An Ownership-Based Framework of the U.S. Current Account, 1982–98

IN THIS REPORT, the Bureau of Economic Analysis (BEA) updates its supplemental, ownership-based framework of the current-account portion of the U.S. international transactions (balance of payments) accounts.¹ This presentation was developed in the first half of the 1990's in response to interest in a supplement to the existing international transactions presentation that would provide additional information about ownership.² This interest arose from the increased interdependence of world economies that occurred as multinational companies (MNC's) have assumed a more prominent role in international markets by integrating production processes on a global scale and as commercial agreements have increasingly covered not only cross-border sales but also sales through locally established affiliates.

The globalization of economic activity can be viewed in a number of ways. From the perspective of MNC's, worldwide sales are aggregated irrespective of the location of the point of sale—for example, irrespective of whether the sale originated from the plant of a company in California or from a plant of that company in Ireland. In terms of the impact on the U.S. economy that is, from the traditional balance-of-payments perspective—the location of the seller is significant; moreover, for sales by affiliates, factor costs—such as labor and capital—and other costs must be subtracted from sales. Like the traditional international transactions accounts, the ownership-based framework presented in this report is organized by residency, but it broadens the definition of the balance on trade in goods and services to include net receipts of income by MNC's from the sales and purchases by their affiliates. The ownershipbased account is fully consistent conceptually with the

Note. — Jeffrey H. Lowe prepared this report.

current account of the traditional international transactions accounts and can be viewed as a "satellite" of those accounts. 3

Highlights of this presentation for 1998 follow:

- Worldwide sales by U.S. companies to foreign persons exceeded sales by foreign companies to U.S. residents by \$363 billion. Sales by the U.S. companies to foreign persons were \$3,173 billion; \$933 billion were from cross-border sales (exports of goods and services), and \$2,240 billion were sales by foreign affiliates. Sales by the foreign companies to U.S. residents were \$2,810 billion; \$1,100 billion were from cross-border sales (imports of goods and services), and \$1,710 billion were sales by U.S. affiliates.
- After deducting costs, such as those for labor, capital, and purchased goods and services, the income to U.S. companies from the sales by their foreign affiliates was \$106 billion; this income combined with the value of U.S. goods and services exports yields a total value of trade accruing to the U.S. economy of \$1,039 billion. After deducting costs, the income to foreign companies from the sales by their U.S. affiliates was \$39 billion; this income combined with the value of U.S. goods and services imports yields a total value of U.S. trade accruing to foreign economies of \$1,139 billion. The resulting balance of this ownership-based measure is -\$99 billion, compared with the -\$167 billion balance on trade of goods and services using the traditional balance-of-payments framework based on location of production.

The ownership-based estimates for 1982–97 have been revised to incorporate the results of last summer's annual revision of the U.S. international transactions accounts, and the estimates for 1997 have been revised to incorporate the latest financial and operating data of

^{1.} For a review of the sources and methods used to prepare the supplemental estimates, see Obie G. Whichard and Jeffrey H. Lowe, "An Ownership-Based Disaggregation of the U.S. Current Account, 1982–93," Survey of Current Busness 75 (October 1995): 52–61. For a general review of the issues relating to ownership relationships in international transactions, see J. Steven Landefeld, Obie G. Whichard, and Jeffrey H. Lowe, "Alternative Frameworks for U.S. International Transactions," Survey 73 (December 1993): 50–61.

^{2.} Among those calling for more information on ownership was a National Academy of Sciences study panel. See Anne Y. Kester, ed., *Behind the Numbers: U.S. Trade in the World Economy*, National Research Council, Panel on Foreign Trade Statistics (Washington, DC: National Academy Press, 1992).

