# INSOURCING JOBS

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**Joint Economic Committee**
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## Executive Summary

Job insourcing – the U.S. jobs created and supported by international trade and investment – is often overlooked. One major source of job insourcing is inward foreign direct investment. From 1988 to 2003, foreign companies increased their direct investment in their American subsidiaries by 326 percent. Between 1988 and 2002, majority-owned American subsidiaries of foreign companies created 2.3 million U.S. jobs. In 2002, these subsidiaries employed a total of 5.4 million U.S. workers. That represented 4.0 percent of all employment in the United States.

The other major source of job insourcing is U.S. exports of services that are subject to international competition. These exports grew by an average of 10.3 percent a year from $27 billion in 1988 to $120 billion in 2003. In 2003, these exports supported an estimated 1.4 million U.S. jobs. That represented 1.0 percent of all employment in the United States.

The number of U.S. jobs attributable to insourcing is increasing. From 1988 to 2002, the number of U.S. jobs at majority-owned American subsidiaries of foreign companies grew by an average of 5.2 percent a year, while the number of jobs attributable to U.S. exports of services that are subject to international competition expanded by an average of 5.8 percent a year. Both were significantly faster than the average of 1.5 percent a year for the U.S. economy as a whole.

Moreover, these jobs are generally high-paying. In 2002, the average annual compensation at majority-owned American subsidiaries of foreign companies was $56,663 per employee, 30 percent higher than the average for all U.S. workers. In 2002, the average annual compensation for jobs attributable to U.S. exports of services that are subject to international competition was $56,078 per employee, 28 percent higher than the average for all U.S. workers.



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# INSOURCING JOBS

## I. INTRODUCTION

A concern expressed by some Americans is that the United States may be losing jobs because of international trade and investment. However, such concerns do not fully reflect the extent of insourcing – the U.S. jobs created by international trade and investment.[1] From 1988 to 2003,[2] the total value of direct investment and supported by foreign companies in their American subsidiaries increased by 325.7 percent to $1,340.0 billion on a historical cost basis (see Chart 3 and Table 1).[3] By increasing their direct investment in their majority-owned American subsidiaries, these foreign companies hired an additional 2.301 million U.S. workers between 1988 and 2002. Thus, these subsidiaries employed a total of 5.420 million U.S. workers in 2002 (see Chart 3 and Table 2).[4]

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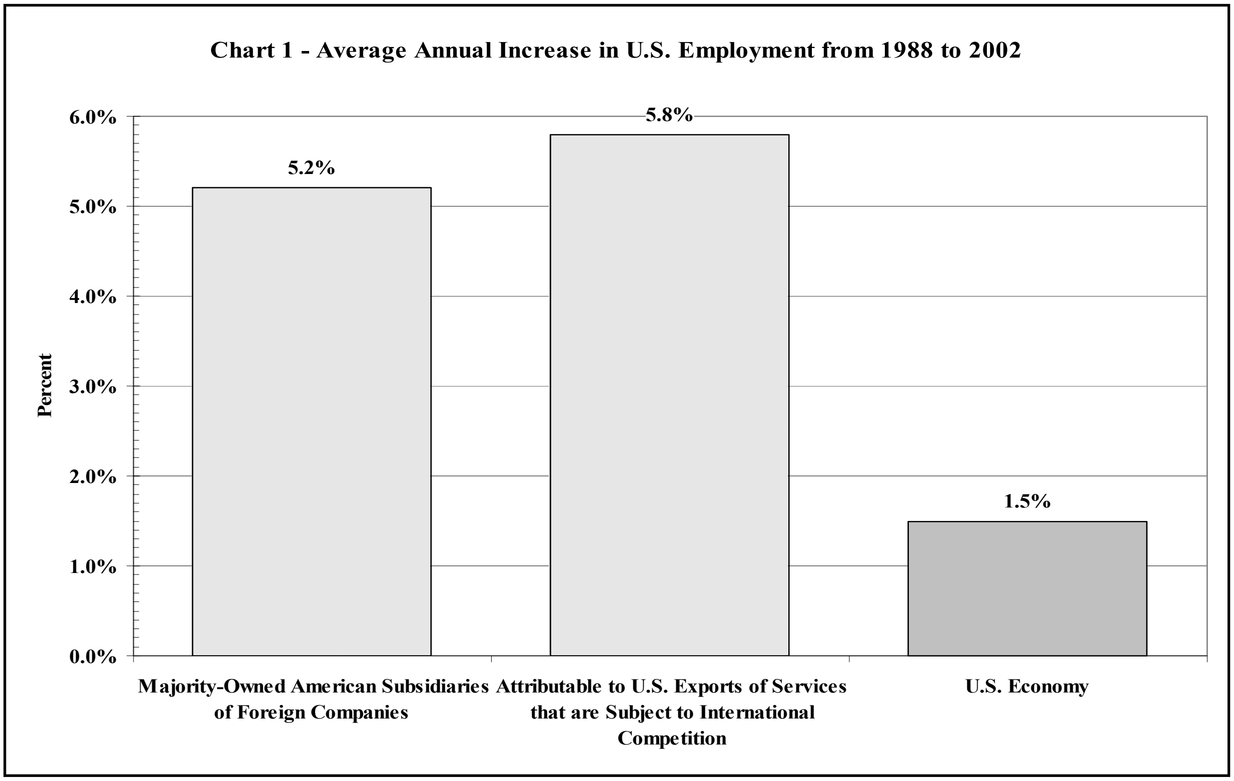
[1] This study uses the latest annual data available from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) and the U.S. Department of Labor, Bureau of Labor Statistics (BLS). Annual BEA data about aggregate inward foreign direct investment by foreign multinational firms in their U.S. non-bank affiliates is available through 2003. Annual BEA financial data about the majority-owned non-bank U.S. affiliates of foreign multinational firms is available through 2002. Annual BEA data about U.S. service exports and annual BLS data about U.S. employment is available through 2003.

