Industry Canada Industrie Canada

Information and Communications Technologies (ICT)

Quarterly Monitor of the Canadian ICT Sector
Fourth Quarter 2010

Canada

Quarterly Monitor of the Canadian ICT Sector
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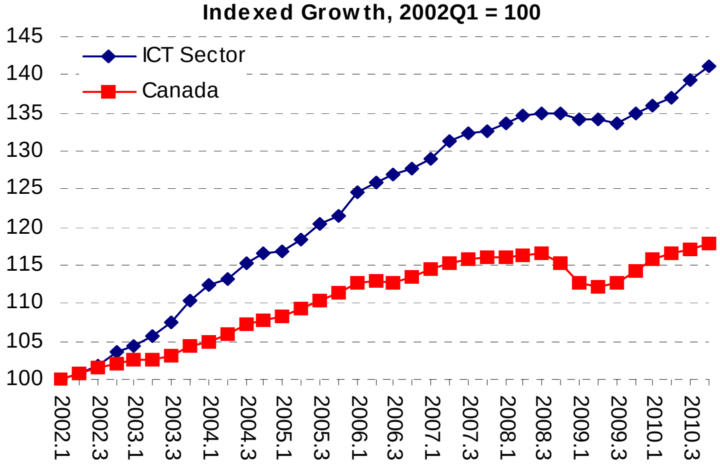
Gross Domestic Product

ICT output continues to rise

The final quarter of 2010 marked the fifth consecutive quarterly increase in real ICT sector output, up 1.4%. Real output for all Canadian industries increased for a sixth consecutive quarter, up 0.6%. Both the ICT sector and the overall Canadian economy GDP trended upwards steadily following the downturn between mid-2008 and mid-2009.

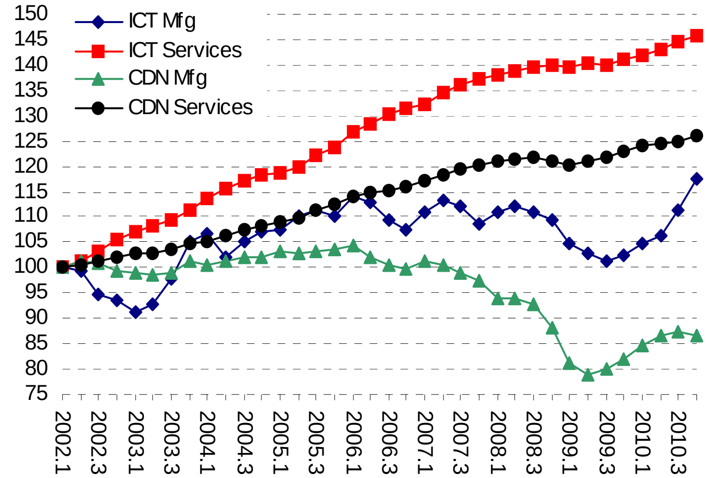
Real GDP: ICT Sector and Canadian Economy, Indexed Growth, 2002Q1 = 100



ICT manufacturing GDP increased sharply this quarter, up 5.5%. The increase for this quarter brought ICT manufacturing output to the highest level seen since 2002. Total Canadian manufacturing GDP fell 0.7% this quarter, after five consecutive increases. While both ICT manufacturing GDP and Canadian manufacturing GDP trended downwards from mid-2008 until mid-2009, ICT manufacturing GDP levels did not fall as severely as Canadian manufacturing GDP. Total Canadian manufacturing output has also not been as resilient as ICT manufacturing output, and consequently has not yet returned to its pre-downturn level.

