

Information and Communications Technologies (ICT)

Quarterly Monitor of the Canadian ICT Sector Third 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

Last Update: January 2013

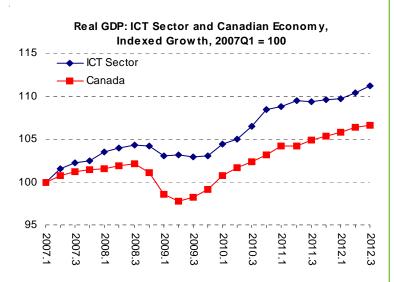
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Gross Domestic Product

ICT output continued to increase

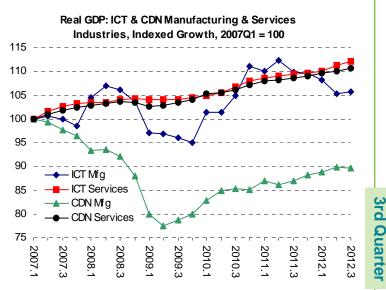
After remaining essentially flat between the third quarter of 2011 and the first quarter of 2012, real ICT sector output (GDP) increased again, up 0.7% in the third quarter of 2012. Meanwhile, real output growth for all Canadian industries slowed down this quarter with an increase of 0.3%. While, GDP growth for the overall economy outpaced the ICT sector over the last five quarters, ICT GDP growth accelerated in the past two quarters.



GDP in the ICT manufacturing industries increased by 0.4% this quarter after four consecutive quarters of decline. Meanwhile total Canadian manufacturing GDP growth stopped this quarter with no significant changes. Total Canadian manufacturing GDP had been growing for the previous four quarters.

The growth in the ICT sector in the third quarter can be mainly attributed to the services* industries which increased by 0.7%. Growth in the ICT services outpaced growth in total Canadian services (0.5%) for a second consecutive quarter.

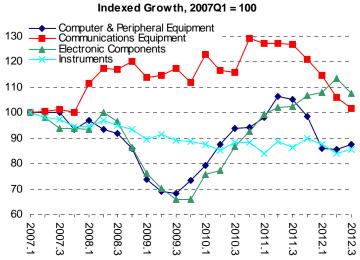
* See ICT services definition on page five. This total includes the ICT wholesaling industries.



Real GDP increased in two of the four key ICT manufacturing industries this quarter. Computer and peripheral equipment industry GDP increased by 2.5%, breaking its sharp downward trend from mid 2011 to mid 2012. The instruments industry also increased this quarter (1.6%), though output in this industry has fluctuated around the same level since the beginning of 2010. Communications equipment GDP continued to fall sharply (-4.0%), down 20% since the third quarter of 2011. While GDP in the electronic components industry had been growing from the end of 2009, it fell this quarter, down 5.1%.

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Gross Domestic Product

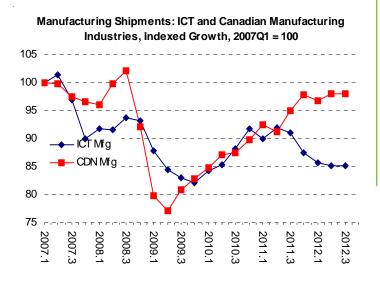
In the services industries, wholesaling GDP increased by 3.2% this quarter. Excluding wholesaling, ICT services output increased by 0.4%.

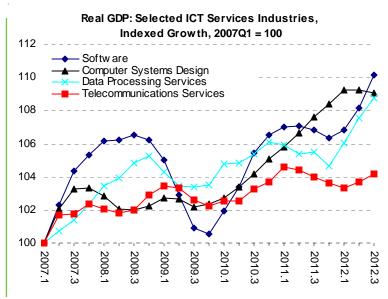
Real GDP increased in three of the four key ICT services industries. Both the software and data processing services industries increased for the third quarter in a row, up 1.9% and 1.1%, respectively. Since the end of 2011, both these industries have increased rapidly, with the data processing industry up 3.9% over the period, and the software industry up 3.6%. Telecommunications services industry GDP grew for the second consecutive quarter, up 0.5%, after falling steadily between the beginning of 2011 and the beginning of 2012. Meanwhile, computer systems design GDP fell for a second consecutive quarter, down by 0.2% this quarter, after growing continuously from the third quarter of 2009 to the first quarter of 2012.

Manufacturing Shipments

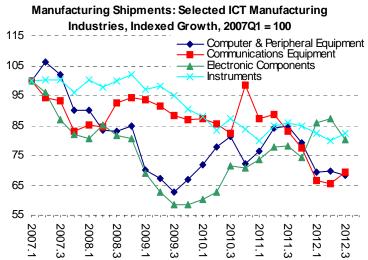
ICT manufacturing shipments stabilized...

Shipments of ICT manufacturers stabilized this quarter after four quarters of decline. Shipments for the whole Canadian manufacturing sector also experienced no changes. However, shipments of ICT manufacturers and the whole Canadian manufacturing sector have been trending in opposite directions since the second quarter of 2011. Over that period, shipments of ICT manufacturers declined by 7.4% while shipments of the whole Canadian manufacturing sector increased by 7.4%.





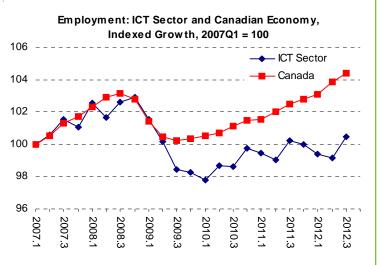
... due to offsetting changes in key industries



Shipments of electronic components and of computer and peripheral equipment decreased this quarter, down 7.9% and 1.9%, respectively. Meanwhile, shipments of communications equipment and instruments increased, up 5.6% and 3.2%, respectively. The increases in shipments of communications equipment and instruments balanced the decreases in electronic components and computer and peripheral equipment, resulting in no changes for shipments of the total ICT manufacturing sector this quarter.

