

APPENDIX B

CONVERSIONS

CONVERSIONS

A Note About Heating Values

The heat content of a fuel is the quantity of energy released by burning a unit amount of that fuel. However, this value is not absolute and can vary according to several factors. For example, empirical formulae for determining the heating value of liquid fuels depend on the fuels' American Petroleum Institute (API) gravity. The API gravity varies depending on the percent by weight of the chemical constituents and impurities in the fuel, both of which are affected by the combination of raw materials used to produce the fuel and by the type of manufacturing process. Temperature and climatic conditions are also factors.

Because of these variations, the heating values in Table B.4 may differ from values in other publications. The figures in this report are representative or average values, not absolute ones. The gross (higher) heating values used here agree with those used by the Energy Information Administration (EIA).

Heating values fall into two categories, usually referred to as “higher” (or gross) and “lower” (or net). If the products of fuel combustion are cooled back to the initial fuel-air or fuel-oxidizer mixture temperature and the water formed during combustion is condensed, the energy released by the process is the higher (gross) heating value. If the products of combustion are cooled to the initial fuel-air temperature, but the water is considered to remain as a vapor, the energy released by the process is lower (net) heating value. Usually the difference between the gross and net heating values for fuels used in transportation is around 5 to 8 percent; however, it is important to be consistent in their use.

Table B.1
Hydrogen Heat Content

1 kilogram hydrogen =	
Higher heating value	Lower heating value
134,200 Btu	113,400 Btu
39.3 kWhr	33.2 kWhr
141,600 kJ	119,600 kJ
33,800 kCal	28,560 kCal

Table B.2
Hydrogen Conversions

	Weight		Gas		Liquid	
	Pounds (lb)	Kilograms (kg)	Standard cubic feet (SCF)	Normal cubic meter (Nm ³)	Gallons (gal)	Liters (L)
1 lb	1.0	0.4536	192.00	5.047	1.6928	6.408
1 kg	2.205	1.0	423.3	11.126	3.733	14.128
1 SCF gas	0.005209	0.002363	1.0	0.02628	0.008820	0.0339
1 Nm ³ gas	0.19815	0.08988	38.04	1.0	0.3355	1.2699
1 gal liquid	0.5906	0.2679	113.41	2.981	1.0	3.785
1 L liquid	0.15604	0.07078	29.99	0.77881	0.2642	1.0

Table B.3
Pressure Conversions

	Bar	Atmosphere	lb/in ² (or psi)
Bar	1.0	0.987	14.5
Atmosphere	1.013	1.0	14.696
lb/in ² (or psi)	0.0689	0.0680	1.0

Table B.4
Heat Content for Various Fuels

Conventional gasoline	125,000 Btu/gal(gross) = 115,400 Btu/gal(net)
Hydrogen	134,200 Btu/kg(gross) = 113,400 Btu/kg(net)
Diesel motor fuel	138,700 Btu/gal (gross) = 128,700 Btu/gal (net)
Biodiesel	126,206 Btu/gal (gross) = 117,093 Btu/gal (net)
Methanol	64,600 Btu/gal (gross) = 56,560 Btu/gal (net)
Ethanol	84,600 Btu/gal (gross) = 75,670 Btu/gal (net)
Gasohol	120,900 Btu/gal (gross) = 112,417 Btu/gal (net)
E85	90,660 Btu/gal (gross) = 81,630 Btu/gal (net)
Aviation gasoline	120,200 Btu/gal (gross) = 112,000 Btu/gal (net)
Propane	91,300 Btu/gal (gross) = 83,500 Btu/gal (net)
Butane	103,000 Btu/gal (gross) = 93,000 Btu/gal (net)
Jet fuel (naphtha)	127,500 Btu/gal (gross) = 118,700 Btu/gal (net)
Jet fuel (kerosene)	135,000 Btu/gal (gross) = 128,100 Btu/gal (net)
Lubricants	144,400 Btu/gal (gross) = 130,900 Btu/gal (net)
Waxes	131,800 Btu/gal (gross) = 120,200 Btu/gal (net)
Asphalt and road oil	158,000 Btu/gal (gross) = 157,700 Btu/gal (net)
Natural gas	
Wet	1,109 Btu/ft ³
Dry	1,027 Btu/ft ³
Compressed	20,551 Btu/pound
	960 Btu/cubic foot
Liquid	90,800 Btu/gal (gross) = 87,600 Btu/gal (net)
Crude petroleum	138,100 Btu/gal (gross) = 131,800 Btu/gal (net)
Fuel Oils	
Residual	149,700 Btu/gal (gross) = 138,400 Btu/gal (net)
Distillate	138,700 Btu/gal (gross) = 131,800 Btu/gal (net)
Coal	
Anthracite - Consumption	21.711 x 10 ⁶ Btu/short ton
Bituminous and lignite - Consumption	21.012 x 10 ⁶ Btu/short ton
Production average	21.352 x 10 ⁶ Btu/short ton
Consumption average	21.015 x 10 ⁶ Btu/short ton

Table B.5
Fuel Equivalents

1 million bbl crude oil/day	= 0.365 billion bbl crude oil/year = 2.117 quadrillion Btu/year = 105.914 million short tons coal/year = 96.085 million metric tons coal/year = 2.059 trillion ft ³ natural gas/year = 2.233 exajoules/year
1 billion bbl crude oil/year	= 2.740 million bbl crude oil/day = 5.800 quadrillion Btu/year = 290.174 million short tons coal/year = 263.246 million metric tons coal/year = 5.642 trillion ft ³ natural gas/year = 6.119 exajoules/year
1 quadrillion Btu/year	= 0.5219 gasoline gallon equivalents = 0.472 million bbl crude oil/day = 172.414 million bbl crude oil/year = 50.030 million short tons coal/year = 45.387 million metric tons coal/year = 972.763 billion ft ³ natural gas/year = 1.055 exajoules/year
1 billion short tons coal/year	= 0.907 billion metric tons coal/year = 9.442 million bbl crude oil/day = 3.446 billion bbl crude oil/year = 19.988 quadrillion Btu/year = 19.444 trillion ft ³ natural gas/year = 21.087 exajoules/year
1 billion metric tons coal/year	= 1.102 billion short tons coal/year = 8.565 million bbl crude oil/day = 3.126 billion bbl crude oil/year = 18.133 quadrillion Btu/year = 17.639 trillion ft ³ natural gas/year = 19.130 exajoules/year
1 trillion ft ³ natural gas/year	= 0.486 million bbl crude oil/day = 0.177 billion bbl crude oil/year = 1.028 quadrillion Btu/year = 51.431 million short tons coal/year = 46.658 million metric tons coal/year = 1.085 exajoules/year
1 exajoule/year	= 447.741 thousand bbl crude oil/day = 163.425 million bbl crude oil/year = 0.948 quadrillion Btu/year = 47.421 million short tons coal/year = 43.021 million metric tons coal/year = 0.922 trillion ft ³ natural gas/year