[2] This study uses 1988 as a base year to cover 15 years of foreign direct investment data. While this choice is somewhat arbitrary, the number of years covered should include at least one complete business cycle so that short-term economic fluctuations in the United States and its major trading partners from obscuring underlying long-term trends in international trade and investment.

[3] The total value of direct investment by foreign companies in their American subsidiaries refers to the foreign direct investment position of foreign multinational firms in their U.S. non-bank affiliates (U.S. inward foreign direct investment position) on a historical cost basis. Alternative measures of the value of the U.S. inward foreign direct investment position are current cost and market value bases. From 1988 to 2003, the U.S. inward foreign direct investment position increased by 286.8 percent to $1,554.0 billion on a current cost basis and by 522.1 percent to $2,435.5 billion on a market value basis. These valuation data include minority-owned as well as majority-owned U.S. affiliates.

[4] All employment and compensation data are for majority-owned non-bank U.S. affiliates of foreign multinational firms.




International trade in services has also contributed to an increase in U.S. employment. From 1988 to 2003, U.S. exports of services that are subject to international competition (i.e., insourcable services) expanded by an average growth rate of 10.3 percent.[5] In 2003, these exports of $120.1 billion supported an estimated 1.355 million American jobs (see Chart 4 and Table 3).[6]

The number of U.S. jobs attributable to insourcing is increasing. The number of U.S. jobs among majority-owned American subsidiaries of foreign companies grew by an average of 5.2 percent a year from 1998 to 2002, while the number of U.S. jobs attributable to U.S. exports of services that are subject to international competition expanded by an average of 5.8 percent a year from 1998 to 2002. Both were significantly faster than the average employment growth rate (establishment survey) of 1.5 percent a year from 1998 to 2002 for the U.S. economy as a whole (see Chart 1).