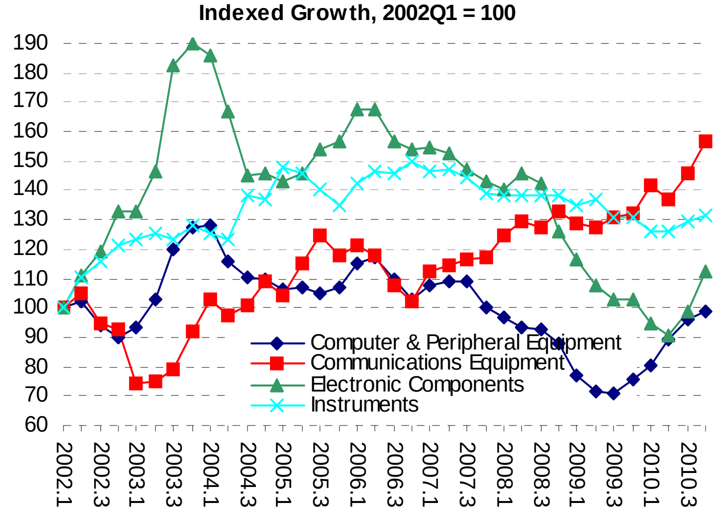
ICT services output grew 0.8% in the final quarter of 2010 for a fifth consecutive quarterly increase. Although ICT services output flattened in early 2009, it resumed its moderate upward trend at the end of 2009. Total Canadian services output also grew by 0.8% this quarter.

Real GDP: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2002Q1 = 100



Real GDP rose in all four key ICT manufacturing industries this quarter. The electronic components industry experienced the largest increase for a second quarter in a row (13.7%). The communications equipment industry grew 7.3%, its second consecutive quarter increase. The computer and peripheral manufacturing industry continued to grow, up for the fifth consecutive quarter (2.4%), though this quarter's increase was not as large as the previous four quarters. The instruments industry also continued to increase (1.7%).

Real GDP: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100



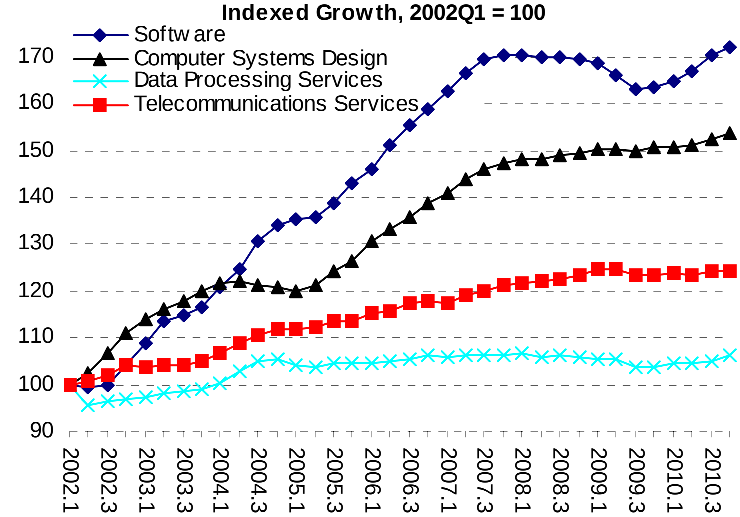
* See ICT services definition on page five. This total includes the ICT wholesaling industries.

Gross Domestic Product

The increase in ICT services output for this quarter was mostly driven by wholesale. Excluding wholesale, ICT services output increased 0.5% from the previous quarter, marking the fifth consecutive increase in the absence of wholesale. Meanwhile, the ICT wholesaling industry output increased 4.3% this quarter.

After wholesaling, growth in the ICT services sub-sector was led by data processing services, up 1.2% this quarter. Software publishing, computer systems design, and telecommunication services increased by 0.9%, 0.8%, and 0.06%, respectively. Since the end of 2009, only the software publishing industry has seen a significant upward trend.

