long run, 400–401
- Pure monopoly, 157
- Put option, 328

## 698 Index

- Qiaotou, China, 147  
 Quota rents, 206  
 Quotas  
   with China, 219  
   rent-seeking and, 222  
   tariffs compared with, 206,  
   217–218, 218f
- RAM (random access memories),  
   production of, 278–279
- Rate of appreciation, 336  
 Rate of depreciation, 334–336  
 Rate of return  
   defined, 329  
   dollar, 329, 334  
   dollar and euro deposits, 334–336, 335t  
   effects of, on portfolio, 679–681  
   real, 329
- Raw materials, prices of, 374  
 Ray, Hélène, 326n  
 R&D. *See* Research and  
   development (R&D)  
 RD curve  
   shifting with international transfers of  
   income, 124–127  
   upward-sloping, 408
- Reagan, Ronald, 536–537  
   disinflation, recession, and, 536  
   exchange rates, current account, and, 450
- Real appreciation, 405  
 Real (Brazilian currency), 634  
 Real exchange rate  
   aggregate demand, 425–426  
   current account and, 424  
   defined, 404  
   interest rate differences and, 410–412  
   in long-run equilibrium, 408–410  
   output prices and, 460n
- Real income  
   aggregate demand and, 358, 425–426  
   aggregate real money and rise in, 360f  
   change in, 666  
   interest rate and, 363f
- Real interest parity, 412–413  
 Real interest rates, 129, 333n, 412–413  
   divergent, in Euro zone, 576f  
   global imbalances and (2000s), 543–544  
   in U.S. (1997–2007), 542f
- Real money demand, interest rate and, 359f  
 Real national income, aggregate money  
   demand and, 358
- Real rate of return  
   defined, 329  
   Fisher effect and, 391
- Real wage, trade, and, 281t  
 Red-tape barriers, 211  
 Reforms  
   currency, 370  
   directions for, 547–548  
   in Latin America, 633–636  
   sequence of, 646–647
- Regional currency arrangements, 464  
 Regulation. *See also* specific regulations  
   asymmetries of, 594  
   banking, 639–641  
   in developing countries, 624  
   of international banking, 595–597  
   international cooperation in, 599–601  
   local content requirement as, 209
- Regulatory arbitrage, 606  
 Reinhart, Carmen M., 629n, 649n  
 Relative demand  
   curve, 31  
   relative supply and, 116f  
   tariffs and, 125–126
- Relative derived demand, 42  
 Relative PPP, 387  
 Relative prices  
   after trade, 30–33  
   demand and, 113–116, 114n  
   determining, 30–33, 61f, 117  
   distribution of income and, 60–62, 61f,  
   78–79, 78f, 79f  
   effects of rise in, 116f  
   equilibrium, with trade and trade  
   flows, 118f  
   exchange rates and, 323–324, 323t  
   pattern of trade and, 90–91  
   relative supply and, 114f  
   in specific factors model, 59–60, 60f  
   supply and, 28–29
- Relative supply, 28–29  
   growth and, 121f  
   of labor, 43  
   production possibilities and, 112–113  
   relative demand and, 116f  
   relative price and, 114f  
   tariffs and, 125–126  
   terms of trade and, 119, 121
- Relative supply and demand, worldwide, 31  
 Relative supply curve, 31  
 Relative wages, 35–36, 40–42  
   defined, 35  
   determination of, 43f  
   equilibrium, 43  
   in multigood model, 42–43  
   specialization and, 40–42
- Renminbi (Chinese currency), 651  
 Rental rate, wage rates and, 97, 97t  
 Rent-seeking, 222  
 Research and development (R&D), U.S.  