Table B.6
Energy Unit Conversions

1 Btu	= 778.2 ft-lb = 107.6 kg-m = 1055 J = 39.30 x 10 ⁻⁵ hp-h = 39.85 x 10 ⁻⁵ metric hp-h = 29.31 x 10 ⁻⁵ kWhr	1 kWhr	= 3412 Btu ^a = 2.655 x 10 ⁶ ft-lb = 3.671 x 10 ⁵ kg-m = 3.600 x 10 ⁶ J = 1.341 hp-h = 1.360 metric hp-h
1 kg-m	= 92.95 x 10 ⁻⁴ Btu = 7.233 ft-lb = 9.806 J = 36.53 x 10 ⁻⁷ hp-h = 37.04 x 10 ⁻⁷ metric hp-h = 27.24 x 10 ⁻⁷ kWhr	1 Joule	= 94.78 x 10 ⁻⁵ Btu = 0.7376 ft-lb = 0.1020 kg-m = 37.25 x 10 ⁻⁸ hp-h = 37.77 x 10 ⁻⁸ metric hp-h = 27.78 x 10 ⁻⁸ kWhr
1 hp-h	= 2544 Btu = 1.98 x 10 ⁶ ft-lb = 2.738 x 10 ⁶ kgm = 2.685 x 10 ⁶ J = 1.014 metric hp-h = 0.7475 kWhr	1 metric hp-h	= 2510 Btu = 1.953 x 10 ⁶ ft-lb = 27.00 x 10 ⁴ kg-m = 2.648 x 10 ⁶ J = 0.9863 hp-h = 0.7355 kWhr

^aThis figure does not take into account the fact that electricity generation and distribution efficiency is approximately 33%. If generation and distribution efficiency are taken into account, 1 kWhr = 10,339 Btu.

Table B.7
International Energy Conversions

To:	Terajoules	Giga-calories	Million tonnes of oil equivalent	Million Btu	Gigawatt-hours
From:	<i>multiply by:</i>				
Terajoules	1	238.8	2.388 x 10 ⁻⁵	947.8	0.2778
Gigacalories	4.1868 x 10 ⁻³	1	10 ⁻⁷	3.968	1.163 x 10 ⁻³
Million tonnes of oil equivalent	4.1868 x 10 ⁴	10 ⁷	1	3.968 x 10 ⁷	11,630
Million Btu	1.0551 x 10 ⁻³	0.252	2.52 X 10 ⁻⁸	1	2.931 x 10 ⁻⁴
Gigawatt-hours	3.6	860	8.6 x 10 ⁻⁵	3412	1

Table B.8
Distance and Velocity Conversions

<p>1 in. = 83.33 x 10⁻³ ft = 27.78 x 10⁻³ yd = 15.78 x 10⁻⁶ mile = 25.40 x 10⁻³ m = 0.2540 x 10⁻⁶ km</p>	<p>1 ft = 12.0 in. = 0.33 yd = 189.4 x 10⁻³ mile = 0.3048 m = 0.3048 x 10⁻³ km</p>
<p>1 mile = 63360 in. = 5280 ft = 1760 yd = 1609 m = 1.609 km</p>	<p>1 km = 39370 in. = 3281 ft = 1093.6 yd = 0.6214 mile = 1000 m</p>

1 ft/sec = 0.3048 m/s = 0.6818 mph = 1.0972 km/h
 1 m/sec = 3.281 ft/s = 2.237 mph = 3.600 km/h
 1 km/h = 0.9114 ft/s = 0.2778 m/s = 0.6214 mph
 1 mph = 1.467 ft/s = 0.4469 m/s = 1.609 km/h

Table B.9
Alternative Measures of Greenhouse Gases

1 pound methane, measured in carbon units (CH ₄)	=	1.333 pounds methane, measured at full molecular weight (CH ₄)
1 pound carbon dioxide, measured in carbon units (CO ₂ -C)	=	3.6667 pounds carbon dioxide, measured at full molecular weight (CO ₂)
1 pound carbon monoxide, measured in carbon units (CO-C)	=	2.333 pounds carbon monoxide, measured at full molecular weight (CO)
1 pound nitrous oxide, measured in nitrogen units (N ₂ O-N)	=	1.571 pounds nitrous oxide, measured at full molecular weight (N ₂ O)

Table B.10
Volume and Flow Rate Conversions^a

1 U.S. gal	= 231 in. ³ = 0.1337 ft ³ = 3.785 liters = 0.8321 imperial gal = 0.0238 bbl = 0.003785 m ³	1 liter	= 61.02 in. ³ = 3.531 x 10 ⁻² ft ³ = 0.2624 U.S. gal = 0.2200 imperial gal = 6.29 x 10 ⁻³ bbl = 0.001 m ³
A U.S. gallon of gasoline weighs 6.2 pounds			
1 imperial gal	= 277.4 in. ³ = 0.1606 ft ³ = 4.545 liters = 1.201 U.S. gal = 0.0286 bbl = 0.004546 m ³	1 bbl	= 9702 in. ³ = 5.615 ft ³ = 158.97 liters = 42 U.S. gal = 34.97 imperial gal = 0.15897 m ³
1 U.S. gal/hr	= 3.209 ft ³ /day = 90.84 liter/day = 19.97 imperial gal/day = 0.5712 bbl/day		= 1171 ft ³ /year = 33157 liter/year = 7289 imperial gal/year = 207.92 bbl/year
For Imperial gallons, multiply above values by 1.201			
1 liter/hr	= 0.8474 ft ³ /day = 6.298 U.S. gal/day = 5.28 imperial gal/day = 0.1510 bbl/day		= 309.3 ft ³ /year = 2299 U.S. gal/year = 1927 imperial gal/year = 55.10 bbl/year
1 bbl/hr	= 137.8 ft ³ /year = 1008 U.S. gal/day = 839.3 imperial gal/day = 3815 liter/day		= 49187 ft ³ year = 3.679 x 10 ⁵ U.S. gal/year = 3.063 x 10 ⁵ imperial gal/year = 1.393 x 10 ⁶ liter/day

^aThe conversions for flow rates are identical to those for volume measures, if the time units are identical.