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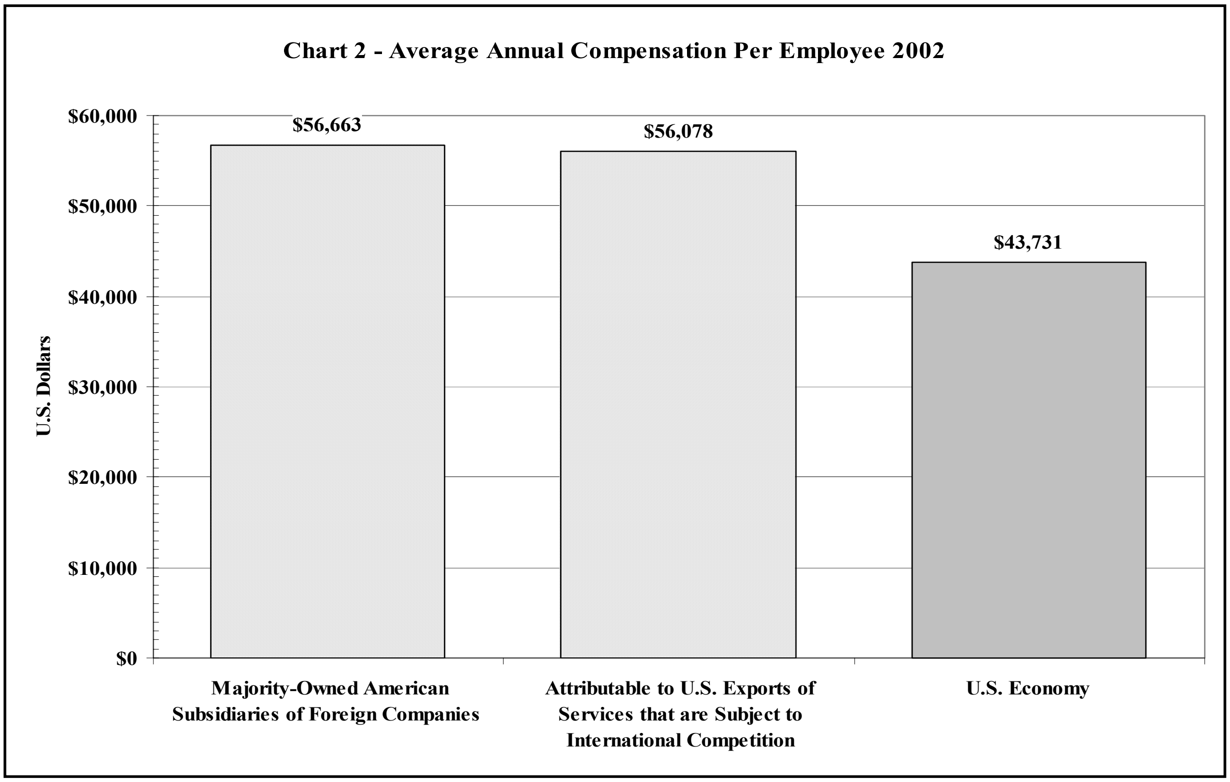
[5] This study defines U.S. exports of services that are subject to international competition as exports of other private services as categorized by the BEA less U.S. exports of educational services. The other major categories of services exports – travel, passenger fares, other transportation, license fees and royalties, and transfers under U.S. military sales contracts to foreign governments – require a physical presence in the United States, involve foreign persons on U.S. carriers during international travel, involve the transport of goods out of the United States, consist of license fees and royalty payments by foreign persons for the use the intellectual property of U.S. persons, or involve defense or foreign policy decisions of foreign governments. These services create jobs that are not easily subject to international competition.

