

### Analytical Paper

### **Canadian Trade Review**

# Diamonds: Still Shining Brightly for Canada's North

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Statistics Statistique Canada Canada

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June 2006

Catalogue no. 65-507-MIE ISSN: 1712-1345 ISBN: 0-662-42559-6

Frequency: Occasional

La version française de cette publication est disponible sur demande (n° 65-507-MIF au Catalogue)

#### How to obtain more information

National inquiries line: 1 800 263-1136

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#### **Note of Appreciation**

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

#### Overview

Since 1999, diamonds have had a profound impact on the economy of Canada's North, in particular, the Northwest Territories (NWT). The Northwest Territories have made Canada a major player in the global diamond market, moving us to third in the world in terms of value of production and sixth in terms of volume by 2004.

The value of Canadian diamond production trails that of long-time leader, Botswana, and is rapidly catching Russia. Diamond mining and related activities have been the driving force behind the economic turnaround for the entire Northwest Territories. The discovery of, and resulting boom in, diamond mining occurred when production in the NWT's other mining area, gold, was being scaled back, thus further magnifying its impact.

The impact of the discovery of diamonds in the NWT extends far beyond the scope of increased exports. Diamonds have had a significant effect on many aspects of the economy of the NWT. Manufacturing shipments, employment, gross domestic product (GDP) and income per capita have all seen remarkable turnarounds since the onset of production in 1999.

This paper examines the overall impact of diamonds on the Northwest Territories since 1999 and provides data on production values from 2002 to 2005.

#### Highlights

- The value of diamond exports from the Northwest Territories surged to more than \$1.6 billion in 2005, almost twice the level in 2002, and more than three times the value exported during the first year of production.
- Over 90% of Canada's diamond exports are destined for the United Kingdom and Belgium.
- Per capita gross domestic product (GDP) in the NWT increased at an annual average rate of 12.5% from the first diamond exports in 1999 to the end of 2005, compared to 1.7% in the pre-diamond period.
- Between 1999 and 2005, manufacturing shipments in the Northwest Territories increased at an average annual rate of 38%, far above the national average of 2.8%.

### Findings

#### Canadian diamond exports double in value

The value of diamond exports from the NWT surged to over \$1.7 billion in 2005, almost twice the value exported in 2002 and nearly three times the value exported during 1999, the first year of production.

Since 1999, the value of exports has risen at an annual average rate of 29%. In addition to the sharp increase in value, the growth in the actual volume of diamond exports has risen as well. Companies exported 12 million carats from the NWT in 2005, a 133% increase from 2002 and up about 10 million carats from 1999.

#### Table 1. Northwest Territories' diamond exports, 1999 to 2005

	Value	Production	
Year	in millions of dollars	in carats	
1999	543	2,100	
2000	654	2,521	
2001	765	3,322	
2002	879	4,980	
2003	1,575	10,021	
2004	1,972	12,699	
2005	1,663	12,001	

Data source: Statistics Canada, 2005, International Trade Division.

Table source: Statistics Canada, 2005, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

Canada's main export destinations for diamonds are the United Kingdom and Belgium. More than 90% of the value of its diamond exports has gone to these two countries every year since 1999. Prior to 2003, Belgium was the primary destination for Canadian diamonds, with \$602 million, or 64% of the total value of diamond exports destined for Belgium in 2002.

For 2003 and 2004, the United Kingdom became the largest export destination for diamonds, garnering 64% and 53%, respectively, of the value of Canada's total diamond exports. For 2005, however, the value of exports show an almost even split in the destination for Canadian diamonds, with the value of exports to Belgium only slightly ahead.

#### Table 2: Canada's top diamond export destinations, 1999 to 2005

	Bel	Belgium		Kingdom	Total Canadian diamond exports
	Value (in millions of dollars)	percentage of total	Value (in millions of dollars)	percentage of total	Value (in millions of dollars)
1999	531	89	21	4	595
2000	476	67	183	26	713
2001	553	68	208	26	813
2002	602	64	259	28	936
2003	478	29	1,053	64	1,650
2004	834	39	1,093	53	2,089
2005	855	47	786	43	1,832

Data source: Statistics Canada, 2005, International Trade Division.

Table source: Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

#### GDP per capita soars

The discovery of diamonds and resulting economic benefits for the NWT has had an impact in areas other than exports. Gross domestic product (GDP) is an overall measure that can be used to illustrate the economic impact of diamond mining on the NWT.

In the six years prior to the discovery of diamonds in Canada's north, per capita GDP in the Northwest Territories was well below the national average. The annual increase in GDP per capita for the NWT between 1993 and 1998 period was 1.7%, about half the national average of 3.3%.

However, by the end of 2004, the annual increase in GDP per capita in the NWT was outpacing that of the rest of Canada. Between 1999, when the first diamonds were exported, to 2004, per capita GDP in the NWT rose at an annual average rate of almost 13%. This was three times the average annual rate of growth of 4.2% in the rest of Canada.

# Table 3a. Gross domestic product per capita, Canada and the Northwest Territories,1993 to 1998 and 1999 to 2004

	1993 to 1998	1999 to 2004	
	Average annu	al increase, in percent	
Canada <sup>1</sup>	3.3	4.2	
Northwest Territories	1.7	12.5	

1. Canada figures exclude the Northwest Territories.

Data source: Statistics Canada, CANSIM, Table 384-0013.

Table source: Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

Another indication of economic growth is personal income per capita; this also registered a remarkable turnaround after the onset of diamond production in the NWT. In the five-year period before diamond production, the annual increase in personal income per capita in the NWT was well below the national average.

The annual increase in per capita personal income was just 0.8% for this period, while the national average was 2.1%. By 2004, the annual change in per capita income for the NWT had accelerated to 4.8%, well above the national average of 2.8%.