   subsidy of, 272
- Reserve currency  
   defined, 484  
   mechanics of, 485  
   in world monetary system, 484–486
- Reserve requirements, Eurocurrency  
   trading and, 598
- Reserves  
   demand for, 489–493  
   in developing countries, 637–638, 638f  
   foreign currencies as, 484–486  
   interest cost of, 491  
   official reserve transactions, 312–313  
   regulatory asymmetries and, 594  
   requirements for, 596
- Residence changes, by region (1990s),  
   575, 575t
- Resources, 80  
   allocation of, 88–89, 89f  
   natural, 624  
   production possibilities and,  
   88–89, 89f  
   in two-factor economy, 88–89
- Returns  
   dynamic increasing, 149–150  
   excess, 274  
   in foreign exchange market, 336–337  
   from trade, 168t
- Reunification. *See* Germany  
 Revaluation, 474–475  
 Revenue, marginal. *See* Marginal revenue  
 Ricardian equivalence, of taxes and  
   government deficits, 305, 306  
 Ricardian model, 36, 37, 111  
   defined, 26  
   empirical evidence on, 45–47  
   specific factors model compared, 56
- Ricardo, David, 2, 5, 21, 26n, 305, 386  
 Rice imports, tariff on, 233  
 Richardson, J. David, 397n  
 Rich/poor gap, 620–621. *See also* Wealth  
 Risk, 332, 498–500  
   defined, 332  
   in foreign exchange market, 336–337  
   with international capital markets, 8  
   money demand and, 358
- Risk aversion, 588–589  
   international portfolio diversification  
   and, 675–681
- Risk neutral, 676, 681  
 Risk premium  
   defined, 481  
   foreign exchange market efficiency and,  
   613–614
- Risky assets, international exchanges of, 4  
 Robinson, James, 655  
 Rockoff, Hugh, 515n  
 Rodriguez, Francisco, 263n  
 Rodrik, Dani, 263n, 268n, 649, 649n, 656n  
 Rogers, John, 573  
 Rogoff, Kenneth, 263n, 548n, 561n, 614,  
   614n, 629n
- Romalis, John, 101, 101n  
 Romer, Christina D., 513n, 518n  
 Rose, Andrew K., 401n, 573  
 RS curve, shift of, 117, 119  
 Ruoan, Ren, 47n  
 Russia. *See also* Soviet Union  
   default by, 608  
   financial crisis in, 642–643  
   real output growth and inflation in, 643t
- Ruth, Babe, comparative advantage and, 33  
 Rybczynski, T.M., 89n  
 Rybczynski effect, 89n
- Sachs, Jeffrey D., 93n, 629n, 656n  
 Safety standards, in global workplaces, 285  
 Sales, dumping and, 178–179  
 Salop, Stephen, 160n  
 Samuelson, Paul, 24, 51, 65n, 88n, 123, 402  
 Sarno, Lucio, 483n  
 Saudi Arabia, 225, 403n
- Saving  
   in Asian economies, 638–639  
   current account and, 302–303  
   outside United States, 544  
   private, 304  
   rates for 24 countries, 610f  
   U.S. investment and, 540, 543
- Saving and loan (S&L) crisis, 599

- Saxenian, Annalee, 142n  
 Scandinavia, duty-free shops in, 406–407  
 Scarce factor, 91  
 SDR. *See* Special Drawing Right (SDR)  
 Seattle, WTO meeting in, 280  
 Secondary income payments, 297n  
 Second best  
   theory of, 226–227, 646  
   trade policy, 229  
 Securities prices, U.S. net foreign debt and, 316  
 Securitization, 601  
 Seigniorage, 624  
 Self-fulfilling currency crises, 478, 628  
 Semiconductor industry, 278–279  
 Service offshoring, 19–21  
 Service outsourcing, 19  
 Services, trade in, 18  
 Settler mortality, of European settlers, 655  
 SGP. *See* *Stability and Growth Pact (SGP)*  
 Shadow banking system, 594–595  
 Shakti Industries, 285  
 Shambaugh, Jay C., 492n, 608n  
 Shatz, Howard, 93n  
 Shipbreaking industry, 287–289  
 Shleifer, Andrei, 656n  
 Short run  
   defined, 363  
   increase in U.S. money supply and, 376f  
   money supply and exchange rate in, 363–368  
   output and exchange rate in, 421–454  
   output in, 426–427, 427f  
   output market equilibrium in, 428–432  
   price rigidity vs. long-run price flexibility in, 372–374  
   trade and income distribution in, 92  
 Short-run equilibrium, for open economy (*DD* and *AA* schedules), 435–437, 436f  
 Signaling effect of foreign exchange intervention, 484  
 Silgoner, Maria Antoinette, 573n  
 Silicon Valley, 140–142  