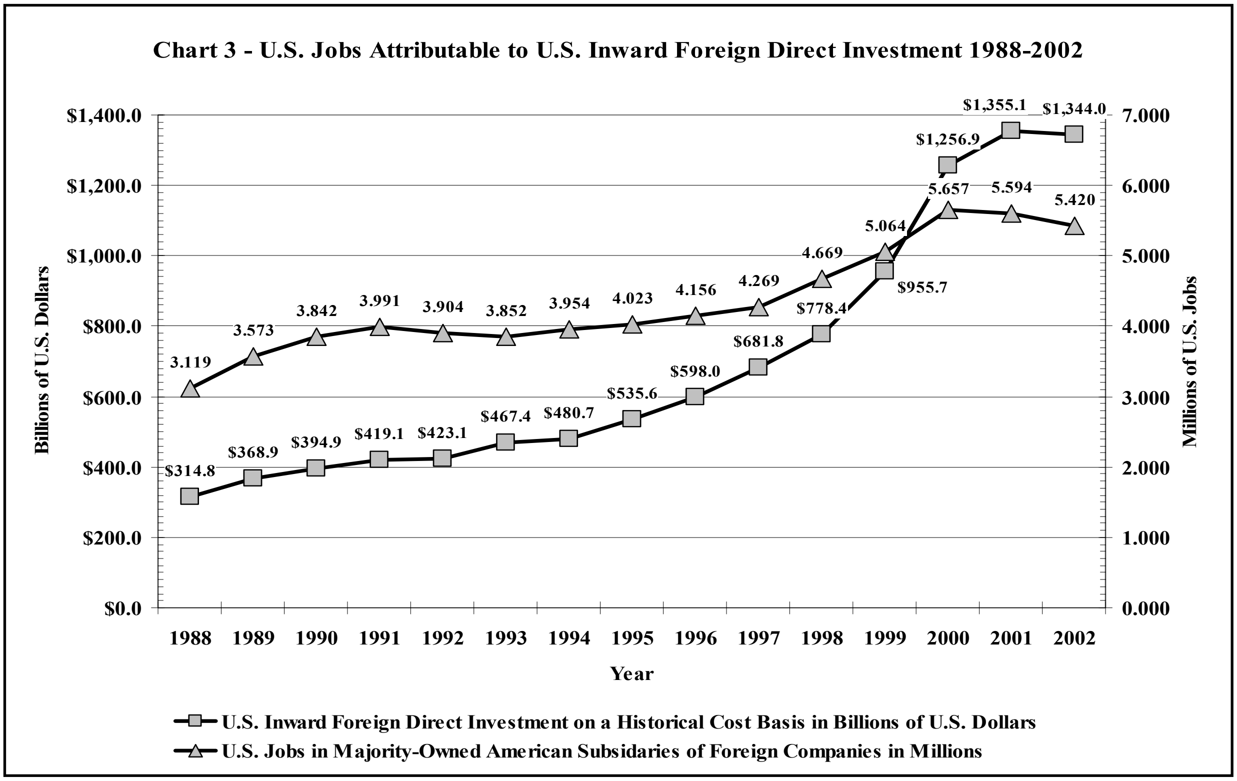
[6] This study estimates the number of jobs attributable to U.S. exports of services that are subject to international competition by multiplying the U.S. exports of such services by compensation as percent of valued-added of such services and then dividing by the compensation per full-time and part-time employee for such services.




Moreover, the U.S. jobs attributable to insourcing are generally high-paying. In 2002, the average annual compensation at majority-owned American subsidiaries of foreign companies was $56,663 per employee, 29.6 percent higher than the average for all U.S. workers.[7] In the same year, the average annual compensation for U.S. jobs attributable to U.S. exports of services that are subject to international competition was $56,078 per employee, 28.2 percent higher than the average annual compensation for all U.S. workers (see Chart 2).[8]

[7] Average annual compensation for majority-owned non-bank U.S. affiliates of foreign multinational firms is calculated by dividing the total compensation paid by majority-owned non-bank U.S. affiliates of foreign multinational firms as provided by BEA by the number of full-time and part-time employees majority-owned non-bank U.S. affiliates of foreign multinational firms as provided by BEA. Average annual compensation for all U.S. workers is calculated by dividing the total compensation accrued to U.S. workers as provided by BEA by the total number of full-time and part-time jobs as provided by the BEA. In 2002, the average compensation for all U.S. workers was $43,731.

[8] Average annual compensation for services industries subject to international competition is calculated by the sum of total compensation for NAICS 1997 classifications 514 information and data processing services, 52 finance and insurance services, 54 professional, scientific, and technical services, and 81 other services not government as provided by BEA divided by the sum of full-time and part-time employees for NAICS 1997 classifications 514 information and data processing services, 52 finance and insurance services, 54 professional, scientific, and technical services, and 81 other services not government as provided by BEA.




## II. FOREIGN DIRECT INVESTMENT AND INSOURCING U.S. JOBS

Foreign direct investment occurs when a company in one country obtains a lasting interest and a degree of management control of a company in another country. Generally, the ownership of at least 10 percent of the voting shares of an incorporated company or at least a 10 percent interest in an unincorporated company distinguishes foreign direct investment from foreign portfolio investment. Foreign direct investment may be outward (i.e., an American company may own a subsidiary company located in another country) or inward (i.e., a foreign company may own a subsidiary company located in the United States).

