Offshoring of American Jobs

What Response from U.S. Economic Policy?

Jagdish Bhagwati and Alan S. Blinder

The Alvin Hansen Symposium on Public Policy
Harvard University

edited and with an introduction by
Benjamin M. Friedman

The MIT Press
Cambridge, Massachusetts
London, England
Accountants, 30, 42
Adjustment Assistance program.
   See Trade Adjustment Assistance
   (TAA)
Advertising, 62, 64
AFL-CIO, 12, 14, 78
Against the Tide: An Intellectual
   History of Free Trade (Irwin), 72
Agriculture, 50, 80, 94, 104–105
Al-Ahram (Cairo newspaper), 1
Allocation, 5–6, 27. See also
   Reallocation
Alterman, Eric, 3
Alvin Hansen Symposium on
   Public Policy, xiii–xiv
American Economic Association,
   81
American Prospect, The (journal), 4
Amiti, Mary, 74
Arab security companies, x
Arbitrage, 95
Artificial intelligence (AI), 33
Associated Press-IPSOS survey, 63
Atkinson, Robert D., 33
Automation, 4–5, 80
Automobile industry, xi, 98

Bananas, 25
Bankruptcy, 42

Banks, 20, 32, 67
Baumol, William, 110
Bhagwati on, 2, 13–14, 17n6
comparative advantage and, 83
reallocation and, 77
technology transfer and, 66
Baumol’s disease, 31, 34
Bernhard Harms Prize, 9
Bernstein, Aaron, 8
Bhagwati, Jagdish, xii, 22, 34
Blinder and, 109–113, 115,
   117–118
China and, 8–10
comparative advantage and, 26,
   38
Freeman and, 66–67, 103, 105–106
free trade and, 1–17, 19
imperfect competition and, 3–7,
   13
India and, 8–10
Invisible Hand and, 5–7
Irwin and, 71–72
Kletzer and, 82–90
Krugman and, 3, 8, 14, 16n1, 66,
   103–105
Lawrence and, 12, 15, 103, 105
media and, 1–15, 105–107
offshoring and, 10–15
“polluter pay” principle and, 6–7
Bhagwati, Jagdish (cont.)
protectionism and, 1–10, 101, 107
response of, 101–109
rise of Japan and, 3–7
slow growth and, 14–15
unskilled labor and, 14–15
Blanchard, Oliver Jean, 79
Blinder, Alan S., xii, 2, 102–103
Bhagwati and, 109–113, 115,
117–118
evidence for theories of, 73–74
Freeman and, 30, 64–69, 109, 112,
115, 119–120, 121n4, 121n6
Irwin and, 71–81, 109–110,
114–119
Kletzer and, 82–90, 109, 111–112,
119–120
Krugman and, 110
Lawrence and, 56n14, 91–99, 109–
110, 114–119
offshoring and, 10–12, 19–59 (see
also Offshoring)
Paul Revere role of, 54, 91–92, 113
Perot approach of, 72, 77, 110, 118
policy recommendations of, 43–
50, 77–81, 117–119
protectionism and, 21, 25–27, 53,
110–111
shift in view of, 11–12
Teaching methods of, 111–112
“Blue Collar Blues: Is Trade to
Blame for Rising U.S. Income
Inequality?” (Lawrence), 105
Blue-collar workers, 42, 105
Borjas, George, 103
Boskin, Michael, 4
Brainard, Lael, 12, 84, 95
Brazil, 25
Brookings Institution, 12
Brown, Clair, 77
Buffett, Warren, 68
Bureau of Labor Statistics (BLS),
35, 62, 89
Bush, George W., 19
Bush, Jeb, 9
Business cycles, 112
Businessweek, 4, 8
Call centers, 10, 31
Cambridge University, 7–8, 13
Canada, 95
Capital-labor ratio, 63
Carpenters, 46, 48
Chace, James, 106–107
Chaplin, Charlie, 53
Charlie Rose (TV show), 10
Charter schools, 45
China, ix, 17n6, 21, 53, 71, 73
Communist politics and, 102
education and, 34, 63–64, 115–116
emergence of, x, 8–10, 22, 51–52
English language and, 51, 57n34
forecast fragility and, 101–103,
118
high growth rate of, 101–103
impersonal jobs and, 24, 34
increased employment in, 39
increased labor supply and, 22–
23, 63
lack of useful capital from, 63
new entrant effects and, 29–30
poor policies of, 101–102
purchasing power parity and, 69
supply-and-demand curve and,
76–77
teachable moment for, 77
training potential of, 115–116
Citibank, 20
Clinton, Hillary, 1, 66, 107
Colleges, 45–47
Columbia School of Journalism,
107
Columbia University, 9–10, 111
Communications technology. See
Information and communications
technology (ICT)
Communism, 102
Comparative advantage, 21, 111
climbing ladder of, 48–50, 77–81
creation of advantage and, 26
education and, 25–27
English language and, 29–30, 32,
42–43, 51–52, 57n34, 115, 118
evidence for theories of, 73–74
future concerns and, 27
India and, 26–31, 52–55
kaleidoscopic movement of, 26,
38, 83
loss of, 26
new entrants and, 26, 29
reallocation and, 27–32
research and development (R&D)
and, 50, 69
resource-based, 25–26
validity of, 83
Computer programmers, 31, 42,
48, 116
Consumption, 86, 105, 112–113
Cooper, Richard, 17n7
Crook, Clive, 106
Currency market, 77, 95, 97

