October 2001



# NationalEconomicTrends

# Give Me Your Skilled....

A previous issue of *National Economic Trends* (January 2001) identified the role of immigration in sustaining the rate of U.S. population growth in the face of a declining birth rate. A related issue is whether changes in immigration policy could help the federal government finance the increase in transfer payments—Social Security and Medicare—that will occur when the baby-boom generation retires.

A recent article suggests that immigration policy could be reformed with this goal in mind.<sup>1</sup> Storesletten (2000) considers the differences between immigrants and the native population and their implications for the projected fiscal burden of the retirement of the baby boomers. His findings suggest that a selective immigration policy one that would increase the inflow of medium- and highskilled immigrants of working age—would generate additional tax revenue without a commensurate increase in government spending.

For immigration to have such a beneficial impact, policies that influence the characteristics of individual immigrants ought to receive as much attention as policies that determine the number of immigrants admitted. Currently, on average, immigrants are younger than the nativeborn. According to the March 2000 Current Population Survey (CPS) of the Census Bureau, 79.0 percent of the foreign-born were between the ages of 18 and 64 years, compared with 59.7 percent of the native population. And 43.6 percent of the foreign-born were between the ages of 25 and 44 years, compared with only 28.6 percent of the native population.

The level of skills and education is also more variable across the foreign-born population than it is across the native population. According to the March 2000 CPS, about 22.2 percent of the foreign-born had less than a 9th grade education, compared with 4.7 percent of the native population. The proportions that hold a bachelor's degree or higher education were much more balanced: 25.8 percent among the foreign-born and 25.6 percent among the native population.

Storesletten finds that an increase in the inflow of lowskilled immigrants alone would not be sufficient to maintain balance in future fiscal budgets. Nor is the average skill level of *current* immigrants high enough to maintain a balanced budget in the long run. Storesletten argues, however, that an increase in the relative inflow of mediumand high-skilled immigrants of working age would enable the government to make promised transfer payments without resorting to tax increases or spending cuts.

Under current immigration policy, it is not clear whether the average skill level of immigrants has been trending up or down. Studies of the Census and CPS data suggest that the average skill level of new immigrants has been declining since the 1980s relative to the native population. An opposing study, however, disputes this finding—at least with respect to legal immigrants—using data from the Immigration and Naturalization Service.<sup>2</sup> It is clear, however, that current immigration policy does not explicitly aim to achieve a high average skill level among new immigrants.

Designing a selective immigration policy would undoubtedly prove difficult, as many past immigrants count on being able to sponsor family members immigrating to this country, regardless of their skill level. Nevertheless, the United States could follow Canada and Australia in implementing a preference system for potential immigrants that would give some weight to family ties as well as skills. As the political process addresses immigration issues, it is worth considering the potential economic impact of switching from the current, rather passive, system to a skill-based, strategic immigration policy.

#### -Rubén Hernández-Murillo

<sup>1</sup>Storesletten, Kjetil. "Sustaining Fiscal Policy Through Immigration," *Journal of Political Economy*, Vol. 108 (2), April 2000, pp. 300-23.

<sup>2</sup>Jasso, Guillermina, Mark R. Rosenzweig and James P. Smith. "The Changing Skill of New Immigrants to the United States: Recent Trends and Their Determinants," NBER Working Paper No. 6764, October 1998.



Views expressed do not necessarily reflect official positions of the Federal Reserve System.

# **Tableof**Contents

#### Page

- 3 Economy at a glance
- 4 Output and growth
- 7 Interest rates
- 8 Inflation and prices
- 10 Labor markets
- 12 Consumer spending
- 14 Investment spending
- 16 Government revenues, spending, and debt
- 18 International trade
- 20 Productivity and profits
- 22 Quick reference tables
- 27 Notes and sources

#### Conventions used in this publication:

- 1. Shaded areas indicate recessions, as determined by the National Bureau of Economic Research.
- Percent change refers to simple percent changes. Percent change from year ago refers to the percent change from the same month or quarter in the previous year. The percent change at annual rate shows what the growth rate would be over an entire year if the same simple percent change continued for four quarters or twelve months. The percent change at annual rate of X between the previous quarter t-1 and the current quarter t is:

$$100 \times \left[ \left( \frac{X_t}{X_{t-1}} \right)^4 - 1 \right]$$

For monthly data replace 4 with 12.

3. All data with significant seasonal patterns are seasonally adjusted, unless labeled NSA.

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#### **Real GDP Growth**





#### **Industrial Production**



# **Change in Nonfarm Payrolls**



#### **Consumer Price Index**



# **Interest Rates**

Percent 8 –



# Unemployment Rate



NAPM

42

#### **Real Gross Domestic Product**

-6

0

-8 –

- 4





Real Change in Private Inventories



76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01

#### Real Final Sales and GDP



#### Industrial Production and NAPM Index



# Aggregate Private Nonfarm Hours



#### **Real Change in Private Inventories**



#### **Real GDP Revisions**



#### **Nominal Gross Domestic Product**



# Average Weekly Private Nonfarm Hours

Hours 34.75 -



# Inventory-Sales Ratio



# Contribution of Components to Real GDP Growth Percent change at annual rate

-6 99Q3 99Q4 00Q1 00Q2 00Q3 00Q4 01Q1 01Q2 Exports Consumption Real GDP Government Imports Inventories Investment

