

MOTORCYCLES

1972

By: Kates, Peat, Marwick & Co.

HD
9710
K3

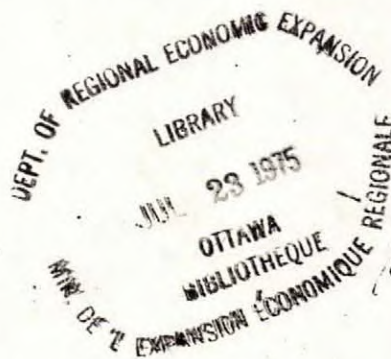
Kates, Peat, Marwick & Co.

HD.
9710
K3

MOTORCYCLES

Department of Regional
Economic Expansion

November 1972





Regional
Economic
Expansion

Expansion
Économique
Régionale

PLEASE NOTE

This report has been edited, where necessary, to remove comments and data that are classed as confidential. In the interest of efficiency, this has been done by simply removing small sections of the report. As a consequence, there are some blank spots which, we hope, will not interfere with the readability of the report.

Department of Regional Economic Expansion

MOTORCYCLES

TABLE OF CONTENTS

	<u>Page</u>
<u>ECONOMIC, SOCIAL AND DEMOGRAPHIC BACKGROUND</u>	I-1
Population Growth.	I-1
Economic and Social Change	I-2
Disposable Income.	I-2
Consumer Expenditures.	I-3
<u>THE COMMODITY</u>	II-1
<u>THE MARKET.</u>	III-1
Canadian Production.	III-1
Imports.	III-2
Exports.	III-4
Total Demand	III-4
Future Growth.	III-6
<u>MANUFACTURING</u>	IV-1
Canadian Producers	IV-1
Costs.	IV-2
Location	IV-3
Strengths/Constraints.	IV-5
<u>CONCLUSIONS</u>	V-1
Market	V-1
Opportunities.	V-1
Export Market.	V-3

SELECTED INDICATORS OF PERSONAL EXPENDITURE AND AGE FOR THE CANADIAN POPULATION, 1961-1971

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	
Population - 000	18,238	18,583	18,931	19,290	19,644	20,015	20,405	20,744	21,061	21,297	21,569	
Personal disposable income - \$ millions		28,243	30,018	31,725	35,149	38,579	42,792	46,427	50,906	53,986	59,401	
Average Personal Disposable income (un-corrected for inflation)		\$1,520	1,590	1,648	1,790	1,920	2,090	2,240	2,410	2,535	2,780	
% Increase on 1962		-	4.6	8.43	17.75	26.3	37.8	47.4	58.5	66.8	83.0	
% Incremental Increase over preceding years on Base of 1962		-	-	3.83	9.32	8.55	11.5	9.6	11.1	8.3	16.2	
Durable Goods Expenditure: - unadjusted DBS - Consistent Set \$ millions		3,725	4,127	4,560	5,085	5,490	5,915	6,494	6,975	6,798	7,778	
Per capita durable goods expenditure - unadjusted		\$200	\$218	\$237	\$258	\$272	\$290	\$313	\$331	\$319	\$362	
No. of Population between 16 - 39, both sexes	6,048	← 645,017 →					6,693	← 1,028,476 →				7,722
% of Population between 16 - 39, both sexes	33.3%					33.3%					35.9%	
Consumer Price Index 1961 = 100	100	101.2	103.0	104.8	107.4	111.4	115.4	120.1	125.5	129.7	133.4	
Corrected Average Personal Disposable Income		1,500	1,540	1,570	1,668	1,725	1,810	1,860	1,920	1,960	2,080	
Corrected Per Capita Durable Goods Expenditure		197	212	226	240	244	251	260	264	246	261	

I - ECONOMIC, SOCIAL AND DEMOGRAPHIC BACKGROUND

The Canadian market for leisure goods and leisure-related goods is being affected by a number of major changes within Canadian society, both economic and social.

POPULATION GROWTH

The social changes appear to occur largely as a result of the post-war baby boom, which has led to a bulge in the age distribution of the population, this bulge occurring in the under-40 sector of the population at the present time. Within the next ten years, this bulge will have passed due to the increased rate of attrition in the over-40 age bracket, but at this present moment, the bulge is highly significant because the 16-39 age bracket is the most active group in participation sports.

Population analyses of age distribution are not available for inter-censal years, so that these figures can only be examined during census years. Thus, in 1961, 6,048,000 individuals were in the age group 16-39 out of a total population of 18,238,000, or 33.3 per cent. By 1971, there were 7,722,000 within the age group 16-39 out of a total population of 21,569,000, or 35.9 per cent. Although the percentage increase does not appear large, in terms of numbers of individuals within the age bracket, there were 1,673,493 additional consumers in this bracket, and personal disposable income had increased dramatically over the period.

ECONOMIC AND SOCIAL CHANGE

The economic changes which are occurring within the same time span include:

1. Increasing leisure time available to workers, chiefly as a result of decreasing hours in the work week, increasing vacation periods.
2. Rapid increases in average personal disposable income over the period.

The increase in the availability of leisure time to the population appears to impose a pressure to fill that leisure time with some form of activity, particularly that which gives personal pleasure. It is thus expected that within the 16-39 age group this will lead to increased consumption of leisure and related goods. While detailed proof of decreasing working hours was not available in time to be incorporated within this introduction, it is thought that the general feeling of the populace that the working week is becoming shorter would be sufficient to generate further increases in demand within this sector in the future.