^{3.} According to the international System of National Accounts, satellite accounts are accounts that augment the central national accounts by "expanding the analytical capacity of national accounting for selected areas...in a flexible manner, without overburdening or disrupting the central system"; they may introduce additional information, alternative accounting frameworks, or "complementary or alternative concepts," while maintaining linkages to the central accounts. See Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and World Bank, System of National Accounts, 1993 (Brussels/Luxembourg, New York, Paris, and Washington, DC, 1993): 489.

foreign-owned affiliates in the United States and of U.S.-owned affiliates abroad; new estimates are presented for 1998. Among the improvements that were incorporated last summer into the annual revision of the U.S. international transactions accounts were the following: Revised estimates of direct investment income receipts and payments for 1982 forward that reflect revised estimates of the current-cost adjustment, which incorporated revised estimates of prices for equipment and structures; revised estimates of "other private services" receipts for 1986 forward that reflect the use of improved estimates of international expenditures of international organizations in the United States and newly developed estimates of expenditures of temporary nonagricultural workers in the United States: and revised estimates of "other private services" receipts and payments for 1997 forward that reflect revisions to financial services receipts and payments.4

In the standard presentation of the current-account estimates, U.S. sales (exports) to foreigners (line 3 of table 1) consist only of the sales of goods and services that are delivered to foreign markets directly from the United States. In the ownership-based presentation, U.S. international "sales" (line 2) also includes the income that is received by U.S. companies from their affiliates abroad (line 8). Similarly, in the ownershipbased presentation, U.S. international "purchases" (line 22) includes the income that is paid by foreign-owned firms in the United States to their foreign owners as well as the payments for the goods and services that are directly delivered to the U.S. market from abroad. These additions, which raise the value of total U.S. "sales" and "purchases," provide a more comprehensive basis for assessing the effect of net "cross-border" sales on the U.S. economy.

In the table, the balance on goods, services, and net

receipts from sales by affiliates (line 43) shows the net result of the active participation of U.S. companies, including U.S. affiliates of foreign owners, in international markets. Each year, this balance has been in smaller deficit (or in surplus) than either the balance on goods and services or the balance on current account; in 1998, this balance was -\$99.2 billion, compared with the balance on goods and services of -\$166.9 billion. The balance was smaller because U.S. parents' receipts of income from their foreign affiliates has been greater than U.S. affiliates' payments of income to their foreign parents.

Additional information on ownership relationships is provided by the disaggregation of trade in goods and in services into trade between affiliated parties (that is, trade within MNC's) and trade between unaffiliated parties. Trade within MNC's is disaggregated into trade between U.S. parent companies and their foreign affiliates and trade between U.S. affiliates of foreign companies and their foreign parent groups. For receipts and payments of direct investment income, the table shows how the income is derived from the production and sales by affiliates.⁵ To highlight the links between the income and the activities that produce it, the income is designated "net receipts" or "net payments" of direct investment income resulting from sales by affiliates.

The addenda to table 1 provide supplemental information on the U.S. content and the foreign content of affiliates' output; this information can be used to describe affiliate operations and analyze the role of direct investment in supplying international markets. For both foreign and U.S. affiliates, output sold (or added to inventory) is broken down between U.S. content and foreign content; the source of the content is then broken down between the affiliates' own value added and other content.

Table 1 *follows*.



^{4.} See Christopher L. Bach, "U.S. International Transactions, Revised Estimates for 1982-99," SURVEY 80 (July 2000): 70-77.

^{5.} These detailed estimates can only be provided for nonbank affiliates.

Table 1.—Ownership-Based Framework of the U.S. Current Account, 1982–98

[Billions of dollars]