U.S. inward foreign direct investment creates jobs in the United States. Between 1988 and 2002, employment at majority-owned American subsidiaries of foreign companies grew by an average of 5.2 percent a year. That is about three times faster than the average annual employment growth rate (establishment survey) for the United States of 1.5 percent during the same period (see Chart 1). In 2002, majority-owned American subsidiaries of foreign companies employed 5.420 million U.S. workers (see Chart 3 and Table 2). These jobs supported by inward foreign direct investment by foreign companies into the United States represent one form of "job insourcing."

Employment at American subsidiaries of foreign companies accounted for 4.0 percent of all employment (household survey) in the United States in 2002. Moreover, workers at American subsidiaries earn considerable more on average than do all U.S. workers. In 2002, the average annual compensation at majority-owned American subsidiaries of foreign companies was $56,663 per employee, 29.6 percent higher than the average for all U.S. workers (see Chart 2).

Interestingly, U.S. inward foreign direct investment is heavily tilted toward manufacturing. In 2002, majority-owned American subsidiaries of foreign companies engaged in manufacturing represented 48.0 percent of the value-added and 41.1 percent of the employment in all American subsidiaries of foreign companies. By comparison, manufacturing accounted for 14.8 percent of the value-added in U.S. private sector and 13.5 percent of all jobs in the U.S. private sector.

In 2002, majority-owned American manufacturing subsidiaries of foreign companies employed 2.228 million U.S. workers.[9] These subsidiaries provided 14.6 percent of all manufacturing jobs in the United States.[10] Moreover, U.S. workers at majority-owned American manufacturing subsidiaries of foreign companies are highly paid. In 2002, the average annual compensation for U.S. manufacturing workers employed by these subsidiaries was $65,201, 18.4 percent higher than the average annual compensation for all U.S. manufacturing workers.[11]

Announced expansions of U.S. inward foreign direct investment since 2002 suggest that American subsidiaries of foreign companies will become a more important source of domestic employment in future years. For example, Nissan recently opened a $1.4 billion vehicle assembly plant in Canton, Mississippi, that is expected to employ about 5,300 American workers. BSH Home Appliance Corporation recently opened two plants in New Bern, North Carolina, employing about 1,200 American workers. However, the ongoing expansion of inward foreign direct investment is not limited to "blue collar" manufacturing plants. For example, Hyundai Motor Company and Kia Motor Company recently established a joint design and technical center in Irvine, California, employing about 100 auto designers and engineers. Ecolabs Inc. is adding about 400 engineers at its research and development center in Eagan, Minnesota.[12]