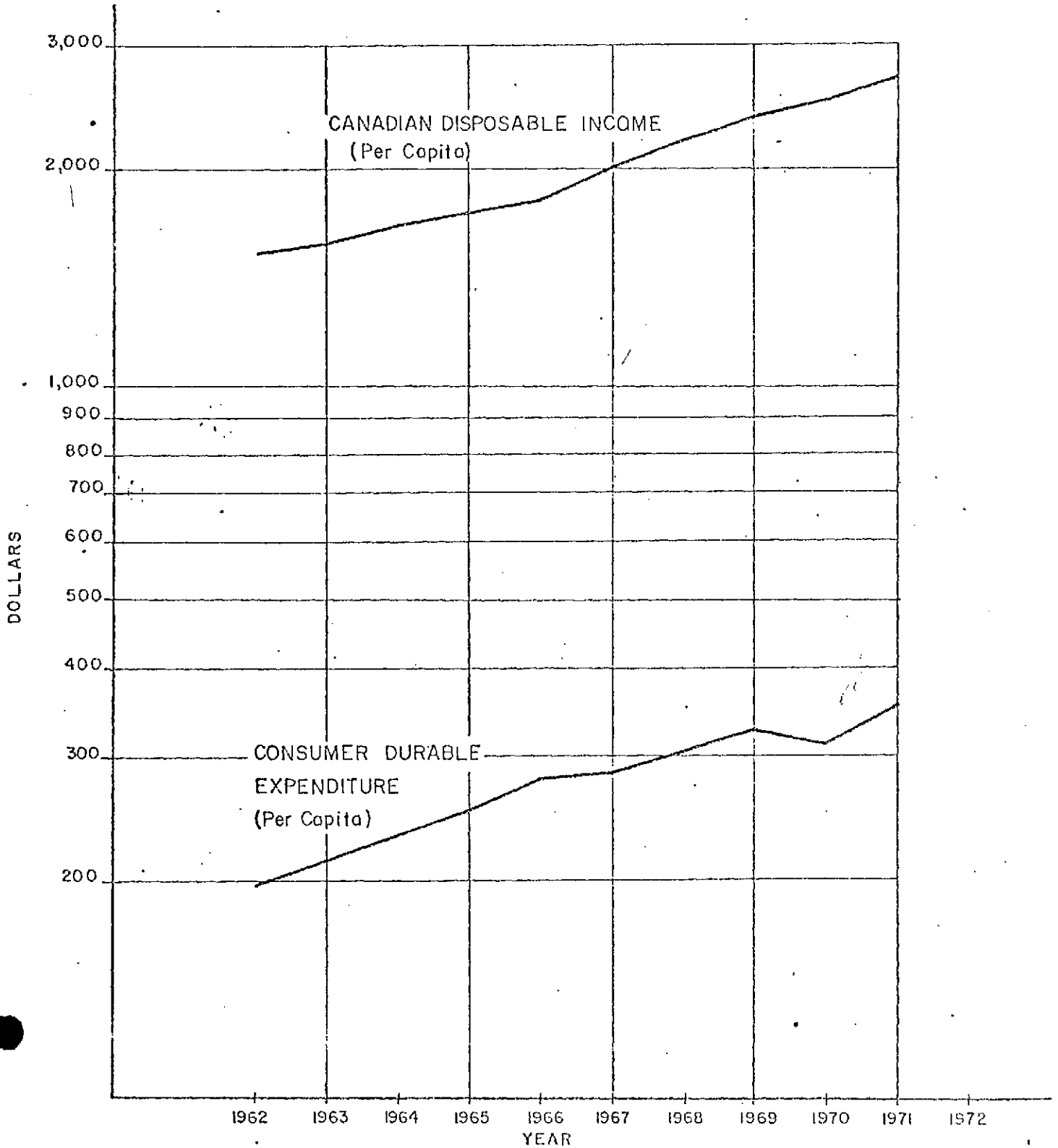
Moreover, the allied trend to a four-day working week will reinforce the trend, and it is concluded that demand for goods in this sector should accelerate.

DISPOSABLE INCOME

With regard to personal disposable income and consumption of durable consumer goods (within which classification leisure goods and leisure-related goods fall), the following is relevant.

COMPARISON OF CANADIAN PER CAPITA PERSONAL
DISPOSABLE INCOME (uncorrected for inflation) WITH
PER CAPITA CONSUMER DURABLE EXPENDITURES

1962-1971



From 1962 to 1971, the absolute increase in personal disposable income (PDI) was 83 per cent, from \$1,590 to \$2,780, while the absolute increase in durable consumer goods expenditure per capita was 81 per cent, from \$200 to \$362. Thus for this period it would appear that if PDI increases by 1 per cent, then per capita durable consumer goods expenditure increases by 1 per cent. (See the exhibit opposite.)

CONSUMER EXPENDITURES

If these figures are corrected for inflation and are re-examined, then PDI increased from \$1,500 to \$2,080, a 38.7 per cent increase over the same period, and per capita consumer durable goods expenditure rose from \$197 to \$271, a 37.7 per cent increase, and the relationships of percentage increases remains constant with a 1 per cent rise in PDI incurring a 1 per cent rise in consumer durable goods expenditure.

An examination of Statistics Canada publication 66-202, Travel, Tourism and Outdoor Recreation, 1972, reveals the following 1969 data:

Average Family Expenditure, Outdoor Recreation	\$103.60
plus Average Family Expenditure, Motorcycles and operation (considered here as a form of recreation)	<u>3.00</u>
Total Apparent Expenditures on Recreation per Family	<u>\$106.60</u>
Total Number of Canadian Families =	5,882,000

Hence, total Canadian family
expenditure on recreation
= 5,882,000 x \$106.60 = \$627,021,200

Canadian Consumer Durable Goods
Expenditures (1969) = \$6,975,000,000

Hence, expenditure on recreation
as percentage of Consumer Durable
Goods Expenditure 9%

Although it has been demonstrated that the proportion of durable goods expenditure within personal disposable income remains reasonably constant as PDI rises, at least over the period 1962-1971, then it would appear a not unreasonable assumption that this will hold true over the next five years.

It is a considerably more dangerous assumption to state that expenditure on recreation will remain at 9 per cent of Canadian consumer durable expenditure over any period of time, especially when the figure is derived from an analysis of only one year. In fact, one can state that there is every possibility that the amounts expended for specific items within the general classification of consumer durable goods can be expected to change proportions as consumer confidence, price indexes for specific commodities, and the absolute amounts of PDI change. However, the figure of 9 per cent may be used as a rough indication of the amounts that may be expended in the recreation sector.

It is within this general economic and sociological framework that the product under review will be examined.

II - THE COMMODITY

Motorcycles are here defined as a two-wheeled vehicles propelled solely by an internal combustion engine with a positive mechanical linkage to the rear wheel. This definition distinguishes between what the public refers to as a motorcycle, and motor-bicycles of the French Solex type, which consist of a normal bicycle, on the front wheel of which is mounted a small motor, which operates as a mechanical assist to the rider by providing power to the front wheel of the bicycle via a friction wheel in contact with the tire. In this case, the rider still pedals the bicycle to start, and to travel up even relatively minor gradients.

Motorcycles may be divided into six type classifications as follows:

- Minibike - up to 175 cc
- Minicycle - up to 125 cc
- Mini Trail - up to 125 cc
- Dual Purpose - up to 750 cc
- Street Machine - road only - up to 1200 cc
- Competition - road and off-road - up to 750 cc.

