# **Quarterly Monitor of the Canadian ICT Sector**

Second Quarter 2014 - Covering the period April 1 - June 30

#### **GDP**

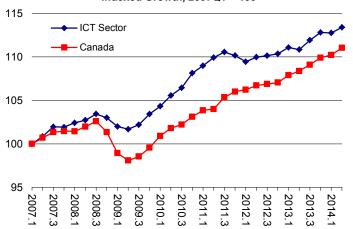
Real ICT sector output (GDP) grew by 0.6% in the second quarter of 2014, after declining by 0.1% in the first quarter. In comparison, real output for all Canadian industries grew by 0.7% this quarter.

Both ICT manufacturing and ICT services grew this quarter. ICT manufacturing grew 2.0% and ICT services grew by 0.5%. However, ICT manufacturing GDP is still 33% below the level reached in the second quarter of 2011. In comparison, total Canadian manufacturing GDP increased 5.1% over the same period.

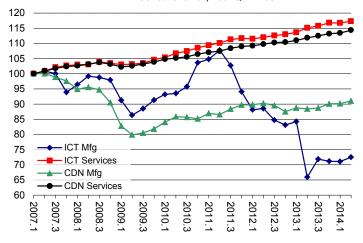
The 0.5% increase in ICT services GDP this quarter was slower than the overall Canadian services sub-sector (0.8%). Both ICT services and total Canadian services GDP have grown steadily, though moderately, since the second quarter of 2009, up 14% and 12%, respectively.

The increase in output for ICT manufacturing this quarter was primarily driven by the computer and peripheral equipment industry, which grew by 10%. That said, output in this industry is down by 9% over the past three years after peaking in the second quarter of 2011. GDP in the electronic components industry increased by 2.7%, after growing by 9.4% in the previous quarter. Output in this industry fell 21% after peaking in the second quarter of 2012. The communications equipment industry fell by 2.9% this quarter after contracting 11% in the previous quarter. Output for this industry has fallen by 55% from its peak in the second quarter of 2011. Most of the decline in ICT manufacturing since 2007 has been due to the large drop in communications equipment GDP.

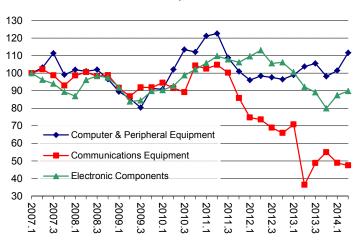
#### Real GDP: ICT Sector and Canadian Economy, Indexed Growth, 2007Q1 = 100



Real GDP: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2007Q1 = 100



Real GDP: Selected ICT Manufacturing Industries, Indexed Growth, 2007Q1 = 100



The growth in output in the ICT services industries this quarter was driven by computer systems design and data processing, which grew by 1.2%. Excluding wholesaling, output in the ICT services sub-sector grew by 0.4% this quarter. ICT wholesaling grew 1.5%, communications services expanded by 0.1%, while software publishing declined by 1.4%. This marks the second quarterly decline in a row for software publishing: it declined by 0.3% in the previous quarter.

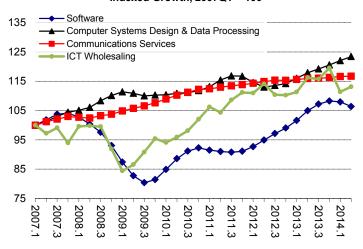
### **Shipments**

ICT manufacturing shipments increased by 3.7% in the second quarter of 2014, after growing by 2.1% the previous quarter. However, ICT shipments are still down 46% since 2007, compared to an increase of 4.4% for all Canadian manufacturing shipments.

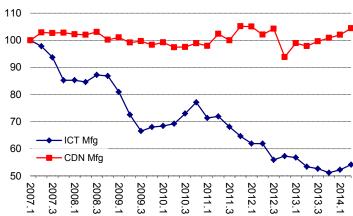
The increase in ICT manufacturing shipments this quarter was driven by two industries: computer and peripheral equipment and electronic components, which increased 21% and 4.7%, respectively.

The main drivers for the large decline in ICT shipments since 2007 have been the computer and equipment and communications peripheral equipment industries. Since 2007, shipments of computer and peripheral equipment have fallen by shipments of communications 60%, while have fallen 54%. equipment components suffered a much smaller decline in shipments over the same period, down 19%.

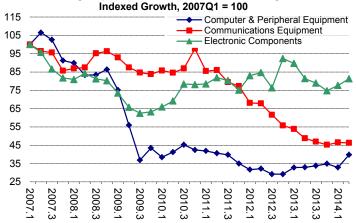
#### Real GDP: Selected ICT Services Industries, Indexed Growth, 2007Q1 = 100



#### Manufacturing Shipments: ICT and Canadian Manufacturing Industries, Indexed Growth, 2007Q1 = 100



## Manufacturing Shipments: Selected ICT Manufacturing Industries,



#### **Employment**

The number of employees\* in the ICT sector grew by 0.7% in the second quarter of 2014. In comparison, total Canadian employment grew by 0.4%.