# Table 3b. Personal income per capita, Canada and the Northwest Territories,1993 to 1998 and 1999 to 2004

	1993 to 1998	1999 to 2004	
	Average annua	l increase, in percent	
Canada <sup>1</sup>	2.1	2.8	
Northwest Territories	0.8	4.8	

1. Canada figures exclude the Northwest Territories.

 Table source:
 Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

Data source: Statistics Canada, CANSIM, Table 384-0013.

Employment in the diamond mining industry has continued its strong growth. From 2001 to 2003, both production employment and total hours worked in the diamond mining industry more than doubled.

The number of production workers increased to almost 1,000 in 2003 from just 84 in 1999. Average wages for production workers have remained virtually unchanged since 2001, with an average annual wage of around \$61,000.

	Production workers persons	Production workers' average wages in dollars	Production workers' hours paid multiplied by 1,000
1998	84	67,857	175
1999	332	70,000	669
2000	419	57,842	914
2001	485	61,643	1,008
2002	762	62,605	1,612
2003	992	61,322	2,164

#### Table 4. Employment and wages in the Canadian diamond mining industry, 1998 to 2003

1. Latest year available.

Data source: Statistics Canada, CANSIM, Table 152-0005.

 Table source:
 Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

#### Retail sales in NWT buck national trend

Another closely related measure of the economic impact of diamonds is retail sales. The average annual rate of growth in retail sales between 1999 and 2005 was virtually unchanged in the rest of Canada from the pre-diamond period between 1993 and 1998. However, in the NWT, retail sales per capita increased sharply.

Between 1993 and 1998, the NWT registered a 4.5% annual increase in retail sales, just below the national average of 4.8%. From 1999 to 2005, retail sales in the NWT grew at an annual average rate of 8.2%, compared to the national average of 5.1%.

Workers in the NWT were also increasing their earnings at a better annual rate from 1999 to 2004. In addition, the annual increase in average weekly earnings in the NWT was much higher than for the rest of Canada in the six-year period since diamond production began.

Between 1993 and 1998, the annual increase in average weekly earnings in the NWT was just 0.6%. This was less than half the national average of 1.4% for the same period.

This trend completely reversed itself by 2005, when the annual increase in average weekly earnings for the NWT had accelerated to 3%, a full percentage point higher than the national average for the period.

#### Table 5a. Retail sales, Canada and the Northwest Territories, 1993 to 1998 and 1999 to 2005

	1993 to 1998	1999 to 2005	
Average annual increase, in percent			
Canada <sup>1</sup>	4.8	5.1	
Northwest Territories	4.5	8.2	

1. Canada figures exclude the Northwest Territories.

Data source: Statistics Canada, CANSIM, Table 080-0015.

Table source: Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

## Table 5b. Average weekly earnings, Canada and the Northwest Territories,1993 to 1998 and 1999 to 2005

	1993 to 1998	1999 to 2005	
	Average annual increase, in percent		
Canada <sup>1</sup>	1.4	2.0	
Northwest Territories	0.6	3.0	

1. Canada figures exclude the Northwest Territories.

Data source: Statistics Canada, CANSIM, Table 281-0027.

Table source: Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

#### Spectacular turnaround in manufacturing

While diamond mining is not itself a manufacturing industry, it requires a significant amount of goods and materials to get plants and mine operations underway, some of which may need to be manufactured in the NWT. As a result, manufacturing shipments can be used to gauge the impact of diamond-related spin-offs in the NWT's economy.

During the pre-diamond period 1993 to 1998, manufacturing shipments in the NWT fared quite poorly, declining at an average annual rate of 12.5% during this five-year period. In contrast, manufacturing shipments in the rest of Canada rose at an annual rate of 75%.

After the start of diamond production in 1999, the annual increase in manufacturing shipments made a remarkable turnaround. Between 1999 and 2005, manufacturing shipments in the NWT increased at an average annual rate of 38%. This phenomenal gain occurred as the national average annual increase was moving strongly in the opposite direction. During the same six-year period, the national average fell to just 2.8% a year.

Mineral production saw an almost equally astounding turnaround, moving from an annual average decline of 0.5% for the pre-diamond period, to a 26.7% average annual gain for the five-year, post-diamond period. The national average saw a similar turnaround, accelerating to 17% each year between 1999 and 2004 from just under 4% during the previous period.

## Table 6a. Manufacturing shipments, Canada and the Northwest Territories,1993 to 1998 and 1999 to 2005

	1993 to 1998	1999 to 2005	
Average annual increase, in percent			
Canada <sup>1</sup>	7.5	2.8	
Northwest Territories	-12.5	37.6	

1. Canada figures exclude the Northwest Territories.

Data source: Statistics Canada, CANSIM, Table 304-0015.

Table source: Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

## Table 6b. Mineral production, Canada and the Northwest Territories,1993 to 1998 and 1999 to 2004

	1993 to 1998	1999 to 2004		
	Average annual increase, in percent			
Canada <sup>1</sup>	3.6	17.3		
Northwest Territories	-0.5	26.7		

1. Canada figures exclude the Northwest Territories.

Data source: Statistics Canada, CANSIM, Table 384-0013.

 Table source:
 Statistics Canada, 2006, Diamonds: Still Shining Brightly in Canada's North, Canadian Trade Review, catalogue number 65-507-MWE2006007.

### Methodology

For this study exports of the diamond industry are limited to those commodities categorised under the Harmonised System heading of 71.02.

The data for the 1999-2005 period for the Northwest Territories exclude Nunavut, while the 1993 – 1998 period include Nunavut. Canadian annual growth rates exclude data for Nunavut and the Northwest Territories.

Trade data used comes from Statistics Canada's International Trade Division, while all other data is from Statistics Canada's CANSIM database.