

**CANADA'S INFORMATION &
COMMUNICATIONS TECHNOLOGIES
TRADE PERFORMANCE
1993-2000**



**ICT Branch, SITT
Industry Canada**

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What is the ICT Sector? (1)

103-05381/

- **ICT Manufacturing** (industry groups also used as product groups in this document)
 - Telecommunication and Other Communication Equipment (SIC 3351,3359)
 - Computer Equipment (SIC 3361,3368)
 - Electronic Parts and Components (SIC 3352)
 - Consumer Electronics (SIC 3341)
 - Instrumentation (SIC 3911,3912)
 - Communications Wires and Cables (SIC 3381)

- **ICT Services**
 - Software and Computer Services (SIC 7721,7722)
 - Telecommunications Services (wired & wireless) (SIC 4821,4839)
 - Cable Television (SIC 4814)
 - ICT Wholesaling (SIC 5743,5744,5791)
 - ICT Rental and Leasing (SIC 9913)

(1) According to the OECD/Statistics Canada industry-based definition adopted in September 1998.





The Canadian ICT Sector at a Glance

ICT Highlights:

- 30,768 establishments (including 1,300 in manufacturing)⁽¹⁾
- 542,000 employees in 2000 (estimate)
- Total revenues of \$132.6 billion in 2000 (estimate)
- GDP of \$47.8 billion⁽²⁾ in 2000 (or 5.1% of Canadian GDP)
- \$44 billion in total exports in 2000 (or 10% of Canadian exports)
- \$5.3 billion in R&D expenditures in 2001 (based on intentions)
- 45.8% of total Canadian private sector R&D in 2001 (intentions)

(1) OECD, Measuring the ICT Sector, for reference year 1997.

(2) In 1997 constant dollars. Excluding Software, Cable and Other Program Distribution, and ICT Wholesaling.

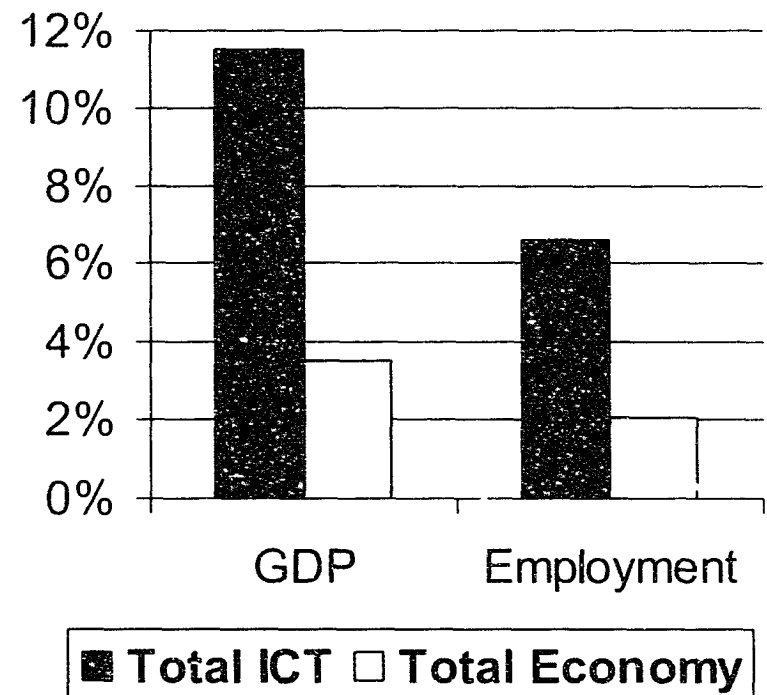
Source: ICT Statistical Overview, Industry Canada.



The ICT Sector is Growing Three Times Faster than the Canadian Economy

- Over the 1993-2000 period, the ICT sector's contribution to GDP has grown at a Compound Annual Growth Rate (CAGR) of 11.5% compared to 3.5% for the Canadian economy.
- Between 1993 and 2000, employment has also increased faster in the ICT sector than in the economy as a whole (CAGR of 6.6% vs 2.1%).

Annual Growth in GDP and Employment, CAGR, 1993-2000⁽¹⁾



(1) ICT employment for 2000 is an estimate.

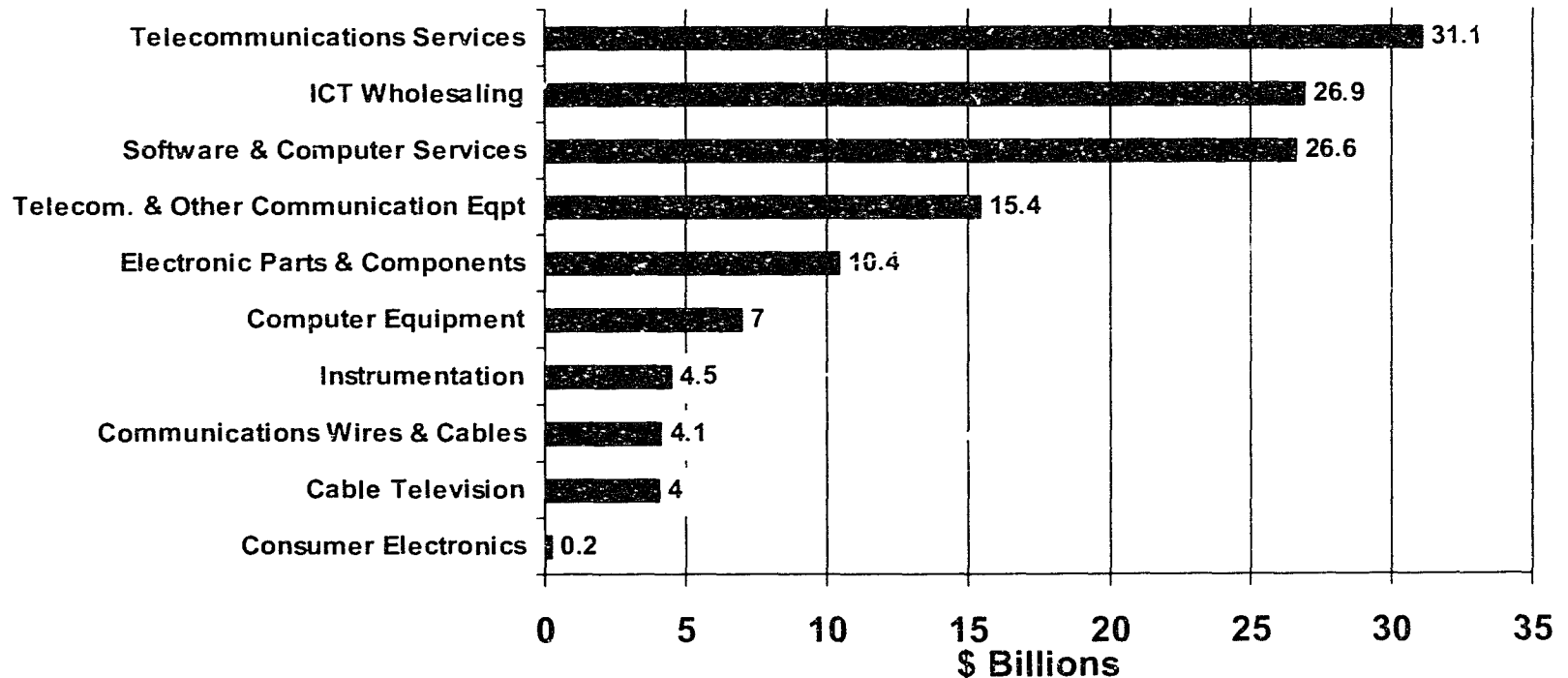
Source: ICT Statistical Overview, Industry Canada.





Canadian ICT Revenues Reached \$132.6 Billion in 2000

Canadian ICT Revenues by Industry, 2000⁽¹⁾



ICT Services account for 67% of all ICT revenues

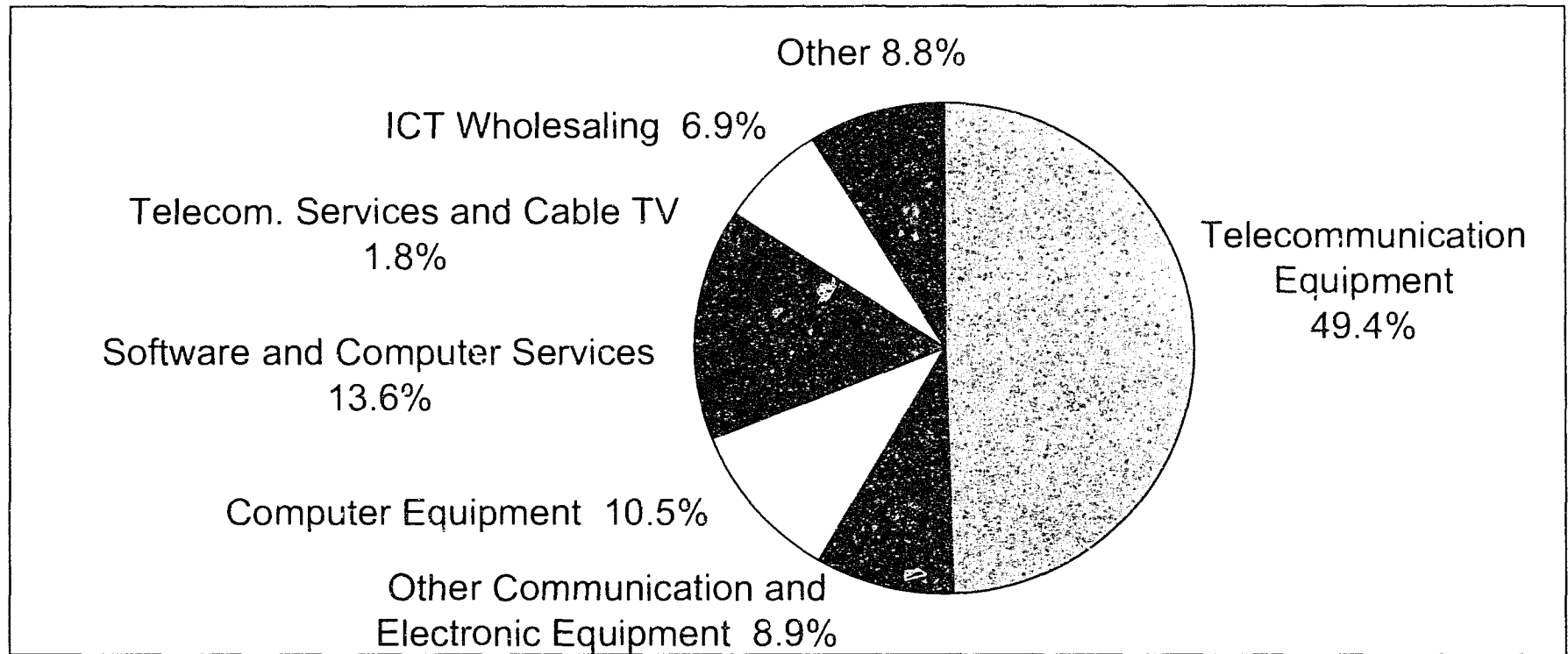
(1) IC estimates based on NAICS. The SIC group names are still used for convenience.

Source: ICT Statistical Overview, Industry Canada.