Table B.11
Power Conversions

FROM	TO					
	Horsepower	Kilowatts	Metric horsepower	Ft-lb per sec	Kilocalories per sec	Btu per sec
Horsepower	1	0.7457	1.014	550	0.1781	0.7068
Kilowatts	1.341	1	1.360	737.6	0.239	0.9478
Metric horsepower	0.9863	0.7355	1	542.5	0.1757	0.6971
Ft-lb per sec	1.36×10^{-3}	1.356×10^{-3}	1.84×10^{-3}	1	0.3238×10^{-3}	1.285×10^{-3}
Kilocalories per sec	5.615	4.184	5.692	3088	1	3.968
Btu per sec	1.415	1.055	1.434	778.2	0.2520	1

Table B.12
Mass Conversions

FROM	TO				
	Pound	Kilogram	Short ton	Long ton	Metric ton
Pound	1	0.4536	5.0×10^{-4}	4.4643×10^{-4}	4.5362×10^{-4}
Kilogram	2.205	1	1.1023×10^{-3}	9.8425×10^{-4}	1.0×10^{-3}
Short ton	2,000	907.2	1	0.8929	0.9072
Long ton	2,240	1,016	1.12	1	1.016
Metric ton	2,205	1,000	1.102	0.9842	1

Table B.13
Fuel Efficiency Conversions

MPG	Miles/liter	Kilometers/L	L/100 kilometers	Grams of CO ₂ per mile ^a	Pounds of CO ₂ per mile ^a
10	2.64	4.25	23.52	877.80	1.94
15	3.96	6.38	15.68	585.20	1.29
20	5.28	8.50	11.76	438.90	0.97
25	6.60	10.63	9.41	351.12	0.78
30	7.92	12.75	7.84	292.60	0.65
35	9.25	14.88	6.72	250.80	0.55
40	10.57	17.00	5.88	219.45	0.49
45	11.89	19.13	5.23	195.07	0.43
50	13.21	21.25	4.70	175.56	0.39
55	14.53	23.38	4.28	159.60	0.35
60	15.85	25.51	3.92	146.30	0.32
65	17.17	27.63	3.62	135.05	0.30
70	18.49	29.76	3.36	125.40	0.28
75	19.81	31.88	3.14	117.04	0.26
80	21.13	34.01	2.94	109.73	0.24
85	22.45	36.13	2.77	103.27	0.23
90	23.77	38.26	2.61	97.53	0.22
95	25.09	40.38	2.48	92.40	0.20
100	26.42	42.51	2.35	87.78	0.19
105	27.74	44.64	2.24	83.60	0.18
110	29.06	46.76	2.14	79.80	0.18
115	30.38	48.89	2.05	76.33	0.17
120	31.70	51.01	1.96	73.15	0.16
125	33.02	53.14	1.88	70.22	0.16
130	34.34	55.26	1.81	67.52	0.15
135	35.66	57.39	1.74	65.02	0.14
140	36.98	59.51	1.68	62.70	0.14
145	38.30	61.64	1.62	60.54	0.13
150	39.62	63.76	1.57	58.52	0.13
Formula	MPG/3.785	MPG/[3.785/1.609]	235.24/MPG	8,778/MPG	19.4/MPG

^a For gasoline-fueled vehicles.

Table B.14
SI Prefixes and Their Values

	Value	Prefix	Symbol
One million million millionth	10^{-18}	atto	a
One thousand million millionth	10^{-15}	femto	f
One million millionth	10^{-12}	pico	p
One thousand millionth	10^{-9}	nano	n
One millionth	10^{-6}	micro	μ
One thousandth	10^{-3}	milli	m
One hundredth	10^{-2}	centi	c
One tenth	10^{-1}	deci	
One	10^0		
Ten	10^1	deca	
One hundred	10^2	hecto	
One thousand	10^3	kilo	k
One million	10^6	mega	M
One billion ^a	10^9	giga	G
One trillion ^a	10^{12}	tera	T
One quadrillion ^a	10^{15}	peta	P
One quintillion ^a	10^{18}	exa	E

^aCare should be exercised in the use of this nomenclature, especially in foreign correspondence, as it is either unknown or carries a different value in other countries. A "billion," for example, signifies a value of 10^{12} in most other countries.

Table B.15
Metric Units and Abbreviations

Quantity	Unit name	Symbol
Energy	joule	J
Specific energy	joule/kilogram	J/kg
Specific energy consumption	joule/kilogram•kilometer	J/(kg•km)
Energy consumption	joule/kilometer	J/km
Energy economy	kilometer/kilojoule	km/kJ
Power	kilowatt	Kw
Specific power	watt/kilogram	W/kg
Power density	watt/meter ³	W/m ³
Speed	kilometer/hour	km/h
Acceleration	meter/second ²	m/s ²
Range (distance)	kilometer	km
Weight	kilogram	kg
Torque	newton•meter	N•m
Volume	meter ³	m ³
Mass; payload	kilogram	kg
Length; width	meter	m
Brake specific fuel consumption	kilogram/joule	kg/J
Fuel economy (heat engine)	liters/100 km	L/100 km

Table B.16
Carbon Coefficients, 2002
(Million metric tons carbon per quadrillion Btu)

Fuel Type	
Coal	
Coal (residential)	26.04
Coal (commercial)	26.04
Coal (industrial coking)	25.63
Coal (industrial other)	25.74
Coal (electric utility)	25.98
Natural gas	
Natural gas (pipeline)	14.47
Natural gas (flared)	14.92
Petroleum	
Asphalt and road oil	20.62
Aviation gasoline	18.87
Crude oil	20.30
Distillate fuel	19.95
Jet fuel	19.33
Kerosene	19.72
LPG	16.99
Lubricants	20.24
Motor gasoline	19.34
Petrochemical feed.	19.37
Petroleum coke	27.85
Residual fuel	21.49
Waxes	19.81

Note: All coefficients based on Higher Heating (Gross Calorific) Value and assume 100 percent combustion.

Conversion of Constant Dollar Values

Many types of information in this data book are expressed in dollars. Generally, constant dollars are used—that is, dollars of a fixed value for a specific year, such as 1990 dollars. Converting current dollars to constant dollars, or converting constant dollars for one year to constant dollars for another year, requires conversion factors (Table B.17 and B.18). Table B.17 shows conversion factors for the Consumer Price Index inflation factors. Table B.18 shows conversion factors using the Gross National Product inflation factors.