# Contributions to Real GDP Growth Rate

	1999		2000				2001	
	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Real GDP	4.65	8.29	2.35	5.69	1.34	1.91	1.32	0.31
Final Sales	4.21	6.14	4.67	3.93	2.29	2.41	3.93	0.73
Change in Inventory	0.44	2.15	-2.32	1.76	-0.95	-0.50	-2.61	-0.42
Consumption	2.98	3.96	3.94	2.50	2.88	2.14	2.05	1.72
Fixed Investment Nonresidential Residential	1.22 1.25 -0.03	0.84 0.76 0.08	2.24 1.88 0.36	1.49 1.52 –0.03	0.44 0.91 -0.47	0.09 0.13 -0.05	0.33 -0.02 0.35	-1.74 -1.99 0.25
<b>Government</b> Federal State and Local	0.77 0.43 0.34	1.50 0.85 0.65	-0.20 -0.84 0.64	0.78 0.90 -0.12	-0.32 -0.66 0.34	0.58 0.27 0.31	0.92 0.19 0.73	0.87 0.11 0.76
Net Exports Exports Imports	-0.76 0.99 -1.76	-0.15 1.27 -1.43	-1.32 0.95 -2.26	-0.84 1.42 -2.26	-0.70 1.13 -1.84	-0.39 -0.46 0.07	0.63 -0.13 0.76	-0.12 -1.37 1.25
Residual	0.18	-0.23	0.53	-0.47	0.22	-0.08	0.39	0.38

#### **Interest Rates**



#### **Treasury Yield Curve**



#### Standard and Poor's 500 Index with Reinvested Dividends





#### **NIPA Chain Price Indexes**



#### **Consumer Price Index**



#### **Producer Price Index, Finished Goods**

Percent change from year ago



#### Employment Cost Index and Compensation per Hour





#### **Consumer Price Index**



#### Producer Price Index, Finished Goods



#### **Employment Cost Index**



#### **Crude Oil and Natural Gas Prices**



# **Consumption Chain Price Index**



# Unit Labor Cost



# Compensation per Hour



#### Employment





#### **Duration of Unemployment**



#### **Change in Nonfarm Payrolls**



#### Change in Household Employment



#### Available Labor Supply and Components



#### **Change in Manufacturing Payrolls**





#### Labor Force and Population

Percent change from year ago 2.5 -



# Unemployment Rate and Help-Wanted Advertising Index



#### **Real Disposable Personal Income**



#### **Real Consumption**



#### **Retail and Food Services Sales**



#### Debt Service Payments as a Percent of Disposable Income and Household Debt Outstanding





#### **Real Consumption**



# **Retail and Food Services Sales**

Percent change



#### Consumer Sentiment (U. of Michigan)



#### Personal Saving Rate



# **Real Consumption**



# **Real Durables Consumption and Vehicle Sales**



# **Real Durables Consumption**



10/01/01

#### Investment



#### **Private Fixed Investment**



#### Real Nonresidential Fixed and Equipment & Software Investment



#### **Real Residential Fixed Investment**



#### Gross Saving Rates and Net Foreign Investment



#### **Real Private Fixed Investment**



#### **Real Equipment & Software Investment**



#### **Real Residential Fixed Investment**



#### Nondefense Capital Goods Orders

Percent change from year ago, excluding aircraft



#### **Real Nonresidential Fixed Investment**



#### Housing Starts and New Home Sales



# National Economic Trends



#### **Government Receipts and Outlays**

Percent of GDP



#### **Government Budgets** Billions of dolla

Dimons			<b>National Inco</b> Calenda	<b>me Accounts</b> ar Years			F	<b>hified Budget</b> iscal Years		
	S	tate and Local			Federal			Federal		
	Receipts	Expenditures	Surplus or Deficit(-)	Receipts	Expenditures	Surplus or Deficit(-)	Receipts	Outlays	Surplus or Deficit(-)	
1980	316.6	307.8	8.8	522.8	576.6	-53.8	517.1	590.9	-73.8	
1981	344.4	336.9	7.5	605.6	659.3	-53.7	599.3	678.2	-79.0	
1982	360.3	362.5	-2.2	599.5	732.1	-132.6	617.8	745.8	-128.0	
1983	392.1	387.3	4.8	623.9	797.8	-173.9	600.6	808.4	-207.8	
1984	436.4	412.6	23.8	688.1	856.1	-168.0	666.5	851.9	-185.4	
1985	469.2	447.0	22.2	747.4	924.6	-177.2	734.1	946.4	-212.3	
1986	507.9	487.2	20.7	786.4	978.5	-192.1	769.2	990.5	-221.2	
1987	536.0	523.8	12.2	870.5	1018.4	-147.9	854.4	1004.1	-149.8	
1988	573.7	558.1	15.6	928.9	1066.2	-137.3	909.3	1064.5	-155.2	
1989	618.9	599.6	19.3	1010.3	1140.3	-130.0	991.2	1143.7	-152.5	
1990	663.4	660.8	2.6	1055.7	1228.7	-173.0	1032.0	1253.2	-221.2	
1991	716.0	723.8	-7.8	1072.3	1287.6	-215.3	1055.0	1324.4	-269.4	
1992	772.2	777.2	-5.0	1121.3	1418.9	-297.6	1091.3	1381.7	-290.4	
1993	823.2	821.7	1.5	1197.3	1471.5	-274.2	1154.4	1409.5	-255.1	
1994	873.8	865.2	8.6	1293.7	1506.0	-212.3	1258.6	1461.9	-203.3	
1995	917.9	902.5	15.4	1383.7	1575.7	-192.0	1351.8	1515.8	-164.0	
1996	960.4	939.0	21.4	1499.1	1635.9	-136.8	1453.1	1560.6	-107.5	
1997	1011.3	980.3	31.0	1625.5	1678.8	-53.3	1579.3	1601.3	-22.0	
1998	1074.4	1033.7	40.7	1749.7	1705.9	43.8	1721.8	1652.6	69.2	
1999	1143.8	1101.7	42.1	1872.8	1753.6	119.2	1827.5	1702.9	124.6	
2000	1222.6	1189.8	32.8	2046.8	1828.3	218.5	2025.2	1788.8	236.4	



