

Information and Communications Technologies (ICT)



# Quarterly Monitor of the Canadian ICT Sector Second Quarter 2012



Quarterly Monitor of the Canadian ICT Sector (URL: http://www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h\_it07958.html)

**Industry Canada** 

Spectrum, Information Technologies and Telecommunications Information and Communications Technologies Branch

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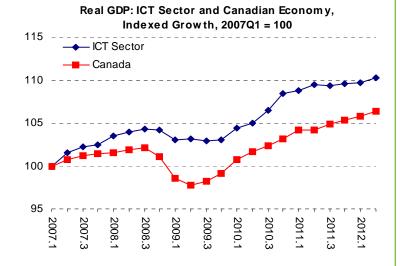
http://www.ic.gc.ca/ict

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### **Gross Domestic Product**

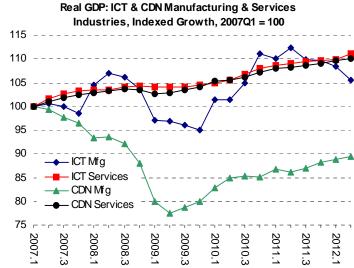
#### ICT output increased

Real ICT sector output (GDP) increased 0.6% in the second quarter of 2012, after having remained essentially flat in the last three quarters. Meanwhile, real output for all Canadian industries increased for a third consecutive quarter, up 0.5%. Over the last four quarters, GDP growth for the overall economy outpaced the ICT sector; the ICT sector grew by 0.8% while the overall economy grew by 2.1%.

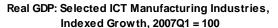


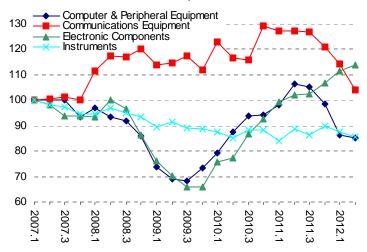
ICT sector GDP growth has been limited by the ICT manufacturing industries, down 2.8% this quarter. ICT manufacturing output has been declining since the second quarter of 2011 (-6.2%) and is now back to the same level as in the third quarter of 2010. Total Canadian manufacturing GDP is following a different trend with a fourth consecutive quarter of growth, up 0.7% this quarter. Total Canadian manufacturing GDP has been trending up since the third quarter of 2009 but remains at a lower level than before the recession.

ICT services\* GDP increased by 1.1% for the second quarter of 2012, a faster pace of growth than total Canadian services GDP (0.4%). Both ICT services and total Canadian services GDP have been growing moderately over the past four quarters, up 2.2% and 1.7% respectively.



Real GDP fell in three of the four key ICT manufacturing industries this quarter. Communications equipment industry GDP fell the most (-8.9%), followed by instruments (-2.1%), and computer and peripheral equipment (-1.3%) industries. Meanwhile, electronic components industry GDP increased 2.1%. Electronic components industry GDP has been increasing since the end of 2009. The computer and peripheral equipment and communications equipment industries upward GDP trend ended in mid-2011. GDP has dropped by 18.3% in the communications equipment industry and by 20.1% in the computer and peripheral equipment industry since the second quarter of 2011.



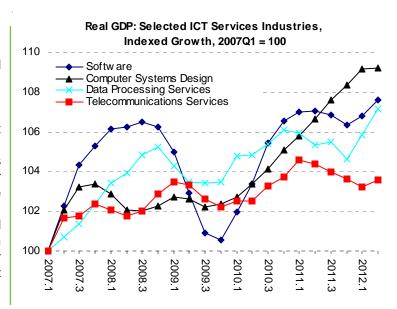


<sup>\*</sup> See ICT services definition on page five. This total includes the ICT wholesaling industries.

### **Gross Domestic Product**

Wholesaling GDP increased sharply, up 8.1% in the second quarter. Excluding wholesaling, ICT services output increased by only 0.3%.

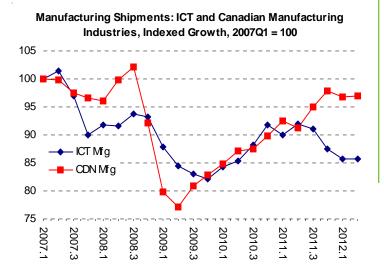
Real GDP increased in all four key ICT services industries. The data processing services industry increased the most (1.2%), followed by the software publishers (0.8%), telecommunications services (0.3%), and computer systems design services (0.04%) industries. Output in the computer systems design industry has trended upwards steadily since late 2009, though it slowed down this quarter. While output in the software publishing and data processing industries trended downwards in 2011, these industries rebounded sharply in the last two quarters. Telecommunications services industry GDP fell steadily from the second quarter of 2011 to the first quarter of 2012 before rebounding this quarter.