 Silver, bimetallic standard and, 488–489  
 Silver movement, 515  
 Singapore, 265, 539  
   economy in, 636, 642  
   exports from, 265  
   foreign exchange trading in, 325  
 Single currency, economic union and, 578–579. *See also* Euro; Maastricht Treaty; Single European Act (1986)  
 Single European Act (1986), 223, 562  
 Skill-biased technological change, 95–96, 95f, 96n  
 Skills, of Southern and Northern work forces, 102–104, 103f  
 Slaughter, Matthew, 67n, 93n  
 Slovenia, 565  
 Smith, Adam, 1, 621  
 Smoot-Hawley Act (1930), 236, 516  
 “Snake,” euro and, 527n  
 Social gains, from producer surplus, 199  
 Sokoloff, Kenneth D., 655n  
 Solnik, Bruno, 609  
 South. *See* North-South trade  
 South America, trade diversion in, 249. *See also* Latin America; specific locations  
 South Asia, protection in, 262  
 South Korea, 265  
   East Asian economic miracle and, 636  
   economic crisis in, 647  
   economy in, 640  
   labor productivity in, 38–39  
   trade surplus in, 6  
 Sovereign default, 629  
 Sovereign nations, 7, 284  
 Soviet Union, collapse of, 538. *See also* Russia  
 Spanish-language television programs, 151  
 Special Drawing Right (SDR), as reserve asset, 491n  
 Special-interest groups, trade policy and, 231  
 Specialization  
   external economies and, 145–146  
   gains from trade and, 34  
   relative wages and, 40–42  
 Specialized suppliers, 140–141  
 Specie, 511  
 Specific factors model, 51–63, 91, 111  
   assumptions of, 52  
   explanation of, 51–53  
   international trade in, 62–63, 62f  
   marginal and total product, 77–78, 77f  
   political economy of trade in, 65–66, 68  
   prices, wages, and labor allocation, 56–60  
   production possibilities, 53–56, 55f  
   relative prices and distribution of income, 60–62  
   Ricardian model compared, 56  
 Specific tariffs, 192  
 Speculation  
   destabilizing, 533  
   foreign exchange, 336n  
 Speculative capital flows, 521  
 Spencer, Barbara, 274  
 Spot exchange rates, 326–328  
   defined, 326  
   dollar and pound, 327f  
 Srinivasan, T.N., 629n  
 Stability and Growth Pact (SGP)  
   defined, 564  
   fiscal policy and, 579, 580  
 Stabilization policies  
   with fixed exchange rate, 472–476  
   with floating exchange rate, 529  
 Stabilizers, exchange rates as, 531–533  
 Stagflation, 534–535  
 Standard trade model, 111–131, 665–672  
   comparative statistics method, 669  
   defined, 112  
   determining relative prices, 117  
   economic growth and, 117, 119, 669–670  
   equilibrium relative price, 118f  
   growth and production possibility frontier, 119  
   international effects of growth, 121–122, 124  
   intertemporal trade, 127–130  
   production, consumption, and trade in, 115f  
   production possibilities and relative supply, 112–113  
   relative prices and demand, 113–116  
   supply, demand, and equilibrium, 665–669  
   tariffs and export subsidies, 124–127  
   transfer of income and, 670–671  
   welfare effect of changes in terms of, 116–117  
   world relative supply and terms of trade, 119, 121  
 Statistical discrepancy, 311  
 Statistics, 656. *See also* specific models  
 Steel products, U.S. tariffs on imports, 242  
 Sterilized foreign exchange intervention  
   defined, 467–468  
   effects of, 483–484  
   imperfect asset substitutability and, 481–482  
   managed floating and, 479–484  
   perfect asset substitutability and, 479–481  
 Sterilized gold flows, 513  
 Stern, Robert M., 99n  
 Sticky prices  
   inflation bias and, 441  
   law of one price and, 406–407  
   price levels in short run, 372–373  
 Stiglitz, Joseph, 649  
 Stocks, returns from, 357n  
 Stolper, Wolfgang, 88n  
 Stolper-Samuelson effect, 88n  
 Store of value, money as, 356  
 Strategic behavior, monopolistic competition and, 159  
 Strategic trade policy  
   arguments for, 278  
   defined, 271  
   imperfect competition and, 274–277  
 Subprime mortgages, 543, 603  
 Subsidies  
   to Airbus, 276, 276f  
   export, 124–127, 203–204, 203f; 210, 233, 243–244  