Line		1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
1	Exports of goods and services and income receipts (IT table 1, line 1)	367.0	356.1	399.9	387.6	407.1	457.1	567.9	650.5	708.9	730.4	749.3	776.9	868.9	1,006.6	1,075.9	1,194.3	1,191.4
2	Receipts resulting from exports of goods and services or sales by foreign affiliates	304.7	297.9	326.4	324.5	347.0	395.2	489.6	551.2	603.1	639.9	674.8	710.0	780.8	890.3	954.6	1,052.5	1,039.4
3 3a	Exports of goods and services, total	275.2 211.2	266.1 201.8	291.1 219.9	289.1 215.9	310.0 223.3	348.9 250.2	431.1 320.2	489.2 362.1	537.1 389.3	581.2 416.9	617.3 440.4	642.8 456.8	703.4 502.4	795.1 575.8	852.1 612.1	936.9 679.7	933.0 670.3
3b 4	Services (IT table 1, line 4) To unaffiliated foreigners	193.3	64.3 183.9	71.2 196.5	73.2 189.7	86.7 212.5	98.7 247.0	110.9 306.3	127.1 342.2	147.8 382.4	164.3 413.2	176.9 430.0	185.9 449.2	201.0 473.9	219.2 541.8	240.0 582.0	257.2 635.3	262.7 635.0
4a 4b 5	Goods Services To affiliated foreigners	139.0 54.3 81.9	129.8 54.0 82.2	136.1 60.3 94.6	128.2 61.6 99.4	140.4 72.1 97.5	164.7 82.3 101.9	214.4 91.9 124.9	238.4 103.8 147.0	261.5 121.0 154.7	277.6 135.6 168.0	285.6 144.4 187.2	295.7 153.4 193.6	313.0 160.9 229.5	365.9 175.9 253.2	389.5 192.5 270.1	430.2 205.1 301.7	427.6 207.4 298.0
5a 5b	To affiliated foreigners	72.2 9.8	72.0 10.3	83.8 10.8	87.8 11.6	83.0 14.6	85.5 16.4	105.8 19.1	123.7 23.3	127.8 26.9	139.3 28.6	154.8 32.5	161.1 32.5	189.4 40.1	209.9 43.3	222.6 47.5	249.6 52.1	242.8 55.2
6 6a	Services To foreign affiliates of U.S. companies Goods	55.4 47.1	58.0 49.4	65.6 56.7	71.3 61.9	72.7 61.1	79.7 66.4	95.4 79.4	109.2 89.4	112.5 90.1	120.6 97.1	131.4 106.0	139.6 113.8	170.8 138.3	187.1 152.7	198.6 161.8	226.9 186.5	228.3 185.4
6b 7	Services To foreign parent groups of U.S. affiliates	8.3 26.5	8.6 24.3	8.9 29.0	9.5 28.0	11.6 24.9	13.3	16.0 29.4	19.7 37.8	22.4 42.2	23.5 47.4	25.4 55.8	25.8 54.0	32.6 58.7	34.4 66.2	36.8 71.5	40.4 74.8	43.0 69.6
7a 7b	Goods Services	25.0 1.5	22.6 1.7	27.1 1.9	25.9 2.1	21.9	19.1	26.4 3.0	34.3 3.5	37.8 4.5	42.2 5.1	48.8 7.1	47.4 6.7	51.1 7.5	57.2 8.9	60.8 10.7	63.0 11.8	57.4 12.3
8	Net receipts by U.S. companies of direct investment income resulting from sales by their foreign affiliates (IT table 1, line 14)	29.5	31.8	35.3	35.4	36.9	46.3	58.4	62.0	66.0	58.7	57.5	67.2	77.3	95.3	102.5	115.5	106.4
9 10	Nonbank affiliates	26.1 935.8	28.7 886.3	32.4 898.6	33.4 895.5	35.6 928.9	45.9 1,052.8	56.7 1,194.7	61.8 1,284.9	65.6 1,493.4	58.5 1,541.6	55.3 1,574.1	63.5 1,570.6	73.4 1,757.4	92.0 2,040.7	99.2 2,233.7	112.3 2,350.9	105.7 2,443.4
