



## U.S. Exports of Advanced Technology Products Declined Less Than Other U.S. Exports in 2009

by Derek Hill<sup>1</sup>

This InfoBrief presents recent trends in U.S. advanced technology product (ATP) exports. It uses U.S. Census Bureau data available through 2010 to examine the changes in these exports during the recent U.S. recession (“2008–09 recession”) and to offer a brief comparison between the 2008–09 recession and the 2001 recession.<sup>2</sup> It focuses on 4 of the 10 ATP areas defined by the Census Bureau. These are aerospace, electronics, information and communications technology (ICT), and life science, which together accounted for 85% of U.S. ATP exports in 2010.<sup>3</sup> This InfoBrief also describes U.S. ATP trade with selected major economies and regions.

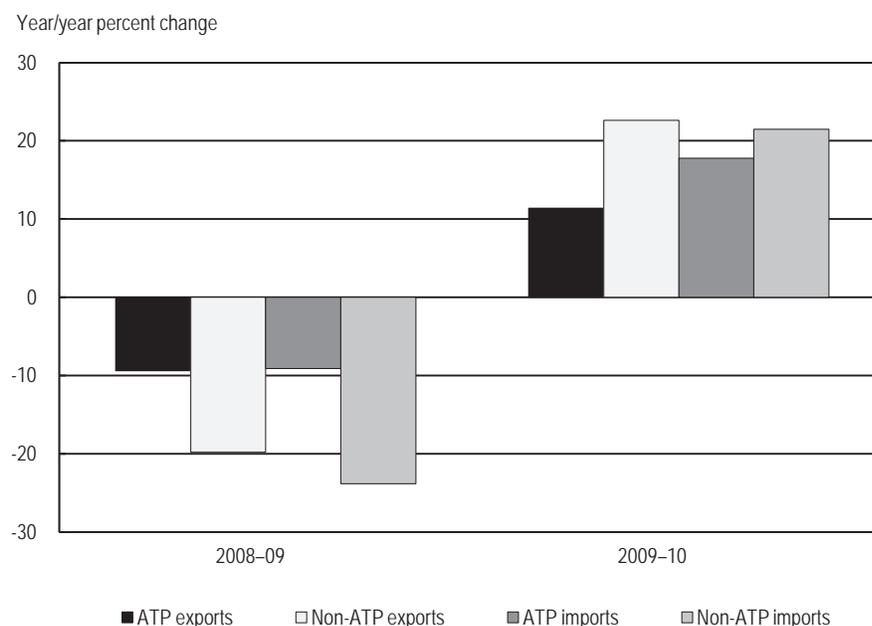
U.S. ATP exports contracted 9% during the recent U.S. recession, from \$270 billion in 2008 to \$245 billion in 2009 (figure 1 and tables 1 and 2)—less than half the 20% rate of loss of non-ATP exports, excluding petroleum. U.S. ATP imports fell by the same percentage as exports, whereas other types of U.S. imports contracted by 24%.

Comparison of data from 2010 with data from 2009 reverses this picture. U.S. ATP exports showed signs of

recovery, advancing by 11% over 2009. But other types of U.S. exports expanded at twice that rate (23%) (figure 1).

The economic impact was far more severe during the 2008–09 recession than during the 2001 recession.

FIGURE 1. Change in U.S. ATP and other non-petroleum trade: 2008–10



ATP = advanced technology product.

NOTE: ATP trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life science, optoelectronics, nuclear technology, and weapons.

SOURCE: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 15 May 2011.

TABLE 1. U.S. merchandise trade, by selected category, and U.S. dollar exchange rate, by selected currencies: 1999–2010