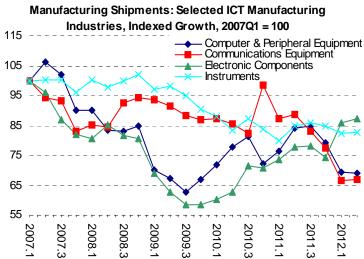
## **Manufacturing Shipments**

## ICT manufacturing shipments stabilized...

Shipments of ICT manufacturers stabilized this quarter and experienced no changes, after three consecutive quarters of decline. Meanwhile, shipments for the whole Canadian manufacturing sector rebounded slightly, up 0.3%. Since the second quarter of 2011, shipments of ICT manufacturers have decreased, down 6.8%, while shipments of total Canadian manufacturing sector have trended upwards, up 6.4%.



## ... due to minimal changes in all key industries

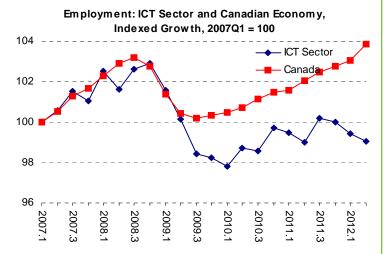


Three of the four key ICT manufacturing industries saw only small changes in shipments this quarter. Shipments of communications equipment and instruments increased by 0.9% and 0.5%, respectively, while shipments of computer and peripheral equipment decreased by 0.5%. However, electronic components manufacturing shipments increased by 1.7%, following a 15.5% increase in the previous quarter.

## **Employment\***

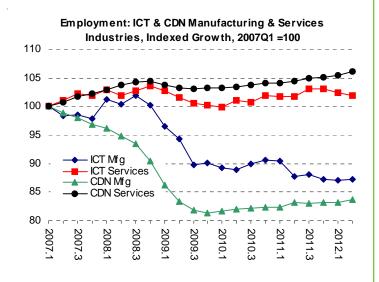
### ICT employment continued to decline

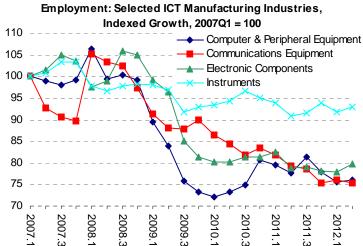
For a third consecutive quarter, the number of employees in the ICT sector fell, down 0.4% this quarter. Since the third quarter of 2011, employment in the ICT sector has trended downwards (-1.2%), while the number of employees in the Canadian economy has increased steadily since the end of 2009.



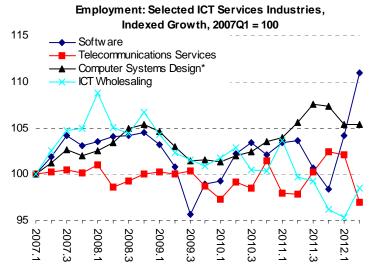
The number of employees in the ICT manufacturing industries rebounded offsetting the decline in the first quarter, up 0.3%. In the last four quarters, employment in the ICT manufacturing industries has remained fairly stable. Employment in the overall manufacturing sector slightly grew, a trend started in the third quarter of 2009.

The number of employees in ICT services declined by 0.5% in the second quarter of 2012, the third consecutive quarterly decline. Meanwhile, employment for the whole Canadian services sector continued to trend up weakly.





Three key ICT manufacturing industries saw employment increases this quarter. Employment in the electronic components, instruments, and computer and peripheral equipment industries increased by 2.3%, 1.2% and 0.5%, respectively. Meanwhile, employment in the communications equipment industry declined by 1.1%, offsetting the gains of the previous quarter.



The decline in ICT services employment this quarter was driven by a 5.0% decrease in the telecommunications services industry. The growth in the software industry employment (6.5%) was not large enough to offset the drop in telecommunications services. Meanwhile, employment in the computer system design industry (including data processing services) remained relatively stable, up only 0.04%.

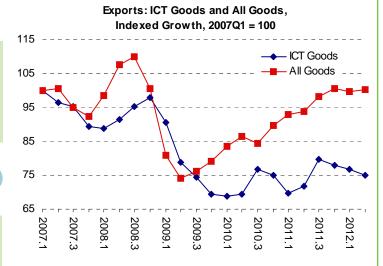
\*Note: Due to reclassification of some of the establishments within the data processing industry to the computer systems design industry, employment in the computer systems design industry has been combined with employment in the data processing industry

2nd Quarter

Oct '12

## Exports of ICT goods continued to fall...

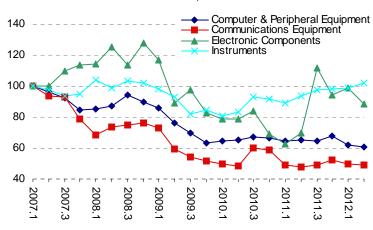
ICT exports fell for a third consecutive quarter, down 2.3%. Meanwhile, the growth trend in total Canadian goods exports began to flatten off. Total Canadian goods exports increased by 0.7% this quarter but has declined by 0.2% over the last two quarters.