Real GDP: Selected ICT Services Industries, Indexed Growth, 2002Q1 = 100

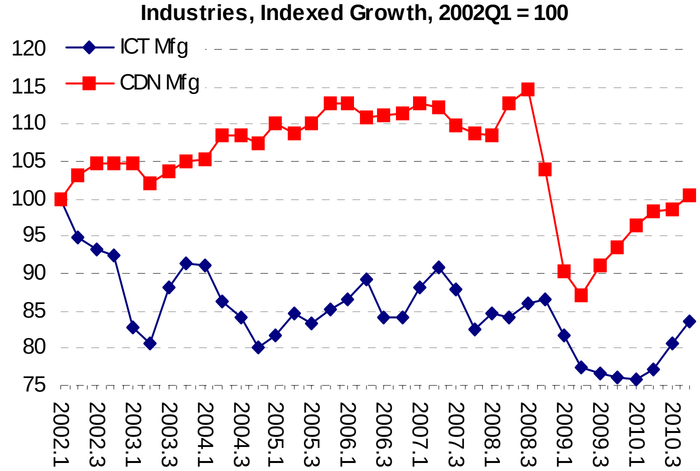


Manufacturing Shipments

ICT manufacturing shipments increase steeply...

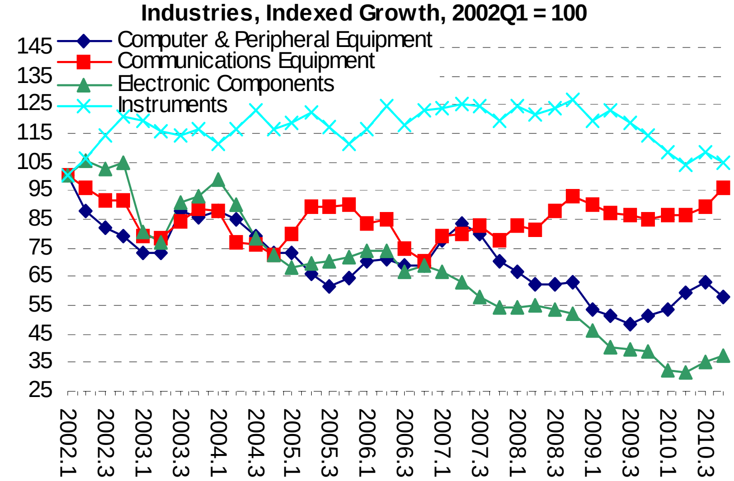
ICT manufacturing shipments continued to rise steeply, up 3.7% this quarter. ICT manufacturing shipments experienced a sharp decline between the third quarter of 2008 and the second quarter of 2009. Shipments continued to steadily decrease up until the beginning of 2010, when they reached their lowest level since 2002. Since the first quarter of 2010, ICT manufacturing shipments have steadily increased, almost returning to the level prior to the decline.

Manufacturing Shipments: ICT and Canadian Manufacturing Industries, Indexed Growth, 2002Q1 = 100



...due to growth in communications equipment and components

Manufacturing Shipments: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100



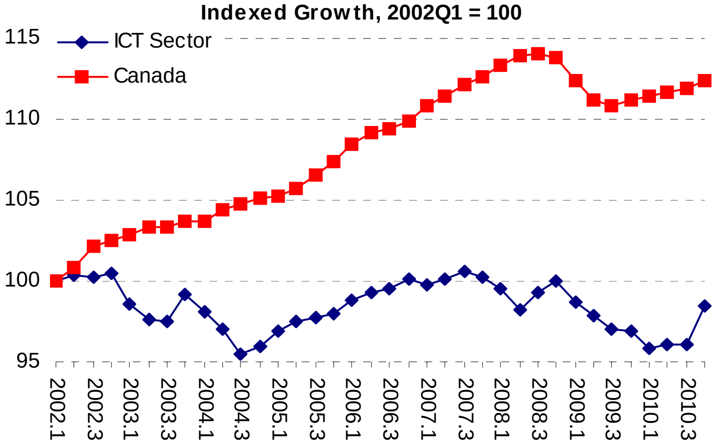
Growth in ICT manufacturing shipments this quarter was attributed to increases in shipments by two of the four the key ICT manufacturing industries. Shipments of communications equipment increased for a fourth consecutive quarter, up 7.6%, while electronic component shipments were up for the second consecutive quarter (5.3%). Meanwhile, shipments of computer and peripheral equipment experienced a sharp drop (-8.2%), after increasing for four quarters in a row. Instruments shipments had trended downward since the second quarter of 2009. It rebounded in the last quarter, but returned to decline in this quarter, down 3.6%.