Davis, Bob, 2–3, 10, 83
Democrats, 1, 4, 14–15, 104, 119
Department of Labor, 80
Design, 62, 64
Dictionary of Occupational Titles
(DOT), 35, 85
Digitalization, 64
Dixit, Avinash, 7
Doctors, 46, 65, 113
Doha round, 119
Downsizing, 75–76

Earned Income Tax Credit, 44, 68
Economic issues
Baumol’s disease, 31, 34
comparative advantage, 21,
25–32

forecast fragility of, 101–103,
117–118
gains-from-trade theorem, 43
Great Depression, 5–6, 112
imperfect competition, 3–7
Invisible Hand, 5–7
natural resources and, 25–26
new entrants, 26
offshoring, 10–15 (see also
Offshoring)
pessimism and, 8–9, 73, 80–81, 92
protectionism, 8–10 (see also
Protectionism)
recession, 42, 75
Stolper-Samuelson theorem, 104
supply-and-demand curve, 76–77
Third Industrial Revolution,
52–54
Washington Consensus and, 67
Economic Policy Institute, 14
Economist journal, 106
Editors, 42
Education, 11–12, 97
Baumol’s disease and, 34
charter schools and, 45
China and, 34, 63–64, 115–116
college, 45–47
comparative advantage and,
25–27
dependencies and, 33–34
federal job training and, 43–45
future workforce and, 45–48
government-sponsored retraining
programs and, 79–80
group learning and, 47
India and, 63–64, 115–116
interregional mobility and, 79
K–12 system reform and, 115,
117–118
literacy rates and, 102
No Child Left Behind and, 45, 47
Office of Automation and
Manpower and, 80
Education (cont.)
O*Net data and, 89
people skills and, 47
personally/ impersonally
delivered services and, 23–24, 93
preparing workforce of the
future, 45–48
problem-solving skills and, 47
raising U.S. standards of, 46–47
rote preparation and, 47
science, 45
skilled labor and, 23–24, 26, 33–34, 38, 45–48, 52, 79
Trade Adjustment Assistance
(TAA) and, 43–44
unemployment and, 79
vocational, 47–48, 68, 78
wages and, 52
white-collar workers and, 42
Elasticity, 76
“Elder Challenges Outsourcing’s
Orthodoxy, An” (Lohr), 8
Electricians, 46
Employment Law Alliance survey, 62–63
Endowments, 33–34
England, 25
English language
China and, 51, 57n34
comparative advantage and, 29–30, 32, 42–43, 51–52, 57n34, 115, 118
India and, 29–30, 42–43, 52, 115, 118
Entertainment, 32, 49
Environmental issues, 6–7, 68
Equilibrium, 119
better, 14
comparative advantage and, 21, 25–27
imperfect competition and, 13
increasing returns and, 13
offshoring and, 22, 38
policy and, 13–14
reallocation and, 29
Europe
absolute price differences and, 95
coping skills of, 51
postwar, 10
U.S. growth and, 8–9
Exchange rates, 95, 97
Exogenous factors, 8–9
Exports, 9, 73–74
comparative advantage and, 21, 25–27, 48–50
future, 48–50
offshoring and, 10–15, 38 (see also Offshoring)
U.S. trade imbalance and, ix–x, 49
Farrell, Diana, 65
Feenstra, Robert, 9–10
Financial Times, 14, 106–107
Florida, 9
Fogel, Robert, 80
Foreign Affairs journal, 10, 12, 23, 72, 103, 106, 114
Foreign direct investment (FDI)
Arab security companies and, x
offshoring as, 20–21
returns to capital and, 30
supply-and-demand curve and, 76
tax system and, 68
trade deficit and, ix–xi, 49
Francis E. Walker medal, xiii
Freeman, Richard B.
Bhagwati and, 66–67, 103, 105–106
Blinder and, 30, 64–69, 109, 112, 115, 119–120, 121n4, 121n6
views of, 61–70
Free trade
China and, 8–10 (see also China)
cyclic episodes of, 71–72
differentiated products and, 4–6
Index