## ...due to a sharp decline in electronic components exports

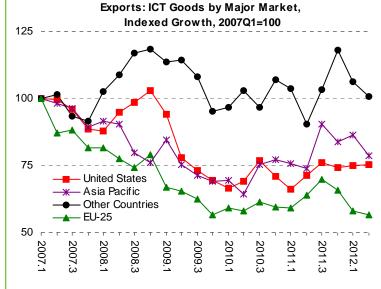
The decrease in ICT exports this quarter was mainly driven by a drop in electronic components, down 10.2%. Since the 60% jump posted in the third quarter of 2011, electronic components exports have fallen by 20%. Exports of computer and peripheral equipment and communications equipment decreased by 2.7% and 0.4%, respectively. Since the beginning of 2011, exports of computer and peripheral equipment and communications equipment remained relatively steady. Meanwhile, exports of instruments have trended up steadily over the same period, increasing by 3.2% this quarter.

#### Exports: ICT Goods by Selected Product Group, Indexed Growth, 2007Q1 = 100



### Exports to the US held steady

ICT exports to the US increased slightly, up 0.2% this quarter. Meanwhile, exports to the Asia Pacific, the EU-25, and all the other remaining countries fell, down 9.1%, 2.7%, and 5.1%, respectively. The US share of Canadian ICT exports was 65% this quarter, up by 2 percentage point from the previous quarter. The share of exports to the Asia Pacific, the EU-25, and other remaining countries decreased to 12.7%, 11.4%, and 11.4%, respectively.



## **Notes, Definitions and Sources**

All growth rates are quarter over quarter unless otherwise mentioned.

#### **Real GDP Versus Manufacturing Shipments**

It is important to note that GDP and shipments differ in two ways. First, GDP measures the total contribution of an industry to the economy in terms of value-added while shipments are a simple measure of revenues. Most of the time, changes in shipments are good indicators of changes in GDP but structural changes to an industry (for example, an increase in outsourcing) can lead to different trends in GDP and shipments indices. Second, GDP is measured in constant dollars while shipments are measured in current dollars. This means that when prices increase, GDP fluctuates less than shipments but when prices decline, GDP fluctuates more than shipments. In the ICT context, this difference is very important in measuring output of the computer equipment industry since a hedonic price index is used. A hedonic price index is a statistical tool used to standardize per unit prices for goods whose quality and characteristics change rapidly such as a computer. The hedonic price index adjusts the price of a computer based on the improvements in speed, design, etc.

#### Information and Communications Technologies Sector\*

#### **ICT Manufacturing:**

- Computer and Peripheral Equipment Mfg
- Communications Equipment Mfg
  - -wired communications equipment mfg
  - -wireless communications equipment mfg
- Audio and Video Equipment Mfg
- Electronic Component Mfg
- Instruments Mfg
- Communication Wire and Cable Mfg
- Commercial and Service Machinery Mfg
- \* Based on the North American Industry Classification System

#### **ICT Services:**

- Software
- Computer Systems Design
- Data Processing Services
- Telecommunications Services
- Cable and Other Program Distribution
- ICT Wholesaling

#### Sources:

GDP (2002 constant dollars): GDP by Industry, Industry Measures and Analysis Division, Statistics Canada. Manufacturing Shipments: Monthly Survey of Manufacturing, Manufacturing, Construction and Energy Division, Statistics Canada.

Employment: Survey on Employment, Payrolls and Hours (SEPH), Labour Statistics Division, Statistics Canada. Exports: Trade Data Online, International Trade Division, Statistics Canada.

#### Notes

- Self-employed workers are not included. Employment trends in this publication are based on the Survey on Employment, Payrolls and Hours (SEPH) and might be slightly different from trends based on annual industry specific surveys reported in the ICT Statistical Overview. Although data from SEPH might not be as reliable as data from industry specific surveys, they are timelier and provide an indication of the current employment situation.
- 2. Data used in this report are adjusted for seasonal variation.

#### **Export Markets:**

United States: United States.

EU-25: United Kingdom, Germany, France, Belgium, Netherlands, Italy, Spain, Sweden, Austria, Finland, Ireland, Denmark, Poland, Portugal, Czech Republic, Greece, Luxembourg, Hungary, Slovenia, Latvia, Lithuania, Estonia, Slovakia, Cyprus and Malta.

Asia Pacific (based on Department of Foreign Affairs and International Trade definition): Afghanistan, Australia, Bangladesh, Bhutan, Brunei Darussalam, Burma (Myanmar), Cambodia (Kampuchea), China, Cook Islands, Fiji, French Polynesia, Guam (U.S.), Hong-Kong, India, Indonesia (includes East Timor), Japan, Kiribati (includes Tuvalu), South Korea, Kyrgyzstan, Laos, Macau (Macao), Malaysia, Maldives, Micronesia, Mongolia, Naura, Nepal, New Caledonia, New Zealand, Niue, Pakistan, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Taiwan (Taipei), Tajikistan, Thailand, Tonga, Turkmenistan, Uzbekistan, Vanuatu (New Hebrides), Vietnam.