11	Less: Foreign affiliates' purchases of goods and services from the United States	65.0	66.1	75.3	79.1	82.6	92.2	110.9	122.3	128.8	138.8	147.4	157.6	192.0	212.3	230.9	260.9	260.1
12 13 14	Less: Costs and profits accruing to foreigners Compensation of employees of foreign affiliates Other	721.3 111.7 609.6	668.5 102.8 565.7	668.5 100.7 567.8	659.6 102.4 557.3	675.7 117.6 558.1	753.1 136.1 617.0	841.2 151.5 689.7	907.9 165.8 742.1	1,065.1 184.8 880.3	1,098.9 196.1 902.8	1,106.9 201.5 905.3	1,089.1 201.1 887.9	1,200.0 224.3 975.7	1,379.3 240.8 1,138.5	1,509.5 252.6 1,256.9	1,555.7 261.4 1,294.4	1,647.8 271.4 1,376.4
15 16	Less: Sales by foreign affiliates to other foreign affiliates of the same parent	123.4 3.4	123.0 3.1	122.4 2.9	123.3 2.0	135.1 1.4	161.5 0.4	185.9 1.8	193.0 0.2	233.9 0.4	245.4 0.3	264.5 2.2	260.4 3.7	292.0 3.9	357.1 3.2	394.1 3.3	422.0 3.3	429.8 0.7
17	Bank affiliates Other income receipts	62.3	58.3	73.5	63.1	60.1	61.9	78.3	99.3	105.8	90.5	74.5	66.9	88.1	116.2	121.3	141.8	152.0
18	Uther private receipts on U.Sowned assets abroad (11 table 1, line 15)	58.2	53.4	68.3	57.6	52.8	55.6	70.6	92.6	94.1	81.2	66.0	60.4	82.4	109.8	115.0	136.4	146.5
19 20	U.S. Government receipts (IT table 1, line 16)	4.1 n.a.	4.8 n.a.	5.2 n.a.	5.5 n.a.	6.4 0.9	5.3 1.0	6.7 1.0	5.7 1.0	10.5 1.2	8.0 1.3	7.1 1.4	5.1 1.4	4.1 1.5	4.7 1.8	4.6 1.8	3.6 1.8	3.6 1.9
21	Imports of goods and services and income payments (IT table 1, line 18)	356.0	377.5	473.9	483.8	530.1	594.4	663.7	721.3	759.2	734.5	762.0	822.0	949.2	1,082.0	1,159.1	1,294.0	1,364.5
22	Payments resulting from imports of goods and services or sales by U.S. affiliates	301.5	328.0	408.6	417.9	455.4	508.2	557.9	586.9	619.4	607.2	655.1	719.7	822.6	921.3	987.3	1,086.5	1,138.6
23 23a	Imports of goods and services, total	299.4 247.6	323.9 268.9	400.2 332.4	411.0 338.1	448.6 368.4	500.6 409.8	545.7 447.2	579.8 477.4	616.0 498.3	609.4 491.0	652.9 536.5	711.7 589.4	800.5 668.6	891.0 749.6	954.2 803.3	1,042.9 876.4	1,099.9 917.2
23b 24	Services (IT table 1, line 21)	51.7 204.0	55.0 221.6	67.7 272.7	72.9 270.8	80.1 295.3	90.8 325.3	98.5 350.4	102.5 365.6	117.7 386.9	118.5 381.1	116.5 408.2	122.3 449.8	131.9 494.6	141.4 558.6	150.9 598.4	166.5 668.0	182.7 709.7
24a 24b	Goods	156.4 47.5	170.5 51.1	209.2 63.5	202.3 68.5	220.0 75.3	241.2 84.1	259.3 91.1	272.7 92.9	280.6 106.3	275.3 105.8	304.8 103.4	341.5 108.2	379.1 115.5	436.1 122.6	468.5 129.9	526.6 141.5	555.5 154.2
25 25a	From affiliated foreigners	95.4 91.2	102.3 98.4	127.5 123.2	140.1 135.8	153.3 148.4	175.2 168.6	195.3 187.9	214.3 204.7	229.1 217.8	228.3 215.6	244.7 231.7	262.0 247.9	305.9 289.5	332.4 313.5	355.8 334.8	374.8 349.8	390.2 361.7