#### **Change in Federal Debt**



#### Federal Government Debt

Billions of dollars, end of month or fiscal year,

#### Federal Surplus (+) / Deficit (-)



# Federal Surplus (+) / Deficit (-), Unified Basis



excluding agency-issu		Jaap pau	Held by	Held b	by Public	Held by Private Investors			
		Total Public Debt	Agencies and Trusts	Total	Federal Reserve Banks	Total	Foreign and International		
1998		5526.2	1765.6	3760.6	446.0	3313.2	1224.2		
1999		5656.3	1989.1	3667.2	489.0	3175.4	1281.4		
2000		5674.2	2235.7	3438.5	511.4	2936.2	1224.9		
1998	March	5542.4	1670.4	3872.1	433.2	3437.5	1250.5		
	June	5547.9	1757.6	3790.4	439.8	3349.3	1256.0		
	September	5526.2	1765.6	3760.6	446.0	3313.2	1224.2		
	December	5614.2	1826.8	3787.4	452.1	3334.0	1278.7		
1999	March	5651.6	1857.1	3794.6	465.7	3327.5	1272.3		
	June	5638.8	1953.6	3685.2	484.9	3199.2	1258.8		
	September	5656.3	1989.1	3667.2	489.0	3175.4	1281.4		
	December	5776.1	2060.6	3715.5	478.0	3233.9	1268.7		
2000	March	5773.4	2085.4	3688.0	501.7	3182.8	1273.9		
	June	5685.9	2190.2	3495.7	505.0	2987.4	1249.1		
	September	5674.2	2235.7	3438.5	511.4	2936.2	1224.9		
	December	5662.2	2248.7	3413.5	511.7	2880.4	1201.3		
2001	March	5773.7	2339.4	3434.4	523.9	2892.9	1196.1		
	June	5726.8	2452.6	3274.2	535.1	2722.6	1167.1		





#### **Exchange Rates**







#### **Goods Import Shares, 2000**



#### Trade Balance



#### **Current Account Balance**



# **Real GDP Growth of Major Trading Partners**



#### Goods Trade



# Services Trade



Germany 8 4 2 -2 1999 2000 France



2000

Ι

Т

2001

Federal Reserve Bank of St. Louis

-30 -

1999

#### Output per Hour and Capacity Utilization, Manufacturing



#### Nonfarm Compensation per Hour



#### Output per Hour, Nonfarm Business and Nonfarm, Nonfinancial Corporations





#### Manufacturing Output per Hour



# Selected Component Shares of National Income



#### Corporate Profits after Tax (with IVA and CCAdj)



# National Economic Trends

	Nom	inal GDP Percent_cha	ange		Real GDP Percent_c	hange	Fir	nal Sales Percent ch	nange	Ch Private Inv	ange in ventories
	Billions of \$	Annual rate	Year ago	Billions of 1996 \$	Annual rate	Year ago	Billions of 1996 \$	Annual rate	Year ago	<u>Billions</u> Last qtr	of 1996 \$ Year/Year ago
1997	8318.4		6.5	8159.450		4.4	8095.204		4.0		63.757
1998	8781.5		5.6	8508.933		4.3	8431.826		4.2		76.727
1999	9268.6		5.5	8856.541		4.1	8792.031		4.3		62.106
2000	9872.9		6.5	9223.994		4.1	9167.025		4.3		50.587
1998 1	8627.8	7.2	6.2	8396.345	6.1	4.7	8286.592	4.0	4.0	113.143	79.722
2	8697.3	3.3	5.0	8442.912	2.2	3.8	8397.191	5.4	4.4	41.975	68.139
3	8816.5	5.6	5.1	8528.466	4.1	3.8	8454.942	2.8	3.6	71.789	73.252
4	8984.5	7.8	6.0	8667.853	6.7	4.8	8588.501	6.5	4.7	79.999	76.727
1999 1	9093.1	4.9	5.4	8733.483	3.1	4.0	8651.156	3.0	4.4	83.378	69.285
2	9161.4	3.0	5.3	8771.221	1.7	3.9	8735.136	3.9	4.0	32.737	66.976
3	9297.4	6.1	5.5	8871.464	4.7	4.0	8825.577	4.2	4.4	39.558	58.918
4	9522.5	10.0	6.0	9049.917	8.3	4.4	8956.256	6.1	4.3	92.749	62.106
2000 1	9668.7	6.3	6.3	9102.499	2.3	4.2	9061.640	4.8	4.7	28.917	48.490
2	9857.6	8.0	7.6	9229.385	5.7	5.2	9148.501	3.9	4.7	78.942	60.042
3	9937.5	3.3	6.9	9260.091	1.3	4.4	9201.271	2.3	4.3	51.725	63.083
4	10027.9	3.7	5.3	9303.923	1.9	2.8	9256.687	2.4	3.4	42.765	50.587
2001 1	10141.7	4.6	4.9	9334.472	1.3	2.5	9347.828	4.0	3.2	-27.113	36.580
2	10202.6	2.4	3.5	9341.739	0.3	1.2	9364.795	0.7	2.4	-38.287	7.273

	Con	sumption		Durables	Consumption		Private Fix	ed Investment		Nonresid	ential Fixed Inv	estment
		Percent c	hange		Percent of	change	-	Percent c	hange		Percent c	hange
	Billions	Annual	Year	Billions	Annual	Year	Billions	Annual	Year	Billions	Annual	Year
	of 1996 \$	rate	ago	of 1996 \$	rate	ago	of 1996 \$	rate	ago	of 1996 \$	rate	ago
1997	5423.902		3.6	657.347		6.6	1328.630		9.6	1009.344		12.2
1998	5683.734		4.8	726.658		10.5	1479.986		11.4	1135.921		12.5
1999	5968.444		5.0	817.834		12.5	1595.386		7.8	1228.634		8.2
2000	6257.816		4.8	895.529		9.5	1716.207		7.6	1350.670		9.9
1998 1	5576.260	5.1	4.2	692.530	7.0	8.0	1431.442	18.7	12.2	1099.458	21.6	14.4
2	5660.165	6.2	5.3	719.710	16.6	13.1	1471.449	11.7	12.2	1132.260	12.5	14.1
3	5713.745	3.8	4.6	727.101	4.2	8.4	1485.359	3.8	9.5	1136.578	1.5	9.6
4	5784.661	5.1	5.0	767.283	24.0	12.7	1531.720	13.1	11.7	1175.370	14.4	12.3
1999 1	5853.953	4.9	5.0	780.519	7.1	12.7	1558.242	7.1	8.9	1192.630	6.0	8.5
2	5936.129	5.7	4.9	809.499	15.7	12.5	1582.823	6.5	7.6	1214.882	7.7	7.3
3	6000.026	4.4	5.0	827.161	9.0	13.8	1610.836	7.3	8.4	1244.626	10.2	9.5
4	6083.617	5.7	5.2	854.151	13.7	11.3	1629.669	4.8	6.4	1262.408	5.8	7.4
2000 1	6171.712	5.9	5.4	892.126	19.0	14.3	1683.440	13.9	8.0	1309.449	15.8	9.8
2	6226.286	3.6	4.9	886.460	-2.5	9.5	1719.215	8.8	8.6	1347.656	12.2	10.9
3	6292.122	4.3	4.9	904.104	8.2	9.3	1730.056	2.5	7.4	1371.096	7.1	10.2
4	6341.092	3.1	4.2	899.419	-2.1	5.3	1732.106	0.5	6.3	1374.460	1.0	8.9
2001 1	6388.492	3.0	3.5	922.425	10.6	3.4	1740.340	1.9	3.4	1373.911	-0.2	4.9
2	6428.402	2.5	3.2	938.115	7.0	5.8	1696.380	-9.7	-1.3	1320.925	-14.6	-2.0
	1									1		