Table B.17
Consumer Price Inflation (CPI) Index

From:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1970	1.000	1.044	1.077	1.144	1.271	1.387	1.466	1.562	1.680	1.871
1971	0.958	1.000	1.032	1.096	1.217	1.328	1.405	1.496	1.610	1.793
1972	0.928	0.969	1.000	1.062	1.179	1.287	1.361	1.450	1.560	1.737
1973	0.874	0.912	0.941	1.000	1.110	1.212	1.282	1.365	1.468	1.635
1974	0.787	0.822	0.848	0.901	1.000	1.091	1.154	1.229	1.323	1.473
1975	0.721	0.753	0.777	0.825	0.916	1.000	1.058	1.126	1.212	1.349
1976	0.682	0.712	0.735	0.780	0.866	0.946	1.000	1.065	1.146	1.276
1977	0.640	0.668	0.690	0.733	0.814	0.888	0.939	1.000	1.076	1.198
1978	0.595	0.621	0.641	0.681	0.756	0.825	0.873	0.929	1.000	1.113
1979	0.534	0.558	0.576	0.612	0.679	0.741	0.784	0.835	0.898	1.000
1980	0.471	0.492	0.507	0.539	0.598	0.653	0.691	0.735	0.791	0.881
1981	0.427	0.446	0.460	0.488	0.542	0.592	0.626	0.667	0.717	0.799
1982	0.402	0.420	0.433	0.460	0.511	0.558	0.590	0.628	0.676	0.752
1983	0.390	0.407	0.420	0.446	0.495	0.540	0.571	0.608	0.655	0.729
1984	0.373	0.390	0.402	0.427	0.474	0.518	0.548	0.583	0.628	0.699
1985	0.361	0.376	0.388	0.413	0.458	0.500	0.529	0.563	0.606	0.675
1986	0.354	0.370	0.381	0.405	0.450	0.491	0.519	0.553	0.595	0.662
1987	0.342	0.357	0.368	0.391	0.434	0.474	0.501	0.533	0.574	0.639
1988	0.328	0.342	0.353	0.375	0.417	0.455	0.481	0.512	0.551	0.614
1989	0.313	0.327	0.337	0.358	0.398	0.434	0.459	0.489	0.526	0.585
1990	0.297	0.310	0.320	0.340	0.377	0.412	0.435	0.464	0.499	0.555
1991	0.285	0.297	0.307	0.326	0.362	0.395	0.418	0.445	0.479	0.533
1992	0.277	0.289	0.298	0.316	0.351	0.383	0.406	0.432	0.465	0.517
1993	0.269	0.280	0.289	0.307	0.341	0.372	0.394	0.419	0.451	0.502
1994	0.262	0.273	0.282	0.300	0.333	0.363	0.384	0.409	0.440	0.490
1995	0.255	0.266	0.274	0.291	0.323	0.353	0.373	0.398	0.428	0.476
1996	0.247	0.258	0.266	0.283	0.314	0.343	0.363	0.386	0.416	0.463
1997	0.242	0.252	0.260	0.277	0.307	0.335	0.355	0.378	0.406	0.452
1998	0.238	0.248	0.256	0.272	0.302	0.330	0.349	0.372	0.400	0.445
1999	0.233	0.243	0.251	0.267	0.296	0.323	0.342	0.364	0.391	0.436
2000	0.225	0.235	0.243	0.258	0.286	0.312	0.330	0.352	0.379	0.422
2001	0.219	0.229	0.236	0.251	0.278	0.304	0.321	0.342	0.368	0.410
2002	0.216	0.225	0.232	0.247	0.274	0.299	0.316	0.337	0.362	0.404
2003	0.211	0.220	0.227	0.241	0.268	0.292	0.309	0.329	0.354	0.395
2004	0.205	0.214	0.221	0.235	0.261	0.285	0.301	0.321	0.345	0.384
2005	0.199	0.207	0.214	0.227	0.252	0.275	0.291	0.310	0.334	0.372
2006	0.192	0.201	0.207	0.220	0.245	0.267	0.282	0.301	0.323	0.360
2007	0.187	0.195	0.202	0.214	0.238	0.259	0.274	0.292	0.314	0.350
2008	0.180	0.188	0.194	0.206	0.229	0.250	0.264	0.281	0.303	0.337

Table B.17
Consumer Price Inflation (CPI) Index (Continued)

From:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1970	2.124	2.343	2.487	2.567	2.678	2.773	2.825	2.928	3.049	3.196
1971	2.035	2.244	2.383	2.459	2.565	2.657	2.706	2.805	2.921	3.062
1972	1.971	2.175	2.309	2.383	2.486	2.574	2.622	2.718	2.830	2.967
1973	1.856	2.047	2.173	2.243	2.340	2.423	2.468	2.559	2.664	2.793
1974	1.671	1.844	1.957	2.020	2.108	2.183	2.223	2.304	2.400	2.515
1975	1.532	1.690	1.794	1.851	1.931	2.000	2.037	2.112	2.199	2.305
1976	1.448	1.598	1.696	1.750	1.826	1.891	1.926	1.996	2.079	2.179
1977	1.360	1.500	1.592	1.644	1.715	1.776	1.809	1.875	1.952	2.046
1978	1.264	1.394	1.480	1.528	1.594	1.650	1.681	1.742	1.814	1.902
1979	1.135	1.252	1.329	1.372	1.431	1.482	1.510	1.565	1.629	1.708
1980	1.000	1.103	1.171	1.209	1.261	1.306	1.330	1.379	1.436	1.505
1981	0.906	1.000	1.062	1.096	1.143	1.184	1.206	1.250	1.301	1.364
1982	0.854	0.942	1.000	1.032	1.077	1.115	1.136	1.177	1.226	1.285
1983	0.827	0.913	0.969	1.000	1.043	1.080	1.100	1.141	1.188	1.245
1984	0.793	0.875	0.929	0.959	1.000	1.036	1.055	1.093	1.139	1.193
1985	0.766	0.845	0.897	0.926	0.966	1.000	1.019	1.056	1.099	1.152
1986	0.752	0.829	0.880	0.909	0.948	0.982	1.000	1.036	1.079	1.131
1987	0.725	0.800	0.849	0.877	0.915	0.947	0.965	1.000	1.041	1.092
1988	0.697	0.768	0.816	0.842	0.878	0.910	0.926	0.960	1.000	1.048
1989	0.665	0.733	0.778	0.803	0.838	0.868	0.884	0.916	0.954	1.000
1990	0.630	0.695	0.738	0.762	0.795	0.823	0.839	0.869	0.905	0.949
1991	0.605	0.667	0.709	0.731	0.763	0.790	0.805	0.834	0.869	0.910
1992	0.587	0.648	0.688	0.710	0.741	0.767	0.781	0.810	0.843	0.884
1993	0.570	0.629	0.668	0.689	0.719	0.745	0.758	0.786	0.819	0.858
1994	0.556	0.613	0.651	0.672	0.701	0.726	0.740	0.767	0.798	0.837
1995	0.541	0.596	0.633	0.654	0.682	0.706	0.719	0.745	0.776	0.814
1996	0.525	0.579	0.615	0.635	0.662	0.686	0.699	0.724	0.754	0.790
1997	0.513	0.566	0.601	0.621	0.647	0.670	0.683	0.708	0.737	0.773
1998	0.506	0.558	0.592	0.611	0.637	0.660	0.672	0.697	0.726	0.761
1999	0.495	0.546	0.579	0.598	0.624	0.646	0.658	0.682	0.710	0.744
2000	0.479	0.528	0.560	0.578	0.603	0.625	0.636	0.660	0.687	0.720
2001	0.465	0.513	0.545	0.562	0.587	0.608	0.619	0.641	0.668	0.700
2002	0.458	0.505	0.536	0.554	0.578	0.598	0.609	0.631	0.658	0.689
2003	0.448	0.494	0.524	0.541	0.565	0.585	0.596	0.617	0.643	0.674
2004	0.436	0.481	0.511	0.527	0.550	0.570	0.580	0.601	0.626	0.656
2005	0.422	0.465	0.494	0.510	0.532	0.551	0.561	0.582	0.606	0.635
2006	0.409	0.451	0.479	0.494	0.515	0.534	0.544	0.563	0.587	0.615
2007	0.397	0.438	0.465	0.480	0.501	0.519	0.529	0.548	0.571	0.598
2008	0.383	0.422	0.448	0.463	0.483	0.500	0.509	0.528	0.549	0.576