The Largest R&D Performer in Canada

R&D Expenditures by ICT Industry, 2001 Intentions (Total: \$5.3 Billion)



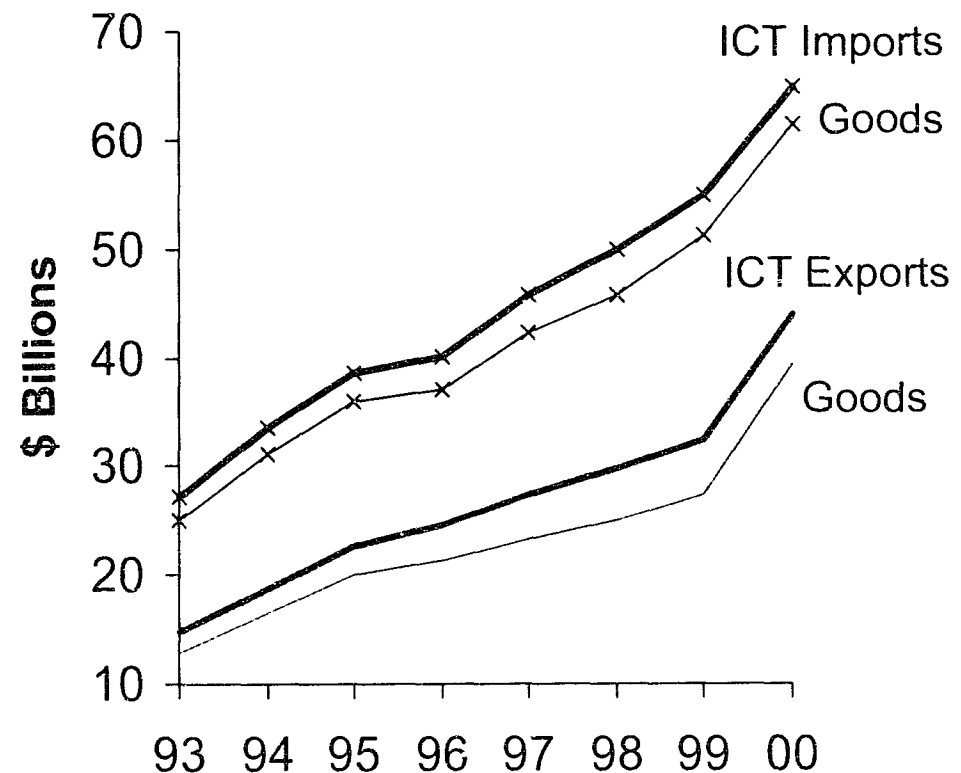
ICT sector represents 45.8% of total Canadian private sector R&D

Source: ICT Statistical Overview, Industry Canada.

Canadian ICT Trade is Growing Fast

- In 2000, Canadian ICT exports increased by an impressive 36%, reaching \$44 billion (including re-exports), while ICT imports reached \$64.9 billion, up 18.1% from 1999.
- Goods accounted for 90% of ICT exports and 95% of ICT imports.
- Between 1993 and 2000, ICT exports increased at a CAGR of 16.9%, while imports grew by 13.2% annually (compared to 12.3% and 10.9% for total Canadian exports and imports respectively).
- The ICT trade deficit shrank to \$20.9 billion in 2000, a decrease of 6.3% over 1999. This is the first decrease of the deficit since 1996. The resulting CAGR between 1993 and 2000 is 7.7%.

**ICT Trade, 1993-2000
Goods and Services**



Source: ICT Statistical Overview, Industry Canada.

ICT Trade Represents a Substantial Share of Canadian Trade

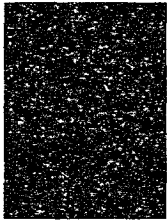
- ICT exports accounted for 10% of total Canadian exports in 2000 (up from 7.5% in 1993) while ICT imports represented 16.8% of total Canadian imports (up from 14.6% in 1993).
- 9.6% of Canadian merchandise exports were ICT goods in 2000 (up from 7% in 1993) while 16.9% of Canadian commercial services exports were ICT services (up from 14.9% in 1993).
- 17.2% of Canadian merchandise imports were ICT goods in 2000 (up from 14.8% in 1993) while imports 11.7% of Canadian commercial services imports were ICT services (down from 12.8% in 1993).

Share of ICT in Total Canadian Trade



Source: ICT Statistical Overview, Industry Canada.





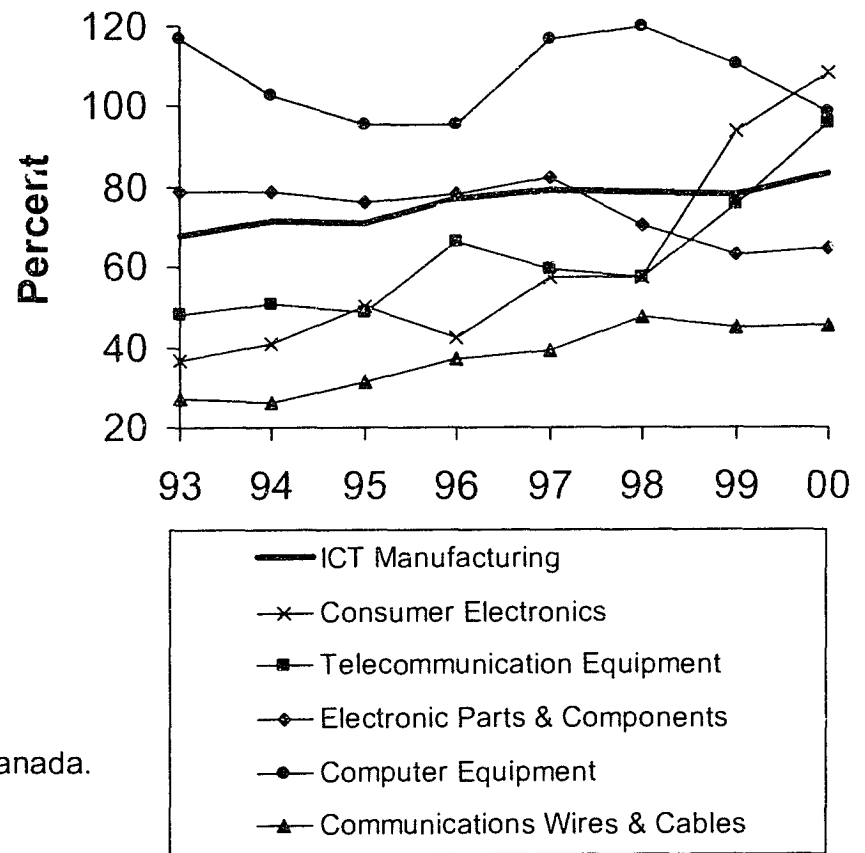
Exports are Crucial to the Canadian ICT Manufacturing Industries

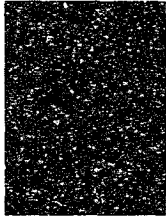
- Domestic exports accounted for 83.8% of ICT manufacturing shipments in 2000, compared to 68.1% in 1993.
- In 2000, more than 95% of the manufacturing shipments of computer and telecommunication equipment were exported. It was also the case for consumer electronics. (See footnote).
- The ratio of domestic exports to manufacturing shipments went down from 82.5% in 1997 to 65% in 2000 for electronic parts and components.
- However, this ratio has strongly increased for communications wires and cables, going from 27.3% to 45.7% between 1993 and 2000.

Source: Data based on the ICT Statistical Overview, Industry Canada.

Note: Some ratios may be higher than 100% since the methodologies used to collect data on exports and shipments are different. See ANNEX 2 for more details. Since Instrumentation related SIC and NAICS are not comparable, the ratio is not available.

Ratio of Domestic Exports to ICT Manufacturing Shipments by Sub-sector, 1993-2000

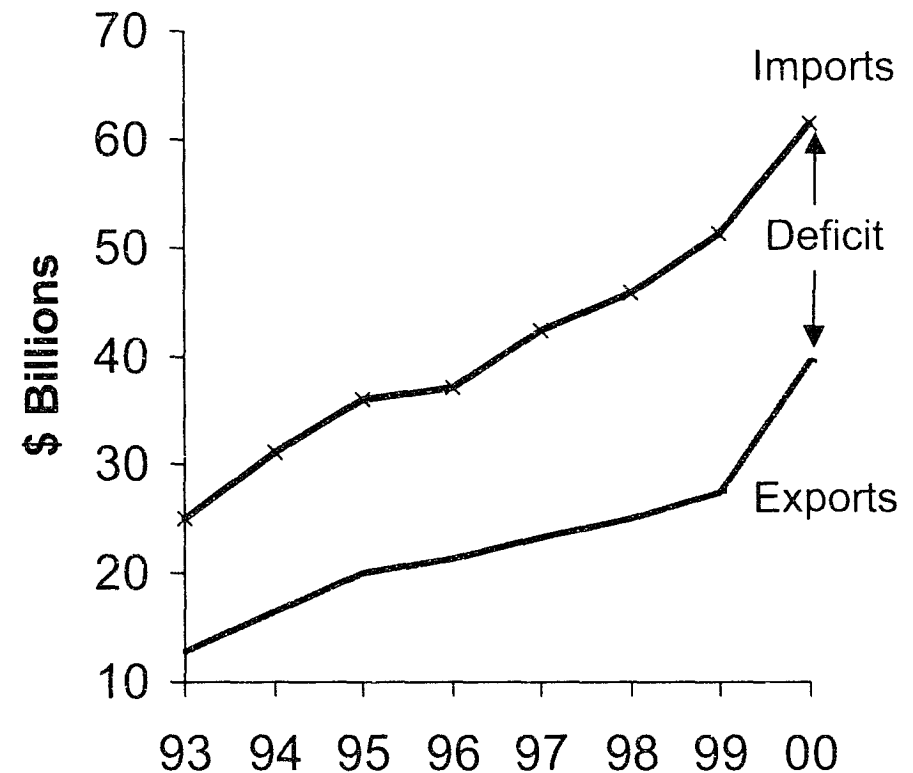




A Substantial, but Declining Trade Deficit in ICT Goods...

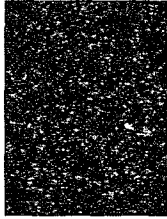
- There was unprecedented growth in Canadian trade of ICT goods in 2000. Exports increased by 43.8%, totaling \$39.4 billion, while imports reached \$61.4 billion, up 20.1% from 1999.
- The resulting trade deficit shrank to \$22 billion, a decrease of 7.3% from 1999 (and a CAGR of 8.6% over the 1993-2000 period). This was the first decrease of the trade deficit in ICT goods since 1996.
- The large deficit is mainly due to high imports of electronic parts and components which reached \$22.4 billion in 2000, including \$12.2 billion in imports of semiconductors.
- Between 1993 and 2000, the CAGRs for the exports and imports of ICT goods were 17.4% and 13.6% respectively (compared to 12.4% and 11.2% for total Canadian merchandises).

**Trade of ICT Goods,
1993-2000**



Source: ICT Statistical Overview, Industry Canada.