# National Economic Trends

	GDP Ch	ain Price Index	(	Emplo	oyment Cost Ind	ex hange	E	CI: Wages	nande	[	CI: Benefits	hande
	Index	Annual rate	Year ago	Index	Annual rate	Year ago	Index	Annual rate	Year ago	Index	Annual rate	Year ago
1997 1998 1999 2000	101.950 103.200 104.660 107.040		2.0 1.2 1.4 2.3	133.3 138.0 142.4 148.9		3.1 3.5 3.2 4.6	130.4 135.6 140.3 146.0		3.5 4.0 3.4 4.1	140.2 143.6 147.6 156.0		2.1 2.4 2.8 5.7
1998 1	102.760	1.1	1.4	136.2	3.0	3.5	133.7	4.0	4.0	142.2	1.1	2.4
2	103.020	1.0	1.2	137.3	3.3	3.5	134.8	3.3	3.9	143.1	2.6	2.4
3	103.380	1.4	1.2	138.8	4.4	3.8	136.5	5.1	4.3	144.1	2.8	2.6
4	103.660	1.1	1.1	139.7	2.6	3.3	137.5	3.0	3.9	145.1	2.8	2.3
1999 1	104.100	1.7	1.3	140.2	1.4	2.9	138.1	1.8	3.3	145.3	0.6	2.2
2	104.450	1.4	1.4	141.8	4.6	3.3	139.7	4.7	3.6	146.7	3.9	2.5
3	104.810	1.4	1.4	143.0	3.4	3.0	140.9	3.5	3.2	148.2	4.2	2.8
4	105.280	1.8	1.6	144.6	4.6	3.5	142.3	4.0	3.5	150.2	5.5	3.5
2000 1	106.250	3.7	2.1	146.6	5.6	4.6	143.9	4.6	4.2	153.2	8.2	5.4
2	106.810	2.1	2.3	148.3	4.7	4.6	145.4	4.2	4.1	155.1	5.1	5.7
3	107.310	1.9	2.4	149.7	3.8	4.7	146.7	3.6	4.1	157.0	5.0	5.9
4	107.780	1.8	2.4	151.0	3.5	4.4	147.9	3.3	3.9	158.7	4.4	5.7
2001 1	108.650	3.3	2.3	152.7	4.6	4.2	149.5	4.4	3.9	161.0	5.9	5.1
2	109.220	2.1	2.3	154.2	4.0	4.0	150.9	3.8	3.8	162.5	3.8	4.8

			Exports		1	Imports		Nonfarm	Output per Hour	1	Nonfarm Compensation/Hr			
			Percent	change		Percent	change		Percent cl	hange		Percent c	hange	
		Billions	Annual	Year	Billions	Annual	Year		Annual	Year		Annual	Year	
		of 1996 \$	rate	ago	of 1996 \$	rate	ago	Index	rate	ago	Index	rate	ago	
19	997	981.458		12.3	1094.778		13.7	107.5		2.0	113.1		3.0	
19	998	1002.420		2.1	1223.500		11.8	110.3		2.6	119.2		5.4	
19	999	1034.852		3.2	1351.721		10.5	112.9		2.4	124.4		4.4	
2	000	1133.204		9.5	1532.260		13.4	116.2		2.9	132.0		6.1	
1998	1	1003.364	0.5	6.7	1184.176	15.9	14.5	109.6	4.5	3.2	116.9	6.8	4.6	
	2	993.110	-4.0	1.4	1216.171	11.3	12.6	109.7	0.4	2.2	118.5	5.6	5.6	
	3	987.612	-2.2	-1.7	1228.855	4.2	9.4	110.4	2.6	2.0	120.0	5.2	5.9	
	4	1025.577	16.3	2.3	1264.818	12.2	10.8	111.6	4.4	3.0	121.2	4.1	5.4	
1999	1	1007.560	-6.8	0.4	1290.592	8.4	9.0	112.2	2.2	2.4	122.3	3.7	4.6	
	2	1018.015	4.2	2.5	1331.390	13.3	9.5	111.9	-1.1	2.0	123.6	4.3	4.3	
	3	1041.766	9.7	5.5	1375.106	13.8	11.9	112.7	2.9	2.1	125.1	4.9	4.2	
	4	1072.056	12.1	4.5	1409.808	10.5	11.5	114.7	7.3	2.8	126.4	4.2	4.3	
2000	1	1095.457	9.0	8.7	1466.565	17.1	13.6	114.5	-0.7	2.0	128.4	6.5	5.0	
	2	1130.581	13.5	11.1	1523.380	16.4	14.4	116.3	6.4	3.9	130.7	7.4	5.7	
	3	1159.306	10.6	11.3	1570.554	13.0	14.2	116.7	1.4	3.5	133.0	7.2	6.3	
	4	1147.470	-4.0	7.0	1568.541	-0.5	11.3	117.4	2.4	2.4	135.9	9.0	7.5	
2001	1	1144.061	-1.2	4.4	1548.585	-5.0	5.6	117.4	0.0	2.5	137.6	5.1	7.2	
	2	1108.299	-11.9	-2.0	1515.039	-8.4	-0.5	118.0	2.1	1.5	139.2	4.7	6.5	