Trade and technology	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Billions of U.S. dollars												
Total non-petroleum												
Exports	687.2	769.9	718.5	682.8	712.1	797.8	878.4	994.4	1,110.4	1,220.3	1,006.9	1,207.4
Imports	956.8	1,097.7	1,037.4	1,057.9	1,124.0	1,289.2	1,421.6	1,551.5	1,626.0	1,650.4	1,305.9	1,576.0
Balance	-269.6	-327.8	-318.9	-375.1	-411.9	-491.5	-543.2	-557.1	-515.5	-430.1	-299.1	-368.6
ATP												
Exports	200.3	227.4	199.6	178.6	180.2	201.6	216.8	247.1	264.9	270.1	244.7	272.7
Imports	181.2	222.1	195.2	195.2	207.0	238.3	259.7	290.8	326.8	331.2	300.9	354.5
Balance	19.1	5.3	4.5	-16.6	-26.8	-36.7	-42.9	-43.7	-61.9	-61.1	-56.2	-81.8
Other, non-petroleum												
Exports	486.9	542.5	518.9	504.2	531.9	596.2	661.6	747.3	845.5	950.2	762.2	934.7
Imports	775.6	875.6	842.2	862.7	917.0	1,050.9	1,161.9	1,260.7	1,299.2	1,319.2	1,005.0	1,221.5
Balance	-288.7	-333.1	-323.3	-358.5	-385.1	-454.7	-500.3	-513.4	-453.7	-369.0	-242.8	-286.8
U.S. dollar exchange rate (2008 = 100.0)												
Currency												
Broad dollar index	116.3	119.7	126.2	127.0	119.4	113.9	111.0	108.8	103.7	100.0	105.8	102.2
Euro	138.2	159.5	164.5	155.8	130.1	118.4	118.3	117.2	107.4	100.0	105.7	111.0
Yuan (China)	119.2	119.2	119.1	119.1	119.1	119.1	117.9	114.7	109.5	100.0	98.3	97.4
Yen (Japan)	110.0	104.3	117.6	121.1	112.1	104.6	106.5	112.5	113.9	100.0	90.6	84.9
Won (South Korea)	108.3	102.9	117.6	113.8	108.5	104.2	93.2	86.9	84.6	100.0	116.0	105.2
Dollar (Taiwan)	102.5	99.2	107.3	109.6	109.2	105.9	101.9	103.1	104.2	100.0	104.8	99.9

ATP = advanced technology product.

NOTES: ATP trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life science, optoelectronics, nuclear technology, and weapons. Foreign currencies are expressed in local currency value per dollar. Broad dollar index is basket of currencies of major U.S. trading partners.

SOURCES: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 15 May 2011, and U.S. Federal Reserve, Statistical Releases, Exchange rates and international data, <http://www.federalreserve.gov/releases/g17/>, accessed 15 May 2011.

However, in the more recent recession the downturn of U.S. ATP exports was relatively milder and the recovery of these exports was relatively faster (figure 2). Similarly, the U.S. computer and electronics industry, a major source of U.S. ATP exports, showed a shorter and shallower decline in production in the 2008–09 recession when compared with the 2001 recession.

## U.S. Advanced Technology Product Exports: Four Selected Technologies

U.S. ATP exports varied between the recent recession (2008–09) and the period surrounding the end of the recent recession (2009–10) among the four largest technologies—*aerospace*, *electronics*, *ICT*, and *life science* (table 2).

### **Aerospace**

U.S. aerospace exports showed little change between 2008 and 2009 (\$85 billion to \$84 billion), with a slight widening of the U.S. trade surplus to \$54 billion in 2009 (table 2). This volatile sector was the only one of the four largest technologies to see a decline in U.S. exports between 2009 and 2010 (4%). During this period the U.S. trade surplus in this technology fell by \$3 billion to reach \$51 billion.

### **Electronics**

Between 2008 and 2009 U.S. electronics showed the sharpest decline in exports among the big four technologies (27%) (table 2). This decline was three times as large as the overall rate of decline for ATP exports (9%). During this period exports of U.S. elec-

tronics dropped from \$51 billion to \$37 billion, and the U.S. trade surplus in this category declined from \$25 billion to \$16 billion. Between 2009 and 2010 exports of U.S. electronics grew by 23%, a faster rate than the other three largest technologies. The U.S. trade surplus in this category rose by \$2 billion to reach \$18 billion.

