

BC STATS

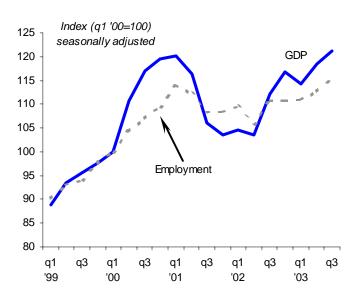
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High Technology Update — Third Quarter 2003

- High tech GDP hits an all-time high
- Employment in high tech increases for the third straight quarter
- High tech exports slump, while imports recover lost ground

High tech industries bounced back from a first quarter dip, posting two consecutive quarterly gains

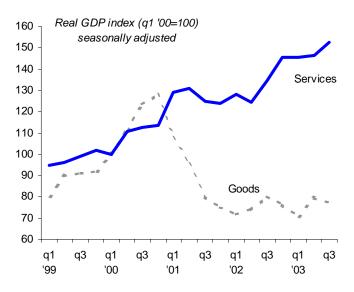


GDP in the high tech sector emerged from the doldrums

With solid performances in the second (+3.6%) and third (+2.3%) quarters,¹ British Columbia's high technology sector recovered from its weak showing in 2001 and 2002. In fact, the third quarter GDP of \$952 million is the highest ever reported. The turnaround was mainly due to strength in the high tech service industries, while the goods industries were still struggling at historically low levels.

High tech service industries, which have been boosting the high tech sector's performance since

The spread between high tech service and goods industries continued expanding



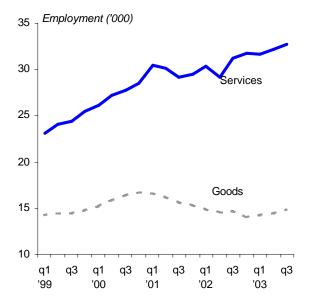
High tech revenues showed a similar trend with total revenues reaching an historical high level after two consecutive quarterly gains (+3.1%,

the end of 2002, continued to expand in the second (+0.7%) and third (+4.1%) quarters. Both information & cultural services and professional, scientific & technology services posted substantial gains. At the same time, the output of high tech manufacturers experienced some volatility. High tech manufacturing GDP posted a strong gain (+12.0%) in the second quarter, the highest growth since the first quarter of 1999. However, the growth didn't last long, as it was followed by a weak third quarter (-2.4%). The growth rates recorded within the manufacturing sector varied significantly. In the third quarter, manufacturers of computer & electronic products maintained robust growth, while manufacturers of aerospace products saw significant decline.

¹ All figures quoted are seasonally adjusted unless otherwise specified. GDP data are reported in constant (1997) dollars; all other dollar figures are in current dollars.

+0.6%). Unsurprisingly, the driving force was the service sector, which posted a substantial gain in the third quarter (+2.1%), after modest growth in the second quarter (+0.9%).

Employment in both goods and service industries expanded in the last two quarters



The high tech sector employed 47,700 people in the third quarter, 2003

High tech employment has been growing steadily since the beginning of 2003. Following the expansion in the first quarter, the number of high tech workers increased 1.8% in the second quarter and 2.3% in the third quarter.

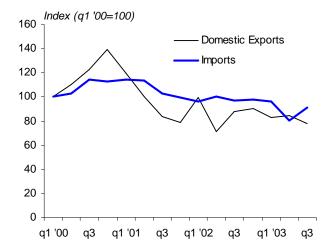
Like the situation with GDP, employment in high tech service industries in the third quarter (32,700) was the highest level ever reported. Compared with the trend in service, employment in high tech goods industries (14,900) was significantly lower than the historical peak in 2000 (16,700). It is not known whether the total job gains were due to more full-time or part-time workers.

Overall, wages and salaries in the high tech sector were up 1.0% in the second quarter and 3.5% in the third quarter. The increase was mainly due to the fact that more people were working in the high tech sector. Wages increased 5.2% in manufacturing and 2.9% in the service sector in the third quarter.

Exports and imports moving in opposite directions in second and third quarters

The pattern displayed in high tech manufacturing was duplicated in the value of trade in high tech commodities.² After experiencing a significant decline (-7.1%) in the first quarter, exports rebounded with a robust 12.0% rise in the second quarter, before being scaled back (-2.4%) in the third quarter. A substantial jump in trade of aerospace products to the United States was the main driver of the second quarter increase.

Imports of high tech goods fell dramatically (-16.2%) in the second quarter before recovering significantly (+13.2%) in the third quarter. Once again, aerospace products were instrumental in the quarterly fluctuations.



High tech exports to most major destinations declined in the third quarter

After plunging 24.7% in the first quarter (unadjusted), high tech exports to the United States climbed 10.8% in the second quarter before slipping back 1.2% in the third quarter. With about 80% of BC's high tech exports destined for the US, the province is even more dependent on trade in high tech products with the Americans than for exports overall. After strong growth in the second quarter, international shipments of high tech goods fell dramatically in the third quarter to both the European Union (-20.3%) and the Pacific Rim (-74.2%).

 $^{^{\}rm 2}$ Quarterly data on high tech service exports and imports is not available.

New Definition for High Technology Commodities

Starting with the first quarterly release of high technology data for British Columbia, the definition of commodities considered high tech has been revised. In the past, BC Stats' definition of high technology commodities used a list of six-digit harmonized system commodity codes matching that of the U.S. Bureau of the Census' advanced technology products (ATP) list. The reason for using codes at the six-digit level was due to the fact that Canadian and American classifications are identical at this level, but at more disaggregated 8- and 10-digit levels the codes differ. It was thought that trying to define high technology at a more disaggregated level would be too onerous a task.

More recently, BC Stats did some analysis of the data and determined that the six-digit level definition was simply too inclusive and inflated the true value of high technology trade substantially. Accordingly, a painstaking effort was made to match the American codes to Canadian codes at the 8-digit level for exports and 10-digit level for imports. In many cases the codes matched exactly and no further effort needed to be expended. However, in other cases there was not an exact match, particularly for exports, which are coded to only 8 digits. For these commodity groups, further analysis was undertaken using available data from

the U.S. Bureau of the Census and Statistics Canada to determine whether or not the majority of these codes were high technology (as defined by the ATP list). If it was judged that this was not the case, the commodity was excluded from the high tech definition. While this may result in some high technology products being excluded from the definition, it should be balanced to some extent by those commodity classifications that, although they are mainly high technology, still include some "low tech" goods. Since the ATP list itself is defined using classification codes, this kind of tradeoff is already present in the definition. No exact measure of high technology trade is possible to achieve since high technology is subjective to begin with, but this new definition should be much more in line with what most people would agree is high technology.

It should be stressed that these figures should not be compared to those previously published by BC Stats since the new definition is far more exclusive and the numbers are significantly lower than those calculated based on the old definition. Historical data back to 1990 that is consistent with the new definition will be published in the 2003 annual edition of the *Profile of the British Columbia High Technology Sector*.