		House	nold Survey E	mployment		( Nonfa	rm Payroll Err	nployment		( Non	farm Aggrega	ite Hours	
			-	Percent	change		-	Percent c	hange		Per	cent cha	nge
			-	Annual	Year			Annual	Year		Monthly	Annual	Year
		Thousands	Change	rate	ago	Thousands	Change	rate	ago	Index	rate	rate	ago
	1996	126720	1812		1.5	119589	2402		2.0	136.6			2.4
	1997	129572	2852		2.3	122676	3087		2.6	141.4			3.5
	1998	131471	1898		1.5	125845	3168		2.6	145.2			2.7
	1999	133501	2030		1.5	128901	3056		2.4	148.4			2.2
	2000	135215	1714		1.3	131757	2857		2.2	151.4			2.1
1000		1720.07	670	1.0	1 7	107775	801		2.4	1.17.0	0.7		
1999	2	132923	032	1.9	1.7	12/7/5	001 707	2.5	2.4	147.0	0.5	1.4	1.9
	2	133192	∠69 475	0.8	1.5	120217	727	2.3	2.4	147.9	0.6	2.0	2.2
	4	174267	435	1.5	1.0	129217	715	2.2	2.4	140.7	0.5	Z.I Z 4	2.2
	7	134203	630	1.9	1.5	130107	890	2.0	2.5	149.9	0.8	5.4	2.5
2000	1	135036	774	2.3	1.6	130984	877	2.7	2.5	151.0	0.7	3.0	2.7
	2	135181	145	0.4	1.5	131854	870	2.7	2.6	151.5	0.3	1.2	2.4
	3	135049	-132	-0.4	1.1	131927	74	0.2	2.1	151.5	0.0	0.2	1.9
	4	135593	544	1.6	1.0	132264	336	1.0	1.7	151.6	0.0	0.2	1.1
2001	1	135865	272	0.8	0.6	132559	295	0.9	1.2	152.0	0.2	1.0	0.6
	2	135130	-735	-2.1	-0.0	132483	-76	-0.2	0.5	151.4	-0.4	-1.5	-0.0
		,											
1999	Aua	133565	44	0.4	1.7	129224	206	1.9	2.4	148.7	0.1	0.8	2 1
	Sep	133795	230	2.1	1.3	129410	186	1.7	2.3	148.7	0.0	0.0	2.1
	~ .												
	Oct	134049	254	2.3	1.5	129863	453	4.3	2.5	149.6	0.6	7.5	2.3
	NOV	134241	192	1.7	1.5	130093	230	2.1	2.5	149.9	0.2	2.4	2.5
	Dec	134498	257	2.3	1.4	130365	272	2.5	2.4	150.2	0.2	2.4	2.2
2000	Jan	134976	478	4.3	1.5	130668	303	2.8	2.5	150.7	0.3	4.1	2.8
	Feb	135120	144	1.3	1.7	130843	175	1.6	2.3	150.9	0.1	1.6	2.4
	Mar	135013	-107	-0.9	1.6	131441	598	5.6	2.7	151.4	0.3	4.0	3.1
	Anr	135517	504	4.6	20	131683	242	2 2	26	151.8	03	3 7	28
	May	13/8/3	-674	-5.8	1.2	131909	272	2.2	2.0	151.0	-0.5	-5.4	2.0
	Jun	135183	340	3.1	1.3	131969	60	0.5	2.5	151.5	0.3	3.4	2.2
	hul	474808	095	 0 E	1.0	171800	70			154.0		0.0	2.2
		134090	-265	-2.5	1.0	131099		-0.6	2.2	151.0	0.1	0.0	2.0
	Sep	134939	371	0.4 3 3	1.0	132046	209	-0.0	2.0	151.5	-0.2	-2.5	2.0
	~-+	155510	571	0.0		102040	205	1.5	2.0	101.7	0.0	J.2	2.0
	Nov	135464	154	1.4	1.1	132145	99	0.9	1.8	151.8	0.1	0.8	1.5
	Doo	1354/8	14	0.1	0.9	132279	134	1.2	1./	151.8	0.0	0.0	1.3
	Dec	135836	358	3.2	1.0	132367	88	0.8	1.5	151.2	-0.4	-4.6	0.7
2001	Jan	135999	163	1.4	0.8	132428	61	0.6	1.3	152.2	0.7	8.2	1.0
	Feb	135815	-184	-1.6	0.5	132595	167	1.5	1.3	151.7	-0.3	-3.9	0.5
	Mar	135780	-35	-0.3	0.6	132654	59	0.5	0.9	152.0	0.2	2.4	0.4
	Apr	135354	-426	-3.7	-0.1	132489	-165	-1.5	0.6	151.5	-0.3	-3.9	-0.2
	May	135103	-251	-2.2	0.2	132530	41	0.4	0.5	151.5	0.0	0.0	0.3
	Jun	134932	-171	-1.5	-0.2	132431	-99	-0.9	0.4	151.2	-0.2	-2.4	-0.2
	Jul	135379	447	4.0	0.4	132444	13	0.1	0.4	150.7	-0.3	-3.9	-0.6
	Aug	134393	-986	-8.4	-0.4	132331	-113	-1.0	0.4	150.1	-0.4	-4.7	-0.8