1. A minibike may generally be considered a very small, unsophisticated machine consisting of small wheels (up to 12" dia. including tire), a small, stationary type engine, and a rudimentary tubular frame. Springing and suspension are rudimentary to non-existent, the damping action being achieved by the tires. There is generally no gearbox, and drive is via a torque converter or a centrifugal clutch. Normally it is not licensed for the road.

2. A minicycle is generally a motorcycle of the trail or cross-country type scaled down so as to be suitable for older children (10-14 age group) but sometimes equal in sophistication to mini-trail machines. Engines will generally be up to 125 cc, there will normally be a gearbox and up to 16" wheels may be used. It is not normally licensed for the road.
3. A mini-trail is a motorbike with wheels up to 12" diameter but considerably more sophisticated, and designed for cross-country use. A gearbox will usually be provided, as will suspension and springing, but it will not normally be licensed for the road. Engine size is up to 125 cc. It is different from the minibike by virtue of sophistication and cost.
4. Dual purpose machines may be generally described as full sized machines with street-going and off-road capabilities. Engine sizes range from 90 cc to 400 cc in two-stroke engines, and 200 cc to 750 cc in four-stroke engines. Frames are generally the heavy duty cross-country type with suitable suspension components. Wheel sizes range from 16-21", normally being 18" rear, 20-21" front, with cross-country tires. This type of machine is normally fitted with lighting, and called a "street-scrambler". It is also usually licensed.
5. Street-machines are, as the name implies, designed for the road, and are licensed. Engine sizes range from 50-900 cc for European and Japanese imports, and up to 1200 cc if American. The bulk of the market is located in this sector.
6. Competition machines fall into one of two classes--road or cross-country. Road racing machines are normally not registered, and are imported by dealers for selected riders. Cross-country machines are either for trial, enduro, or moto-cross. They may be licensed, and are readily available to the public. Size range is normally 100-400 cc with two-stroke engines.

III - THE MARKET

CANADIAN PRODUCTION

Canadian production to date has been concentrated wholly in the mini-bike area, and this market is felt to be declining by the principal importers and producers.

In 1960, there were five Canadian producers of these machines:

- Sasco Enterprises Ltd. - Toronto
- Two Wheels Ltd. - Toronto
- Northern Gilbro Ltd. - Windsor
- Delhi Metal Products Ltd. - Delhi, Ont. (DMP)
- S.E. Woods - Newmarket, Ont.

Of these, only Delhi Metal Products now remains in the field.

It is estimated that Canadian production of mini-bikes never exceeded 10,000 units in any of the years 1969-1972, which were the years in which the bulk of the machines were sold. Presently Canadian production is down to about 6,500 units a year and is falling rapidly.

However, in 1973, Bombardier Ltd. (Moto-Ski division) of Valcourt, Quebec will commence production on a serious scale, of motorcycles of 125, 175, and 250 cc capacity, utilizing engines imported from their wholly

CANADIAN MOTORCYCLE IMPORTS

Product and C of O	1962*		1963*		1964		1965		1966	
	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)
<u>Motorcycles</u>										
United Kingdom	781	451	557	432	614	423	999	795	2,772	1,650
Austria	485	73	160	28	520	74	586	80	513	107
Belgium-Luxemburg	N/A	-	-	-	Nil	Nil	2	-	35	7
Denmark	N/A	-	-	-	Nil	Nil	Nil	Nil	-	1
France	51	5	34	3	309	30	615	65	1,386	113
West Germany	148	61	139	63	32	26	640	120	90	56
Greece	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Italy	436	138	566	179	1,584	399	2,535	701	3,423	979
Netherlands	57	14	-	-	Nil	Nil	95	22	5	2
Portugal	Nil	Nil	Nil	Nil	Nil	Nil	3	1	Nil	Nil
Spain	N/A	-	-	-	42	17	75	34	155	66
Sweden	N/A	-	-	-	2	-	2	1	3	2
Switzerland	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Czechoslovakia	229	39	180	43	492	78	1,854	236	2,162	366
Hungary	Nil	Nil	Nil	Nil	2	-	Nil	Nil	Nil	Nil
USSR	N/A	-	-	-	Nil	Nil	Nil	Nil	8	3
Yugoslavia	Nil	Nil	Nil	Nil	125	26	Nil	Nil	Nil	Nil
Japan	1,183	188	3,463	578	15,551	2,578	40,152	7,501	41,938	9,250
Taiwan	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
U.S.A.	716	498	458	467	659	577	981	813	785	835
TOTAL:	4,086	1,466	5,560	1,795	19,932	4,230	48,541	10,360	53,275	13,439

* Note: Values for 1962-1966 are not comparable with later years because figures include motorcycles of all types plus parts.

CANADIAN MOTORCYCLE IMPORTS

Product and C of O	1967		1968		1969		1970		1971	
	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)	No.	Value (\$000)
<u>Motorcycles</u>										
United Kingdom	4,301	2,883	6,455	4,107	7,152	4,619	5,261	3,499	5,284	4,006
Austria	981	224	-	-	1	-	1	-	1	1
Belgium-Luxemburg	Nil	Nil	-	-	-	-	2	-	3	3
Denmark	Nil	Nil	-	-	-	-	2	1	2	1
France	Nil	Nil	1	1	2	1	115	10	238	28
West Germany	414	161	187	139	83	66	182	171	523	477
Greece	Nil	Nil	-	-	2	1	-	-	1	-
Italy	670	200	138	64	252	109	860	154	6,248	1,047
Netherlands	Nil	Nil	-	-	-	-	1	1	2	1
Portugal	Nil	Nil	-	-	-	-	4	2	2	1
Spain	289	117	218	97	257	118	434	189	538	238
Sweden	11	8	-	-	51	34	106	76	136	95
Switzerland	Nil	Nil	-	-	-	-	-	-	1	1
Czechoslovakia	518	110	228	53	409	105	131	43	636	185
Hungary	Nil	Nil	7	2	-	-	-	-	2	1
USSR	Nil	Nil	-	-	-	-	-	-	5	1
Yugoslavia	Nil	Nil	-	-	-	-	-	-	2	-
Japan	14,284	4,077	12,162	4,021	16,046	4,246	37,068	8,850	63,162	16,981
Taiwan	Nil	Nil	-	-	-	-	2,240	64	3,033	108
U.S.A.	565	643	862	759	1,349	1,012	8,654	1,841	11,171	2,400
TOTAL:	22,036	8,425	20,262	9,245	25,604	10,311	55,065	14,904	90,990	25,575
<u>Powercycles and Motor Scooters</u>										
United Kingdom	3	1	21	4	-	-	4	1	152	28
Austria	38	5	-	-	-	-	-	-	-	-
Belgium-Luxemburg	Nil	Nil	25	2	100	8	-	-	-	-
France	103	11	20	2	205	17	24	2	45	3
Iceland	Nil	Nil	1	-	-	-	-	-	-	-
Italy	630	138	49	5	571	75	467	78	948	166
Netherlands	Nil	Nil	1	-	-	-	-	-	1	-
Israel	Nil	Nil	-	-	5	2	-	-	-	-
Japan	77	18	-	-	640	45	1,160	118	-	-
Taiwan	Nil	Nil	-	-	290	9	50	2	-	-
U. S. A.	261	39	920	111	3,369	396	3,876	526	292	60
TOTAL:	1,113	211	1,037	125	5,180	553	5,581	726	1,438	256
GRAND TOTAL:	23,149	8,636	21,299	9,370	30,784	10,864	60,646	15,630	92,428	25,831

owned subsidiary in Austria.