### **ICT**

U.S. ICT exports fell 14% between 2008 and 2009 (from \$77 billion to \$67 billion) (table 2), a rate one and a half times greater in percentage terms than the overall decline in U.S. ATP exports. The U.S. trade deficit in this technology, the largest among these four technologies, was nearly unchanged during this period (\$105 billion to \$103 billion). Between 2009 and 2010

TABLE 2. U.S. trade in advanced technology products, by selected technology and country/economy: 2008–10 (Billions of U.S. dollars)

Characteristic	Exports			Imports			Balance		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
<b>Technology</b>									
All technologies	270.1	244.7	272.7	331.2	300.9	354.5	-61.1	-56.2	-81.8
Aerospace	84.6	84.0	80.7	35.0	29.9	29.3	49.6	54.1	51.4
Electronics	50.9	37.3	45.9	25.6	20.9	27.8	25.3	16.4	18.1
ICT	77.3	66.7	77.7	181.8	169.8	205.1	-104.5	-103.1	-127.4
Life science	25.2	25.3	27.8	39.9	38.1	41.8	-14.7	-12.8	-14.0
All others	32.1	31.5	40.5	48.8	42.2	50.5	-16.7	-10.7	-10.0
<b>Countries/economies</b>									
All countries/economies	270.1	244.7	272.7	331.2	300.9	354.5	-61.1	-56.2	-81.8
Asia	93.7	79.3	97.7	191.1	170.7	209.2	-97.4	-91.4	-111.5
China	24.9	25.4	29.6	92.2	90.3	116.5	-67.3	-64.9	-86.9
India	3.7	4.0	3.2	1.1	1.0	1.4	2.6	3.0	1.8
Japan	17.5	14.2	15.6	26.7	19.9	23.3	-9.2	-5.7	-7.7
South Korea	10.2	8.1	11.0	16.4	15.2	17.4	-6.2	-7.1	-6.4
Taiwan	9.9	7.0	10.5	13.8	12.1	15.4	-3.9	-5.1	-4.9
All others	27.7	20.6	27.8	41.0	32.2	35.1	-13.3	-11.6	-7.3
EU	75.2	70.0	66.2	68.8	60.5	65.8	6.4	9.5	0.4
France	10.9	11.5	10.6	12.1	10.4	10.6	-1.2	1.1	0.0
Germany	17.2	16.9	16.6	11.6	10.4	10.1	5.6	6.5	6.5
United Kingdom	14.2	13.0	12.1	10.8	9.3	9.5	3.4	3.7	2.6
All others	33.0	28.6	26.9	34.3	30.4	35.5	-1.3	-1.8	-8.6
NAFTA	48.4	44.6	54.7	57.0	54.0	61.6	-8.6	-9.4	-6.9
Canada	28.8	24.0	27.5	16.6	14.2	12.8	12.2	9.8	14.7
Mexico	19.6	20.6	27.1	40.3	39.7	48.7	-20.7	-19.1	-21.6
All others	52.8	50.8	54.1	14.3	15.8	17.9	38.5	35.0	36.2

ICT = information and communications technology; EU = European Union; NAFTA = North American Free Trade Agreement.

NOTES: ATP trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, ICT, life science, optoelectronics, nuclear technology, and weapons. China includes Hong Kong. Other Asia consists of Indonesia, Malaysia, the Philippines, Singapore, and Thailand. EU includes all 27 member countries. Advanced technology product trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life sciences, optoelectronics, nuclear technology, and weapons.

SOURCE: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 15 May 2011.

U.S. ICT exports grew 16%, faster than U.S. ATP exports overall (11%) but lagging behind the growth of U.S. ICT imports (21%); this resulted in a widening of the U.S. ICT trade deficit from \$103 billion in 2009 to \$127 billion in 2010.

### Life Science

U.S. exports in this category showed little change between 2008 and 2009 (\$25 billion in both years), with the U.S.

trade deficit falling slightly to reach \$13 billion in 2009 (table 2). Between 2009 and 2010 U.S. exports of life science grew at about the rate of ATP exports overall, and the U.S. life science trade deficit widened slightly to \$14 billion in 2010.