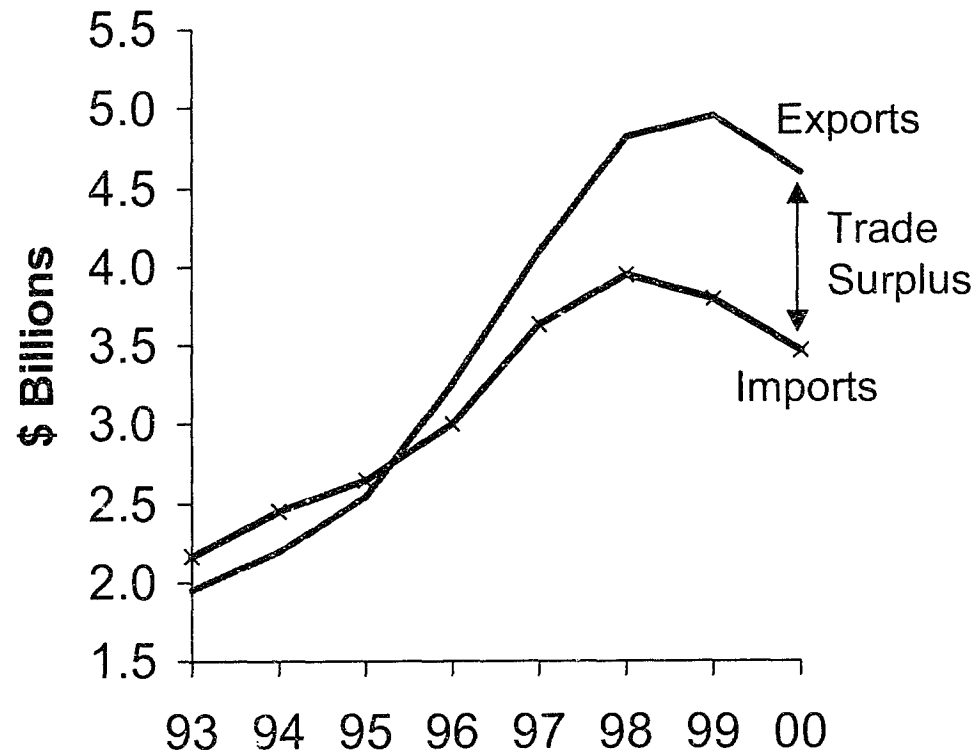




... and a Small and Declining Trade Surplus in ICT Services

- ICT services represent a small portion of total Canadian ICT trade. They accounted for 10% of exports and 5% of imports in 2000.
- Exports in ICT services decreased for the first time in 2000, totaling \$4.6 billion, down by 7.4% from 1999. Imports continue to fall for the second consecutive year, decreasing by 8.7% to \$3.5 billion.
- The resulting CAGR for the 1993-2000 period was 13% for exports and 7% for imports (compared to 11% and 8.4% respectively for the Canadian commercial services).
- The trade surplus in ICT services decreased slightly in 2000, down by 3.3% to \$1.13 billion. This surplus is strictly due to software and computer services. Other ICT services are showing trade deficits.

Trade of ICT Services, 1993-2000



Source: ICT Statistical Overview, Industry Canada.



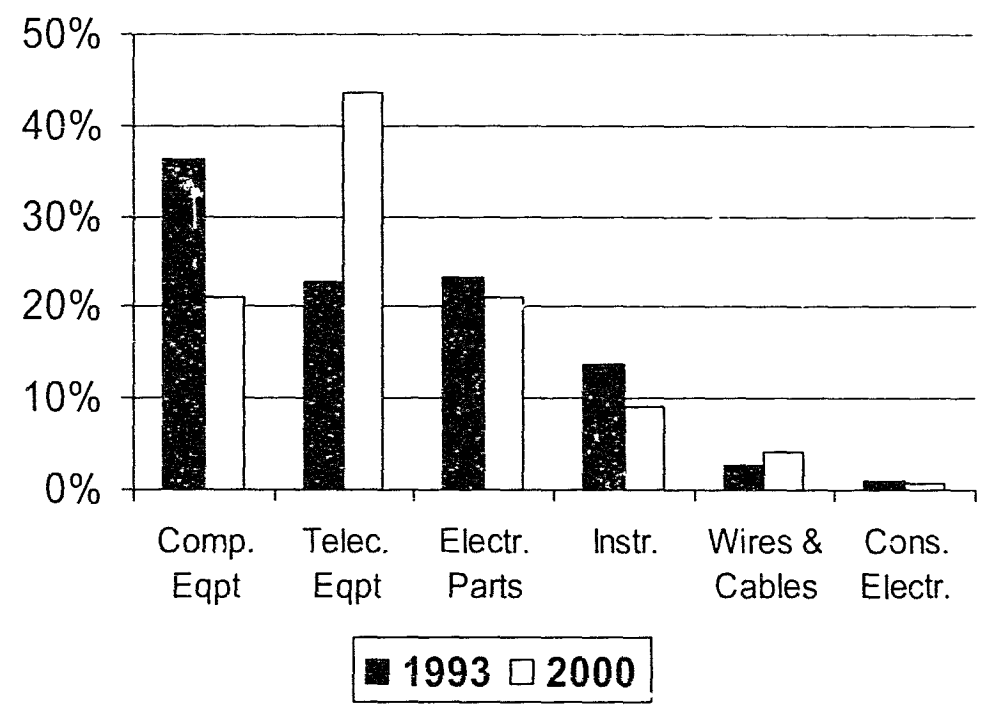


Composition of Canadian Exports in ICT Goods

- Computer equipment, telecom. and other communication equipment, and electronic parts and components represented 86% of total exports of ICT goods in 2000.
- The share of exports of telecom. and other communication equipment increased significantly from 22.7% to 43.7% between 1993 and 2000 at the expense of computer equipment's share, which decreased from 36.3% to 21%.
- This is the result of much stronger growth in the exports of telecom. and other communication equipment over this period. Specifically, exports in this product group grew by a spectacular 76% in 2000 (telecom. equipment alone increased by 100%).

Shift in Composition of Exports in ICT Goods

1993: \$12.8 Billion
2000: \$39.4 Billion



Source: Data based on the ICT Statistical Overview, Industry Canada.

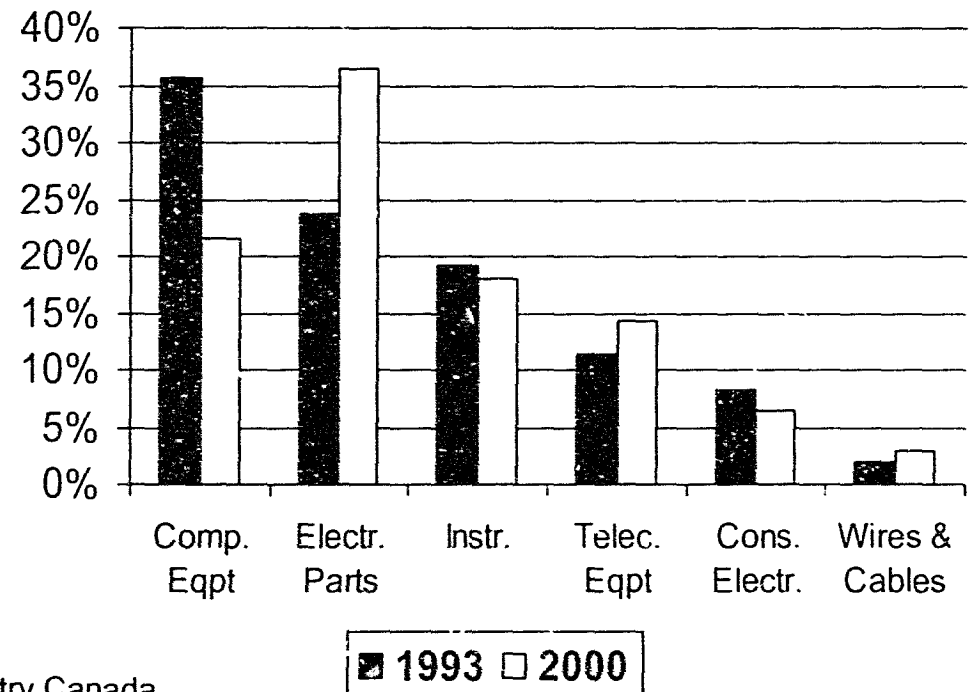


Composition of Canadian Imports in ICT Goods

- Electronic parts and components, computer equipment, and instrumentation represented 76% of the imports of ICT goods in 2000.
- The share of imports of electronic parts and components increased from 23.8% to 36.5% between 1993 and 2000, while the share of computer equipment decreased from 35.6% to 21.6% (see footnote).
- Electronic parts and components accounted for 64% of the trade deficit in ICT goods in 2000.
- Most of the ICT goods experienced a trade deficit over the 1993-2000 period. Telecom. and other communication equipment is the only group consistently showing a trade surplus over the ten last years (\$8.3B in 2000, up 149% from 1999).

Shift in Composition of Imports in ICT Goods

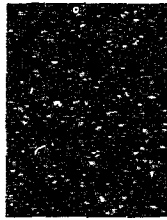
1993: \$25.1 Billion
2000: \$61.4 Billion



Source: Data based on the ICT Statistical Overview, Industry Canada.

Note: This is not a long term trend, but rather the result of a strong jump of \$5.1B (or 86.1%) in the imports of electronic parts and components in 1994.



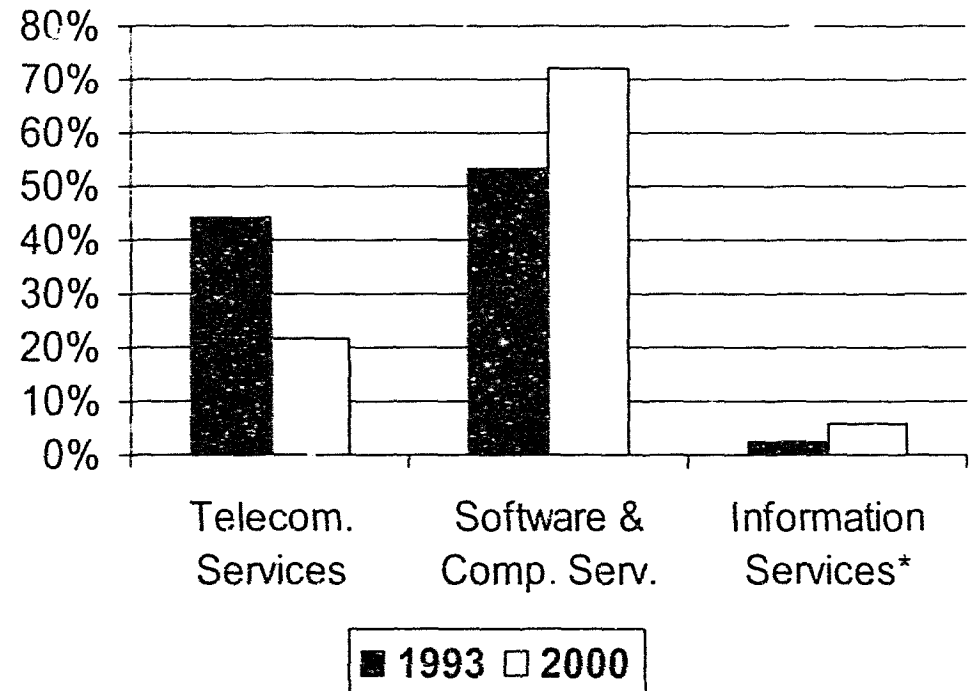


Composition of Canadian Exports in ICT Services

Shift in Composition of Exports in ICT Services

1993: \$1.9 Billion
2000: \$4.6 Billion

- Software and computer services represented 72.2% of the exports of ICT services in 2000, while telecommunications and information services accounted for 21.8% and 6% respectively.
- The share of exports of software and computer services increased significantly from 53.5% to 72.2% between 1993 and 2000 at the expense of telecom services' share, which decreased from 44% to 21.8%.