   by U.S. to cotton producers, 243  
 Substitution effects, 115  
 Sudden stop, 508, 627  
 Sugar industry (United States), 68, 206–207, 207f; 232  
 Summers, Lawrence H., 565n  
 Supply. *See also* Relative supply  
   demand, long-run real exchange rate, and, 405–408  
   and demand and trade in single industry, 193–195  
   of domestic currency bonds, 499  
   optimum tariff and, 253  
   relative output, 410  
 Supply curve  
   export, 193, 194f  
   relative, 31  
 Supply of labor, relative, 43  
 Suramian, Arvind, 268n, 656n  
 Surplus  
   consumer, 198–199  
   in current account, 300, 304–306, 508–509, 542, 544

## 700 Index

- Surplus (*continued*)  
 in developing countries, 627  
 producer, 198–199  
 trade, 6
- Sveikauskas, Leo, 99
- Svensson, Lars E.O., 548n
- Swap lines, 606–608
- Swaps, foreign exchange, 328
- Swiss National Bank (SNB), 607
- Symmetric firms, in monopolistically competitive industry, 161
- Symmetric monetary system, 545–546  
 under floating exchange rates, 529  
 under gold standard, 487
- Tabellini, Guido, 565n
- Taiwan, 265  
 China and, 265  
 economy in, 636
- Tangible goods, trade in, 4
- Tariff-rate quota, 222
- Tariffs, 124, 237. *See also* Free trade;  
 Preferential trading agreements;  
 specific tariffs  
 on bananas, 248  
 basic analysis of, 192–198  
 chicken tariff, 202  
 costs and benefits of, 199–202, 200*f*  
 domestic market failure argument for,  
 226–229, 227*f*, 258–259  
 domestic welfare and, 254–255  
 effects of, 195–196, 196*f*  
 export subsidies and, 124–127  
 indirect costs of, 202  
 measuring protection from, 196–198  
 monopolist protected by, 217, 217*f*  
 optimum, 225, 225*f*  
 in presence of monopoly, 215–218  
 prices and, 253–254  
 prohibitive, 216n  
 quotas compared with, 206,  
 217–218, 218*f*  
 reduction of, 245  
 relative demand and supply effects of,  
 125–126  
 removal of, 233–234  
 in small country, 196, 197*f*  
 terms of trade and, 125*f*, 126*f*, 225–226  
 as trade policy, 192–193  
 U.S. tariffs on imported steel, 242  
 voter preferences for, 229–230, 230*f*  
 welfare effects of, 201*f*
- Tarr, David G., 208n
- Taxes  
 DD schedule and, 430  
 on imports in which carbon emitted,  
 289–290  
 net, 303n  
 U.S. cuts in, 536
- Taylor, Alan M., 394n, 492n, 608n
- Taylor, Mark P., 394n, 483n
- Technology  
 decline of technology industry,  
 273–274, 274*f*, 277  
 world trade pattern and, 16–17
- Temin, Peter, 517n
- Terminology, euronyms as, 559*t*
- Terms of trade  
 in advanced countries, 124*t*  
 defined, 112  
 export subsidy effects on, 126  
 relative supply and, 119, 121  
 tariff effects on, 124–125, 126*f*  
 welfare effects of changes in, 116–117
- Terms of trade argument for a tariff,  
 225–226
- Thailand, 539, 636, 641, 647
- Theory of the second best, 226–227  
 defined, 226
- Third world, 19. *See also* Developing  
 countries  
 anti-globalization movement and, 279
- Tigers, East Asian, 265
- Time deposits, 356n
- Tobin, James, 488n, 589
- Tokyo, foreign exchange trading in, 325
- Tokyo Round, 238
- “Too-big-to-fail” policy, 596n
- Tower, Edward, 566n
- Toyota, 183
- Tradable industries, 150, 150*t*
- Trade. *See also* Barriers to trade; Free  
 trade; Gains from trade; International  
 trade; Money; Tariffs; World trade  
 barter and, 355  
 British vs. American, 45  
 consumption possibilities expanded by,  
 34*f*, 91  
 distribution of income and, 91–92  
 economies of scale as cause of, 45  
 in Eurocurrency, 592  
 in European Union, 223–224,  
 572–578, 574*f*  
 with external economies, 147–148  
 firm responses to, 172–175  
 gains from, 587–588  
 in goods, 17–19  
 gravity model of, 11–13  
 growth of developing-country, 265*f*  
 impediments to, 14–16  
 interregional, 150–152  
 intertemporal, 127, 301, 458–459, 508,  
 587–588  
 monopolistic competition and,  
 164–171  
 nontrade and, 36  
 in one-factor world, 29–36  
 relative prices and, 30–33, 90–91, 90*f*  
 in services, 21  