### U.S. Advanced Technology Product Trade by Country/Region

The pattern in U.S. ATP exports from 2008 to 2010 varied widely among

three main trading regions: Asia, the European Union, and the North American Free Trade Agreement (NAFTA) trade zone.<sup>4</sup>

### Asia

U.S. ATP exports to Asia fell from \$94 billion in 2008 to \$79 billion in 2009; at 15%, this is the largest decline among the three main trading regions (table 2). The decline was driven by a drop in electronics exports to Asia, the most important export market for this technology, and a drop in ICT exports (tables 3–4).

During this period U.S. ATP exports declined steeply (19%–29%) to Japan, South Korea, and Taiwan, but these exports to China saw little change (table 2). The change in U.S. ATP imports by Asian country/economy was similar, and the U.S. trade deficit with this region fell slightly to \$91 billion in 2009.

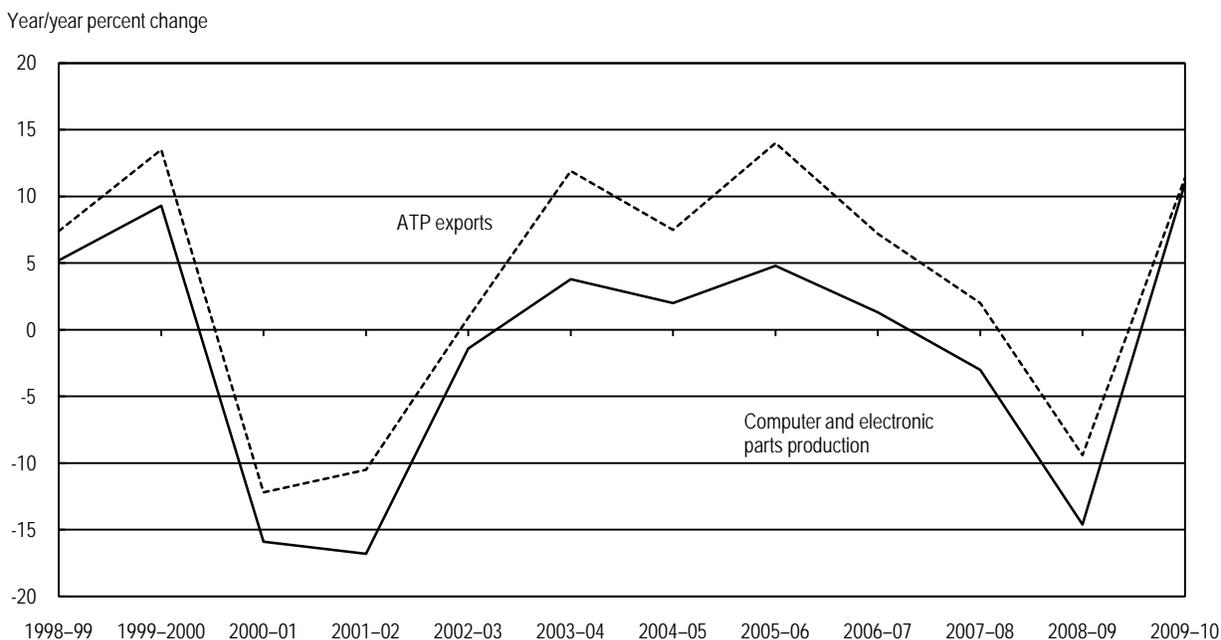
The stronger performance of U.S.-China ATP trade relative to other Asian economies may reflect both the apparently milder impact of the 2008–09 recession on China when compared with other major Asian ATP exporters and a stable U.S.-China currency exchange rate when compared with the dollar fluctuating against other Asian currencies (table 1).<sup>5</sup>

The data for 2010 offer a contrasting picture. U.S. ATP exports to Asia grew 23% between 2009 and 2010 (table 2), a rate more than two times greater than the overall increase in ATP exports, with rapid growth in electronics (table 3). But U.S. imports from Asia exceeded exports, widening the U.S. ATP trade deficit with Asia during this period from \$91 billion in 2009 to \$112 billion in 2010.

### European Union

U.S. ATP exports to the European Union totaled \$70 billion in 2009 (table 2), down 7% from 2008, led by steep

FIGURE 2. Change in U.S. ATP exports and computer and electronic parts production: 1998–2010



ATP = advanced technology product.