It is also likely that if the mini-bike market dies, both Moto-Ski and DMP will endeavour to enter the mini-cycle field.

IMPORTS

The Canadian motorcycle industry is an industry largely of motorcycle importers at the present time, and wholly of importers prior to 1967. The industry was slowly dying until the late 1950's from lack of public acceptance of motorcycles and motorcyclists, due in large part to the public behaviour of motorcyclists and the unsatisfactory image conveyed to the public by the protective clothing motorcyclists wore.

This picture changed radically both in Canada and the U.S.A. commencing in 1959. In that year, Honda commenced an advertising campaign which rapidly achieved what British and American manufacturers had been unable to achieve in North America since they commenced selling in the market. In short, Honda not only popularized motorcycling, but also they made it acceptable socially.

Largely as a result of the campaign, motorcycle imports have accelerated extremely rapidly, as is shown opposite, from 4,000 units in 1962 to 90,000 in 1971. The Japanese have almost entirely dislodged the British from their prominence as importers, and have relegated the

U.S. IMPORTS OF MOTORCYCLES

<u>Size</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Up to 50 cc	111,528	98,828	17,226	25,061	146,703	163,260	127,465
50-90 cc	229,995	159,830	69,892	66,002	137,172	295,592	365,161
91-190 cc	108,384	210,540	107,850	88,046	145,468	241,335	419,068
191-290 cc	53,744	66,732	57,954	46,346	60,334	72,625	112,588
Over 290 cc	105,440	149,048	92,919	123,319	140,649	299,086	469,397
NES	-	-	2,007	4,461	11,200	18,936	44,924
TOTAL	<u>609,091</u>	<u>684,978</u>	<u>347,848</u>	<u>353,235</u>	<u>641,526</u>	<u>1,090,838</u>	<u>1,538,603</u>

only serious manufacturers in America to relative insignificance. This is clearly demonstrated by the change in motorcycle statistics of imports to Canada between 1962 and 1971:

<u>Country</u>	<u>% of Total Import Value</u>	
	<u>1962</u>	<u>1971</u>
England	30.8	15.5
Japan	12.8	65.6
U.S.A.	34.0	8.7

The import figures do not give any indication of sizes of motorcycles entering Canada, so it is not possible to show any definite trends as to growth of size classes. The Motorcycle Industry Import Committee (MIIC) have commenced tabulating imports by size, make, and use on a national basis by month but 1972 is the first year for which such figures will be available, and the figures are not yet complete.

However, it is possible to gain some insight into probable trends in engine size in Canada from an examination of data on U.S. imports. Assuming that the usage pattern is similar in the two countries, it can be seen from the Exhibit opposite that the greatest increase has been in the 91-190 cc and over 290 cc categories. There has been a market decline recently in imports of motorcycles less than 50 cc, even when total demand is climbing rapidly.

EXPORTS

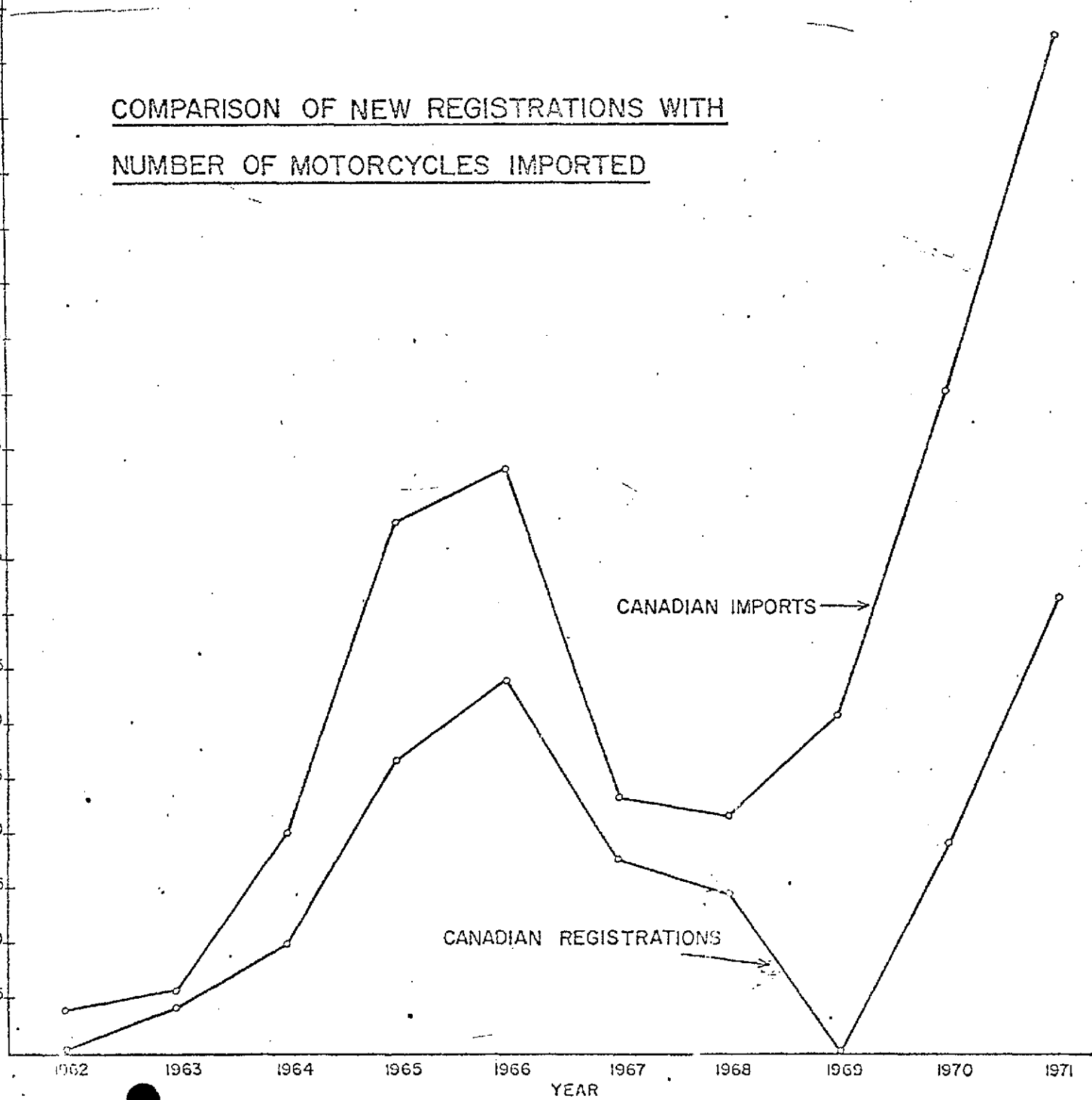
Statistics Canada has no report of any motorcycle exports that was readily available, and appeared to assume that there were none. However, an examination of U.S. Import Statistics shows that from 1966 onward, Canada exported machines into the U.S. over the entire size spectrum, shipping \$5,000 value in 1966, rising to \$408,000 in 1971. In fact the majority of these machines appear to be over 90 cc. It has not been possible to discover the source of these exports but it is likely that they are re-exports.