equilibrium and, 13–14, 21–27, 38
exchange rates and, 95, 97
exogenous factors and, 8–9
fundamentalism of, 111
gains assumption of, 21
Great Depression and, 5
imperfect competition and, 3–7, 13
increasing returns and, 13
India and, 8–10 (see also India)
Invisible Hand and, 5–7
lack of consensus on, 1, 3, 105–107, 109–110
liberalization and, 15
loss of faith in, 1
Marxism and, 5
media interpretation on state of, 1–15, 105–107
North American Free Trade Agreement (NAFTA) and, 61, 72, 77–78
offshoring and, 10–15 (see also Offshoring)
perceived flight from, 2–3
"polluter pay" principle and, 6–7
protectionism and, 1, 4, 84, 92, 98 (see also Protectionism)
rise of Japan and, 3–7
second thoughts on, 2, 83, 111
slow growth and, 14–15
theoretical attacks against, 72
traditional gains from, 83–84
two-way effects of, 75–76
unskilled labor and, 14–15
"Free Trade Was Passé After All" (Krugman), 3–4
Friedman, Benjamin M., ix–xiv
Friedman, Thomas, 10, 95
Frito-Lay, 5

Gains-from-trade theorem, 43
Gates, Bill, 46
Geek Squad, 48

General Agreement on Trade in Services (GATS), 11, 16n4
Georgia, 77
German language, 43
Germany, 106
Globalization, 8, 10
capital-labor ratio and, 63
costs of, 83–84
exchange rates and, 95, 97
measurement of, 67
North American Free Trade Agreement (NAFTA) and, 61
offshoring and, 10–15 (see also Offshoring)
Trade Adjustment Assistance (TAA) and, 78–79
wage stagnation and, 103–105
Washington Consensus and, 67
Goldberg, Arthur, 80
Gomory, Ralph, 2, 13–14, 17n6, 66, 83, 110
“Gospel of Free Trade Is Losing Its Apostles, The” (Pennar), 4
Grapes, 25
Gravity models, 95
Great Depression, 5–6, 112
Great Society, 44
Greider, William, 13, 66
Grieco, Paul L. E., 84
Gross Domestic Product (GDP) growth, 69, 81, 94, 104
Grossman, Gene, 6, 65
Group learning, 47

Haltiwanger, John, 77
Hamilton, Alexander, 50
Hansen, Alvin, xiii–xiv, 81
Hard Heads, Soft Hearts (Blinder), 77
Harvard University, xiii, 14–15, 33, 46, 80
Health insurance, 44, 68
Health tourism, 65
High school dropouts, 45
Hollywood, 32, 49
Hong Kong, 102
Hufbauer, Gary Clyde, 84
Hurricanes, 9
Hymans, Saul, 26

Idaho, 77
Immigration, 14, 103
Imperfect competition
differentiated products and, 4–6
equilibrium and, 13
Invisible Hand and, 5–7
political economy and, 7
rise of Japan and, 3–7
Imports, 5
cheap capital goods and, 102
employment effects and, 15, 94
globalization and, 102, 104–105
Keynesian unemployment and, 39
real wages and, 15
service sector and, 20, 48, 97–98
U.S. trade imbalance and, ix, 39
wage-loss insurance and, 57n28
Increasing returns, 13
In Defense of Globalization
(Bhagwati), 17n8, 101
India, 17n6, 71, 110
comparative advantage and, 26–31, 52–55
emergence of, x, 8–10, 22, 51–52, 54, 91–92
English language and, 29–30, 42–43, 52, 115, 118
forecast fragility and, 101–102, 118
higher education and, 63–64
high growth rate of, 101–103
impersonal jobs and, 24, 34
increased employment in, 39
increased labor supply and, 22–23, 63
knee-jerk interventionism of, 102
lack of useful capital from, 63
new entrant effect of, 29–31
reputation building and, 95–96
rising supply prices and, 115
rupee appreciation and, 77
supply-and-demand curve and, 76–77
teachable moment for, 77
threat of, 54, 91–92
training potential of, 115–116
wages and, 77, 115
Industrial Revolution
First, 46, 52, 54
Second, 52, 80
Third, 52–54
Industry
automation and, 4–5, 80
automobile, 98
Benedict Arnold CEOs and, 61
comparative advantage and, 21, 25–27
corporate governance reform and, 69
differentiated products and, 4–6
downsizing and, 75–76
externality issues and, 4–5, 8–9
Markusen models and, 66
oligopolistic, 6
protectionism and, 1–10, 84, 92, 98–99
reallocation and, 27–32 (see also Offshoring)
steel, 98
unions and, 12, 14, 65, 68, 96, 98, 104
“Inflation, Unemployment, and Monetary Policy” symposium, xivn1
Information and communications technology (ICT), xi, 10, 22, 64
forecast fragility and, 118
future innovation and, 32–33
location of work and, 20–21, 55n2, 85–86
relocation model and, 30–32
transportation costs of, 85
Insurance, 44, 57n28, 68, 78–79
International Monetary Fund (IMF), 67
Internet, 62, 64–65, 71, 85–86
Interventionism, 102
Invisible Hand, 5–7
Irwin, Douglas A.
Bhagwati and, 71–72
Blinder and, 71–81, 109–110, 114–119
media frenzy and, 71–72
“Is Free Trade Passé?” (Krugman), 16n1