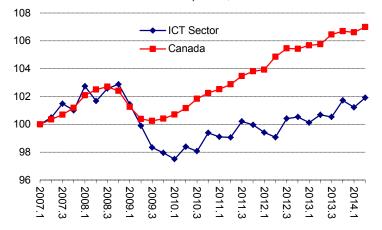
ICT manufacturing employment fell by 1.2% this quarter, continuing its long-term downwards trend. Since the beginning of 2007, employment in the ICT manufacturing industries has fallen by 35%. In comparison, employment in the overall manufacturing industries declined by 18% over the same period, and has remained stable since 2010.

The number of employees in the ICT services industries increased by 0.9% this quarter, while employment in the overall services sector increased by 0.4%. Employment in ICT services has grown by 7.8% since the beginning of 2007.

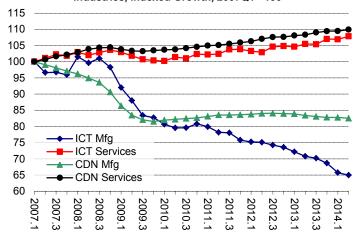
The decline in employment in ICT manufacturing this quarter was entirely due to the communications equipment industry, which fell by 3.9%. All other ICT manufacturing industries experienced gains in employment. Computer and peripheral equipment industry employment grew by 1.4%, and electronic components increased by 0.5%. Employment has been trending down in all ICT manufacturing industries over the last seven years.

The increase in employment in ICT services this quarter was due to computer systems design and data processing, which grew by 2.7%. All other ICT services industries posted losses in employment: software publishing shrank by 2.4%, communications services fell by 0.6%, and ICT wholesaling declined by 0.3% this quarter.

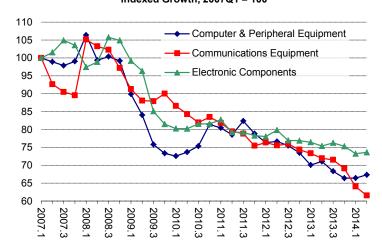
## Employment: ICT Sector and Canadian Economy, Indexed Growth, 2007Q1 = 100



#### Employment: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2007Q1 =100



Employment: Selected ICT Manufacturing Industries, Indexed Growth, 2007Q1 = 100



<sup>\*</sup>Note: Self-employed workers not included. See Note 2 on page 5.

Since 2007, software publishing and computer systems design and data processing have seen robust employment gains: 23% for software publishing, and 21% for computer systems design and data processing. Over the same period, employment in ICT wholesaling fell 6.8%, and communication services declined 6.5%.

#### **Exports**

Exports of ICT goods increased by 1.8% this quarter, while total Canadian goods exports increased by 3.6%. ICT exports have fallen 43% since the beginning of 2007.

The increase in ICT exports this quarter was driven by two product groupings: electronic components (up 13%), and communications equipment (up 1.2%).

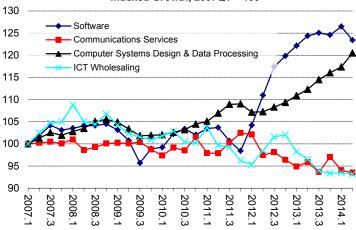
Since the beginning of 2007, exports of all ICT product groupings have declined substantially, with communications equipment declining the most (down 56%).

## **Exports by Geographic Market\***

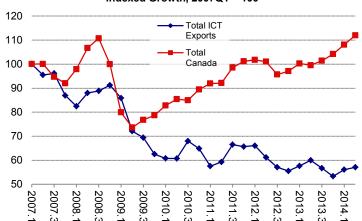
Canada's ICT exports to the US declined by 1.6% in comparison with the same quarter one year ago. Exports to the EU-25 fell by 19% year-over-year while exports to the Asia Pacific region were up 14.2%. ICT exports to all other countries fell 33% over the last 12 months.

The US share of Canadian ICT exports was 67% this quarter, while the share of ICT goods exports to the EU 25 was 12%. Asia Pacific and the rest of world each accounted for 11% of Canadian ICT goods exported.

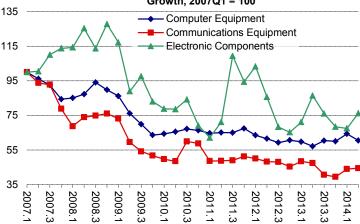
#### Employment: Selected ICT Services Industries, Indexed Growth, 2007Q1 = 100



#### Exports: ICT Goods and All Goods, Indexed Growth, 2007Q1 = 100



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



<sup>\*</sup>Note: Seasonally adjusted data on exports of ICT goods by market are not available. See Note 1 on page 5.

#### **Notes, Definitions and Sources**

All growth rates are quarter over quarter unless otherwise mentioned.

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

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.

#### **Sources: Statistics Canada**

- GDP: GDP by Industry, Industry Measures and Analysis Division.
- Manufacturing Shipments: Monthly Survey of Manufacturing, Manufacturing, Construction and Energy Division.
- Employment: Survey on Employment, Payrolls and Hours (SEPH), Labour Statistics Division.
- Exports: Trade Data Online, International Trade Division.

#### **Notes:**

- 1. Data used in this report are adjusted for seasonal variation, with the exception of data on exports of ICT goods by market. For this reason, year-over-year comparisons are used instead of quarter-over-quarter comparisons for export data by market.
- 2. Self-employed workers are not included. Employment trends are based on the Survey on Employment, Payrolls and Hours (SEPH) and might be slightly different from trends based on annual industry specific surveys. 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.

#### **Export Markets:**

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.