Employment*

ICT employment increases sharply...

ICT employment increased significantly in the final quarter of 2010 (2.5%), after showing little change in the previous two quarters. This quarter's increase in ICT employment was mainly attributed to the increase in ICT services employment. In comparison, employment in the Canadian economy has increased steadily since mid-2009, up 0.4% this quarter.

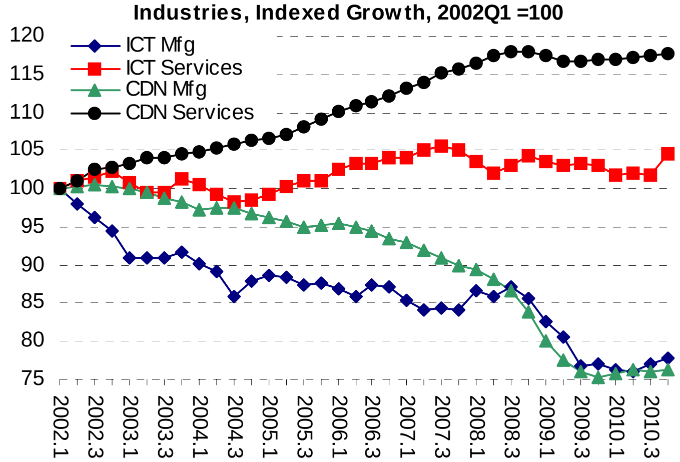
Employment: ICT Sector and Canadian Economy, Indexed Growth, 2002Q1 = 100



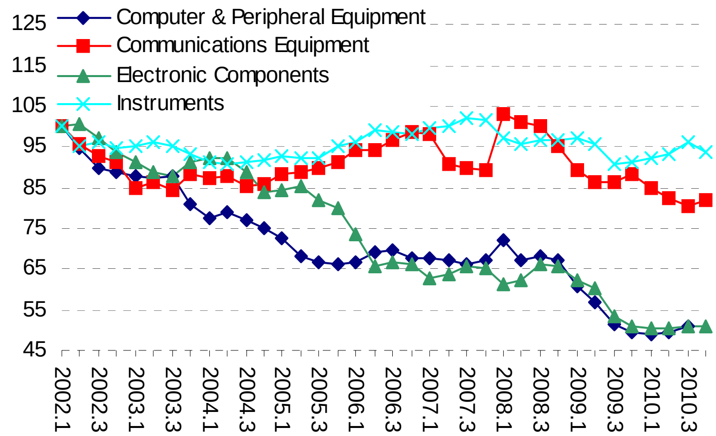
The declining trend in ICT manufacturing industries employment tapered off after the third quarter of 2009, rebounded in the third quarter, and continued to rise this quarter (1.0%). Canadian manufacturing industries employment had remained essentially flat since the second half of 2008, increasing slightly this quarter (0.3%).

Employment in the ICT services industries increased sharply this quarter, up 2.8%, after trending downwards since the last quarter of 2008. The sharp increase from this quarter brought ICT services employment to a level slightly higher than the level prior to the downward trend. Employment in the Canadian services sector continued to increase, though slightly, up 0.3%.