 in standard model, 111–131  
 sugar imports and, 206–207, 207*f*  
 supply and demand in single industry  
 and, 193–195  
 total U.S. with major partners  
 (2003), 11*f*  
 without increasing returns, 168
- Trade agreements, 236–238. *See also*  
 specific agreements  
 defined, 14  
 environmental standards in, 283  
 NAFTA as, 14–16  
 preferential, 245–247
- Trade barriers. *See* Barriers to trade
- Trade creation, 247
- Trade diversion  
 defined, 247  
 in South America, 249
- Trade elasticities, Marshall-Lerner  
 condition and, 460–462
- Trade flow  
 gradual adjustment and current account,  
 447–451  
 income distribution and, 93–94
- Trade imbalances, 294
- Trade liberalization, 233–234, 238–239,  
 241, 243–244  
 environmental Kuznets curve and, 287  
 in Mexico, 261  
 since 1985, 263–265  
 wage inequality and, 96
- Trade negotiations  
 environment and, 289–290  
 labor standards and, 282–283
- Trade-offs, opportunity costs and, 25
- Trade policy  
 activist, 272–279  
 in Asian economies, 265–268  
 controversies in, 271–290  
 in developing countries, 256–268  
 effects of, 211, 211*t*  
 export subsidies and, 203–204, 210  
 import quotas and, 206–207  
 import-substituting industrialization  
 and, 262–263  
 income distribution and, 229–234  
 instruments of, 192–211  
 international negotiations and, 234–243  
 local content requirements and, 209  
 national procurement and, 210  
 political campaign contributions and, 232  
 political economy of, 219–247  
 red-tape barriers and, 211  
 special-interest groups and, 231, 231*t*  
 tariff analysis and, 192–198  
 tariff costs and benefits, 199–202  
 voluntary export restraints and, 208–209
- Trade preferences, on bananas, 248
- Trade-Related Aspects of Intellectual  
 Property (TRIPS), 240
- Trade rounds, 237. *See also* Doha Round
- Trade surplus, balance of payments  
 and, 6
- Trade war, 235, 235*t*
- Transfers of income  
 international, 297  
 nontradables and, 404n  
 unilateral, 297
- Transition economies, 181
- Transparency, increasing, 649
- Transparency International, corruption  
 index by, 624n
- Transportation, progress of, 16–17
- Transport costs  
 law of one price and, 395  
 nontradables and, 396  
 nontraded goods and, 43–44
- The Trap* (Goldsmith), 38
- Treaty of Rome, 562
- Trebbi, Francesco, 656n
- Trefler, Daniel, 100, 100n
- Triffin, Robert, 526



- Trilemma  
 Bretton Woods system and, 519  
 of exchange rate regime, 648  
 open economy, 509–510, 510*f*
- TRIPS. *See* Trade-Related Aspects of Intellectual Property (TRIPS)
- Tuna, protection of, 222
- Two-country framework, 423*n*, 545
- Two-factor economies  
 effects of international trade between, 89–98  
 factor prices and goods prices in, 86–88  
 mix of inputs in, 84–86  
 model of, 81–89  
 prices and production in, 81–84, 84*f*  
 resources and output in, 88–89
- Two-firm competition, 274–276, 275*t*, 276*t*
- Unconventional monetary policies, 453–454
- Underemployment, 506
- Undershooting, 444*n*
- Unemployment, 294, 536  
 international trade and, 66–68, 67*f*  
 monetary policy and, 554*f*  
 in specific factor model, 52–53
- Unfair practices, dumping as, 178
- Unilateral transfers, 297, 297*n*, 300*n*
- Unions, in EU, 579
- United Kingdom. *See* England (Britain)
- United States. *See also* Dollar (U.S.); North American Free Trade Agreement (NAFTA)  
 air pollution standards in, 241  
 assets of, 310–311, 313–316, 314*t*, 315*f*  
 balance of payments in (2006), 309*t*  
 banana imports and, 248  
 bank regulation in, 595–597  
 convertible currency in, 520  
 distribution of wages in, 92–96  
 economic size and trade with, 14*f*  
 embargo by Jefferson in, 36  
 entertainment exports from, 151  
 exports of, 99  
 external balance problem of, 525–527  
 factor abundance in, 91–92  
 factor content of exports and imports (1962), 99*t*  
 financial derivatives in, 311  
 foreign inflation and, 528–529  
 GNP in, 296*f*  
 gold standard and, 511, 516  
 home prices (2000–2010), 540*f*  