Table B.17
Consumer Price Inflation (CPI) Index (Continued)

From:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1970	3.369	3.510	3.616	3.724	3.820	3.928	4.044	4.137	4.201	4.294
1971	3.227	3.363	3.464	3.568	3.659	3.763	3.874	3.963	4.025	4.114
1972	3.127	3.258	3.356	3.457	3.545	3.646	3.754	3.840	3.900	3.986
1973	2.944	3.068	3.160	3.255	3.338	3.432	3.534	3.615	3.671	3.752
1974	2.651	2.763	2.846	2.931	3.006	3.091	3.183	3.256	3.306	3.379
1975	2.429	2.532	2.608	2.686	2.755	2.833	2.916	2.983	3.030	3.097
1976	2.297	2.394	2.466	2.540	2.605	2.678	2.757	2.821	2.865	2.928
1977	2.157	2.248	2.315	2.384	2.446	2.515	2.589	2.649	2.690	2.749
1978	2.005	2.089	2.152	2.216	2.273	2.337	2.406	2.462	2.500	2.555
1979	1.800	1.876	1.933	1.990	2.041	2.099	2.161	2.211	2.245	2.295
1980	1.586	1.653	1.703	1.754	1.799	1.850	1.904	1.948	1.978	2.022
1981	1.438	1.498	1.543	1.590	1.630	1.677	1.726	1.766	1.793	1.833
1982	1.354	1.411	1.454	1.497	1.536	1.579	1.626	1.663	1.689	1.726
1983	1.312	1.367	1.409	1.451	1.488	1.530	1.575	1.611	1.637	1.673
1984	1.258	1.311	1.350	1.391	1.426	1.467	1.510	1.545	1.569	1.603
1985	1.215	1.266	1.304	1.343	1.377	1.416	1.458	1.492	1.515	1.548
1986	1.193	1.243	1.280	1.318	1.352	1.391	1.432	1.464	1.487	1.520
1987	1.151	1.199	1.235	1.272	1.305	1.342	1.381	1.413	1.435	1.467
1988	1.105	1.151	1.186	1.221	1.253	1.288	1.326	1.357	1.378	1.408
1989	1.054	1.098	1.131	1.165	1.195	1.229	1.265	1.294	1.315	1.344
1990	1.000	1.042	1.073	1.106	1.134	1.166	1.200	1.228	1.247	1.275
1991	0.960	1.000	1.030	1.061	1.088	1.119	1.152	1.178	1.197	1.223
1992	0.932	0.971	1.000	1.030	1.056	1.086	1.118	1.144	1.162	1.187
1993	0.904	0.943	0.971	1.000	1.026	1.055	1.086	1.111	1.128	1.153
1994	0.882	0.919	0.947	0.975	1.000	1.028	1.059	1.083	1.100	1.124
1995	0.858	0.894	0.921	0.948	0.972	1.000	1.030	1.053	1.070	1.093
1996	0.833	0.868	0.894	0.921	0.945	0.971	1.000	1.023	1.039	1.062
1997	0.814	0.849	0.874	0.900	0.923	0.950	0.978	1.000	1.016	1.038
1998	0.802	0.836	0.861	0.887	0.909	0.935	0.963	0.985	1.000	1.022
1999	0.785	0.818	0.842	0.867	0.890	0.915	0.942	0.963	0.978	1.000
2000	0.759	0.791	0.815	0.839	0.861	0.885	0.911	0.932	0.947	0.967
2001	0.738	0.769	0.792	0.816	0.837	0.861	0.886	0.906	0.920	0.941
2002	0.727	0.757	0.780	0.803	0.824	0.847	0.872	0.892	0.906	0.926
2003	0.710	0.740	0.763	0.785	0.805	0.828	0.853	0.872	0.886	0.905
2004	0.692	0.721	0.743	0.765	0.785	0.807	0.831	0.850	0.863	0.882
2005	0.669	0.697	0.718	0.740	0.759	0.780	0.803	0.822	0.835	0.853
2006	0.648	0.676	0.696	0.717	0.735	0.756	0.778	0.796	0.809	0.826
2007	0.630	0.657	0.677	0.697	0.715	0.735	0.757	0.774	0.786	0.804
2008	0.607	0.633	0.652	0.671	0.688	0.708	0.729	0.745	0.757	0.774

Table B.17
Consumer Price Inflation (CPI) Index (Continued)