Japan
absolute price differences and, 95
media frenzy over, 3–7
postwar, 10
protectionism and, 4
rise of, 3–7, 10
threat of, 71–72, 78
Japanese language, 42–43
Jefferson, Thomas, 25, 50
Jensen, Brad, 65, 85, 87, 97, 120
Job satisfaction, 23–24, 53
Job security, 22
Associated Press-IPSOS survey and, 63
Employment Law Alliance survey and, 62–63
extent of offshoring’s impact and, 34–37
net vs. gross job loss and, 38
O*NET and, 36, 86–89
personal/impersonal jobs and, 23–24, 28–32, 35–37
professional jobs and, 42, 86–89
relocation and, 27–32
Job training, 93
educational system and, 47 (see also Education)
federal, 43–45, 79–80
need for more, 115, 117
vocational, 47–48, 68, 78
Johnson, Harry, 8–9, 13
Johnson, Lyndon, 44
Journalism schools, 106–107. See also Media
Journal of Economic Perspectives, 8
Journal of International Economics, 103
Journal of Political Economy, 6
Julius Caesar (Shakespeare), 69

Katz, Larry, 79, 103
Kemp, Murray, 13
Kennedy, John F., 80
Kennedy Round, 12
Kennedy School of Government, 15
Kerry, John, 11–12, 61
Keynes, John Maynard
business cycles and, 112
forecasting and, 19, 28
free trade and, 5–6, 8
on word choice, 73, 94
Keynesian unemployment, 38–39, 41, 92
Kirkegaard, Jacob, 74
Kletzer, Lori G., 91
Bhagwati and, 82–90
Blinder and, 82–90, 109, 111–112, 119–120
geographic employment distribution and, 65
protectionism and, 84
Know Nothings, 119
Koster, Marvin, 17n7
Krugman, Paul  
Bhagwati and, 3, 8, 14, 16n1, 66, 103–105  
Blinder and, 110  
imperfect competition and, 3–7, 13  
protectionism and, 3–7  
rise of Japan and, 3–7  
wage depression and, 15  
Kuttner, Robert, 4, 7  
Kuznets, Simon, 80–81  

Labor  
Associated Press-IPSOS survey and, 63  
avtomation and, 4–5, 80  
bargaining and, 96  
blue collar, 42, 105  
Bureau of Labor Statistics (BLS) and, 35, 62, 89  
corporate governance reform and, 69  
downsizing and, 75–76  
employee stock ownership and, 69  
Employment Law Alliance survey and, 62–63  
federal job training and, 43–45, 79–80  
future risk and, 32–34  
geographic distribution of, 65  
guaranteed income and, 68  
human contact and, 53  
insurance and, 44  
interregional mobility and, 79  
job satisfaction and, 53  
job security and, 22–23 (see also Job security)  
literacy rates and, 102  
location of work and, 20–21, 55n2, 85–86  

Markusen models and, 66  
et vs. gross job loss and, 38  
North American Free Trade Agreement (NAFTA) and, 61, 72, 77–78, 119  
Office of Automation and Manpower and, 80  
offshoring and, xi, 10–15, 19–55 (see also Offshoring)  
O*NET and, 36, 85–89  
pensions and, 44, 68–69  
people skills and, 47  
personal/impersonal jobs and, 23–24, 28–32, 35–37  
“polluter pay” principle and, 6–7  
profit sharing and, 69  
skilled, 23–24, 26, 33–34, 38, 45–48, 52, 79  
Third Industrial Revolution and, 52–54  
Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 78–79  
turnover and, 23, 75, 94–96  
unions and, 12, 14, 65, 68, 96, 98, 104  
unskilled, 5, 14, 61, 96, 103, 105, 108n8  
weakened bargaining position of, 68  
white collar, 11, 20–21, 42, 55n2, 64–65, 71, 73, 79, 85–89, 102  
LaLonde, Robert J., 45  
Lane, Julia, 77  
Lawrence, Robert Z.  
Bhagwati and, 12, 15, 103, 105  
Blinder and, 56n14, 91–99, 109–110, 114–119  
media and, 92  
protectionism and, 92, 98–99
Lawyers, 32, 42  
Lee, Thea, 14  
Lemann, Nicholas, 107  
Letterman, David, 19  
Liberalization, 15, 43, 98  
Litan, Robert, 12  
Literacy, 102  
Log wage equation, 40  
Lohr, Steve, 8  
*Los Angeles Times*, 4