 import quota on automobiles, 228  
 interregional trade in, 573  
 liabilities of, 313–316  
 liquidity trap, 452  
 mortgage market crisis in, 543, 603  
 share of imports by industry, 102*f*, 103*f*  
 states trading with British Columbia, 16*f*  
 tariffs and, 242–243  
 trade and, 12*f*, 18  
 WTO and subsidies to cotton producers, 242
- Unit isoquant, 107, 107*f*
- Unit labor requirements, 26, 33, 34*f*
- Unit of account, money as, 355–356
- Unskilled labor, in production of imports, 100–101
- Upper middle-income economies, 620
- Uruguay, Mercosur and, 242
- Uruguay Round, 5, 238  
 benefits and costs of, 240–242  
 MFA phaseout and, 233
- U.S. Trade Adjustment Assistance program, 67
- Value date, of currency exchange, 327
- Van Wincoop, Eric, 574*n*
- Vehicle currency, 326
- Venezuela, pollution standards and, 241
- Vertical FDI (foreign direct investment), 183, 183*n*, 184–185
- Vietnam, manufacturing costs in, 146–147, 146*f*
- Viner, Jacob, 402*n*
- Volatility, foreign exchange market efficiency and, 614–615
- Volcker, Paul, 535–536
- Volkswagen, 202–203
- Voluntary export restraint (VER), 208
- von Peter, Götz, 608*n*
- Voters, policy preferences of, 229–230, 230*f*
- Wage convergence, mass migration and, 70–71
- Wage rate  
 comparative international, 97*t*  
 relative productivity and, 37–39  
 relative wages, specialization, and, 40–42  
 rental rate and, 97
- Wage-rental ratio  
 changing, 108*f*  
 determining, 109*f*
- Wages. *See also* Relative wages  
 comparative advantage based on, 37–39  
 distribution in United States, 92–96  
 exploitation by trade and, 39–40  
 globalization and, 280–282  
 for immigrant labor, 73  
 inequality of, and foreign investment, 96  
 maquiladoras and, 281, 282  
 North-South trade and, 93  
 opposition to globalization and, 280–282  
 productivity reflected in, 38–39, 39*f*  
 relative, 35–36, 40–42, 43*f*  
 skill-biased technological change and, 95–96  
 in specific factors model, 57
- Waldman, Daniel, 380
- Wall, Howard J., 15*n*
- Wal-Mart, anti-globalization movement and, 280
- Ward, Geoffrey C., 33
- Wealth. *See also* Income gap  
 object of, 329  
 in world economy, 620–623
- Wealth of Nations, The* (Smith), 1, 621
- Wealthy nations. *See* Advanced nations
- Welfare  
 with external economies, 147–148  
 tariffs and, 254–255
- Welfare costs, of U.S. protection, 234*t*
- Welfare effect, 670  
 of changes in terms of trade, 116–117  
 of tariff, 201*f*
- West, Nathaniel, 151
- West Indies, bananas from, 248
- Willett, Thomas D., 566*n*
- Williamson, Jeffery G., 71*n*
- Wolfe, Tom, 142*n*
- Wood, Adrian, 93*n*
- Woodford, Michael, 379*n*
- Workers. *See also* Labor; Labor force displaced, 52–53  
 education of, 72  
 globalization and, 280–282  
 low-skilled in United States, 92  
 mobility of, 52–53  
 skilled/unskilled wage gap, 93–94, 94*f*
- Work force. *See* Labor force; Workers
- Workplace, standards in, 285
- World Bank, 237, 518*n*  
 demonstrations against, 280  
 on liberalization of trade, 243  
 Mercosur and, 249
- World equilibrium, 195, 195*f*
- World trade, 10–21. *See also* International trade  
 composition of (2008), 18*f*  
 gravity model of, 11–13  
 India and, 267  
 pattern of, 16–21  
 service offshoring, 19–21  
 in services, 239, 240  
 values of exports, 17*t*
- World Trade Organization (WTO), 5, 7, 239–240, 518*n*  
 anti-globalization movement and, 5, 241  
 defined, 237  
 dispute settlement procedure of, 240–241  
 European banana import regime and, 248  
 national sovereignty and, 240–241, 284  
 Seattle meeting of, 280  
 U.S. tariffs on steel and, 242
- World War II, international monetary system after, 504
- Worldwide inflation. *See* Inflation
- WTO. *See* World Trade Organization (WTO)
- Wynne, Mark A., 373*n*
- Yen (Japan)  
 carry trade and, 344–346  
 exchange rate with dollar, 395*f*  
 interest rates on, 333*f*
- Yuan (China), 651, 651*f*  
 rate of return and, 330–331, 331*f*  
 undervalued, 651–653
- Yuskavage, Robert E., 306*n*