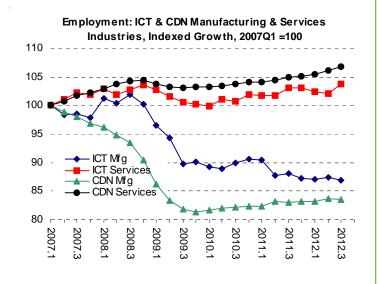
Sharp increase in ICT employment

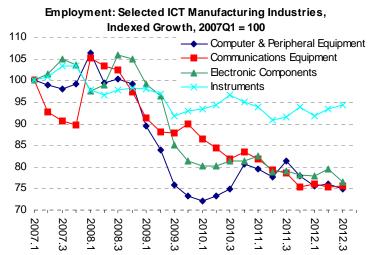
The number of employees in the ICT sector increased sharply (1.3%) after three consecutive quarters of declines. While employment in the ICT sector decreased steadily between the third quarter of 2011 and the second quarter of 2012, the large increase in this quarter more than offset the decline during that period.



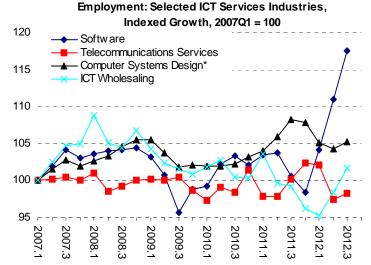
However, in the ICT manufacturing industries, the number of employees fell 0.4% in the third quarter, offsetting the increase in the previous quarter. In the last four quarters, employment in ICT manufacturing industries remained fairly stable. Employment in the overall manufacturing sector fell slightly, down 0.2%.

In the ICT services industries, the number of employees increased sharply this quarter, up 1.7%, after three consecutive quarters of decline. The number of employees in the whole Canadian services sector continued to trend up steadily with a quarterly increase of 0.6%.





The ICT manufacturing industries saw employment decreases in electronic components and computer and peripheral equipment this quarter, down 3.8% and 1.6%, respectively. Employment in the communications equipment industry increased slightly, up 0.5%, while the instruments industry increased sharply by 1.1%. With the exception of the instruments industry, employment has been trending down significantly in all key ICT manufacturing industries since mid-2008.



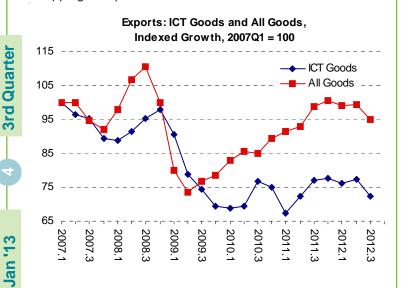
Growth in ICT services employment this quarter was led by a 6.0% jump in the software industry. Employment in the computer systems design and telecommunication services industries also grew this quarter, up 0.9% and 0.8%, respectively. The number of employees in the software industry has now increased by 19.5% in the last three quarters.

*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

Exports of Goods

Large drop in exports of ICT goods..

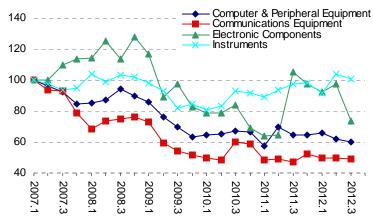
ICT exports fell sharply this quarter, down 6.5%. Total Canadian goods exports also fell, down 4.3%. ICT exports and total Canadian goods exports have experienced similar trends since the beginning of 2011, increasing between the first and third quarter of 2011, flattening off with mild fluctuations between the third quarter of 2011 and the second quarter of 2012, and dropping this quarter.



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

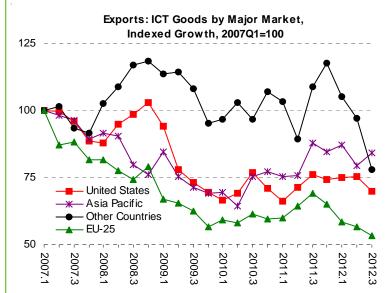
While all key ICT exports groups declined this quarter, the decrease was mainly driven by a large drop in electronic components, down 24.7%. Since the 64% jump posted in the third quarter of 2011, electronic components exports decreased by 30%. Exports of computer and peripheral equipment, instruments, and communications equipment fell by 3.1%, 3.0% and 1.7% respectively. Since the beginning of 2011, exports of computer and peripheral equipment and communications equipment have remained relatively steady. Exports of instruments have experienced an upwards trend, while exports of electronic components have been erratic.

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



Exports to the US fell

ICT exports to the US dropped by 7.0% this quarter, after remaining essentially flat since the third quarter of 2011. Exports to the EU-25 also decreased, down by 5.6%, while exports to the Asia Pacific increased by 6.0%. ICT Exports to all the other countries fell by 19.9% this quarter. The US share of Canadian ICT exports was 64% this quarter, down by 1 percentage point from the previous quarter. The share of exports to the Asia Pacific, the EU-25, and other countries were 14.6%, 11.5%, and 9.5%, 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

ICT Services:

- Software
- Computer Systems Design
- Data Processing Services
- Telecommunications Services
- Cable and Other Program Distribution
- ICT Wholesaling
- * Based on the North American Industry Classification System

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:

- 1. 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.