Macroeconomics, 10, 12, 38–39, 112  
Malthus, Thomas, 116  
Mankiw, Greg, 19, 65  
Mann, Catherine, 65  
Manufacturing, 49, 56n19  
Baumol’s disease and, 31  
downsizing and, 75  
employment share of, 94, 105, 115  
foreign competition and, 42  
Industrial Revolution and, 46, 52, 54  
North American Free Trade Agreement (NAFTA) and, 61  
offshoring and, 62 (see also Offshoring)  
reallocation and, 27–32  
restoring base of, 28  
supply-and-demand curve and, 76–77  
*Marketplace* (NPR show), 55n2  
Markets  
Arab security companies and, x  
Baumol’s disease and, 31, 34  
China and, 8–10, 17n6, 51–53 (see also China)  
comparative advantage and, 27–32 (see also Comparative advantage)  
currency, 77, 95, 97  
English language and, 29–30, 32  
exchange rates and, 95, 97  
exogenous factors and, 8–9  
future U.S. exports and, 48–50  
gains-from-trade theorem and, 43  
Gross Domestic Product (GDP) growth and, 69, 81, 94, 104  
imperfect competition and, 3–7  
India and, 8–10, 17n6, 51–55 (see also India)  
Invisible Hand and, 5–7  
natural resources and, 25–26  
new entrants and, 26, 29, 75  
niche, 75–76  
political economy and, 7  
"polluter pay" principle and, 6–7  
regional specialization and, 106  
rigidities and, 51  
Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 68, 78–79, 117, 119  
U.S. trade imbalance and, ix  
wireless delivery and, 41, 51  
Markusen, James, 66  
Marshall, Alfred, 74, 76  
Marx, Groucho, 110, 112  
Marx, Karl, 5, 110, 112  
Massachusetts Institute of Technology (MIT), 4, 8, 106  
Mathematics, 2, 8, 45  
Matthews, R. C. O., 13  
McCartney, Paul, 1, 66  
McKinley, William, 33  
McKinsey Global Institute, 62  
Meade, James, 13  
Meany, George, 12, 78  
Media, 67  
China and, 9  
free trade interpretations and, 1–15, 105–107  
heretical arguments and, 3  
hype and, 1, 3, 77, 105–107  
India and, 9
Media (cont.)
Irwin response and, 71–72
journalism schools and, 106–107
Lawrence response and, 92
mathematics and, 8
rise of Japan and, 3–7
Mexico, 61, 72
Microsoft, 20–21
Mining, 94
Mishel, Lawrence, 14
Mode 1, 10–12, 113
Mode 2, 86
Mode 3, 86
Modern Times (film), 53
Monopolies, 66
Monsoons, 9
Movie stars, 32
“Muddles over Outsourcing, The” (Bhagwati), 16n2

Nanotechnology, 68
Nation, The (magazine), 3, 13
National Academy of Public Administration, 20
National Public Radio (NPR), 10, 55n2
Natural resources, 25–26
“Nature makes no leap,” 74
NBER Program, 9
Networking, 33
New Democrats, 1, 14–15
New New Thing, 113
New Republic magazine, 5
New York Times, 2, 8, 15, 77, 104, 106
Nilekani, Nandan, 10
No Child Left Behind program, 45, 47
Nongovernmental organizations (NGOs), 102
North American Free Trade Agreement (NAFTA), 61, 72, 77–78, 119

Office of Automation and Manpower, 80
Offshoring
absolute price differences and, 95
adjustment issues and, 37–41
Associated Press-IPSOS survey and, 63
Baumol’s disease and, 31, 34
Benedict Arnold CEOs and, 61
big deal hypothesis and, 22, 24, 27, 32, 34, 54, 83, 91, 93, 97
Blinder on, 10–12, 19–55
Bureau of Labor Statistics (BLS) data and, 62
business-as-usual approach to, 22, 24, 32, 84, 120
call centers and, 10
China and, 8–10, 17n6, 22, 51–53
(see also China)
comparative advantage and, 27–32 (see also Comparative advantage)
compensating losers and, 43
continuation of, 32–34
define components of, 21–25
defining, 20–21
disproportionate benefits of, 65–66
downsizing and, 75–76
educational response to, 11–12
(see also Education)
elasticity and, 76
Employment Law Alliance survey and, 62–63
English language and, 29–30, 32, 42–43, 51–52, 57n34, 115, 118
equilibrium and, 22, 27, 38
estimating potential job loss and, 34–37, 86–89, 93–94, 97, 114–115
flux issues and, 11–12
as foreign direct investment (FDI), 20–21
Index