Source: Data based on the ICT Statistical Overview, Industry Canada.

* Including news agency services, which are not part of the ICT definition.

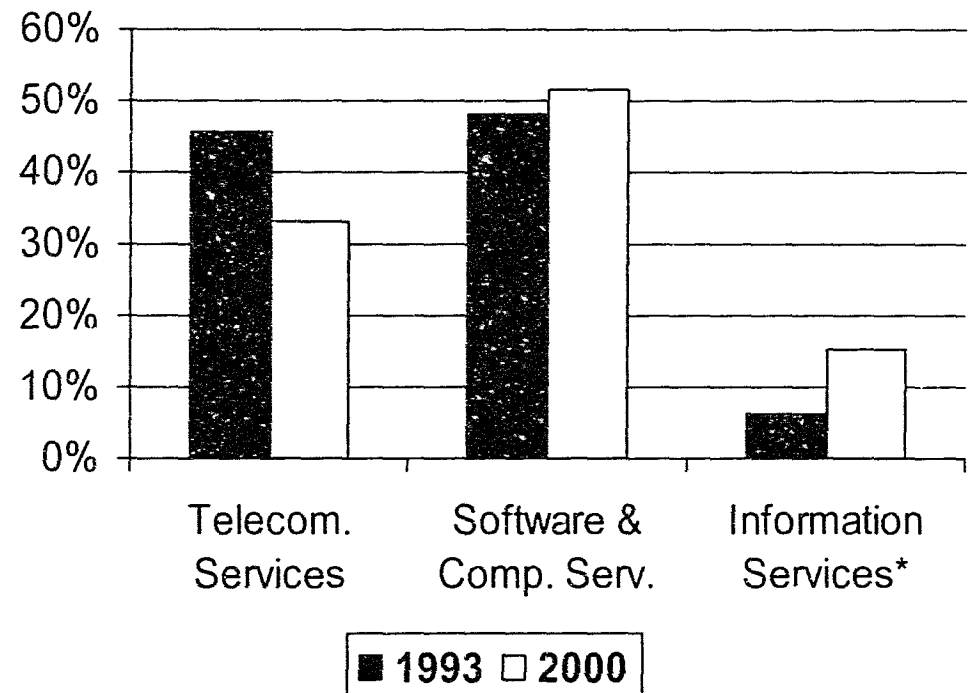


Composition of Canadian Imports in ICT Services

- Software and computer services represented 51.5% of the imports of ICT services in 2000 while telecommunications and information services accounted for 33.1% and 15.4% respectively.
- The share of imports of information services increased from 6.4% to 15.4% between 1993 and 2000 at the expense of telecom services' share, which decreased from 45.5% to 33.1%.
- In 2000, Canada had a trade surplus of \$1.5 billion in software and computer services but trade deficits of \$144 and \$257 million in telecommunications and information services respectively.

Shift in Composition of Imports in ICT Services

1993: \$2.2 Billion
2000: \$3.5 Billion



Source: Data based on the ICT Statistical Overview, Industry Canada.

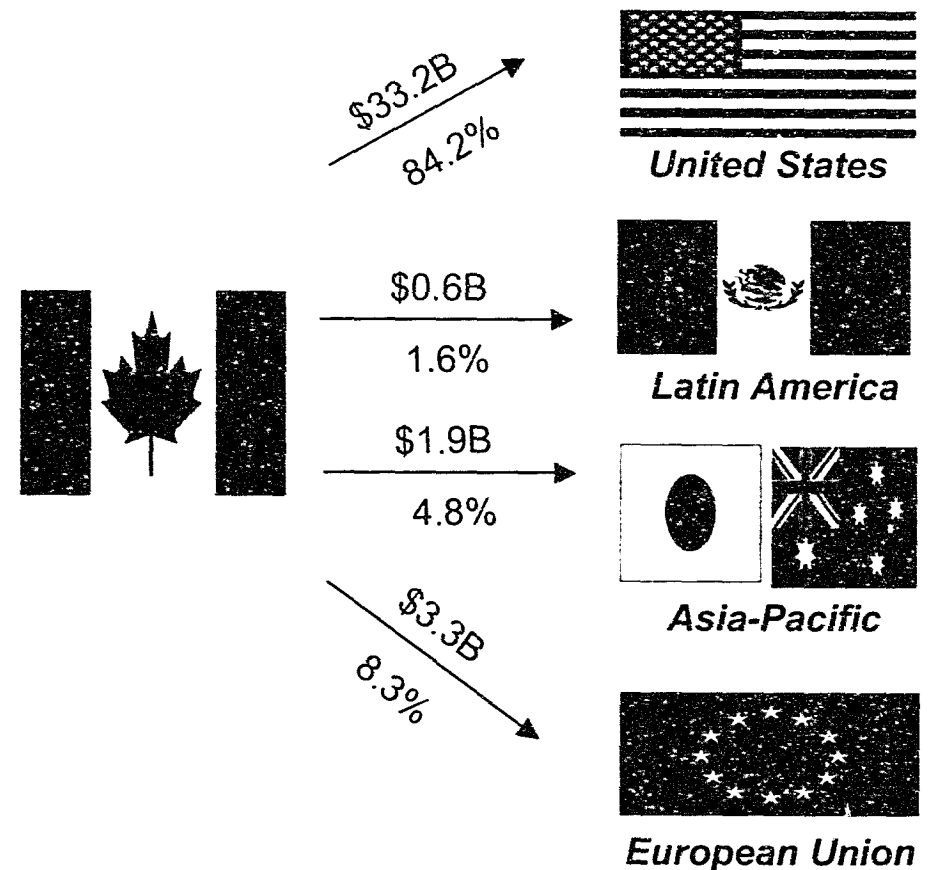
* Including news agency services, which are not part of the ICT definition.



The U.S. is our largest ICT export market...

- Shipments to the United States grew by 44.9% in 2000 to reach \$33.2 billion. These exports accounted for 84.2% of all exports of ICT goods, up from 77.8% in 1993.
- After two years of decline, exports to the Asia-Pacific region went up by 30.7% to reach \$1.9 billion in 2000. However, the proportion of shipments to this region fell constantly between 1993 and 2000, going from 8.9% to 4.8%.
- These changes in the shares of the U.S. and the Asia-Pacific region are mainly due to our exports of telecom. and other communication equipment which have strongly increased to the U.S. while they decreased to the Asia-Pacific region.
- The proportion of exports to other regions of the world remained relatively stable between 1993 and 2000.

Exports of ICT Goods by Region of Destination, Value and Share, 2000



Rest of the World: \$0.4 Billion (1.1%) October 2001

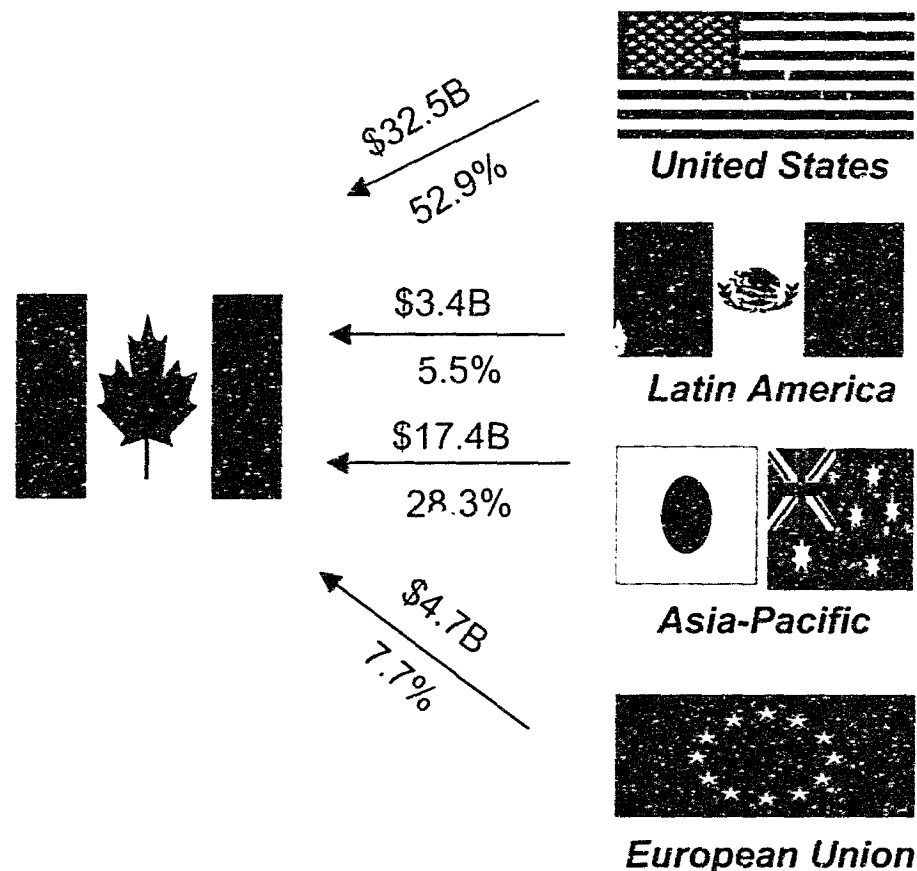
Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.



...while the Asia-Pacific region represents a substantial share of our ICT imports

- Imports from the U.S. grew by 14.7% in 2000, reaching \$32.5 billion and accounting for 52.9% of all imports of ICT goods down from 57% in 1993.
- Imports from the Asia-Pacific region went up by 21.8% in 2000 to a value of \$17.4B, accounting for a substantial 28.3% of all imports of ICT goods.
- The share of imports from Latin America increased from 2% to 5.5% between 1993 and 2000 at the expense of the U.S. share. The proportion of imports from all other regions remained relatively stable over this period.
- The 1993-2000 CAGRs in imports by region of origin were 31.1% for Latin America, 17.2% for the E.U., 13.6% for the Asia-Pacific region, and 12.4% for the U.S.

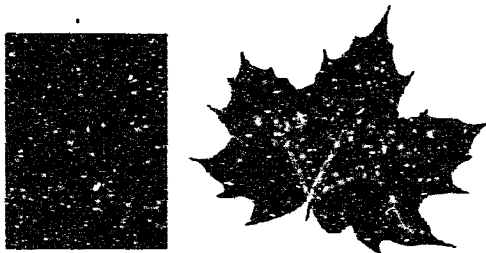
Imports of ICT Goods by Region of Origin, Value and Share, 2000



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

Rest of the World: \$3.4 Billion (5.6%) October 2001





The Top 15 ICT Export Market of Canada

Canadian Exports of ICT Goods, Top 15 Countries of Destination, 2000

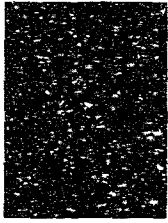
- Our largest export market by far is the U.S. (\$33.2 billion), which showed a CAGR of 18.8% over the 1993-2000 period. The U.K. comes second, with \$1.9 billion in 2000.
- Hong Kong, Germany, Japan and France follow in terms of size. Our exports to the U.K. and Hong Kong showed the highest CAGR over the 1993-2000 period with 27.9% and 23.2% respectively.
- The U.K. and Germany experienced the strongest growth in 2000 with increases of 108.8% and 95.4% respectively.
- After several years of decline, shipments to China and Japan went up in 2000, showing growth rates of 41.9% and 9.1% respectively.
- Exports to Ireland went down for a second consecutive year, decreasing by 25.7%. Exports to Taiwan also decreased, down by 17.6% from 1999.