NOTES: Computer and electronic parts production (shipments) valued in current dollars. It includes computer and peripheral equipment, communications equipment, audio and video equipment, magnetic and optical media manufacturing, semiconductors, navigational, and measure and control equipment. ATP trade classified by the Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life science, optoelectronics, nuclear technology, and weapons.

SOURCE: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 20 July 2010 and Survey of Manufacturers' Shipments, Inventories, and Orders, <http://www.census.gov/manufacturing/m3/>, accessed 15 May 2011.

falls in ICT and electronics (tables 3–4). The trend varied among the three largest European Union economies: increasing to France, showing little change to Germany, and declining to the United Kingdom. The U.S. trade surplus with the European Union widened from \$6 billion to \$10 billion between 2008 and 2009.

Between 2009 and 2010 U.S. ATP exports to the region fell 5%, led by the fall in aerospace (tables 2–3). Among the three largest European Union economies, U.S. ATP exports decreased to France (–8%) and the United Kingdom (–7%) and remained roughly steady to

Germany (–2%). U.S. ATP imports from the European Union rose slightly during this period (from \$61 billion to \$66 billion), led by life science (table 4). The U.S. ATP trade surplus with the European Union fell from \$10 billion to less than \$500 million during this period.

#### **NAFTA Trade Zone**

U.S. ATP exports to NAFTA partners fell 8% between 2008 and 2009, from \$48 billion to \$45 billion (table 2), with losses in all four technologies (tables 3–4). U.S. ATP exports to Canada declined by 17%, but U.S. ATP exports to Mexico rose by 5%. The U.S. trade surplus with Canada fell slightly to \$10

billion in 2009, and the trade deficit with Mexico showed little change (\$19 billion in 2009).

Between 2009 and 2010 U.S. ATP exports to NAFTA grew 23% (table 2), with strong gains in electronics and ICT (tables 3–4). These exports to Mexico rose briskly (32%), fueled by strong gains in ICT and electronics, with a smaller increase to Canada (15%). The U.S. ATP trade deficit with NAFTA narrowed slightly during this period, with the U.S. trade surplus with Canada rising from \$10 to \$15 billion and the U.S. trade deficit with Mexico increasing \$3 billion to reach \$22 billion.

TABLE 3. U.S. trade in aerospace and electronics products, by selected country/economy: 2008–10  
(Billions of U.S. dollars)

Country/economy	Exports			Imports			Balance		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
<b>Aerospace</b>									
All countries/economies	84.6	84.0	80.7	35.0	29.9	29.3	49.6	54.1	51.4
Asia	22.6	23.1	24.8	3.9	4.2	4.5	18.7	18.9	20.3
China	5.2	7.6	7.2	0.4	0.4	0.5	4.8	7.2	6.7
India	1.8	2.2	1.3	0.0	0.0	0.0	1.8	2.2	1.3
Japan	6.7	5.5	5.3	2.6	2.8	3.0	4.1	2.7	2.3
South Korea	2.6	1.9	2.6	0.4	0.4	0.5	2.2	1.5	2.1
Taiwan	1.2	0.8	1.3	0.2	0.2	0.2	1.0	0.6	1.1
All others	5.2	5.0	7.1	0.4	0.3	0.3	4.8	4.7	6.8
EU	30.4	29.8	26.2	18.1	16.3	15.7	12.3	13.5	10.5
France	7.3	8.6	7.2	8.8	7.5	7.4	-1.5	1.1	-0.2
Germany	5.7	5.5	5.4	2.8	3.1	2.2	2.9	2.4	3.2
United Kingdom	7.2	6.1	6.0	4.0	3.5	3.4	3.2	2.6	2.6
All others	10.3	9.6	7.6	2.6	2.2	2.8	7.7	7.4	4.8
NAFTA	8.8	7.4	7.0	8.3	7.1	6.7	0.5	0.3	0.3
Canada	7.3	5.7	5.4	7.8	6.7	6.0	-0.5	-1.0	-0.6
Mexico	1.5	1.6	1.6	0.5	0.5	0.7	1.0	1.1	0.9
All others	22.8	23.7	22.8	4.6	2.3	2.3	18.2	21.4	20.5
<b>Electronics</b>									
All countries/economies	50.9	37.3	45.9	25.6	20.9	27.8	25.3	16.4	18.1
Asia	34.8	24.4	29.7	19.7	14.7	20.5	15.1	9.7	9.2
China	9.5	7.9	9.3	2.1	1.7	2.8	7.4	6.2	6.5
India	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Japan	1.6	1.2	1.3	2.9	2.1	2.9	-1.3	-0.9	-1.6
South Korea	3.3	2.7	2.7	2.7	2.3	3.0	0.6	0.4	-0.3
Taiwan	5.3	3.1	3.3	4.5	3.2	3.6	0.8	-0.1	-0.3
All others	15.0	9.4	13.0	7.4	5.4	8.1	7.6	4.0	4.9
EU	4.9	2.9	3.0	3.2	1.9	2.3	1.7	1.0	0.7
France	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.2
Germany	1.5	0.7	0.9	0.8	0.5	0.7	0.7	0.2	0.2
United Kingdom	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2
All others	2.4	1.4	1.3	1.8	0.9	1.1	0.6	0.5	0.2
NAFTA	7.6	7.0	9.9	2.1	2.0	2.0	5.5	5.0	7.9
Canada	2.8	2.3	2.7	1.1	1.1	1.0	1.7	1.2	1.7
Mexico	4.8	4.7	7.2	1.0	0.9	1.0	3.8	3.8	6.2
All others	3.6	2.9	3.4	0.6	2.4	3.0	3.0	0.5	0.4