TOTAL DEMAND

As Canadian production has been confined largely to mini-bike manufacture, and this market is declining rapidly, the import figures may be regarded as an indication of demand. However, because of the rapid increase in importation, large quantities of motorcycles were placed into inventory, and thus a closer measure of real demand is the number of new registrations of motorcycles. These are as follows:

1971	41,466 units
1970	19,040
1969	(-1925)
1968	14,637
1967	17,716
1966	33,967
1965	26,834
1964	9,947
1963	4,085

COMPARISON OF NEW REGISTRATIONS WITH
NUMBER OF MOTORCYCLES IMPORTED



NOTE - In 1969 snowmobiles became a separate registration category, and they were removed from motorcycles where they had previously been.(in Ontario)

However, it should be remembered that these registration figures do not include mini-bikes sold but not registered, or any other unregistered machines. An examination of the January to August 1972 sales figures of the MIIC shows that of the 63,441 machines of all types sold, (and the 1972 figures do not include all Canadian dealers) 18,808 machines were mini-bikes or competition machines and hence were probably not registered, and a further 15,027 machines were dual purpose, and need not necessarily be registered. Thus, on the basis of 1972 January to August sales, registrations of motorcycles could understate sales of motorcycles by about one-third.

Thus, actual sales in 1971 were likely in the range of 55,000-60,000 units.

A graphic comparison of the number of units imported with the number of new registrations is shown opposite. It should be noted that in 1969, a net decrease in registrations is indicated. This is because in that year, Ontario removed snowmobiles from motorcycle registrations, and instituted a special license and registration category. The resulting decrease of registrations in Ontario was approximately 8,000 units, and this more than offset new registrations for that year.

This change occurred at the end of an import decrease of three years duration, which was caused by the excess inventory position of Canadian importers and dealers. It appears possible that such an excess inventory position could be developing again.

MOTORCYCLE REGISTRATIONS PER
1,000 POPULATION: (1970 Census)

<u>State or Province</u>	<u>Density per Thousand Population</u>
Minnesota	23
N. Dakota	22
Michigan	21
Vermont	20
N. Hampshire	17
Wisconsin	13
Maine	13
Pennsylvania	11
Massachusetts	10
Quebec	10
Ontario	11 ⁷

Source: Motorcycle Industry Import Committee

FUTURE GROWTH

The MIIC looks for 1973 sales to be at existing levels and thereafter for sales to increase by up to 10 per cent a year over the next five years. An article on motorcycle trade in a trade magazine for snowmobile dealers of the U.S., also predicts a growth rate in the U.S. of 10 per cent a year over the next five years

Despite the recent rapid increase in sales, the market appears far from saturation, and this is demonstrated by the Exhibit opposite, which compares motorcycle registrations in various U.S. states with those in Ontario and Quebec. Some U.S. states have twice the density of motorcycles per 1,000 population.

This difference is felt to be due largely to the lack of merchandising skills on the part of most existing Canadian dealerships. As proof, the MIIC cites the density of registrations in Quebec where merchandising is much more sophisticated than in Ontario. A density of 10 for Quebec compared to 7 in Ontario represents 50 per cent increase for Quebec over the Ontario figure, and in view of the relatively large population of Ontario, it also represents a very large untapped market in that province. Most Canadian distributors are endeavouring to upgrade the merchandising skills of their dealers by education and by subsidizing the costs of increased merchandising.

Again, the fact that the U.S. is such a major market, and is a heavy importer of motorcycles, would indicate that it could prove

feasible for a manufacturer in Canada to sell significant numbers of machines in the United States. Full details on U.S. imports of motorcycles are presented as Appendix A to this report.

IV - MANUFACTURINGCANADIAN PRODUCERS

There are at present two Canadian producers, Delhi Metal Products and Moto-Ski, in a dying sector of the market, with a combined production rate in 1972 of approximately 6,000 units.

Both are located within their major market areas, but in rural areas approximately 100-200 miles from the core of that market. Thus it can be said that although there is no geographic concentration as such, there would appear to be a minor locational factor which is market oriented. If any locational feature is noteworthy, it would appear to be:

- located in the Eastern half of Canada
- in largely rural areas, which presumably means reduced labour rates.

Both are very small producers compared with the manufacturers of the imports.

Markets

The two manufacturers previously mentioned both market nationally in Canada, and one exports small quantities to the United States.

Delhi markets primarily in the home province, while Moto-Ski markets 40 per cent of output in the United States, 50-55 per cent in Ontario and Quebec, with the remainder going to the Atlantic Provinces.

COST BREAKDOWN FOR \$2,000
MOTORCYCLE, RETAIL PRICE

	<u>High Commission</u>	<u>Low Commission</u>	<u>Median Commission</u>
Ex-works Price	\$ 815	\$1,095	\$ 943
Shipping & Brokerage	50	65	57
Duty	95	130	112
FST	118	153	134
Wholesale Commission	322	197	274
Retail Commission	<u>600</u>	<u>360</u>	<u>480</u>
Consumer Price	<u><u>\$2,000</u></u>	<u><u>\$2,000</u></u>	<u><u>\$2,000</u></u>

Source: Motorcycle Industry Imports Committee

Sources

Of these manufacturers, Delhi manufactures the frame and other tubular parts, importing the remainder. Of the imported components, 75 per cent by value came from the U.S. (engine and clutch) with the remainder coming from Japan.