		Reta	il and Food S	ervices Sale	es		Industrial Pr	oduction		Tross	11/1
	Unempl.	Billions	Monthly/	Annual	Year	-	Monthly/	Annual	Year	Yiel	ds
	Rate	of dollars	quarterly	rate	ago	Index	quarterly	rate	ago	3-mo	10 — yr
1996	5.4	2638.816			5.8	119.556			4.6	5.01	6.44
1997	5.0	2769.378			4.9	127.586			6.7	5.06	6.35
1998	4.5	2906.996			5.0	133.669			4.8	4.78	5.26
1999	4.2	3146.523			8.2	139.203			4.1	4.64	5.64
2000	4.0	3385.506			7.6	146.989			5.6	5.82	6.03
1000 1		704 000				170 500					
1999 1	4.5	761.800	2.0	8.4	7.4	136.506	1.0	3.9	3.3	4.41	4.98
2	4.5	777.540	2.1	8.5	1.2	138.137	1.2	4.9 E 0	3.8	4.45	5.54
4	4.2	794.170	2.1	0.0	9.4	140.114	1.4	5.0	4.4	4.05	5.66
	4.1	012.999	2.4	9.0	0.5	142.030	1.4	5.7	5.1	5.04	0.14
2000 1	4.0	839.058	3.2	13.5	10.1	144.365	1.6	6.7	5.8	5.52	6.48
2	4.0	842.109	0.4	1.5	8.3	147.130	1.9	7.9	6.5	5.71	6.18
3	4.0	851.886	1.2	4.7	7.3	148.406	0.9	3.5	5.9	6.02	5.89
4	4.0	852.453	0.1	0.3	4.9	148.055	-0.2	-0.9	4.2	6.02	5.57
2001 1	4.2	863,401	1.3	5.2	2.9	145.481	-1.7	-6.8	0.8	4.82	5.05
2	4.5	874.458	1.3	5.2	3.8	143.854	-1.1	-4.4	-2.2	3.66	5.27
3										3.17	4.98
1999 Sep	4.2	265.999	0.2	2.1	9.3	140.392	0.1	1.0	4.1	4.68	5.92
Oct	4.1	267.076	0.4	5.0	8.1	141.481	0.8	9.7	4.4	4.86	6.11
Nov	4.1	270.712	1.4	17.6	8.8	141.879	0.3	3.4	5.1	5.07	6.03
Dec	4.1	275.211	1.7	21.9	9.7	142.808	0.7	8.1	5.7	5.20	6.28
2000 Jan	4.0	275.864	0.2	2.9	9.6	143.569	0.5	6.6	5.6	5.32	6.66
Feb	4.1	279.909	1.5	19.1	10.0	144.291	0.5	6.2	5.9	5.55	6.52
Mar	4.0	283.285	1.2	15.5	10.8	145.234	0.7	8.1	5.8	5.69	6.26
Apr	4.0	279.961	-1.2	-13.2	8.9	146.266	0.7	8.9	6.4	5.66	5.99
May	4.1	280.447	0.2	2.1	7.9	147.228	0.7	8.2	6.4	5.79	6.44
Jun	4.0	281.701	0.4	5.5	8.1	147.896	0.5	5.6	6.7	5.69	6.10
Jul	4.0	283.035	0.5	5.8	7.8	147.595	-0.2	-2.4	5.7	5.96	6.05
Aug	4.1	283.230	0.1	0.8	6.7	148.650	0.7	8.9	6.0	6.09	5.83
Sep	3.9	285.621	0.8	10.6	7.4	148.973	0.2	2.6	6.1	6.00	5.80
Oct	3.9	285.070	-0.2	-2.3	6.7	148.660	-0.2	-2.5	5.1	6.11	5.74
Nov	4.0	283.648	-0.5	-5.8	4.8	148.206	-0.3	-3.6	4.5	6.17	5.72
Dec	4.0	283.735	0.0	0.4	3.1	147.300	-0.6	-7.1	3.1	5.77	5.24
2001 Jan	4.2	288.054	1.5	19.9	4.4	146.013	-0.9	-10.0	1.7	5.15	5.16
Feb	4.2	288.245	0.1	0.8	3.0	145.443	-0.4	-4.6	0.8	4.88	5.10
Mar	4.3	287.102	-0.4	-4.7	1.3	144.987	-0.3	-3.7	-0.2	4.42	4.89
Apr	4.5	291.116	1.4	18.1	4.0	144.607	-0.3	-3.1	-1.1	3.87	5.14
May	4.4	291.691	0.2	2.4	4.0	144.227	-0.3	-3.1	-2.0	3.62	5.39
Jun	4.5	291.651	-0.0	-0.2	3.5	142.727	-1.0	-11.8	-3.5	3.49	5.28
Jul	4.5	292.128	0.2	2.0	3.2	142.581	-0.1	-1.2	-3.4	3.51	5.24
Aug	4.9	293.083	0.3	4.0	3.5	141.499	-0.8	-8.7	-4.8	3.36	4.97
Sep										2.64	4.73
						1)					