Country of Destination	Exports (M \$Cdn)	CAGR % 1993-2000	Growth % 1999-2000
1 U.S.	33,167	18.8%	44.9%
2 U.K.	1,867	27.9%	108.8%
3 Hong Kong	481	23.2%	60.8%
4 Germany	411	11.2%	95.4%
5 Japan	288	3.5%	41.9%
6 France	253	11.8%	22.6%
7 Netherlands	241	11.1%	35.3%
8 Australia	229	11.0%	49.1%
9 South Korea	186	12.6%	35.7%
10 China	165	-9.2%	9.1%
11 Mexico	160	5.5%	30.8%
12 Ireland	153	24.1%	-25.7%
13 Taiwan	147	10.5%	-17.6%
14 Italy	136	3.9%	65.1%
15 Brazil	118	9.8%	6.06%
Total Top 15	37,999	18.0%	46.0%
Total Worldwide	39,411	17.4%	43.8%



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

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Canada Ranks 16th in Global Exports of ICT Goods

Global Exports of ICT Goods, Top 16 Countries, 1998

- The U.S. and Japan are the two largest exporters of ICT products, followed by Germany, Singapore and the U.K. These five countries represent \$673 billion or 48.4% of global exports of ICT goods.
- Canada, which showed a CAGR similar to that of the U.S., went from the 13th to the 16th rank between 1993 and 1998. With a total of \$25.1 billion in 1998, Canada accounted for 1.8% of global exports of ICT goods.
- With a CAGR of 69%, the Philippines posted the largest annual growth rate in exports over the 1993-1998 period, followed by China (45%), Mexico (28%) and Ireland (25%). Half of the top 16 export countries are Asian.

Export Country	ICT Exports (Billions \$Cdn)	CAGR % 1993-98
1 U.S.	239.2	13.9%
2 Japan	164.9	3.2%
3 Germany	96.0	11.1%
4 Singapore	90.9	14.7%
5 U.K.	82.1	12.4%
6 Taiwan	69.2	15.4%
7 Hong Kong	60.3	14.3%
8 France	58.7	15.1%
9 Malaysia	56.0	17.3%
10 Netherlands	55.1	16.2%
11 Korea Rp	51.1	14.4%
12 China	45.2	32.7%
13 Mexico	41.9	27.6%
14 Ireland	31.1	25.4%
15 Philippines	29.3	69.0%
16 Canada	25.1	14.0%
Top 16 countries	1,199.7	13.6%
Total Worldwide	1,390.0	14.0%



Source: Industry Canada compilations based on World Trade Analyzer, Statistics Canada.

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Canada's Share of Global ICT Imports is Stagnant

Global Imports of ICT Goods, Top 15 Importers & Canadian Share

- Global imports of ICT goods showed a CAGR of 14% between 1993-1998. With \$276 billion in 1998, the U.S. is by far the largest buyer of ICT goods in the world, followed by Germany, the U.K., Japan and France, while Canada ranks 10th.
- Over the 1993-1998 period, Canada has seen its share of U.S. imports increase from 6.69% to 7.20% but its share of worldwide imports remained relatively stable since Canada's share decreased in a number of countries (especially in China, Japan and Italy).
- The strongest growing ICT markets are Asian countries such as China, Malaysia, Japan and Taiwan. Mexico and the Netherlands also exhibited substantial growth between 93 and 98.

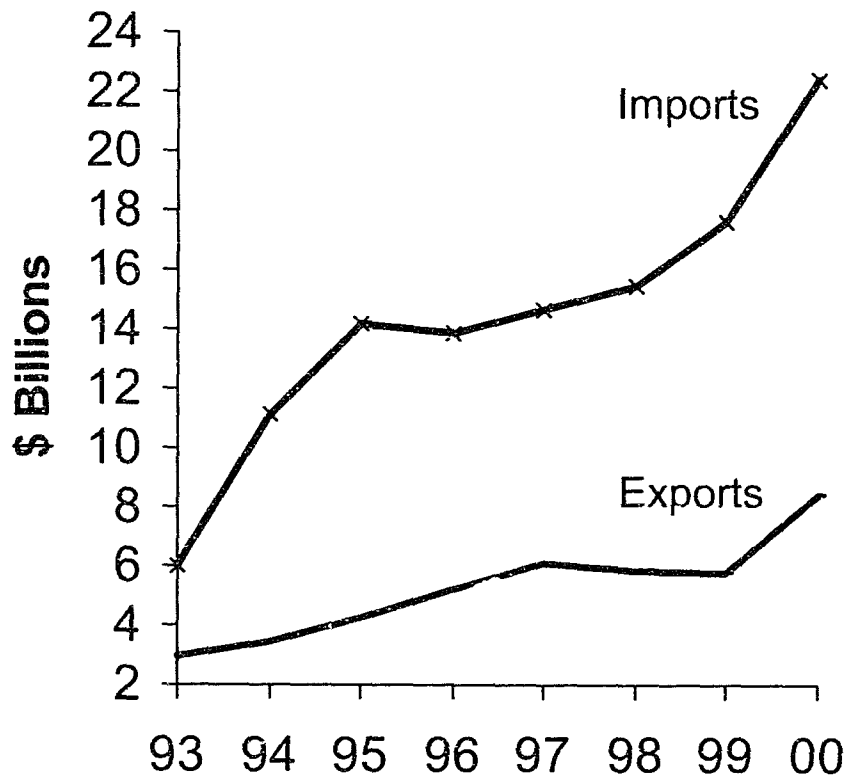
Import Country	Global Imports (Billions \$Cdn)			Cdn Share (percent %)		
	1998	1993	CAGR	1998	1993	+/-
1 U.S.	276.2	152.5	12.6%	7.20	6.69	+
2 Germany	102.4	59.7	11.4%	0.22	0.25	-
3 U.K.	85.3	45.3	13.5%	0.92	0.90	+
4 Japan	67.0	29.9	17.5%	0.38	0.64	-
5 France	62.3	33.5	13.2%	0.36	0.37	-
6 Singapore	59.4	34.5	11.5%	0.21	0.19	+
7 Netherlands	57.2	25.7	17.4%	0.25	0.35	-
8 Hong Kong	55.9	29.4	13.7%	0.49	0.42	+
9 China	52.1	21.8	19.1%	0.38	1.08	-
10 Canada	45.7	27.1	11.0%			
11 Taiwan	42.6	20.4	15.8%	0.40	0.37	+
12 Malaysia	41.0	17.9	17.9%	0.08	0.12	-
13 Mexico	37.7	15.4	19.6%	0.93	1.05	-
14 Italy	35.9	21.8	10.5%	0.22	0.47	-
15 Korea Rp.	27.5	16.7	10.4%	0.41	0.50	-
Top 15	1,020.5	534.8	13.8%			
Top 15 (-Can)	974.8	507.7	13.9%	2.35	2.37	-
Worldwide	1,390.0	721.9	14.0%			
World. (-Can)	1,344.3	694.8	14.1%	1.70	1.73	-

Source: Industry Canada compilations based on World Trade Analyzer, Statistics Canada.

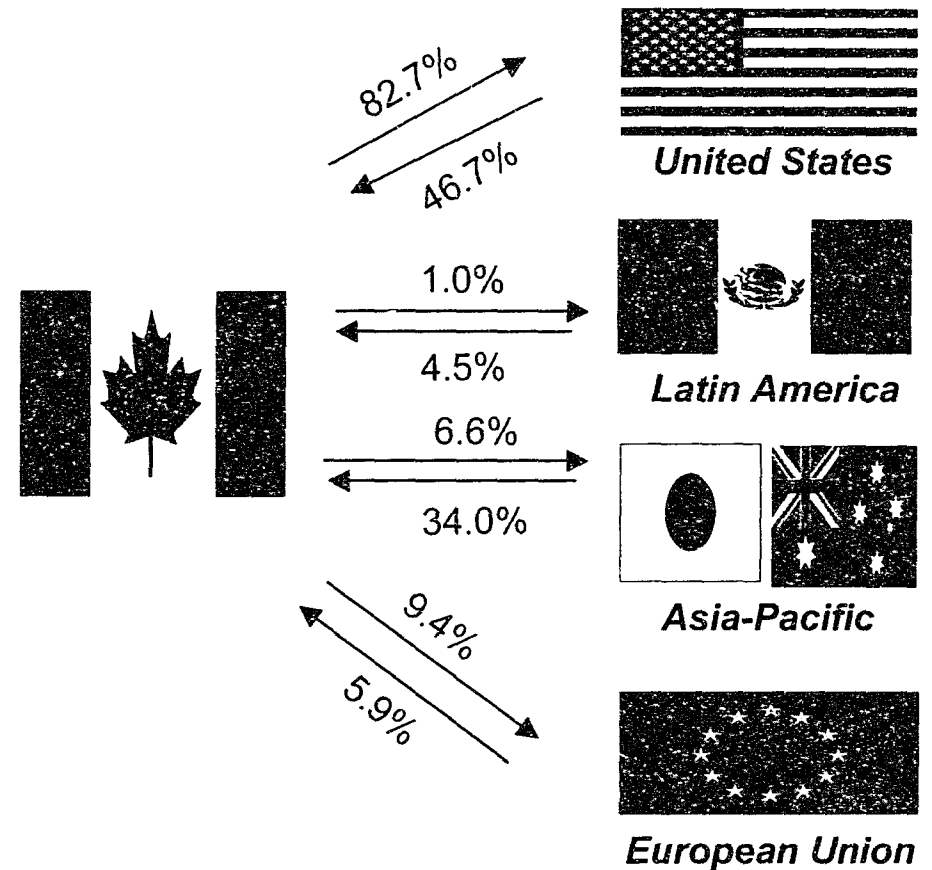
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Canadian ICT Trade by Product Group and Region