25b 26	ServicesFrom foreign affiliates of U.S. companies	4.2 42.1	3.9 45.8	4.2 55.0	4.4 56.5	4.8 57.5	6.7 63.6	7.5 73.1	9.6 79.6	11.3 85.9	12.7 88.9	13.0 99.4	14.1 103.1	16.4 121.8	18.9 129.7	21.0 145.0	25.0 157.8	28.5 170.3
26a 26b	Goods Services	39.3 2.8	43.6 2.2	52.8 2.2	54.0 2.4	55.0 2.5	60.4 3.2	69.5 3.6	74.7 4.9	80.3 5.6	83.5 5.4	93.9 5.5	97.1 6.0	114.9 7.0	122.3 7.4	137.2 7.8	147.5 10.4	158.1 12.2
27 27a	From foreign parent groups of U.S. affiliates	53.4 51.9	56.4 54.8	72.5 70.5	83.7 81.7	95.7 93.4	111.6 108.2	122.2 118.4	134.7 129.9	143.2 137.5	139.4 132.2	145.3 137.8	158.9 150.8	184.1 174.6	202.7 191.2	210.8 197.7	217.0 202.4	219.9 203.5
27b 28	Services	1.4	1.6	2.0	1.9	2.3	3.4	3.9	4.8	5.8	7.3	7.5	8.1	9.4	11.4	13.1	14.6	16.3
29	31)Nonbank affiliates	2.1 1.4	4.1 3.3	8.4 7.8	6.9 5.6	6.9 5.6	7.7 7.4	12.2 10.7	7.0 6.6	3.5 4.9	-2.3 −1.8	2.2 2.4	7.9 7.5	22.2 19.3	30.3 25.7	33.1 30.2	43.6 39.7	38.7 36.0
30 31	Sales by U.S. affiliates	518.1	536.6	593.6	633.0	672.0	744.6	886.4	1,056.6	1,175.9	1,185.9	1,232.0	1,329.4	1,443.5	1,544.6	1,667.6	1,726.3	1,881.9
32 32	abroad Less: Costs and profits accruing to U.S. persons	85.7 431.0	83.1 450.2	102.5 483.3	115.3 512.1	128.1 538.4	147.0 590.2	159.4 716.3	176.6 873.5	188.7 982.3	186.0 1,001.7	192.0 1,037.6	208.7 1,113.3	241.8 1,182.4	262.3 1,256.6	281.8 1,355.6	279.6 1,407.1	306.0 1,539.9
34	Compensation of employees of U.S. affiliates Other	61.5 369.5	66.8 383.4	73.2 410.1	79.9 432.2	86.5 451.9	96.0 494.2	119.6 596.8	144.2 729.3	163.6 818.7	176.0 825.7	182.1 855.5	193.0 920.3	200.6 981.8	206.4 1,050.2	220.6 1,135.0	233.5 1,173.6	260.7 1,279.2
35	Less: Sales by U.S. attiliates to other U.S. attiliates of the same parent ¹	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.								
36 37	Bank affiliates Other income payments	0.7 54.5	0.8 49.5	0.7 65.3	1.4 65.9	1.3 74.7	0.2 86.2	1.5 105.9	0.5 134.4	-1.4 139.7	-0.5 127.4	-0.2 106.9	0.5 102.3	2.8 126.6	4.6 160.6	2.9 171.8	3.9 207.6	2.7 226.0
38	Other private payments on foreign-owned assets in the United	35.2	30.5	44.2	42.7	47.4	57.7	72.3	93.8	95.5	82.5	63.1	57.8	76.5	97.0	97.9	112.8	127.7
39 40	States (IT table 1, line 32) U.S. Government payments (IT table 1, line 33) Compensation of employees (IT table 1, line 34)	19.3 n.a.	19.0 n.a.	21.2 n.a.	23.1 n.a.	24.6 2.7	26.2 2.3	31.7 1.8	38.4 2.3	40.8 3.5	40.9 4.0	39.1 4.8	39.4 5.1	44.2 6.0	57.4 6.3	67.6 6.3	88.1 6.7	91.1 7.1
41	Unilateral current transfers, net (IT table 1, line 35)	-16.5	-17.3	-20.3	-22.0	-24.1	-23.3	-25.3	-26.2	-26.7	10.8	-35.0	-37.6	-38.3	-34.1	-40.1	-40.8	-44.0