as fundamental trade phenomenon, 22
future risk and, 32–34
gains assumption and, 21
gains-from-trade theorem and, 43
General Agreement on trade in Services (GATS) and, 11
as impending catastrophe, 72–74, 114
increasing returns and, 13
India and, 8–10, 17n6, 22, 51–55 (see also India)
intellectual positions on, 19
intra-firm trade and, 98
job creation and, 21
job satisfaction and, 23–24, 53
large impact on U.S. structure, 22–24
location of work and, 20–21, 55n2, 85–86
lower U.S. wages and, x (see also Wages)
mass unemployment and, 27
measurement of, 21, 64–65, 86–89, 120
of medical services, 65
monopoly loss and, 66
national data systems and, 52–54
natural resources and, 25–26
net vs. gross job loss and, 38
new entrants and, 29
North American Free Trade Agreement (NAFTA) and, 61, 72, 77–78, 119
O*NET and, 36, 85–89
vs. outsourcing, 20
personal jobs and, 23–24, 28–32, 34–37, 53, 93, 115
physical proximity and, 10–12, 90
policy recommendations for, 43–50
politics of, 41–43
positive impact of, 22, 65–67
potential jobs affected by, 35–37
preparing workforce of the future, 45–48
as productivity advance, 65–66
professional jobs and, 42 (see also White-collar workers)
professions subject to, 86–89
returns to capital and, 30
scale effects and, 74–75, 84–89
self-evident truths and, 25–27, 32–34
service sector and, 20–24, 27–32, 41–42 (see also Service sector)
slower productivity growth from, 51
social welfare and, 22
structural unemployment from, 38–39
supply-and-demand curve and, 76–77
technology and, 32–34 (see also Technology)
as Third Industrial Revolution, 22, 52–54
Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 68, 78–79, 90, 117, 119
trade deficit and, 49
transition issues and, 27–32, 35–41
as two-way street, 49
vulnerability issues and, 11
wage depression and, x–xii, 14, 27, 30–31, 40–41, 52, 93, 96–97
wireless delivery and, 41, 112–113
Offshoring Institute, 62
Oil, 25, 118
Old Democrats, 1
O*NET, 36, 85–89
Onshoring, 32, 38
“Outsourcing Works So Well, India Is Sending Jobs Abroad” (*New York Times*), 77
Oversaving, 81
Oxbridge, 106
Panagariya, Arvind, 13, 22, 34, 115
Pareto moves, 43, 111, 120
Passell, Peter, 106
PBS, 1
Pennar, Karen, 4
Pensions, 44, 68–69
People skills, 47
PepsiCo, 5
Perot, Ross, 72, 77, 110, 118
Peterson Institute for International Economics, 105
Philippines, 42, 115
“Play It Again Sam: A New Look at Trade and Wages” (Bhagwati), 104
Plumbers, 46
Policy, xii
Blinder’s recommendations for, 43–50, 77–81, 117–119
building a better safety net, 43–45 equilibrium and, 13–14
estimating potential job loss and, 35–37
federal job training and, 43–45
future U.S. exports and, 48–50
General Agreement on Trade in Services (GATS) and, 11, 16n4
government-sponsored training programs and, 43–45, 79–80
interest groups and, xii
interventionist, 102
liberalization, 15, 43, 98
No Child Left Behind and, 45, 47
North American Free Trade Agreement (NAFTA) and, 61, 72, 77–78, 119
preparing workforce of the future, 45–48
radical, 68
Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 78–79
Washington Consensus and, 67
Political economy, 7
Politics
Arab security companies, x
communist China and, 102
Democrats and, 1, 4, 14–15, 104, 119
federal job training and, 43–45, 79–80
Know Nothings and, 119
laissez-faire and, 24, 84, 120
offshoring and, 41–43
socialism and, 112
Trade Adjustment Assistance (TAA) and, 43–44
white-collar workers and, 42
“Polluter pay” principle, 6–7
Portugal, 25
Potato chips, 4–5
Prices, 5–6
absolute differences in, 95
arbitrage and, 95
Baumol’s disease and, 31, 34
comparative advantage and, 30
exchange rates and, 95, 97
future technology and, 33
international differences in, 92–93
purchasing power parity and, 69
supply-and-demand curve and, 76–77
Princeton University, 6–7, 33
Index