Trade in Electronic Parts & Components, 1993-2000



Trade in Electronic Parts & Components, Share by Region, 2000



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

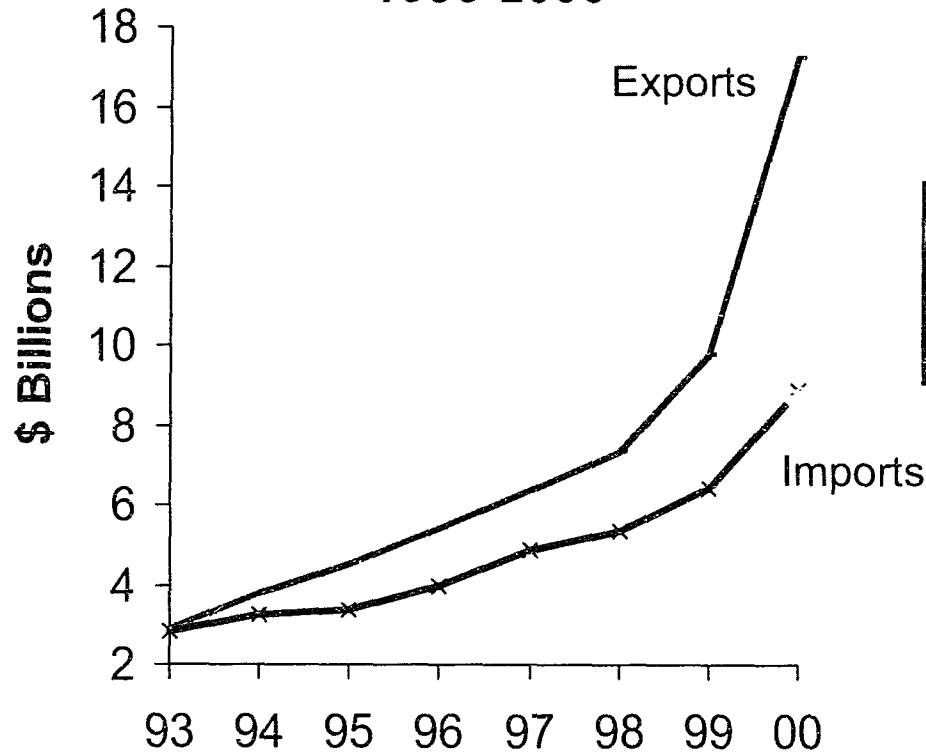
Rest of the World: Exports (0.3%), Imports (8.9%)

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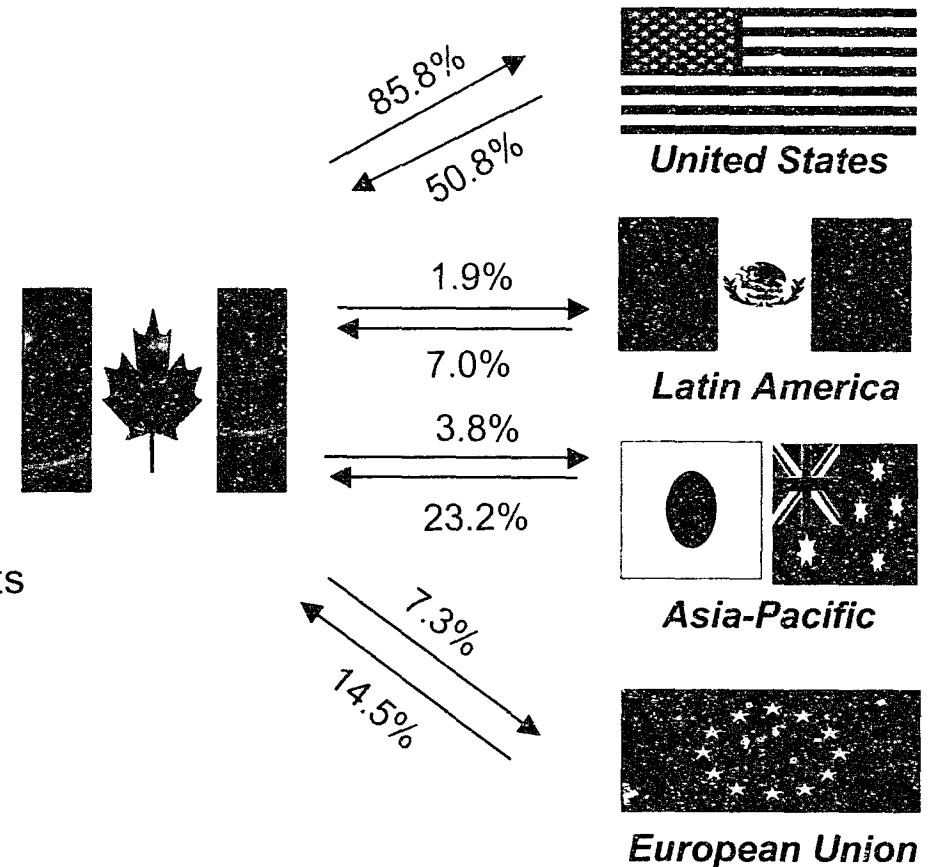


Canadian ICT Trade by Product Group and Region

Trade in Telecom. & Other Communication Equipment, 1993-2000



Trade in Telecom. & Other Communication Equipment, Share by Region, 2000



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

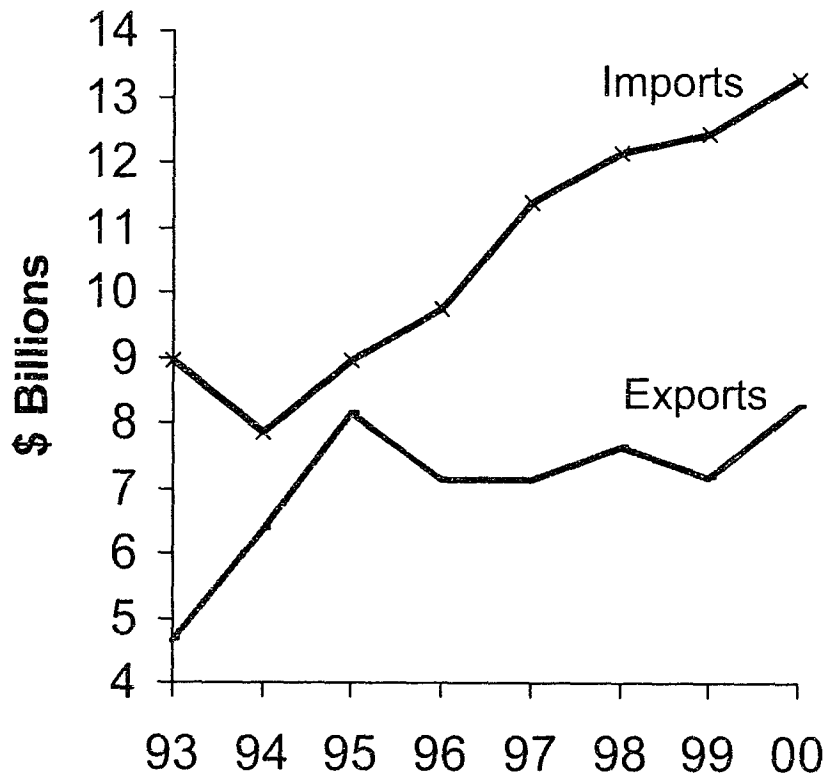
Rest of the World: Exports (1.2%), Imports (4.5%)

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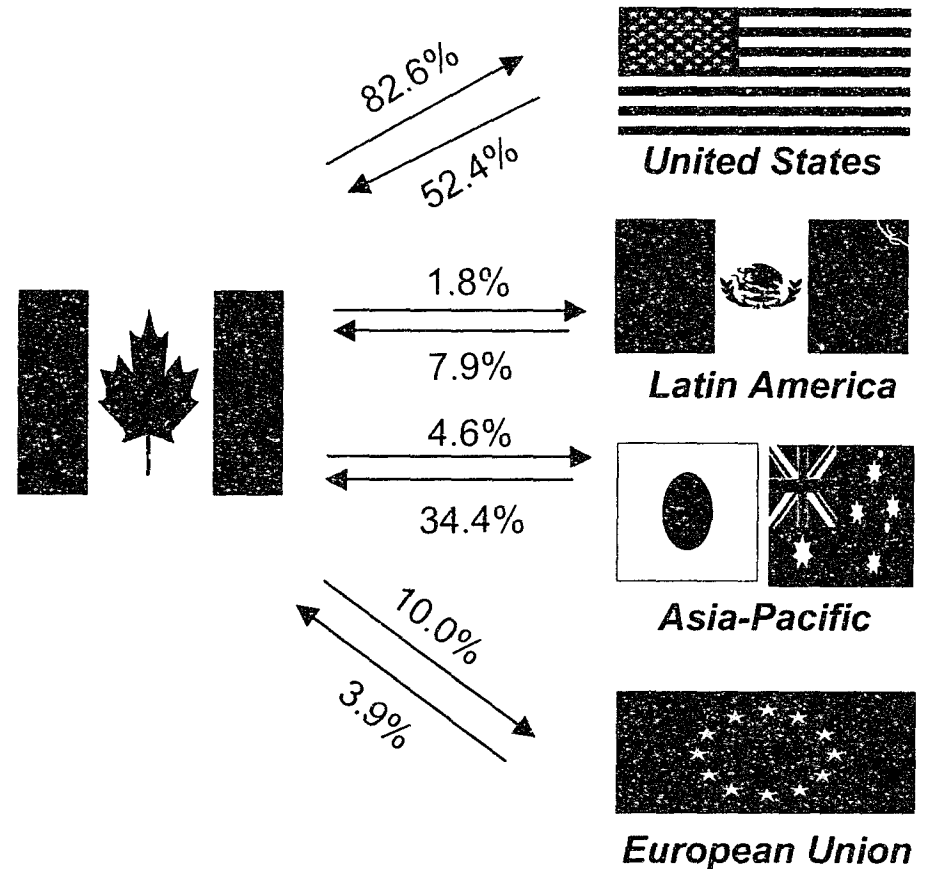


Canadian ICT Trade by Product Group and Region

Trade in Computer Equipment, 1993-2000



Trade in Computer Equipment, Share by Region, 2000



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

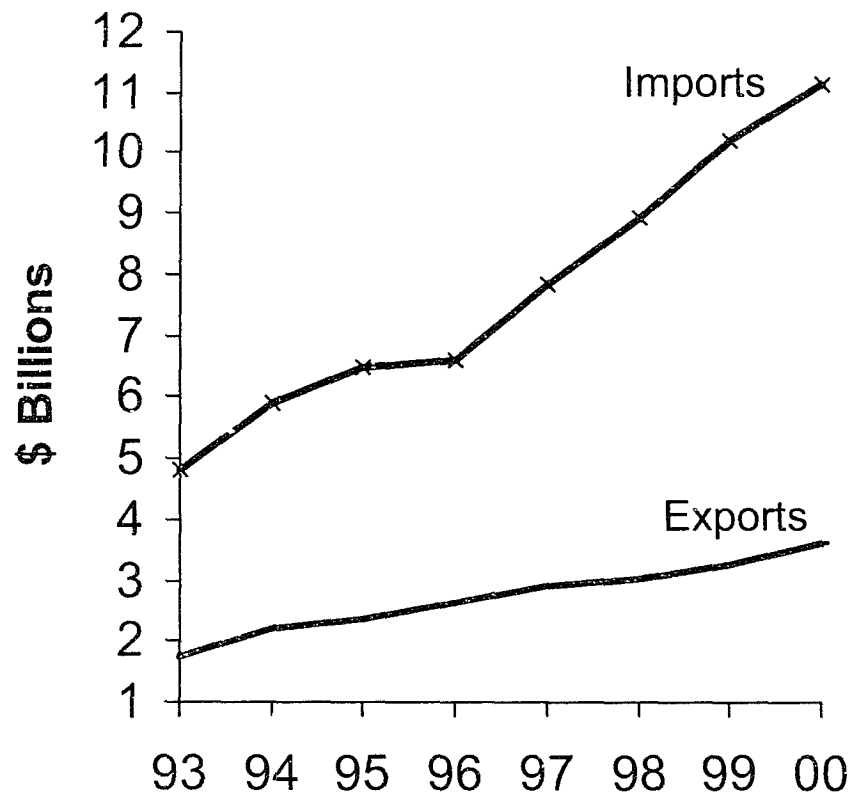
Rest of the World: Exports (1.0%), Imports (1.4%)