EU = European Union; NAFTA = North American Free Trade Agreement.

NOTES: China includes Hong Kong. Other Asia consists of Indonesia, Malaysia, the Philippines, Singapore, and Thailand. EU includes all 27 member countries. Advanced technology product trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life science, optoelectronics, nuclear technology, and weapons.

SOURCE: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 15 May 2011.

TABLE 4. U.S. trade in information and communications technology and life science products, by selected country/economy: 2008–10  
(Billions of U.S. dollars)

Country/economy	Exports			Imports			Balance		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
<b>Information and communications technology</b>									
All countries/economies	77.3	66.7	77.7	181.8	169.8	205.1	-104.5	-103.1	-127.4
Asia	18.0	15.6	17.0	138.4	133.3	160.4	-120.4	-117.7	-143.4
China	6.3	6.2	7.1	81.0	79.6	103.0	-74.7	-73.4	-95.9
India	1.0	1.0	0.9	0.4	0.4	0.6	0.6	0.6	0.3
Japan	3.3	2.6	2.5	12.6	9.2	9.4	-9.3	-6.6	-6.9
South Korea	1.5	1.1	1.2	12.6	12.0	13.1	-11.1	-10.9	-11.9
Taiwan	1.0	0.7	0.8	8.2	8.2	10.9	-7.2	-7.5	-10.1
All others	4.9	4.0	4.5	23.7	24.0	23.6	-18.8	-20.0	-19.1
EU	16.5	12.2	12.7	7.7	6.2	7.0	8.8	6.0	5.7
France	1.4	1.0	1.0	0.3	0.3	0.4	1.1	0.7	0.6
Germany	2.6	2.0	1.9	1.5	1.2	1.3	1.1	0.8	0.6
United Kingdom	3.1	2.3	2.5	1.2	0.9	0.8	1.9	1.4	1.7
All others	9.4	6.8	7.3	4.7	3.9	4.5	4.7	2.9	2.8
NAFTA	25.2	23.3	29.9	25.8	25.6	32.6	-0.6	-2.3	-2.7
Canada	14.2	11.7	14.2	5.2	4.0	3.6	9.0	7.7	10.6
Mexico	11.0	11.6	15.7	20.6	21.6	29.0	-9.6	-10.0	-13.3
All others	17.6	15.6	18.0	9.8	4.7	5.1	7.8	10.9	12.9
<b>Life science</b>									
All countries/economies	25.2	25.3	27.8	39.9	38.1	41.8	-14.7	-12.8	-14.0
Asia	6.7	6.9	8.4	4.7	4.9	5.6	2.0	2.0	2.8
China	1.8	2.0	2.4	1.1	1.3	1.5	0.7	0.7	0.9
India	0.4	0.4	0.5	0.5	0.5	0.7	-0.1	-0.1	-0.2
Japan	2.8	2.7	3.4	2.1	1.9	2.2	0.7	0.8	1.2
South Korea	0.6	0.6	0.7	0.2	0.2	0.2	0.4	0.4	0.5
Taiwan	0.3	0.2	0.3	0.1	0.1	0.1	0.2	0.1	0.2
All others	0.8	0.9	1.0	0.7	0.9	0.8	0.1	0.0	0.2
EU	10.8	10.8	11.0	26.8	25.0	27.2	-16.0	-14.2	-16.2
France	1.0	0.9	1.0	1.7	1.6	1.8	-0.7	-0.7	-0.8
Germany	2.5	2.5	2.6	3.4	3.2	3.5	-0.9	-0.7	-0.9
United Kingdom	1.3	1.1	1.1	2.6	2.0	2.0	-1.3	-0.9	-0.9
All others	6.1	6.3	6.3	19.1	18.3	19.8	-13.0	-12.0	-13.5
NAFTA	2.8	2.7	2.9	4.2	4.0	4.1	-1.4	-1.3	-1.2
Canada	2.0	1.9	2.1	1.4	1.2	0.9	0.6	0.7	1.2
Mexico	0.8	0.8	0.8	2.8	2.8	3.2	-2.0	-2.0	-2.4
All others	4.8	4.9	5.5	4.3	4.2	5.0	0.5	0.7	0.5