Principles of Economics (Marshall), 74
Pringles, 5
Problem-solving skills, 47
Production
Baumol’s disease and, 31, 34
disproportionate benefits and, 65–66
foreign competition and, x–xi, 42 (see also China; India)
literacy rates and, 102
natural resources and, 25–26
North American Free Trade Agreement (NAFTA) and, 61
offshoring and, 10–15 (see also Offshoring)
“polluter pay” principle and, 6–7
slower average growth of, 51
standard of living and, 32
supply-and-demand curve and, 76–77
Professional jobs. See White-collar workers
Professors, 32–34
Profit sharing, 69
Protectionism
Bhagwati on, 1–10, 101, 107
Blinder on, 21, 25–27, 53, 110–111
China and, 8–10
comparative advantage and, 21, 25–27
India and, 8–10
industry externalities and, 4
Invisible Hand and, 5–6
Japan and, 4
Kletzer on, 84
Krugman on, 3–7
Lawrence on, 92, 98–99
Samuelson on, 8–10
wireless delivery and, 41
Purchasing power parity, 69
Radiologists, 24, 30, 42, 55n3, 79
Reallocation, 65. See also Offshoring
Baumol’s disease and, 31, 34
digitalization and, 64
disruption caused by, 27–28
equilibrium and, 29
estimating potential job loss and, 35–37
future speculation and, 27–28
as impending catastrophe, 72–74
information and communications technology (ICT) and, 30–32
Markusen models and, 66
monopoly loss and, 66
net vs. gross job loss and, 38
new entrants and, 29
personal/impersonal jobs and, 28–32
slower productivity growth from, 51
standard of living and, 32
trade model for, 29–32
unemployment factors and, 38–39
wage effects and, 40–41
Recession, 42, 75
Regression analysis, 40, 57n23, 96–97, 116
Research and development (R&D), 50, 69
Returns to capital, 30
Revere, Paul, 54, 91–92, 113
Ricardo, David, 21, 25
Roberts, Paul Craig, 13, 66
Robinson, Joan, 7
Rose, Charlie, 66
Rossi-Hansber, Esteban, 65
Rote preparation, 47
Routinizability, 116
Russia, 106
Sampson, Gary P., 12
Samuelson, Paul, 8–10, 16n2, 66, 83, 107, 110–111
Saudi Arabia, 25
School for International Affairs, Columbia, 106
Schrage, Michael, 4–5
Science, 32, 45
Second Industrial Revolution, 52, 80
Secretary of Labor, 80
Semiconductor chips, 4–5
Service sector, 83, 94
Baumol’s disease and, 31, 34
Benedict Arnold CEOs and, 61
comparative advantage and, 27–32
division of labor and, 75–76
education and, 46
English language and, 29–30, 42–43, 52, 115, 118
exchange rate and, 95, 97
expansion of, 31–32
future risk and, 32–34
imports and, 97
increased complexity of, 33
information and communications technology (ICT) and, 30–32
innovation in, 49–50
job satisfaction and, 23–24
job security and, 23
location of work and, 20–21, 55n2, 85–86
O*NET and, 36, 85–89
personal jobs and, 23–24, 28–32, 34–37, 53, 93, 115
preparing workforce of the future, 45–48
qualitative changes in, 23
relocation measurement of, 86–89
skilled labor and, 26
Third Industrial Revolution and, 22, 53–54
tourism and, 20
trade deficit and, 49
wireless delivery and, 41, 51, 53, 112
Shakespeare, William, 69
“Shaking Up Trade Theory” (Bernstein), 8
Shipbuilding, xi
Shoe manufacturing, xi
Silicon Valley, 25
Singapore, 102, 105
Smith, Adam, 5, 7, 25, 72
Snape, Richard H., 12
Socialism, 112
Social welfare
increase of global, 53
Invisible Hand and, 5–7
offshoring and, 22
Solow, Robert, 4, 14
South Korea, 102, 105
Soviet bloc, former, 29–30, 53, 63
Special interest groups, xii
Srinivasan, T. N., 13, 22, 34, 104, 115
Stafford, Frank, 26
Stagnation, 81, 103–105
Standard Occupational Classification (SOC), 35, 85
Standard of living, 32, 49, 92, 112–113
Stanford University, 4
Steel industry, xi, 98
Steelworkers Union, 65
Stolper-Samuelson theorem, 104
Supply-and-demand curve, 76–77
Swagel, Phillip, 65
Taiwan, 102, 105
Tarrif retaliation, 7
Taxes, 44, 68
Teachable moments, 77
Technology, 112
  automation and, 4–5, 80
  call centers and, 10
digitalization and, 64
externality issues and, 4–5
future innovations and, 32–34
future prices of, 33
government-sponsored retraining programs and, 79–80
information and communications technology (ICT), xi, 10, 20–22, 30–33, 55n2, 64, 85–86, 118
international competition and, x–xi
Internet, 62, 64–65, 71, 85–86
location of work and, 20–21, 55n2, 85–86
monopoly loss and, 66
nanotechnology and, 68
Office of Automation and Manpower and, 80
protectionism and, 4–5
reallocation model and, 30–32
Stolper-Samuelson theorem and, 104
transportation costs of, 85
wage depression and, 14, 104
wireless delivery and, 41, 51, 112–113
“Technology, not Globalisation, Is Driving Wages Down”
  (Bhagwati), 14
Tobin, James, xiii–xiv
Tourism, 20, 113
Trade Adjustment Assistance (TAA)
  AFL-CIO and, 12, 78
  as burial insurance, 78
  costs of, 78–79
  expansion of, 90
  Kennedy and, 12
  reform of, 43–44, 68, 78–79, 117, 119
  wage insurance and, 57n28, 78–79
Trade deficit, ix–xi, 49
Transition costs, 27, 37–41, 114–115
Turnover, 23, 75, 94–96
TV, 49
Tyson, Laura, 3–7, 14, 110
Uchitelle, Lou, 2
U.K. Institute of Directors, 62
Unemployment, 57n21. See also
  Offshoring
cyclical, 39
education and, 79
frictional, 92
government-sponsored retraining programs and, 79–80
Keynesian, 38–39, 41, 92
post–World War II era and, 81
reallocation estimates and, 38–39
structural, 92
Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 78–79
Unemployment insurance, 44
Unions, 12, 14, 65, 68, 96, 98, 104
United States
  absolute price differences and, 95
  Arab security companies and, x
  China and, 8–10 (see also China)
coping skills of, 51
English language and, 29–30, 32, 42–43, 51–52
United States (cont.)
- European view of growth of, 8–9
- exchange rate and, 95, 97
- foreign-held assets and, ix–x
- future exports of, 48–50
- Great Depression and, 5–6, 112
- Gross Domestic Product (GDP) growth and, 69, 81, 94
- India and, 8–10 (see also India)
- innovation and, 49–50
- interest groups and, xii
- national data system of, 52–54
- as net exporter, 73–74
- North American Free Trade Agreement (NAFTA) and, 61, 72, 77–78, 119
- post–World War II era and, 81
- purchasing power parity and, 69
- rise of Japan and, 4
- standard of living and, 32, 49, 92, 112–113
- tax system and, 68
- theory of comparative advantage and, 21, 25–27
- Third Industrial Revolution and, 52–54
- Trade Adjustment Assistance (TAA) and, 12, 43–44
- trade imbalance of, ix–xi, 49
- turnover rates in, 94–95
- underdeveloped parts of, 77
- Universal health insurance, 44, 68
- Uruguay Round, 11
- U.S. Department of Labor, 43–44
- U.S. Patent Office, 33