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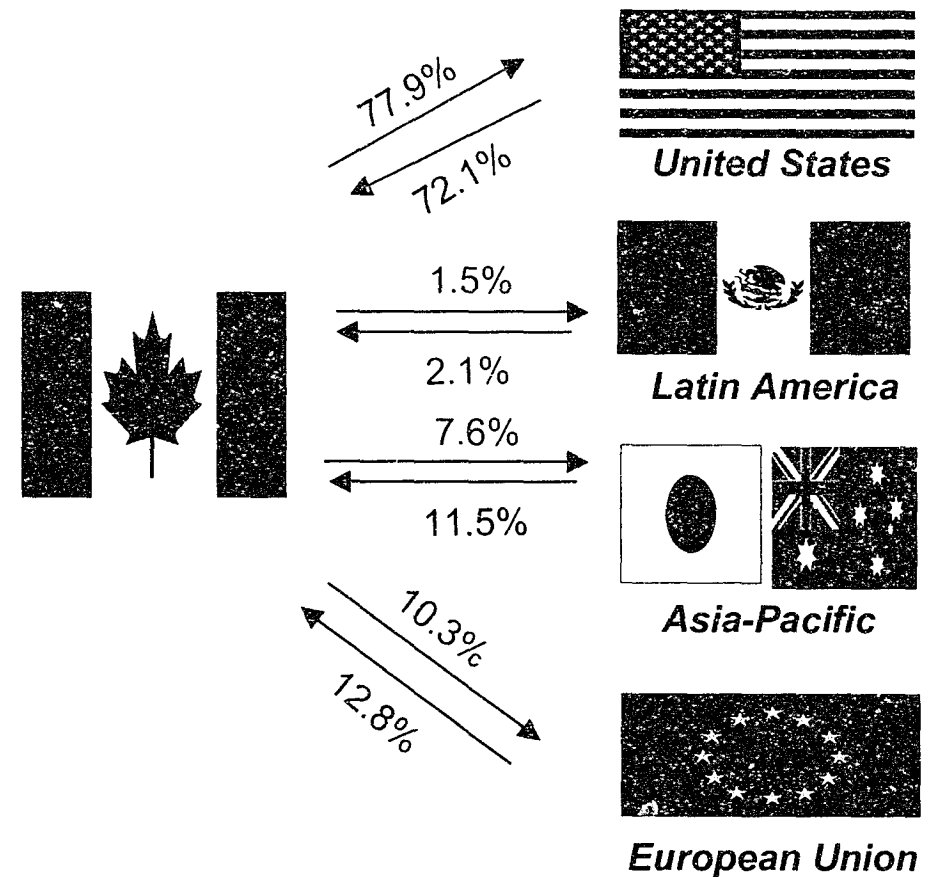


Canadian ICT Trade by Product Group and Region

Trade in Instrumentation, 1993-2000



Trade in Instrumentation, Share by Region, 2000



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

Rest of the World: Exports (2.7%), Imports (1.5%)

October 2001





Canadian ICT Exports by Product

Canadian ICT Exports, Top 15 Products, 2000

Rank	HS ⁽¹⁾	Product Description	Value (\$'000)
1	8517	Electrical apparatus for line telephony, incl. current line phone sets	12,614,184
2	8542	Electronic integrated circuits and microassemblies	4,866,834
3	8473	Parts and accessories of ADP ⁽²⁾ machines (incl. power supplies, PCBs)	4,598,114
4	8471	ADP ⁽²⁾ machines, incl. computers, peripherals, storage units, controller cards	3,231,064
5	8525	Transmission apparatus for radio-telephony, radio-broadcasting, television	2,949,075
6	9013	Optical devices, appliances and instruments (incl. lasers) and parts thereof	1,758,751
7	8529	Parts suitable for transmission/reception apparatus	929,009
8	9001	Optical fibres	789,764
9	8544	Insulated wire/cable and insulated electronic conductors	764,482
10	9032	Automatic regulating or controlling instruments and apparatus	653,238
11	8805	Flight simulators and parts thereof (8805.20)	638,457
12	8534	Printed circuits	561,861
13	9031	Measuring or checking instruments, appliances and machines & parts thereof	473,344
14	9027	Instruments and apparatus for physical or chemical analysis	451,130
15	8531	Electric sound or visual signaling apparatus (fire alarm/burglar) & parts thereof	406,955
		Total Top 15 Products (account for 90% of all ICT products exports)	35,686,260
		Total all ICT Products ⁽³⁾	39,632,345

(1) Includes only the 6-digit HS codes specifically related to the ICT sector definition (which is based on SIC codes).

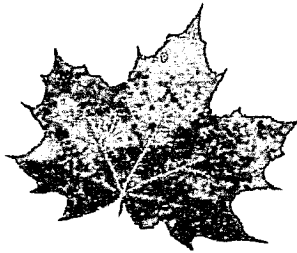
(2) Automatic Data Processing.

(3) Slightly different from \$39.4B since the concordance between HS and SIC codes is not 100% compatible for the ICT sector.



Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

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Canadian ICT Imports by Product

Canadian ICT Imports, Top 15 Products, 2000

Rank	HS ⁽¹⁾	Product Description	Value (\$'000)
1	8471	ADP ⁽²⁾ machines, incl. computers, peripherals, storage units, controller cards	11,380,897
2	8542	Electronic integrated circuits and microassemblies	11,095,063
3	8517	Electrical apparatus for line telephony, incl. current line phone sets	5,876,647
4	8473	Parts and accessories of ADP ⁽²⁾ machines (incl. power supplies, PCBs)	5,427,137
5	8525	Transmission apparatus for radio-telephony, radio-broadcasting, television	2,638,636
6	9032	Automatic regulating or controlling instruments and apparatus	2,592,491
7	8534	Printed circuits	1,606,503
8	8529	Parts suitable for transmission/reception apparatus	1,569,307
9	8527	Reception apparatus for radio-telephony or radio-broadcasting	1,505,831
10	9018	Instruments and appliances used in vet/med/surg/dental	1,394,185
11	8528	Reception apparatus such as tv receivers, video monitors, video projectors	1,387,813
12	8541	Diodes/transistors and similar semicon devices	1,235,392
13	8544	Insulated wire/cable and insulated electronic conductors	1,048,138
14	9030	Instruments and apparatus designed for telecom (electricity, semicon)	995,364
15	9001	Optical fibres	887,599
		Total Top 15 Products (account for 82% of all ICT products imports)	50,641,001
		Total all ICT Products ⁽³⁾	61,551,634

(1) Includes only the 6-digit HS codes specifically related to the ICT sector definition (which is based on SIC codes).

(2) Automatic Data Processing.

(3) Slightly different from \$61.4B since the concordance between HS and SIC codes is not 100% compatible for the ICT sector.

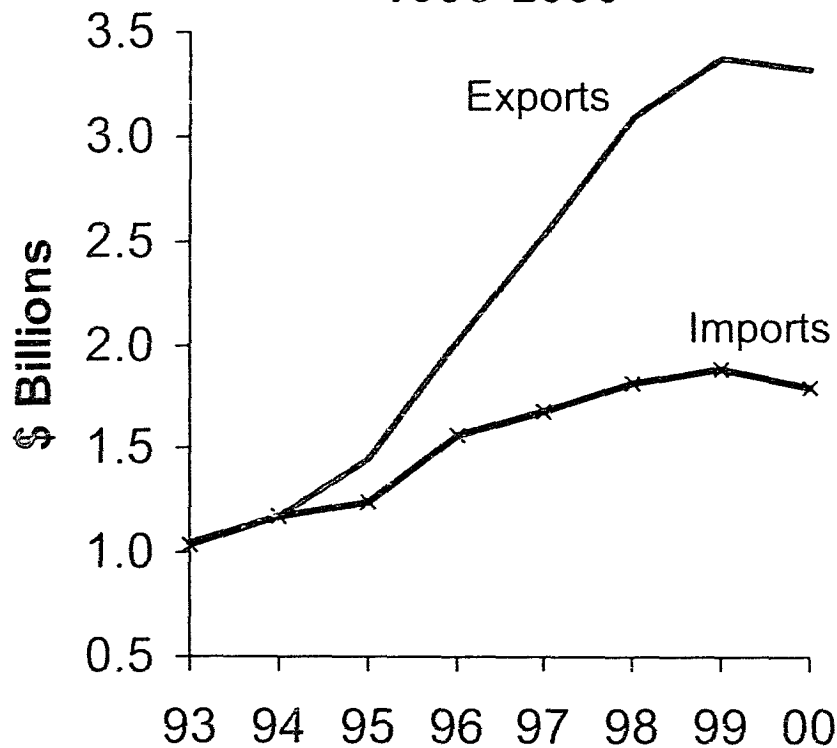


Source: Industry Canada compilations based on Trade Data Online, Statistics Canada.

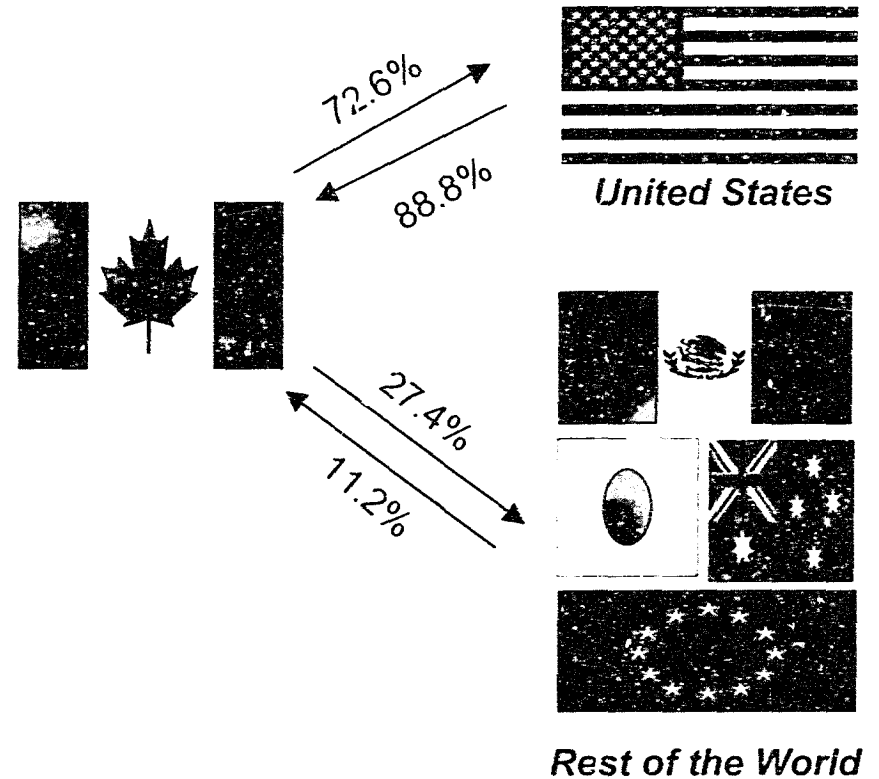
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Canadian ICT Trade by Type of Services and Region

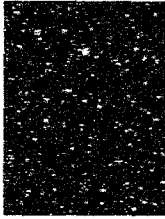
Trade in Software & Computer Services, 1993-2000