# National Economic Trends

			Consum	er Price Inde	<b>X</b> chance		Consumer Price Index less Food and Energy Percent change					Producer Price Index Finished Goods Percent change				
			Monthly/	Annual	Year	Year		Monthly/	Annual	Year	Year	-	Monthly/	Annual	Year	
		Index	quarterly	rate	ago	to date	Index	quarterly	rate	ago	to date	Index	quarterly	rate	ago	
1	1996	157.0			2.9		165.8			2.7		131.3			2.6	
1	1997	160.6			2.3		169.7			2.4		131.8			0.4	
1	1998	163.1			1.5		173.6			2.3		130.7			-0.9	
1	1999	166.7			2.2		177.2			2.1		133.0			1.8	
		1/2.3			5.4		181.5			2.4		138.0			3.7	
1999	1	164.9	0.4	1.6	1.7	1.6	175.9	0.5	1.9	2.2	1.9	131.4	0.3	1.2	0.7	
	2	166.0	0.7	2.9	2.1	2.2	176.8	0.5	1.9	2.1	1.9	132.3	0.7	2.8	1.3	
	3	167.2	0.7	2.8	2.3	2.4	177.6	0.5	1.9	2.0	1.9	133.6	1.0	4.0	2.3	
	4	168.5	0.8	3.2	2.6	2.6	178.7	0.6	2.4	2.0	2.0	134.8	0.9	3.7	2.9	
2000	1	170.3	1.0	4.2	3.3	4.2	179.8	0.6	2.6	2.2	2.6	136.3	1.1	4.4	3.7	
	2	171.5	0.7	3.0	3.3	3.6	181.0	0.7	2.7	2.4	2.6	137.5	0.9	3.6	3.9	
	3	173.0	0.9	3.5	3.5	3.6	182.1	0.6	2.5	2.6	2.6	138.4	0.7	2.6	3.6	
	4	174.3	0.7	2.9	3.4	3.4	183.2	0.6	2.4	2.5	2.5	139.8	1.0	4.1	3.7	
2001	1	176 1	10	42	34	4 2	184.6	0.8	32	27	32	141 6	13	53	39	
	2	177.4	0.8	3.1	3.4	3.6	185.8	0.6	2.6	2.7	2.9	142.1	0.3	1.2	3.3	
1999 A	Aug	167.1	0.2	2.9	2.2	2.4	177.5	0.1	1.4	1.9	1.6	133.6	0.7	8.4	2.4	
S	Sep	167.8	0.4	5.1	2.6	2.7	178.0	0.3	3.4	2.1	1.8	134.5	0.7	8.4	3.1	
C	Oct	168.2	0.2	29	2.6	27	178 3	0.2	20	21	1 8	134.6	0.1	0.9	27	
N	lov	168.5	0.2	2.2	2.6	2.7	178.7	0.2	2.7	2.1	1.9	134.7	0.1	0.9	3.0	
D	Dec	168.9	0.2	2.9	2.7	2.7	179.0	0.2	2.0	1.9	1.9	135.2	0.4	4.5	3.0	
2000 .	lan	169.4	0.3	3.6		3.6	170 /	0.2	27	2 0	27	1 75 1	-0.1	0	2.6	
2000 C	Feb	170.2	0.5	5.8	2.0	3.0 4.7	179.4	0.2	2.7	2.0	2.7	136.3	0.1	11 2	2.0 4.0	
Ň	Mar	171.2	0.6	7.3	3.8	5.6	180.3	0.3	4.1	2.4	2.9	137.5	0.9	11.1	4.6	
	۸ <i></i>									~ ~	~ ~			~ .		
, M	-γµ ∕lav	1/1.1	-0.1	-0./	3.1 z 2	4.0	180.7	0.2	2.7	2.3	2.9	137.1	-0.3	-3.4	3./	
, iv	lun	172.2	0.1	65	3.Z	3.4 3.9	181.0	0.2	2.0	2.4	2.7	137.1	0.0	11.0	J.6 15	
		172.2	0.0	0.0	<b>.</b> .,	0.0	101.5	0.2	2.0	2.0	2.0		0.5	11.0	<b>.</b>	
	Jul	172.7	0.3	3.5	3.6	3.9	181.7	0.2	2.7	2.5	2.6	138.2	-0.1	-0.9	4.1	
A	Nug	172.8	0.1	0.7	3.4	3.5	182.1	0.2	2.7	2.6	2.6	138.0	-0.1	-1.7	3.3	
3	beh	1/3.6	0.5	5./	3.5	3.7	182.6	0.3	3.3	2.6	2.7	139.0	0.7	9.1	3.3	
C	Oct	173.9	0.2	2.1	3.4	3.6	182.8	0.1	1.3	2.5	2.6	139.6	0.4	5.3	3.7	
N	lov	174.3	0.2	2.8	3.4	3.5	183.3	0.3	3.3	2.6	2.6	139.8	0.1	1.7	3.8	
D	)ec	174.6	0.2	2.1	3.4	3.4	183.5	0.1	1.3	2.5	2.5	140.0	0.1	1.7	3.6	
2001 J	Jan	175.7	0.6	7.8	3.7	7.8	184.1	0.3	4.0	2.6	4.0	141.6	1.1	14.6	4.8	
F	eb	176.2	0.3	3.5	3.5	5.6	184.7	0.3	4.0	2.8	4.0	141.7	0.1	0.9	4.0	
Ν	/lar	176.3	0.1	0.7	3.0	4.0	185.1	0.2	2.6	2.7	3.5	141.6	-0.1	-0.8	3.0	
A	Apr	176.8	0.3	3.5	33	3.8	185.5	0.2	2.6	2.7	3.3	142.3	0.5	6.1	3.8	
M	lay	177.5	0.4	4.9	3.6	4.0	185.7	0.1	1.3	2.6	2.9	142.2	-0.1	-0.8	3.7	
J	Jun	177.9	0.2	2.7	3.3	3.8	186.3	0.3	3.9	2.8	3.1	141.7	-0.4	-4.1	2.5	
	. hat	177 4		77	0 7	<u>, , , , , , , , , , , , , , , , , , , </u>	100 0	<u>م م</u>	1 ^	۰ ۳	2 ^	1 4 0 4	_^ ^	10 5	1 6	
Δ	JUC	1775	-0.3	-3.3 07	2.1 27	∠.ŏ 2.5	187 0	0.2	1.9	∠./ 27	2.9 2 9	140.4	-0.9 -	C.UI- 4 4	1.0 2.1	
, (	-3		0.1	0.7	2.1	2.0		0.2	2.0	£.1	2.3	1 - 10.3	0.4	- <b>* • "</b>		

#### Notes

Pages 4, 5: Final sales is gross domestic product (GDP) minus change in private inventories. Advance, preliminary, and final GDP growth rates are released during the first, second, and third months of the following quarter. Changes result from incorporation of more complete information. Real GDP is measured in 1996 dollars. The Purchasing Managers' Index is a weighted average of diffusion indexes for new orders, production, supplier deliveries, inventories, and employment. Aggregate and average weekly hours are paid hours of production and nonsupervisory employees. The inventory-sales ratio uses nominal (current-dollar) inventory and sales data.