Employment: ICT & CDN Manufacturing & Services Industries, Indexed Growth, 2002Q1 =100

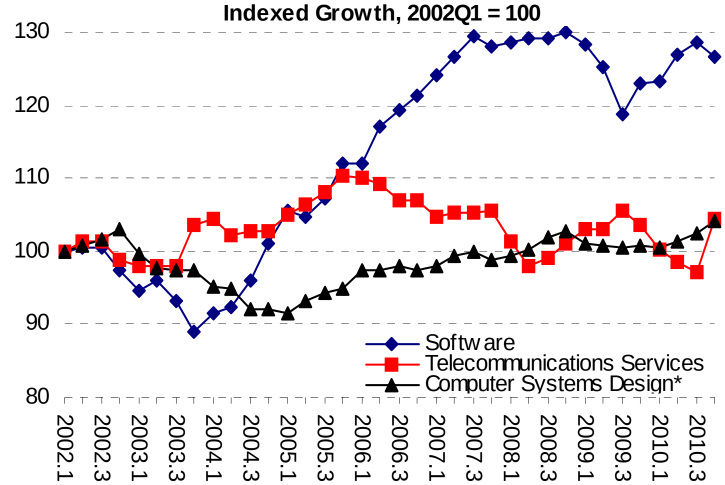


Employment: Selected ICT Manufacturing Industries, Indexed Growth, 2002Q1 = 100



In three of the four key ICT manufacturing industries, employment increased this quarter. Employment in the computer and peripheral equipment industry experienced the largest growth, up 7.8%. Employment in the communications equipment industry increased 1.9% after falling for the previous three quarters. Electronic component manufacturing industry employment grew slightly (0.2%), while employment in the instruments industry fell 2.5% after four consecutive quarters of growth.

Employment: Selected ICT Services Industries, Indexed Growth, 2002Q1 = 100



On the services side, two out of the three key ICT services industries increased employment this quarter. Employment in the telecommunications services industry experienced a dramatic increase of 7.5%, after declining for four quarters prior. Computer systems design industry employment continued to increase for the fifth quarter in a row, up 1.7%. Meanwhile, employment in the software publishing industry fell 1.4%, after four quarters of growth. The sharp increase in ICT services employment this quarter was predominately driven by the increase in employment in the telecommunications services industry.

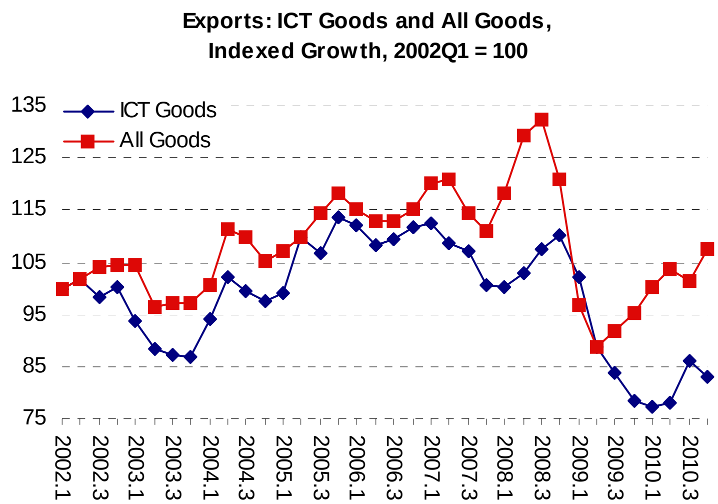
*Note: Due to reclassification of some of the establishments within the data processing industry to the computer systems design industry, employment in the computer systems design industry has been combined with employment in the data processing industry

* see note 1 on page 5

Exports of Goods

Drop in ICT goods exports...