- Video conferencing, 33
- Visible Hand, 7
- Vocational education, 47–48, 68, 78
- Voice recognition systems, 33

Wage insurance, 44, 57n28, 68, 78–79

Wages
- capital-labor ratio and, 63
- depression of, x–xii, 14, 27, 30–31, 40–41, 52, 93, 96–97
- education and, 52
- elasticity and, 76
- factor content approach and, 103
- foreign competition and, 42
- Great Depression and, 5–6
- Gross Domestic Product (GDP) growth in, 69
- immigration and, 103
- increased labor supply and, x, 116
- India and, 77, 115
- international differences in, 92–93
- Invisible Hand and, 5–7
- log equation for, 40
- Markusen models and, 66
- profit sharing and, 69
- purchasing power parity and, 69
- reallocation effects and, 40–41
- regression analysis and, 40, 57n23, 96–97, 116
- skilled labor and, 52, 79
- stagnation and, 81, 103–105
- Stolper-Samuelson theorem and, 104
- supply-and-demand curve and, 76–77
- technology and, 14
- Trade Adjustment Assistance (TAA) and, 12, 43–44, 57n28, 68, 78–79, 117, 119
- unskilled labor and, 5, 14, 61, 96, 103, 105, 108n8
- workforce of the future and, 45–48
- Wall Street, 49
- Wall Street Journal, 2, 10, 13
- Wal-Mart, 113
Washington Consensus, 67
Weather, 9
Wei, Shang-Jin, 74
Weinstein, David, 10
Weinstein, Michael, 106
Wessel, David, 2, 10, 83
White-collar workers, 11, 102
digitalization of, 64
impersonal jobs and, 23, 28–35,
39, 46–54, 64–65, 86, 97, 112, 115, 119
location of work and, 20–21, 55n2,
85–86
media frenzy and, 71
as new trade victims, 42, 73, 79
O*Net and, 85–89
personal jobs and, 23–24, 28–32,
34–37, 53, 93, 115
Trade Adjustment Assistance (TAA) and, 79
Who’s Bashing Whom? (Tyson), 5
Wikipedia, 61
Wolf, Martin, 106
Work Activities data, 86–89
World Bank, 67
World Trade Organization (WTO), 86
World War II era, 81

Yale University, 106