*Page 6:* For information on how to calculate the **contribution** of a component to the overall GDP growth rate, see the October 1999 issue of the *Survey of Current Business*, p. 16. The sign is changed for **imports**.

*Page 7:* Ten-year **Treasury yields** are adjusted to constant maturity. Three-month yields are secondary market averages, but all rates used in the yield curves are adjusted to constant maturity. **Standard and Poor's 500 Index with Reinvested Dividends** shows the total return: capital gains plus dividends.

Pages 8,9: Oil (West Texas intermediate) and Natural Gas (Henry Hub) prices are monthly averages of daily spot prices listed in the *Wall Street Journal*. Consumer price index is for all urban consumers. The consumption chain price index is the index associated with the personal consumption expenditures component of GDP. The Employment Cost Index (ECI) covers private nonfarm employers. ECI compensation refers to a fixed sample of jobs, while compensation per hour covers all workers in the nonfarm business sector in a given quarter. In both cases, compensation is wages and salaries plus benefits.

*Pages 10,11:* **Nonfarm payroll employment** is counted in a survey of about 390,000 establishments (Current Employment Survey). It excludes self-employed individuals and workers in private households, but double-counts individuals with more than one job. The **household survey** (Current Population Survey) of about 50,000 households provides estimates of civilian employment, unemployment rate, labor force participation rate, and employment-population ratio. **Population** is civilian, noninstitutional, 16 years and over. 90 percent confidence intervals for the unemployment rate (± 0.2 percentage points) and change in household survey employment (± 376,000) measure uncertainty due to sample size. The **available labor supply** is the sum of the unemployed and those persons not in the labor force but who want to work now. The household survey was significantly changed in January 1994, so care should be exercised in making short-term comparisons around this date, particularly with the duration data shown on page 10.

*Pages 13:* The **Michigan consumer sentiment index** shows changes in a summary measure of consumers' answers to five questions about their current and expected financial situation, expectations about future economic conditions, and attitudes about making large purchases. The survey is based on a representative sample of U.S. households.

Pages 14, 15: Overall gross saving includes government saving, which is the sum of the government surplus and capital consumption (see notes for pages 16 and 17). Net foreign investment (NFI) is U.S. investment abroad minus foreign investment in the U.S. Aside from a statistical discrepancy, NFI also equals the difference between gross domestic investment and saving. The comprehensive revision introduced the equipment & software component of business investment.

Pages 16, 17: Government consumption and investment is current expenditures on goods and services, including capital consumption (depreciation) and gross investment, as reported in the NIPAs. The **unified federal budget surplus/deficit** differs from **NIPA basis** in four main ways: (1) NIPA excludes transactions involving existing assets; (2) NIPA outlays exclude government investment and include consumption of government capital, while unified budget outlays do the reverse; (3) NIPA accounts exclude Puerto Rico and U.S. territories; and (4) various timing issues are handled differently. **Outlays and** receipts are from the NIPAs, except as noted. Since 1977, the federal fiscal year starts on October 1. Excluded agency debt was 0.6 percent of federal debt at the end of fiscal 1997. Federal debt held by the public includes holdings of the Federal Reserve System and excludes holdings of the social security and other federal trust funds. Federal grants in aid to state and local governments appear in both state and local receipts and federal outlays.

*Pages 18, 19:* The **trade balance** (shown on a balance of payments basis) is the difference between exports and imports of goods (merchandise) and services. It is nearly identical in concept to the **net exports** component of GDP, but differs slightly in accounting details. The **investment income balance** equals income received from U.S.-owned assets in other countries minus income paid on foreign-owned assets in the U.S. The investment income balance is nearly identical in concept to the difference between gross national product and gross domestic product, but differs in accounting details. The **current account balance** is the trade balance plus the balance on investment income plus net unilateral transfers to the U.S. from other countries.

*Pages 20, 21:* **Output per hour** (Y/H), **unit labor cost** (C/Y), and **compensation per hour** (C/H) are indexes which approximately obey the following relationship: %(Y/H) + %(C/Y) = %(C/H) with %() meaning percent changes. Unit labor cost is shown on page 9. **Real compensation per hour** uses the CPI to adjust for the effects of inflation. Nonfarm business accounted for about 76 percent of the value of GDP in 1996, while nonfinancial corporations accounted for about 54 percent. **Inventory valuation adjustments (IVA)** remove the effect of changes in the value of existing inventories from corporate profits and proprietors' income. (This change in value does not correspond to current production and therefore is not part of GDP). **Capital consumption adjustments (ICAdj)** increase profits and proprietors' income by the difference between estimates of economic depreciation and depreciation allowed by the tax code. Components of national income not shown are rental income of persons and net interest.

**NOTE:** Measures of retail sales (pp. 12-13), manufacturers' orders, shipments and inventories (p. 15), and the total business inventory-to-sales ratio (p. 5) are now based on the North American Industry Classification System (NAICS). Data from January 1992 onward are on a NAICS basis, while data before that are on the old Standard Industrial Classification (SIC) system. For more information, see *http://www.census.gov/epcd/www/naics.html* 

#### Sources

- Bureau of Economic Analysis (BEA), U.S. Dept. of Commerce National income and product accounts, international trade and investment data (except by country), auto and light truck sales
- Census Bureau, U.S. Dept. of Commerce Inventory-sales ratios, retail sales, capital goods orders, housing starts, exports and imports by country
- Bureau of Labor Statistics (BLS), U.S. Dept. of Labor All employment-related data, employment cost index, consumer and producer price indexes, unit labor cost, output per hour, compensation per hour, multifactor productivity

United States Department of Treasury Unified budget receipts, outlays, deficit, debt

- Federal Reserve Board Index of industrial production, treasury yields, exchange rates, capacity utilization, household debt
- *The Survey Research Center, The University of Michigan* Consumer sentiment index
- The Conference Board Help-wanted advertising index
- Organization for Economic Cooperation and Development (OECD) GDP for major trading partners (not available on FRED)