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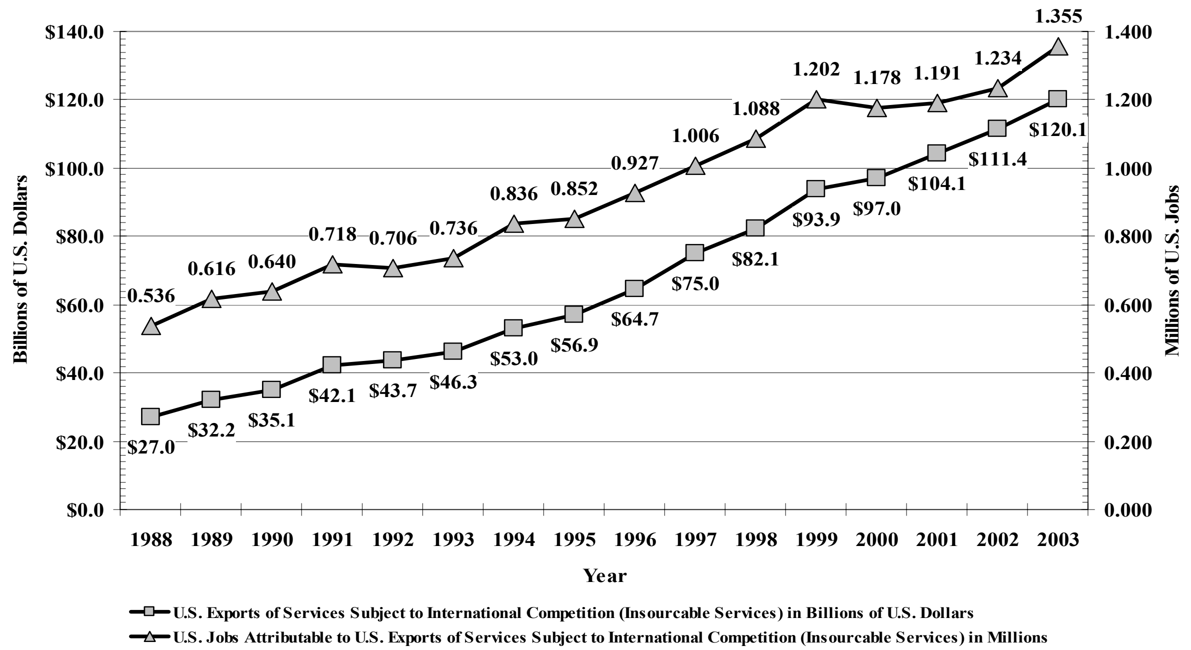
[9] The BEA calculates the number of manufacturing jobs in majority-owned U.S. affiliates of foreign multinational firms is calculated on both a by industry of affiliate basis and a by industry of sales basis. The by industry of sales basis excludes jobs in manufacturing firms by industry that produce non-manufactured goods or provide services (e.g., post-sale services) that are included in the by industry of affiliate basis. The number of manufacturing jobs in the text is calculated on a by industry of affiliate basis. Alternatively, the number of manufacturing jobs in majority-owned U.S. affiliates of foreign multinational firms is 1.858 million in 2002 on a by industry of sales basis.

[10] This percentage is calculated on a by industry of affiliate basis. Alternatively, the percentage is 12.7 percent calculated on a by industry of sales basis.

[11] Average annual compensation for majority-owned U.S. affiliates of foreign multinational firms engaged in manufacturing is calculated by dividing the total compensation paid by majority-owned U.S. affiliates of foreign multinational firms engaged in manufacturing as provided by BEA by the number of full-time and part-time employees majority-owned U.S. affiliates of foreign multinational firms engaged in manufacturing as provided by BEA. Average annual compensation for all U.S. manufacturing workers is calculated by dividing the total compensation accrued to U.S. manufacturing workers as provided by BEA by the total number of full-time and part-time manufacturing employees as provided by the BEA. In 2002, the average compensation for all U.S. manufacturing workers was $55,078.

[12] Organization for International Investment website, found at http://www.ofii.org/insourcing/recent_expansions.doc.

**Chart 4 - U.S. Jobs Attributable to U.S. Exports of Services Subject to International Competition (Insourcable Services) 1988-2003**




## III. U.S. EXPORTS OF SERVICES AND INSOURCING U.S. JOBS

U.S. exports of services that are subject to international competition grew by an average of 10.3 percent a year from $27.0 billion in 1988 to $120.1 billion in 2003 (see Chart 4).[13] From

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[13] Several major categories of services exports – travel, passenger fares, and other transportation – employ U.S. workers that are not generally subject to international competition because they involve the physical presence of a foreign person in the United States (for example, U.S. workers that are employed in hotels, restaurants, and theme parks in central Florida to provide travel-related services to foreign visitors to Walt Disney World, Universal Orlando, and Sea World) or are related to the transport of goods out of the United States (for example, U.S. workers that are employed by FedEx to pick up, process, and ship a case of pinot nior wine from Etude winery in California to a restaurant in Tokyo). Additionally, exports of educational services, which largely consist of tuition and fees paid by foreign students to U.S. colleges and universities, also require a physical presence by foreign persons in the United States. Even though such services are counted as exports, the physical presence of a foreign person or good in the United States means that it is virtually impossible for the providers of such services to employ foreign workers to supply such services from outside of the United States.

Exports of the use by foreign persons of intellectual property rights owned by U.S. persons generate license fees and royalties. Since intellectual property is unique and legally protected from uncompensated duplication, the U.S. creators of these intellectual property rights are not subject to direct competition from foreign workers. The exclusion of exports of travel, passenger fares, other transportation services, license fees and royalties, education services, and transfers under U.S. military sales contracts with foreign government leaves U.S. exports of services that are subject to international competition. These include information and data processing services, finance and insurance services, professional, scientific, and technical services, and other services except government. The jobs supported by the exports of U.S. services industries subject to international competition represent another form of "job insourcing."