From:	2000	2001	2002	2003	2004	2005	2006	2007	2008
1970	4.438	4.564	4.637	4.742	4.869	5.034	5.196	5.344	5.549
1971	4.252	4.373	4.442	4.543	4.664	4.822	4.978	5.120	5.316
1972	4.120	4.237	4.304	4.402	4.519	4.672	4.823	4.960	5.151
1973	3.878	3.989	4.052	4.144	4.255	4.399	4.541	4.670	4.849
1974	3.493	3.592	3.649	3.732	3.832	3.961	4.089	4.206	4.367
1975	3.201	3.292	3.344	3.420	3.511	3.630	3.747	3.854	4.002
1976	3.026	3.112	3.162	3.234	3.320	3.432	3.543	3.644	3.784
1977	2.842	2.922	2.969	3.036	3.117	3.223	3.327	3.421	3.553
1978	2.641	2.716	2.759	2.822	2.897	2.995	3.092	3.180	3.302
1979	2.372	2.439	2.478	2.534	2.602	2.690	2.777	2.856	2.966
1980	2.090	2.149	2.183	2.233	2.292	2.370	2.447	2.516	2.613
1981	1.894	1.948	1.979	2.024	2.078	2.149	2.218	2.281	2.369
1982	1.784	1.835	1.864	1.907	1.958	2.024	2.089	2.149	2.231
1983	1.729	1.778	1.806	1.847	1.897	1.961	2.024	2.082	2.162
1984	1.657	1.705	1.731	1.771	1.818	1.880	1.940	1.996	2.072
1985	1.600	1.646	1.672	1.710	1.756	1.815	1.874	1.927	2.001
1986	1.571	1.616	1.641	1.679	1.724	1.782	1.839	1.892	1.964
1987	1.516	1.559	1.584	1.620	1.663	1.719	1.775	1.825	1.895
1988	1.456	1.497	1.521	1.555	1.597	1.651	1.704	1.753	1.820
1989	1.389	1.428	1.451	1.484	1.523	1.575	1.626	1.672	1.736
1990	1.318	1.355	1.376	1.408	1.445	1.494	1.542	1.586	1.647
1991	1.264	1.300	1.321	1.351	1.387	1.434	1.480	1.522	1.581
1992	1.227	1.262	1.282	1.311	1.346	1.392	1.437	1.478	1.535
1993	1.192	1.226	1.245	1.273	1.307	1.352	1.395	1.435	1.490
1994	1.162	1.195	1.214	1.242	1.275	1.318	1.360	1.399	1.453
1995	1.130	1.162	1.180	1.207	1.240	1.281	1.323	1.360	1.413
1996	1.098	1.129	1.147	1.173	1.204	1.245	1.285	1.321	1.372
1997	1.073	1.103	1.121	1.146	1.177	1.217	1.256	1.292	1.341
1998	1.056	1.087	1.104	1.129	1.159	1.198	1.237	1.272	1.321
1999	1.034	1.063	1.080	1.104	1.134	1.172	1.210	1.245	1.292
2000	1.000	1.028	1.045	1.069	1.097	1.134	1.171	1.204	1.250
2001	0.972	1.000	1.016	1.039	1.067	1.103	1.138	1.171	1.216
2002	0.957	0.984	1.000	1.023	1.050	1.086	1.121	1.153	1.197
2003	0.936	0.963	0.978	1.000	1.027	1.061	1.096	1.127	1.170
2004	0.912	0.938	0.952	0.974	1.000	1.034	1.067	1.098	1.140
2005	0.882	0.907	0.921	0.942	0.967	1.000	1.032	1.062	1.102
2006	0.854	0.878	0.892	0.913	0.937	0.969	1.000	1.028	1.068
2007	0.831	0.854	0.868	0.887	0.911	0.942	0.972	1.000	1.038
2008	0.800	0.823	0.836	0.855	0.877	0.907	0.936	0.963	1.000

Source:
U.S. Bureau of Labor Statistics.

Table B.18
Gross National Product Implicit Price Deflator

From:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1970	1.000	1.050	1.096	1.157	1.261	1.380	1.460	1.553	1.662	1.800
1971	0.952	1.000	1.043	1.102	1.201	1.315	1.391	1.479	1.583	1.714
1972	0.913	0.958	1.000	1.056	1.151	1.260	1.333	1.418	1.517	1.643
1973	0.864	0.908	0.947	1.000	1.090	1.193	1.262	1.342	1.437	1.556
1974	0.793	0.833	0.869	0.917	1.000	1.094	1.158	1.231	1.318	1.427
1975	0.724	0.761	0.794	0.838	0.914	1.000	1.058	1.125	1.204	1.304
1976	0.685	0.719	0.750	0.792	0.864	0.945	1.000	1.064	1.138	1.233
1977	0.644	0.676	0.705	0.745	0.812	0.889	0.940	1.000	1.070	1.159
1978	0.602	0.632	0.659	0.696	0.759	0.830	0.878	0.934	1.000	1.083
1979	0.555	0.583	0.609	0.643	0.701	0.767	0.811	0.863	0.923	1.000
1980	0.509	0.535	0.558	0.589	0.642	0.703	0.744	0.791	0.847	0.917
1981	0.466	0.489	0.510	0.539	0.587	0.643	0.680	0.723	0.774	0.838
1982	0.439	0.461	0.481	0.508	0.553	0.606	0.641	0.682	0.729	0.790
1983	0.422	0.443	0.462	0.488	0.532	0.583	0.616	0.656	0.702	0.760
1984	0.407	0.427	0.446	0.471	0.513	0.562	0.594	0.632	0.676	0.732
1985	0.395	0.415	0.433	0.457	0.498	0.545	0.576	0.613	0.656	0.711
1986	0.386	0.406	0.423	0.447	0.487	0.533	0.564	0.600	0.642	0.695
1987	0.376	0.395	0.412	0.435	0.477	0.519	0.549	0.584	0.625	0.677
1988	0.364	0.382	0.398	0.421	0.459	0.502	0.531	0.565	0.604	0.654
1989	0.350	0.368	0.384	0.405	0.442	0.483	0.511	0.544	0.582	0.631
1990	0.337	0.354	0.369	0.390	0.425	0.465	0.492	0.524	0.561	0.607
1991	0.326	0.342	0.357	0.377	0.411	0.450	0.476	0.506	0.542	0.587
1992	0.319	0.334	0.349	0.369	0.402	0.440	0.465	0.495	0.530	0.573
1993	0.311	0.327	0.341	0.360	0.393	0.430	0.455	0.483	0.517	0.560
1994	0.305	0.320	0.334	0.353	0.384	0.421	0.445	0.473	0.507	0.549
1995	0.299	0.314	0.327	0.346	0.377	0.412	0.436	0.464	0.497	0.538
1996	0.293	0.308	0.321	0.339	0.370	0.405	0.428	0.455	0.487	0.528
1997	0.288	0.303	0.316	0.334	0.364	0.398	0.421	0.448	0.479	0.519
1998	0.285	0.299	0.312	0.330	0.360	0.394	0.416	0.443	0.474	0.513
1999	0.281	0.295	0.308	0.325	0.355	0.388	0.410	0.437	0.467	0.506
2000	0.275	0.289	0.301	0.318	0.347	0.380	0.402	0.427	0.457	0.495
2001	0.269	0.282	0.294	0.311	0.339	0.371	0.392	0.417	0.447	0.484
2002	0.264	0.277	0.289	0.306	0.333	0.365	0.386	0.410	0.439	0.475
2003	0.259	0.272	0.283	0.299	0.326	0.357	0.378	0.402	0.430	0.465
2004	0.251	0.264	0.276	0.291	0.317	0.347	0.367	0.391	0.418	0.453
2005	0.244	0.256	0.267	0.282	0.308	0.337	0.356	0.379	0.406	0.439
2006	0.236	0.248	0.259	0.273	0.298	0.326	0.345	0.367	0.392	0.425
2007	0.230	0.241	0.252	0.266	0.290	0.317	0.335	0.357	0.382	0.413
2008	0.225	0.236	0.246	0.260	0.283	0.310	0.328	0.349	0.374	0.405