Moto-Ski also manufactures the frame and miscellaneous parts while 60 per cent of imported components by value originate in Japan, and 40 per cent in the U.S. Approximate Canadian content of machine, material and labour, is 50 per cent.

COSTS

The ex-works price of a motorcycle is usually less than half the suggested retail price of the machine. This is shown in the breakdown of costs opposite.

Tariffs

The tariff structure on imports to Canada of both motorcycle parts and complete motorcycles is identical, as follows:

Commonwealth Preferential Tariff	Free
Most Favoured Nation	12½ per cent
Other Nations	30 per cent

The identical tariff structure on parts and complete motorcycles is felt to be detrimental to the establishment of an assembly facility in Canada, because assembly in Canada gives no cost advantage over complete

importation. Thus, as a relatively high wage area, this structure will inhibit assembly as opposed to complete manufacture.

The tariff structure of imports to the United States (the principal potential export market) appears deliberately structured to inhibit machine assembly, with the tariff on parts higher than the tariff on complete machines.

<u>Source</u>	<u>Tariff Parts (1972)</u>	<u>Tariff Machines (1972)</u>
Most Favoured Nation	6%	5%
Other	25%	10%

LOCATION

Major Factors

Depending on whether an assembly or a complete manufacturing facility is being considered the locational factors change. Some of the more important factors are as follows:

1. Where an assembly operation is contemplated, then the best location would appear to be Eastern Ontario, midway between Toronto and Montreal. This gives rapid access to the two major marketing areas, with hopefully reduced labour rates over the metropolitan areas. (It should be noted that labour is the critical determinant of location when assembly is the object). Thus labour cost is reduced, and so also is transport costs.

The second most favourable area would appear to be Manitoba or Saskatchewan, which would be between the major western and the major eastern market.

*was with
Lucy*

2. When the facility is full manufacturing, then access to market and less expensive labour remain important, but access to raw materials and components becomes more important. As an example, one would need access to a relatively sophisticated foundry industry in steel and aluminum as a source of barrel castings, crankcase castings, and rod forgings, piston, etc.

N.B

Linkage
Patterns

When assembly is the prime activity of such a plant, then it could also become involved in snowmobile and all terrain vehicle assembly. It would not diminish significantly the value of imports of these items, because they would enter Canada as components rather than as complete units.

However, where complete manufacture is undertaken, then considerable local sourcing and import substitution could occur and even major export of motorcycles is feasible. Moreover, other possibilities exist for engine sales to equipment manufacturers in Canada where full manufacturing is undertaken, i.e. small generators, pumps, compressors, lawn mowers, cement mixers, etc.

Regional Locational
Possibilities

In the case of an assembly operation, it was noted earlier that market proximity is desirable. However, as engines will likely continue to be manufactured abroad and imported, and as a sophisticated foundry industry is also a major requirement, consideration might be given to location in for example, Saint John, New Brunswick, where good

N.B
This
consideration

port facilities are available together with a planned foundry based metal working complex.

However, more data is needed on specific transportation costs of raw materials, components and CKD kits.

STRENGTHS/CONSTRAINTS

Strengths

Where an assembly facility is the option chosen, then only a moderate amount of capital is necessary, because obviously assembly work is labour intensive rather than capital intensive. An entrepreneur could become involved in assembly for a relatively modest outlay and provided the vehicle has previously become known, then the facility could be steadily augmented in size until it could commence substitution of imported components with items of domestic manufacture. An operation of relatively small scale, labour intensive, with small capital investment requirements but large working capital requirements for inventory would attract RDIA grants near the maximum under the limits, and this factor could be a considerable inducement to a small businessmen.

Constraints

It is known that the major Japanese companies have been continuously approached by governments at Provincial level, and do not appear to be interested. Therefore the companies that could be approached must be necessarily small, because no companies in the world approach the size of the Japanese manufacturers.

While such companies exist, with quality products reasonably well known in the trade, their size (with one or two exceptions) generally means that they cannot afford a competent North American marketing team, and on the success of the marketing would hang the success of the venture. Therefore, with marketing so critical, it would appear that the Canadian entrepreneur will of necessity have existing expertise and skilled marketing staff in leisure goods or allied lines, and this implies an existing, medium sized Canadian company, teaming up with an existing European manufacturer. Such a company in Canada might logically be a snowmobile manufacturer.

the benefit occurring because the seasonal nature of both products is complementary; or a diversified, aggressive group such as the proprietors of CCM because they not only have the marketing skills, they also have directly related technical knowledge and manufacturing facilities i.e. frame manufacture.

V - CONCLUSIONS

MARKET

The total value of North American imports in 1971 was \$520,794,000, representing 1,631,031 machines and this market, the largest and most lucrative in the world, is expected to grow at an annual rate of 10 per cent per annum over the next five years. Canada alone imported 92,428 machines worth \$25,831,000 in 1971, and this is approximately an 80 per cent increase in value of imports over 1969.

While two Canadian manufacturers of mini-bikes exist, this is a declining sector of the market, and Canadian production is not large in comparison to imports of the same type.

OPPORTUNITIES

Production

Canadian manufacture of motorcycles of normal size does not exist at present, but will commence, apparently on significant scale, in 1973. It is still felt that there is adequate scope for the establishment of another motorcycle manufacturer in the Canadian market.

It is felt that this manufacturer would ideally ally himself with a foreign manufacturer, and commence initially as an assembler. Thereafter, foreign components could be gradually reduced as domestic sources of supply are located, and the domestic content of the machine increases.

It is suggested that if Canada should change the tariffs in any way as a result of British entry to the EEC, then the opportunity might be taken to establish a differential between parts and complete machines, in the order of 2 to 2½ per cent, the parts being at the lower rate. This would provide a reasonable ^{incentive} for assembly in Canada.

The large costs inherent in the design and development of a complete motorcycle are prohibitive, unless a prospective manufacturer should purchase engine and gearbox from an existing manufacturer. Also, advertising and promotion costs associated with launching a new product up to the point of consumer acceptance are very high. Therefore it is recommended that:

- either a medium sized existing manufacturer be approached and informed of the DREE program with a view to setting up a facility by himself, or
- a small manufacturer be approached to set up a joint venture facility in conjunction with a Canadian manufacturer with adequate resources in terms of allied production capacity and marketing skills, resources, and background in the leisure goods industry.