For 1988 through 1997, SIC 1987 classifications 60 banking, 61 credit agencies other than banking, 62 security and commodity brokers, 63 insurance carriers, 64 insurance agents, brokers, and service, 67 holding and other investment companies, 73 business services, 81 legal services, 84 miscellaneous professional services and 89 other

1988 to 2003, the number of jobs supported by such exports grew by an annual average of 6.1 percent a year. In 2003, exports of such services supported an estimated 1.355 million American jobs (see Chart 4 and Table 3). These jobs accounted for 1.0 percent of all employment (household survey) in the United States. In 2002, the average annual compensation for U.S. workers in services industries subject to international competition was $56,078 per employee, 28.2 percent higher than the average annual compensation for all U.S. workers (see Chart 2).

## IV. CONCLUSION

Job insourcing from both inward foreign direct investment and exports of services subject to international competition have greatly benefited American workers during last decade and half by creating many new high-paying jobs. From 1988 to 2002, the total value of direct investment by foreign companies in their American subsidiaries increased by 325.7 percent to $1,340.0 billion on a historical cost basis, creating 2.301 million jobs in such majority-owned subsidiaries. In 2002, majority-owned American subsidiaries of foreign companies employed a total of 5.420 million U.S. workers. In same year, the average annual compensation for jobs in these American subsidiaries was $56,663 per employee, 29.6 percent higher than the average for all U.S. workers.

Similarly, from 1988 to 2003, U.S. exports of services that are subject to international competition expanded by an average growth rate of 10.3 percent. In 2003, these exports of $120.1 billion supported an estimated 1.355 million U.S. jobs. In 2002, the average annual compensation for these jobs was $56,078 per employee, 28.2 percent higher than the average for all U.S. workers.

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Senior Economist to the Vice Chairman

services are used to represent services employing U.S. workers subject to international competition (i.e., insourcable services). For 1998 through 2003, NAICS 1997 classifications 514 information and data processing services, 52 finance and insurance services, 54 professional, scientific, and technical services, and 81 other services not government are used. Telecommications services are excluded because NAICS 1997 combines telecommunications and broadcasting under a single industrial classification and broadcasting would not generally be considered as a service industry subject to international competition.

| Table 1 – U.S. Inward Foreign Direct Investment 1988-2002 | | | |
|---|---|---|---|
| Year | U.S. Inward Foreign Direct Investment - Historical Cost in Billions of U.S. Dollars (BEA) | U.S. Inward Foreign Direct Investment - Current Cost in Billions of U.S. Dollars (BEA) | U.S. Inward Foreign Direct Investment U.S. - Market Value in Billions of U.S. Dollars (BEA) |
| **1988** | $314.8 | $334.6 | $316.2 |
| **1989** | $368.9 | $401.8 | $391.5 |
| **1990** | $394.9 | $467.9 | $534.7 |
| **1991** | $419.1 | $505.3 | $539.6 |
| **1992** | $423.1 | $533.4 | $669.1 |
| **1993** | $467.4 | $540.3 | $696.2 |
| **1994** | $480.7 | $593.3 | $768.4 |
| **1995** | $535.6 | $618.0 | $757.9 |
| **1996** | $598.0 | $680.1 | $1,005.7 |
| **1997** | $681.8 | $745.6 | $1,229.1 |
| **1998** | $778.4 | $824.1 | $1,637.4 |
| **1999** | $955.7 | $920.0 | $2,179.0 |
| **2000** | $1,256.9 | $1,101.7 | $2,798.2 |
| **2001** | $1,355.1 | $1,421.0 | $2,783.2 |
| **2002** | $1,344.0 | $1,513.5 | $2,560.3 |
| **2003** | $1,340.0 | $1,505.2 | $2,025.3 |

| Table 2 – U.S. Jobs at American Subsidiaries of Foreign Companies 1988-2002[14] | |
|---|---|
| Year | Employment in Millions (BEA) |
| **1988** | 3.119 |
| **1989** | 3.573 |
| **1990** | 3.842 |
| **1991** | 3.991 |
| **1992** | 3.904 |
| **1993** | 3.852 |
| **1994** | 3.954 |
| **1995** | 4.023 |
| **1996** | 4.156 |
| **1997** | 4.269 |
| **1998** | 4.669 |
| **1999** | 5.064 |
| **2000** | 5.657 |
| **2001** | 5.594 |
| **2002** | 5.420 |