42 43	Memoranda: Balance on goods and services (IT table 1, line 73) Balance on goods, services, and net receipts from sales by affiliates	-24.2	-57.8	-109.1	-121.9	-138.5	-151.7	-114.6	-90.6	-78.9	-28.3	-35.7	-68.9	-97.0	-95.9	-102.1	-105.9	-166.9
44	(line 2 minus line 22)	3.2 -5.5	-30.1 -38.7	-82.2 -94.3	-93.4 -118.2	-108.5 -147.2	-113.1 -160.7	-68.3 -121.2	-35.7 -97.0	-16.3 -77.0	32.7 6.6	19.7 -47.7	-9.6 -82.7	-41.8 -118.6	-31.0 -109.5	-32.7 -123.3	-34.0 -140.5	-99.2 -217.1
	Addenda: Source of the content of foreign nonbank affiliates' sales: 2																	
45	Output sold to nonaffiliates or added to inventory, total (line 10 minus line 15 plus the change in inventories)	802.9	746.7	773.7	779.0	800.9	808.1	1,019.4	1,094.2	1,277.0	1,294.8	1,304.1	1,301.7	1,484.5	1,700.0	1,844.4	1,933.4	2,026.4
46 47	Foreign content	737.9 286.7	680.6 272.1	698.5 276.1	699.9 280.4	718.2 298.8	815.9 348.2	908.4 383.1	971.9 403.1	1,148.2 440.0	1,156.0 441.6	1,156.6 440.6	1,144.1 442.2	1,292.5 494.1	1,487.7 560.9	1,613.6 595.7	1,672.5 620.8	1,766.3 615.4
48 49	Other foreign content	451.2 65.0	408.5 66.1	422.4 75.3	419.5 79.1	419.4 82.6	467.7 92.2	525.3 110.9	568.8 122.3	708.2 128.8	714.4 138.8	716.1 147.4	701.9 157.6	798.4 192.0	926.8 212.3	1,017.9 230.9	1,051.7 260.9	1,150.8 260.1
50	Source of the content of U.S. nonbank affiliates' sales: ² Output sold to nonaffiliates or added to inventory, total (line 30																	
51	minus line 35 plus the change in inventories) U.S. content	521.5 435.8	534.8 451.7	600.3 497.8	638.5 523.3	678.0 549.9	751.6 604.6	899.7 740.3	1,070.5 893.8	1,186.6 998.0	1,190.5 1,004.6	1,235.5 1,043.5	1,336.6 1,127.9	1,449.7 1,207.9	1,551.4 1,289.2	1,671.7 1,390.0	1,730.8 1,451.2	1,893.1 1,587.1
52 53	Value added by U.S. affiliates of foreign companies	103.5	111.5 340.2	128.8 369.0	134.9 388.4	142.1 407.8	157.9 446.7	190.4 550.0	223.4 670.4	239.3 758.7	257.6 746.9	266.3 777.2	285.7 842.1	313.0 894.9	322.6 966.5	358.1 1,031.9	389.4 1,061.8	418.1 1,169.0
54	Foreign content	85.7	83.1	102.5	115.3	128.1	147.0	159.4	176.6	188.7	186.0	192.0	208.7	241.8	262.3	281.8	279.6	306.0

^{1.} Conceptually, sales by U.S. affiliates to other U.S. affiliates of the same foreign parent should be subtracted, but information on these sales is unavailable. However, because U.S. affiliates are generally required to report to BEA on a fully consolidated basis, most such sales are eliminated through consolidation and the remaining amounts are thought to be immaterial.

^{2.} The sales exclude the affiliates' sales to other affiliates of their parent. For U.S. affiliates, data on sales to other affiliates are unavailable. IT International transactions n.a. Not available