Ideally, the motorcycle company approached should have the following attributes:

1. His range of products should include both off- and on-road vehicles.
2. He should already be active in North America.
3. He should be aggressive.

EXPORT MARKET

The size and profitability of the North American market as a whole, and our proximity to the U.S., would indicate that there are good reasons why a manufacturing facility for motorcycles should be established. The fact that Moto-Ski can export mini-bikes to the United States against such competition as Rupp indicates strongly that a Canadian assembler and/or manufacturer can compete in the U.S. market, as well as in Canada.

Three current factors appear to make the proposition more feasible over the short term:

1. If the Japanese yen were to be revalued upward by at least 10 per cent in 1973, and there appears to be a possibility of this, this would undoubtedly make Japanese motorcycles either more expensive to buy or less profitable to sell both in Canada and the U.S.
2. Britain will be joining the EEC in 1973, and in all probability will lose the preferential tariff rate, thus making British machines less competitive. This could be an opportune time to contact selected British manufacturers with a view to establishing joint ventures.
3. The increasing complexity of safety and pollution regulations and the decreasing reaction times available to comply with these regulations, will almost force importers to install some form of permanent engineering facility within North America, such as Kawasaki has done in the United States. If a permanent engineering staff is installed, it is a relatively small step to install a moderate assembly facility.

For all these reasons, it is felt that the proposal be studied in much greater depth immediately, to quantify the financial opportunity available in Canada to a new manufacturer and/or assembler.

APPENDIX A

U.S. MOTORCYCLE IMPORTS,
BY SIZE AND COUNTRY

U.S. MOTORCYCLE IMPORTS, BY SIZE AND COUNTRY
(In Units and in Thousands of Dollars)

Country and Size Range	1965		1966		1967		1968		1969		1970		1971	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
<u>Canada</u>														
Up to 50cc			N11	N11	324	48	-	-	-	-	7	1	18	4
51 - 90			N11	N11	N11	N11	10	1	4	1	11	1	-	-
91 - 190			3	1	6	1	-	-	24	2	-	-	1,626	305
191 - 290			8	4	8	3	7	2	28	17	-	-	126	59
Over 290			N11	N11	N11	N11	40	28	51	28	137	134	40	40
NES			N11	N11	N11	N11	-	-	-	-	44	36	-	-
TOTAL:	N11	N11	11	5	338	52	57	31	107	48	199	172	1,810	408
<u>Mexico</u>														
Up to 50cc													4	1
51 - 90											11	2	6	2
91 - 190											25	8	733	241
191 - 290											6	2	5	2
Over 290											-	-	-	-
NES											-	-	-	-
TOTAL:	N11	N11	N11	N11	N11	N11	N11	N11	N11	N11	42	12	748	246
<u>Sweden</u>														
Up to 50cc														
51 - 90														
91 - 190					10	6							280	148
191 - 290			102	66	319	194	760	389	383	238	1,126	690	1,402	902
Over 290			4	3	177	138	526	300	1,118	726	2,453	1,720	3,338	2,385
NES			-	-	-	-	-	-	10	7	54	36	-	-
TOTAL:	2	1	106	69	506	338	1,286	685	1,511	971	3,633	2,446	5,020	3,435
<u>United Kingdom</u>														
Up to 50cc	919	81	167	20	-	-	-	-	11	10	16	6	9	2
51 - 90	1,031	132	10	2	35	14	94	62	21	12	169	27	9	4
91 - 190	429	115	761	212	37	14	843	549	352	168	653	265	1,231	577
191 - 290	2,489	971	2,616	1,141	2,958	1,276	7,046	3,067	6,785	3,019	3,228	1,700	7,941	4,102
Over 290	28,538	16,699	44,619	30,159	40,034	26,898	39,124	26,525	29,829	21,395	35,684	25,086	43,834	36,462
NES	-	-	-	-	64	24	392	229	723	365	292	128	152	129
TOTAL:	33,406	17,998	48,173	31,534	43,128	28,226	47,499	30,432	37,721	24,969	40,042	27,212	53,176	41,276

U.S. MOTORCYCLE IMPORTS, BY SIZE AND COUNTRY
(In Units and In Thousands of Dollars)

Country and Size Range	1965		1966		1967		1968		1969		1970		1971	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
Belgium														
Up to 50cc	29	4	35	6	-	-	-	-	-	-	-	-	30	3
51 - 90	480	65	-	-	-	-	-	-	20	3	-	-	-	-
91 - 190	-	-	-	-	-	-	-	-	-	-	-	-	98	37
191 - 290	30	8	-	-	-	-	-	-	-	-	-	-	13	9
Over 290	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NES	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL:	538	77	35	6	111	111	-	-	20	3	-	-	141	49
France														
Up to 50cc	6,925	683	2,432	258	864	59	246	18	326	25	876	43	628	44
51 - 90	532	66	39	3	-	-	-	-	500	30	-	-	-	-
91 - 190	-	-	-	-	-	-	-	-	-	-	-	-	31	10
191 - 290	100	19	124	6	5	1	-	-	-	-	-	-	-	-
Over 290	520	40	101	6	-	-	-	-	-	-	-	-	-	-
NES	-	-	-	-	100	8	105	8	67	6	-	-	125	8
TOTAL:	8,077	808	2,696	273	969	68	351	26	893	61	876	43	784	62
Netherlands														
Up to 50cc	49	9	419	60	135	33	-	-	170	5	-	-	21	4
51 - 90	-	-	42	8	25	4	-	-	-	-	-	-	-	-
91 - 190	-	-	8	1	9	2	-	-	8	3	-	-	-	-
191 - 290	-	-	-	-	-	-	-	-	382	12	-	-	-	-
Over 290	-	-	-	-	29	18	-	-	-	-	-	-	-	-
NES	-	-	-	-	-	-	-	-	172	7	-	-	-	-
TOTAL:	49	9	469	69	198	57	-	-	812	27	-	-	21	4
West Germany														
Up to 50cc	886	116	1,377	218	1,764	257	497	75	-	-	508	31	446	69
51 - 90	450	68	461	98	615	142	267	54	103	28	1,528	1,268	997	702
91 - 190	176	38	870	188	315	96	1,358	409	2,338	703	3,195	1,105	2,065	832
191 - 290	291	86	503	178	1,460	396	1,132	334	333	165	506	258	928	573
Over 290	3,243	1,976	3,760	2,170	2,607	1,690	2,698	1,866	1,694	1,146	2,253	1,729	1,260	864
NES	-	-	-	-	137	38	2	2	75	50	322	97	5,020	4,111
TOTAL:	5,046	2,284	6,971	2,852	6,898	2,619	5,954	2,740	4,544	2,092	8,372	4,488	10,716	7,151