[14] American subsidiaries of foreign companies refers to majority-owned non-bank U.S. affiliates of foreign multinational firms.

| Table 3 – U.S. Jobs Attributable to U.S. Exports of Services Subject to International Competition | | | | | | |
|---|---|---|---|---|---|---|
| **Year** | **Exports of Other Private Services in Millions of U.S. Dollars (BEA)** | **Exports of Education Services in Millions of U.S. Dollars (BEA)** | **Export of Insourcable Services in Millions of U.S. Dollars (Calculated from BEA Data)** | **Compensation as a Percent of Value-Added for Insourcable Services (BEA)** | **Compensation per Full-Time & Part-Time Employees for Insourcable Services in U.S. Dollars (BEA)** | **Estimate of Jobs Gained by Insourcing Services in Millions (Calculation by JEC)** |
| **1988** | $31,111 | $4,142 | $26,969 | 61.5% | $30,951 | 0.536 |
| **1989** | $36,729 | $4,575 | $32,154 | 61.2% | $31,935 | 0.616 |
| **1990** | $40,251 | $5,126 | $35,125 | 61.4% | $33,739 | 0.640 |
| **1991** | $47,748 | $5,679 | $42,069 | 60.5% | $35,451 | 0.718 |
| **1992** | $49,864 | $6,186 | $43,678 | 61.3% | $37,959 | 0.706 |
| **1993** | $53,023 | $6,738 | $46,285 | 62.6% | $39,378 | 0.736 |
| **1994** | $60,209 | $7,174 | $53,035 | 62.6% | $39,726 | 0.836 |
| **1995** | $64,386 | $7,515 | $56,871 | 62.1% | $41,416 | 0.852 |
| **1996** | $72,615 | $7,887 | $64,728 | 61.9% | $43,212 | 0.927 |
| **1997** | $83,349 | $8,346 | $75,003 | 60.9% | $45,401 | 1.006 |
| **1998** | $91,158 | $9,036 | $82,122 | 61.3% | $46,313 | 1.088 |
| **1999** | $103,523 | $9,616 | $93,907 | 62.8% | $49,044 | 1.202 |
| **2000** | $107,361 | $10,348 | $97,013 | 65.0% | $53,531 | 1.178 |
| **2001** | $115,614 | $11,478 | $104,136 | 64.3% | $56,245 | 1.191 |
| **2002** | $124,181 | $12,759 | $111,422 | 62.1% | $56,078 | 1.234 |
| **2003** | $133,818 | $13,672 | $120,146 | 63.1% | $55,945 | 1.355 |

For 1988 through 1997, SIC 1987 classifications 60 banking, 61 credit agencies other than banking, 62 security and commodity brokers, 63 insurance carriers, 64 insurance agents, brokers, and service, 67 holding and other investment companies, 73 business services, 81 legal services, 84 miscellaneous professional services and 89 other services are used to represent services employing U.S. workers subject to international competition (i.e., insourcable services). For 1998 through 2003, NAICS 1997 classifications 514 information and data processing services, 52 finance and insurance services, 54 professional, scientific, and technical services, and 81 other services not government are used. For 2003, compensation as a percent of value-added for insourcable services is estimated as the average of compensation as a percent of value-added for insourcable services for 1998-2002. For 2003, compensation per full-time and part-time employee for insourcable services is estimated by adjusting the compensation per full-time and part-time employee for insourcable services in 2002 by the changes in the employment cost index. The estimate of the number of U.S. jobs attributable to U.S. exports of insourable services is derived by multiplying the U.S. exports of insourcable services by compensation as percent of value-added of insourcable services and then dividing by the compensation per full-time and part-time employee for insourcable services.