Trade in Software & Computer Services, Share by Region, 2000

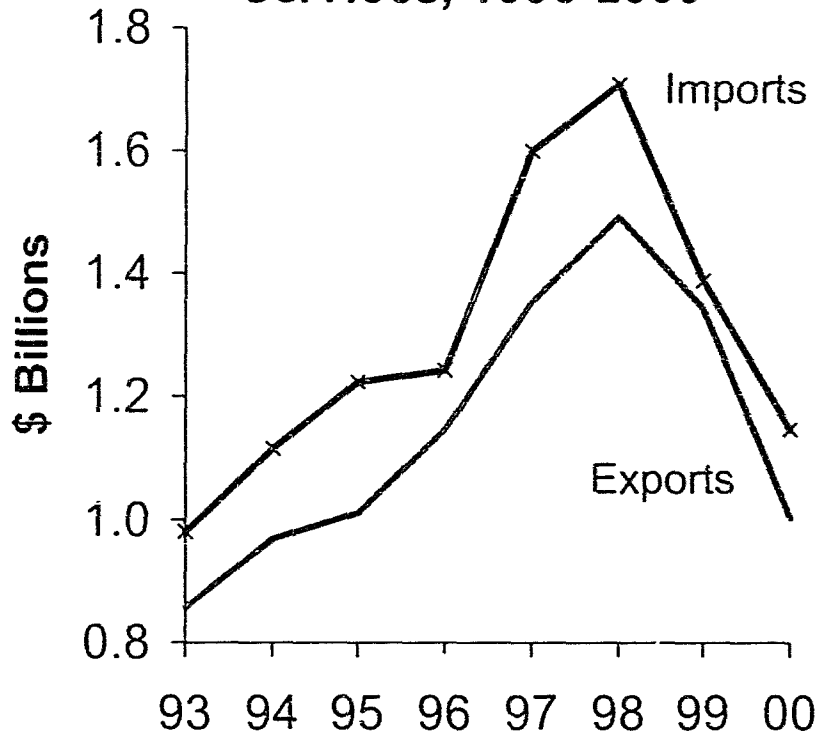


Source: Industry Canada compilations based on Trade Data Online and Canada's International Transactions in Services (Cat. no. 67-203-XIB), Statistics Canada.

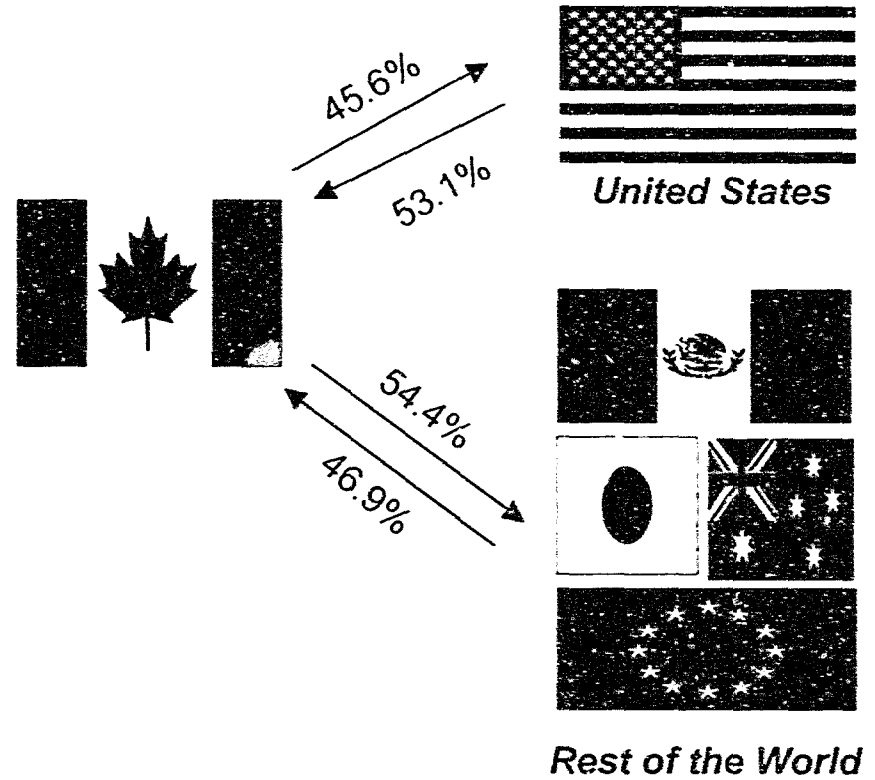


Canadian ICT Trade by Type of Services and Region

Trade in Telecommunications Services, 1993-2000



Trade in Communications Services*, Share by Region, 2000



Source. Canada's International Transactions in Services (Cat. no. 67-203-XIB), Statistics Canada.

* Including postal and courier services, which are not part of the ICT definition.

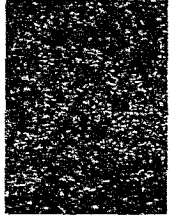




Conclusions

- In 2000, there was unprecedented growth in Canadian trade of ICT goods. Exports increased by 43.8%, totaling \$39.4 billion, while imports reached \$61.4 billion, up 20.1% from 1999. This impressive growth is mainly due to exports of telecommunication equipment which increased by 100% over the last year.
- Canadian exports of ICT services decreased for the first time in 2000, totaling \$4.6 billion, down by 7.4% from 1999. Imports continue to fall for the second consecutive year, decreasing by 8.7% to \$3.5 billion. This decline in trade of ICT services is partially due to drops in exports and imports of telecommunications services.
- Between 1993 and 2000, trade of ICT goods increased at a faster rate than other goods. As a result, exports and imports of ICT goods have increased their share of total Canadian merchandise trade to 9.6% and 17.2% respectively.
- Exports are crucial to the Canadian ICT manufacturing industries. Domestic exports of ICT goods accounted for 84% of ICT manufacturing shipments in 2000.
- Canada faces a large, yet slightly declining, trade deficit in ICT goods while it benefits from a small (but also declining) trade surplus in ICT services. The trade deficit in ICT goods is mainly due to high imports of electronic parts and components, especially semiconductors.

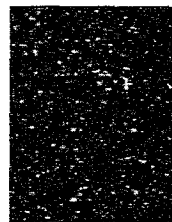




Conclusions (cont'd)

- Telecommunication and other communication equipment showed the strongest growth in exports with an increase of 76% in 2000 and a CAGR of 29% over the 1993-2000 period.
- The U.S. is our major market, accounting for 84% of our exports and 53% of our imports of ICT goods in 2000.
- However, the Asia-Pacific region represents a substantial share of our ICT imports, reaching 28% in 2000.
- Canada went from 13th to 16th place in terms of global exports of ICT goods between 1993 and 1998.
- Over the 1993-1998 period, Canada has seen its share of U.S. imports increase from 6.7% to 7.2% but its share of worldwide imports remained stagnant at 1.7% since Canada's share decreased in a number of countries.
- The strongest growing ICT markets are Asian countries such as China, Malaysia, Japan and Taiwan, with CAGR in imports ranging from 15.8% to 19.1% between 1993 and 1998.





ANNEX 1: Growth Rates in Canadian ICT Trade by Product and Services Group

Product/Services Group	Exports		Imports	
	Growth 1999-2000	CAGR 1993-2000	Growth 1999-2000	CAGR 1993-2000
Telecom. and Other Communication Equipment	76.0%	29.0%	38.0%	17.5%
Communications Wires and Cables	47.8%	24.5%	50.4%	21.2%
Electronic Parts and Components	44.5%	15.8%	27.5%	20.8%
Computer Equipment	15.1%	8.6%	6.8%	5.8%
Consumer Electronics	10.9%	11.6%	19.0%	9.8%
Instrumentation	10.8%	10.9%	9.1%	12.7%
Total ICT Goods	43.8%	17.4%	20.1%	13.6%
All Goods	16.1%	12.4%	11.4%	11.2%
Telecommunications Services	-25.3%	2.2%	-17.5%	2.3%
Software and Computer Services	-1.7%	18.0%	-4.8%	8.1%
Information Services	10.4%	28.8%	0.8%	21.3%
Total ICT Services	-7.4%	13.0%	-8.7%	7.0%
All Commercial Services	4.7%	11.0%	4.7%	8.4%
Total ICT Goods and Services	36.0%	16.9%	18.1%	13.2%
All Goods and Commercial Services	15.3%	12.3%	10.8%	10.9%



Source: Data based on the ICT Statistical Overview, Industry Canada.

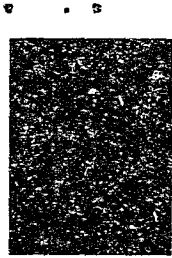
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ANNEX 2: Technical Notes

- In this document, unless otherwise indicated, the term "exports" means "total exports" which include domestic exports and re-exports. Domestic exports include goods manufactured in Canada and goods of foreign origin which have been transformed in Canada. Re-exports are exports of foreign goods which have not been materially transformed in Canada, including foreign goods withdrawn for export from bonded customs warehouse. Re-exports accounted for 11% of total exports of ICT goods in 2000.
- For trade of ICT goods, the following SIC codes are those used in Trade Data Online (Statistics Canada): 3341, 3351, 3352, 3359, 3361, 3368, 3381, 3911, 3912 (except for slides 19 and 20 where SITC codes were used and slides 25 and 26 where HS codes were used).
- Trade data for ICT services includes three categories: Software and Computer Services, Telecommunications Services, and Information Services. Trade data for Software and Computer Services includes custom and prepackaged software and contains both medium and content/royalties values. Please consult the "Sources and Technical Notes" of the ICT Statistical Overview for further details on the methodology used with regards to trade in ICT goods and services.
(see <http://strategis.ic.gc.ca/SSG/it00957e.html>)





ANNEX 2: Technical Notes

- On slide 9, some ratios of domestic exports to manufacturing shipments may be higher than 100% since the methodologies used to collect data are different. Manufacturing shipments are collected on an industry (establishment) basis, while domestic exports are collected on a commodity basis (HS codes) and then associated to a specific manufacturing industry (SIC codes) using Statistics Canada internal concordances. In some cases, the exported commodity may be associated to an industry other than the one that produced or transformed it.

- The SITC codes used in World Trade Analyzer (Statistics Canada and United Nations) for ICT goods are:
 - 75 Office machines & automatic data processing machines
 - 76 Telecommunications & sound recording apparatus
 - 772 Electronic apparatus such as switches, relay, fuses
 - 774 Electronic apparatus for medical purposes
 - 776 Thermionic, cold and photo-cathode valves
 - 87 Professional, scientific & controlling instruments
 - 881 Photographic apparatus and equipment, n.e.s.





ANNEX 2: Technical Notes

- Area Definitions:

- Asia Pacific: Afghanistan, Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China (including Mongolia), Fiji, Hong Kong, India, Indonesia (including East Timor), Israel, Japan, Kiribati (including Tuvalu), North Korea, South Korea, Laos, Malaysia, Maldives, Nepal, New Caledonia, New Zealand, Pakistan, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Taiwan, Thailand, and Vietnam.
- European Union (E.U.): Total for the 15 member states: France, Belgium, Luxembourg, Germany, Italy, Netherlands, Spain, Portugal, United Kingdom, Ireland, Greece, Denmark, and (since 1995) Austria, Sweden, and Finland.
- Latin America: Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Falkland Islands, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, St. Kitts-Nevis, Surinam, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, and Venezuela.