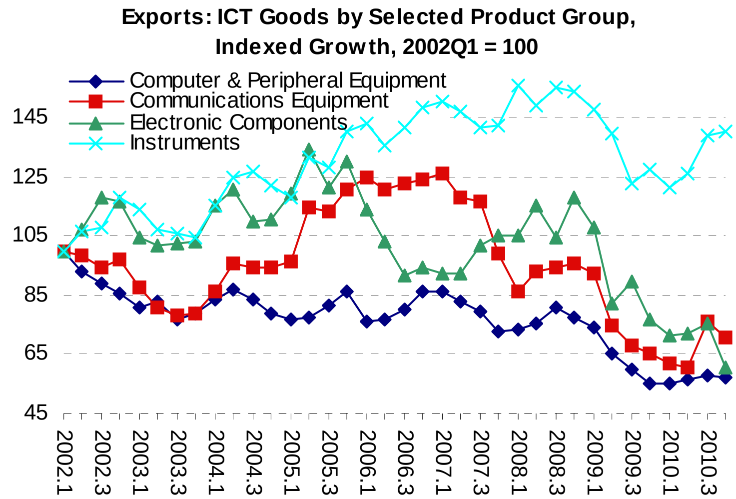
In the fourth quarter of 2010, ICT goods exports declined 3.8% following a sharp increase in the previous quarter. ICT exports dropped throughout 2009, leaving ICT goods exports at the lowest level of the analyzed period. The declining trend flattened off at the end of 2009 and turned around in the second quarter of 2010, but fell again in this quarter. Total Canadian exports have trended upwards since the second quarter of 2009, up 5.9% this quarter.



...attributed to fall in electronic components exports

Three out of the four key ICT product group exports experienced decreases this quarter. Exports of electronic components experienced the sharpest decline, down 20.0%. Exports of communications equipment fell 6.6% after increasing sharply in the previous quarter. Computer equipment exports fell slightly by 1.1%, while instruments exports experienced a slight increase of 0.8%.

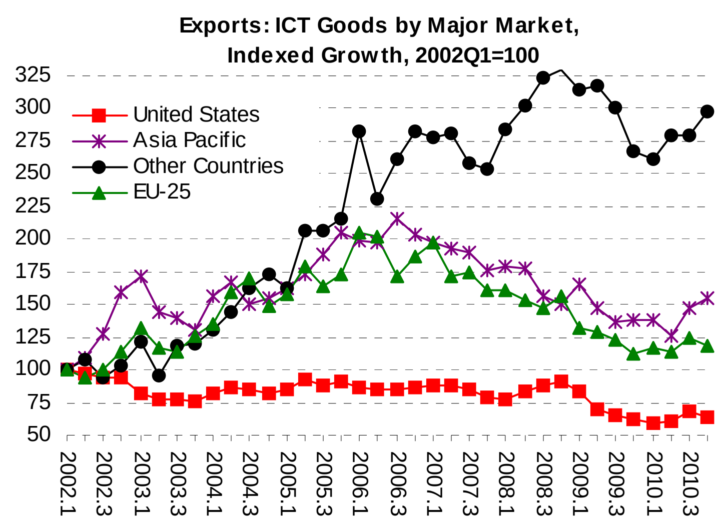
Out of the four key ICT product groups, only the instruments product group has shown a significant upward trend in the past year. Exports of computer and peripheral equipment were flat for the past year, while exports of electronic components and communications equipment were erratic in 2010.



Exports to the US decrease

ICT exports to the US decreased this quarter (-7.8%) after increasing for two quarters in a row. The US share in Canadian ICT goods exports now stands at 62%, down 3 percentage points from the previous quarter.

ICT exports to Asia Pacific economies were up 4.4%, the second consecutive quarter increase. Exports to 'Other countries' increased for the third quarter in a row, up 6.4%. Meanwhile, ICT exports to the EU-25 declined 4.6%. The share of ICT exports to Asia Pacific and the EU-25 now stands at 12.9% and 12.3%, respectively, while 'Other countries' share increased and now stands at 12.4%.



Notes, Definitions and Sources

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. Using this hedonic price deflator, a very rapid decline in production prices is observed resulting in a much stronger growth in the GDP index compared to the shipments index for the computer equipment industry.

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.