Table B.18
Gross National Product Implicit Price Deflator (Continued)

From:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1970	1.963	2.148	2.279	2.369	2.458	2.533	2.589	2.660	2.751	2.855
1971	1.870	2.046	2.170	2.256	2.341	2.413	2.466	2.533	2.620	2.719
1972	1.792	1.960	2.080	2.162	2.244	2.312	2.363	2.428	2.510	2.606
1973	1.697	1.857	1.970	2.048	2.125	2.190	2.238	2.299	2.378	2.468
1974	1.557	1.703	1.807	1.879	1.949	2.009	2.053	2.109	2.181	2.264
1975	1.422	1.556	1.651	1.716	1.781	1.835	1.876	1.927	1.993	2.068
1976	1.344	1.471	1.561	1.623	1.683	1.735	1.773	1.822	1.884	1.955
1977	1.264	1.383	1.467	1.525	1.583	1.631	1.667	1.713	1.771	1.838
1978	1.181	1.292	1.371	1.425	1.479	1.524	1.557	1.600	1.655	1.717
1979	1.091	1.193	1.266	1.316	1.366	1.407	1.438	1.478	1.528	1.586
1980	1.000	1.094	1.161	1.207	1.252	1.290	1.319	1.355	1.401	1.454
1981	0.914	1.000	1.061	1.103	1.144	1.179	1.205	1.238	1.281	1.329
1982	0.861	0.943	1.000	1.040	1.079	1.112	1.136	1.167	1.207	1.253
1983	0.829	0.907	0.962	1.000	1.038	1.069	1.093	1.123	1.161	1.205
1984	0.799	0.874	0.927	0.964	1.000	1.031	1.053	1.082	1.119	1.161
1985	0.775	0.848	0.900	0.935	0.970	1.000	1.022	1.050	1.086	1.127
1986	0.758	0.830	0.880	0.915	0.950	0.978	1.000	1.027	1.063	1.103
1987	0.738	0.808	0.857	0.891	0.924	0.952	0.973	1.000	1.034	1.073
1988	0.714	0.781	0.828	0.861	0.894	0.921	0.941	0.967	1.000	1.038
1989	0.688	0.752	0.798	0.830	0.861	0.887	0.907	0.932	0.963	1.000
1990	0.662	0.724	0.768	0.799	0.829	0.854	0.873	0.897	0.928	0.963
1991	0.640	0.700	0.743	0.772	0.801	0.825	0.844	0.867	0.896	0.930
1992	0.625	0.684	0.726	0.755	0.783	0.807	0.825	0.847	0.876	0.909
1993	0.611	0.669	0.709	0.738	0.765	0.789	0.806	0.828	0.856	0.889
1994	0.598	0.655	0.695	0.722	0.749	0.772	0.789	0.811	0.838	0.870
1995	0.586	0.642	0.681	0.708	0.734	0.757	0.773	0.794	0.822	0.853
1996	0.575	0.630	0.668	0.694	0.721	0.743	0.759	0.780	0.806	0.837
1997	0.566	0.619	0.657	0.683	0.709	0.730	0.746	0.767	0.793	0.823
1998	0.560	0.613	0.650	0.676	0.701	0.722	0.738	0.759	0.784	0.814
1999	0.552	0.604	0.641	0.666	0.691	0.712	0.728	0.748	0.773	0.803
2000	0.540	0.591	0.627	0.652	0.676	0.697	0.712	0.732	0.757	0.785
2001	0.528	0.577	0.612	0.637	0.660	0.681	0.696	0.715	0.739	0.767
2002	0.518	0.567	0.602	0.626	0.649	0.669	0.684	0.702	0.726	0.754
2003	0.508	0.555	0.589	0.613	0.636	0.655	0.669	0.688	0.711	0.738
2004	0.494	0.540	0.573	0.596	0.618	0.637	0.651	0.669	0.692	0.718
2005	0.479	0.524	0.556	0.578	0.600	0.618	0.632	0.649	0.671	0.697
2006	0.463	0.507	0.538	0.559	0.580	0.598	0.611	0.628	0.649	0.674
2007	0.451	0.493	0.523	0.544	0.564	0.582	0.594	0.611	0.632	0.656
2008	0.441	0.483	0.512	0.533	0.533	0.569	0.582	0.598	0.618	0.642

Table B.18
Gross National Product Implicit Price Deflator (Continued)

From:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1970	2.966	3.069	3.140	3.212	3.281	3.348	3.412	3.468	3.507	3.557
1971	2.824	2.923	2.990	3.059	3.124	3.189	3.249	3.303	3.340	3.388
1972	2.707	2.801	2.865	2.932	2.994	3.056	3.114	3.165	3.200	3.247
1973	2.563	2.653	2.714	2.777	2.836	2.894	2.949	2.998	3.031	3.075
1974	2.351	2.433	2.489	2.547	2.601	2.655	2.705	2.750	2.780	2.821
1975	2.148	2.224	2.274	2.327	2.377	2.426	2.472	2.513	2.540	2.577
1976	2.031	2.102	2.150	2.200	2.247	2.293	2.336	2.375	2.401	2.436
1977	1.909	1.976	2.021	2.068	2.112	2.156	2.197	2.233	2.258	2.290
1978	1.784	1.846	1.889	1.932	1.974	2.014	2.052	2.086	2.109	2.140
1979	1.647	1.705	1.744	1.785	1.822	1.860	1.895	1.927	1.948	1.976
1980	1.510	1.563	1.599	1.636	1.671	1.705	1.738	1.767	1.786	1.812
1981	1.381	1.429	1.462	1.496	1.527	1.559	1.588	1.615	1.633	1.656
1982	1.301	1.347	1.378	1.410	1.440	1.469	1.497	1.522	1.539	1.561
1983	1.252	1.295	1.325	1.356	1.385	1.413	1.440	1.464	1.480	1.501
1984	1.206	1.249	1.277	1.307	1.335	1.362	1.388	1.411	1.426	1.447
1985	1.171	1.212	1.239	1.268	1.295	1.322	1.347	1.369	1.384	1.404
1986	1.145	1.186	1.213	1.241	1.267	1.293	1.318	1.340	1.354	1.374
1987	1.115	1.154	1.180	1.208	1.233	1.259	1.283	1.304	1.318	1.337
1988	1.078	1.116	1.141	1.168	1.193	1.217	1.240	1.261	1.275	1.293
1989	1.039	1.075	1.100	1.125	1.149	1.173	1.195	1.215	1.228	1.246
1990	1.000	1.035	1.059	1.083	1.106	1.129	1.150	1.170	1.182	1.200
1991	0.966	1.000	1.023	1.047	1.069	1.091	1.112	1.130	1.143	1.159
1992	0.945	0.978	1.000	1.023	1.045	1.066	1.087	1.105	1.117	1.133
1993	0.923	0.955	0.977	1.000	1.021	1.042	1.062	1.080	1.092	1.107
1994	0.904	0.935	0.957	0.979	1.000	1.021	1.040	1.057	1.069	1.084
1995	0.886	0.917	0.938	0.959	0.980	1.000	1.019	1.036	1.047	1.062
1996	0.869	0.900	0.920	0.942	0.962	0.981	1.000	1.017	1.028	1.043
1997	0.855	0.885	0.905	0.926	0.946	0.965	0.984	1.000	1.011	1.026
1998	0.846	0.875	0.895	0.916	0.936	0.955	0.973	0.989	1.000	1.014
1999	0.834	0.863	0.883	0.903	0.922	0.941	0.959	0.975	0.986	1.000
2000	0.816	0.844	0.864	0.884	0.903	0.921	0.939	0.954	0.965	0.979
2001	0.797	0.825	0.844	0.863	0.882	0.900	0.917	0.932	0.942	0.956
2002	0.783	0.811	0.829	0.848	0.866	0.884	0.901	0.916	0.926	0.939
2003	0.767	0.794	0.812	0.831	0.848	0.866	0.882	0.897	0.907	0.920
2004	0.746	0.772	0.789	0.808	0.825	0.842	0.858	0.872	0.882	0.894
2005	0.724	0.749	0.766	0.784	0.801	0.817	0.833	0.846	0.856	0.868
2006	0.700	0.724	0.741	0.758	0.774	0.790	0.805	0.819	0.828	0.840
2007	0.681	0.705	0.721	0.738	0.753	0.769	0.783	0.796	0.805	0.817
2008	0.667	0.690	0.706	0.722	0.737	0.753	0.767	0.780	0.788	0.800

Table B.18
Gross National Product Implicit Price Deflator (Continued)

From:	2000	2001	2002	2003	2004	2005	2006	2007	2008
1970	3.635	3.722	3.787	3.867	3.977	4.097	4.237	4.355	4.449
1971	3.462	3.544	3.606	3.683	3.787	3.902	4.035	4.147	4.237
1972	3.317	3.397	3.456	3.529	3.630	3.739	3.867	3.975	4.061
1973	3.142	3.217	3.273	3.343	3.438	3.542	3.662	3.764	3.846
1974	2.882	2.951	3.002	3.066	3.153	3.249	3.359	3.453	3.528
1975	2.633	2.696	2.743	2.802	2.881	2.968	3.069	3.155	3.223
1976	2.489	2.549	2.593	2.648	2.723	2.806	2.901	2.982	3.047
1977	2.340	2.396	2.438	2.490	2.561	2.638	2.728	2.804	2.865
1978	2.186	2.239	2.278	2.326	2.392	2.465	2.548	2.620	2.676
1979	2.019	2.067	2.103	2.148	2.209	2.276	2.353	2.419	2.472
1980	1.851	1.896	1.929	1.970	2.026	2.087	2.158	2.218	2.266
1981	1.692	1.733	1.763	1.800	1.852	1.908	1.972	2.027	2.071
1982	1.595	1.633	1.662	1.697	1.745	1.798	1.859	1.911	1.952
1983	1.534	1.571	1.598	1.632	1.679	1.729	1.788	1.838	1.878
1984	1.479	1.514	1.540	1.573	1.618	1.667	1.723	1.772	1.810
1985	1.435	1.469	1.495	1.527	1.570	1.617	1.672	1.719	1.756
1986	1.404	1.438	1.463	1.494	1.536	1.583	1.636	1.682	1.719
1987	1.366	1.399	1.424	1.454	1.495	1.540	1.593	1.637	1.673
1988	1.321	1.353	1.377	1.406	1.446	1.490	1.540	1.583	1.617
1989	1.273	1.304	1.326	1.355	1.393	1.435	1.484	1.525	1.558
1990	1.226	1.255	1.277	1.304	1.341	1.382	1.429	1.468	1.500
1991	1.184	1.213	1.234	1.260	1.296	1.335	1.380	1.419	1.450
1992	1.158	1.185	1.206	1.232	1.267	1.305	1.349	1.387	1.417
1993	1.131	1.159	1.179	1.204	1.238	1.275	1.319	1.356	1.385
1994	1.108	1.134	1.154	1.179	1.212	1.249	1.291	1.327	1.356
1995	1.086	1.112	1.131	1.155	1.188	1.224	1.265	1.301	1.329
1996	1.065	1.091	1.110	1.134	1.166	1.201	1.242	1.276	1.304
1997	1.048	1.073	1.092	1.115	1.147	1.181	1.222	1.256	1.283
1998	1.037	1.061	1.080	1.103	1.134	1.168	1.208	1.242	1.269
1999	1.022	1.046	1.064	1.087	1.118	1.152	1.191	1.224	1.251
2000	1.000	1.024	1.042	1.064	1.094	1.127	1.166	1.198	1.224
2001	0.977	1.000	1.017	1.039	1.069	1.101	1.138	1.170	1.195
2002	0.960	0.983	1.000	1.021	1.050	1.082	1.119	1.150	1.175
2003	0.940	0.962	0.979	1.000	1.028	1.059	1.096	1.126	1.150
2004	0.914	0.936	0.952	0.972	1.000	1.030	1.065	1.095	1.118
2005	0.887	0.908	0.924	0.944	0.970	1.000	1.031	1.060	1.083
2006	0.858	0.878	0.894	0.913	0.939	0.969	1.000	1.027	1.049
2007	0.835	0.855	0.870	0.888	0.914	0.943	0.974	1.000	1.022
2008	0.817	0.837	0.851	0.869	0.894	0.923	0.953	0.979	1.000

Source:

U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Washington, DC, monthly.