U.S. MOTORCYCLE IMPORTS, BY SIZE AND COUNTRY
(In Units and in Thousands of Dollars)

Country and Size Range	1965		1966		1967		1968		1969		1970		1971	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
<u>Austria</u>														
Up to 50cc	4,922	469	10,615	1,467	2,550	366	3,232	506	-	-	-	-	-	-
51 - 90	8,026	1,121	4,687	688	1,815	286	495	74	-	-	-	-	-	-
91 - 190	1,011	175	5,927	1,205	1,966	365	796	251	2,580	666	1,835	693	4,189	1,456
191 - 290	2,411	640	4,713	1,295	2,015	989	3,193	963	25	3	113	41	20	5
Over 290	-	-	-	-	4	2	-	-	-	-	-	-	-	-
NES	-	-	-	-	-	-	-	-	401	89	-	-	-	-
TOTAL:	16,370	2,405	25,942	4,655	8,350	2,008	7,816	1,794	3,006	758	1,948	734	4,209	1,461
<u>East Germany</u>														
Up to 50cc	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51 - 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91 - 190	-	-	-	-	-	-	10	6	-	-	-	-	-	-
191 - 290	-	-	-	-	-	-	3	1	20	10	30	14	30	14
Over 290	-	-	-	-	-	-	-	-	15	8	34	16	-	-
NES	-	-	-	-	-	-	-	-	2	1	-	-	-	-
TOTAL:	-	-	-	-	-	-	13	7	37	19	64	30	30	14
<u>Czechoslovakia</u>														
Up to 50cc	1,876	161	893	83	-	-	20	2	150	13	330	32	680	67
51 - 90	-	-	10	1	-	-	138	18	223	33	400	69	595	86
91 - 190	976	157	787	158	138	18	35	7	200	46	494	91	1,125	283
191 - 290	523	129	473	131	393	113	241	60	667	294	1,072	493	1,029	521
Over 290	424	112	497	161	221	65	251	109	402	183	1,194	552	1,493	656
NES	-	-	-	-	-	-	-	-	83	38	-	-	-	-
TOTAL:	3,799	559	2,660	534	752	196	685	196	1,725	607	3,490	1,238	4,922	1,613
<u>Hungary</u>														
Up to 50cc	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51 - 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91 - 190	-	-	604	97	60	10	-	-	-	-	-	-	-	-
191 - 290	226	43	259	70	115	30	-	-	-	-	-	-	3	1
Over 290	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NES	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL:	226	43	863	167	175	40	-	-	-	-	-	-	3	1

U.S. MOTORCYCLE IMPORTS, BY SIZE AND COUNTRY
(In Units and in Thousands of Dollars)

Country and Size Range	1965		1966		1967		1968		1969		1970		1971	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
<u>Spain</u>														
Up to 50cc	11	2	62	19	-	-	-	-	-	-	18	2	174	35
51 - 90	114	18	88	27	481	166	120	46	35	13	-	-	67	45
91 - 190	2,011	601	4,357	1,215	2,770	760	1,231	375	2,154	721	3,535	1,260	4,327	1,670
191 - 290	3,297	1,068	3,718	1,416	5,120	1,985	5,310	2,089	6,651	2,739	10,371	4,446	10,700	4,863
Over 290	360	76	505	168	677	232	1,716	836	695	370	1,243	671	654	348
NES	-	-	-	-	-	-	79	36	10	4	92	46	366	131
TOTAL:	5,793	1,765	8,730	2,845	9,048	3,143	8,456	3,382	9,545	3,847	15,259	6,425	16,288	7,092
<u>Italy</u>														
Up to 50cc	23,669	2,848	21,796	2,715	4,997	564	5,331	616	16,968	1,854	17,158	2,101	8,982	1,311
51 - 90	5,075	719	6,666	925	1,876	262	1,912	270	2,612	489	9,554	1,451	11,891	1,921
91 - 190	24,341	4,603	45,072	8,354	35,690	7,036	14,651	3,074	10,228	1,520	8,389	2,290	11,732	2,985
191 - 290	12,980	3,736	16,485	5,400	18,772	6,207	5,553	2,036	4,978	1,866	1,436	556	3,613	1,536
Over 290	3,909	875	1,994	616	4,707	1,712	3,779	1,619	4,099	1,912	7,276	3,642	8,081	4,562
NES	-	-	-	-	-	-	275	145	1,582	167	8,327	974	7,020	902
TOTAL:	69,974	12,781	92,013	18,010	66,042	15,781	31,501	7,760	40,467	7,808	52,140	11,014	51,319	13,217
<u>Taiwan</u>														
Up to 50cc	-	-	-	-	-	-	202	23	6,869	546	24,021	2,215	9,540	794
51 - 90	-	-	-	-	80	6	100	7	-	-	1,528	210	9,517	1,184
91 - 190	-	-	-	-	-	-	-	-	9	2	300	57	1,411	240
191 - 290	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Over 290	-	-	-	-	-	-	-	-	-	-	-	-	84	12
NES	-	-	-	-	-	-	-	-	5,950	189	8,798	329	27,642	1,041
TOTAL:	-	-	-	-	80	6	302	30	12,828	737	34,647	2,811	48,194	3,271
<u>Japan</u>														
Up to 50cc	72,230	8,365	60,835	6,938	6,578	538	15,416	1,573	121,754	14,411	120,305	13,830	106,932	13,534
51 - 90	214,133	31,959	147,825	22,246	64,959	10,034	62,866	9,825	133,652	21,435	282,283	46,287	341,207	57,500
91 - 190	79,266	21,152	152,123	36,551	66,848	14,144	69,120	16,119	127,570	30,343	221,405	53,489	389,979	105,120
191 - 290	31,296	10,186	37,692	12,026	26,629	8,335	23,099	8,120	40,082	12,444	54,732	17,861	86,724	31,283
Over 290	68,432	23,744	97,552	36,148	44,452	16,279	75,183	29,117	102,743	44,270	248,803	119,362	410,585	206,508
NES	-	-	-	-	1,706	228	3,565	1,138	2,121	687	1,000	221	4,561	1,481
TOTAL:	465,357	95,406	496,027	113,909	211,172	49,558	249,249	65,892	527,922	123,590	928,528	251,050	1,339,989	415,426