EU = European Union; NAFTA = North American Free Trade Agreement.

NOTES: China includes Hong Kong. Other Asia consists of Indonesia, Malaysia, the Philippines, Singapore, and Thailand. EU includes all 27 member countries. Advanced technology product trade classified by U.S. Census Bureau and consists of advanced materials, aerospace, biotechnology, electronics, flexible manufacturing, information and communications technology, life science, optoelectronics, nuclear technology, and weapons.

SOURCE: U.S. Census Bureau, Foreign Trade Statistics, Advanced Technology Trade database, <http://www.census.gov/foreign-trade/statistics/country/index.html>, accessed 15 May 2011.

## Notes

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2. According to the National Bureau of Economic Research, the most recent U.S. recession started in December 2007 and ended in June 2009, making it the longest recession since World War II. For convenience, this recession period is identified as “2008–09” in this InfoBrief. Real gross domestic product (GDP) growth fell from 1.9% in 2007 to 0% in 2008 and contracted 2.6% in 2009. The previous recession in 2001 lasted less than 1 year (March 2001 to November 2001), with real GDP growth slowing in 2001 but remaining positive.

For more information, see <http://www.nber.org/cycles/main.html>.

Fluctuations of the U.S. dollar against other currencies, which may be a contributing factor in the trends discussed here, have not been systematically included in this analysis. For example, appreciation of the U.S. dollar against the euro makes U.S. exports more expensive in euro terms, which may reduce U.S. exports to the European Union. Table 1 shows the U.S. dollar exchange rate against selected currencies.

3. The other six ATP areas are advanced materials, biotechnology, flexible manufacturing, nuclear technology, optoelectronics, and weapons. More information on the collection, definition, and measurement of ATPs and other trade data can be found at <http://www.census.gov/foreign-trade/guide/sec2.html>.

4. Asia includes China, India, Indonesia, Japan, Malaysia, the Philippines, Singapore, South Korea, Taiwan, and Thailand; China includes Hong Kong. The European Union includes 27 current member countries. NAFTA comprises Canada, Mexico, and the United States.

5. China’s real GDP growth slowed from 13% in 2007 to 9% in 2008, with other major Asian ATP exporters showing a sharper slowdown in GDP growth or a contraction in their GDP during this period. For statistics on GDP growth rates for Asian countries, see the World Bank’s World Development Indicators, <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>; for Taiwan, see Taiwan’s official economic statistics website, <http://eng.stat.gov.tw/mp.asp?mp=5>.

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