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Technological Innovation Studies Program

Research Report

STRUCTURAL ASPECTS OF SMALL BUSINESS

IN THE CANADIAN ECONOMY

by

Christian Marfels
Department of Economics
Dalhousie University
May, 1978

Rapport de recherche

Programme des études sur les innovations techniques



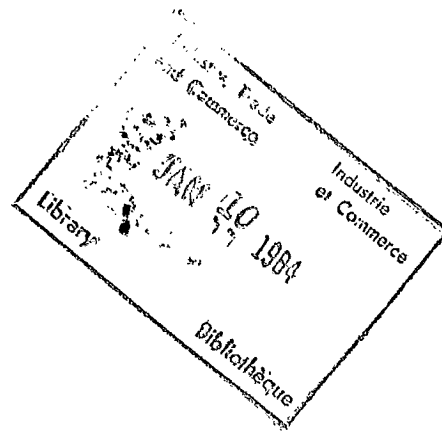
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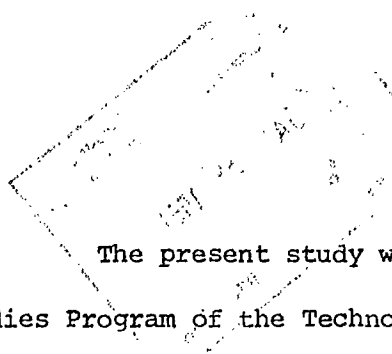
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The views and opinions expressed in this report are those of the authors and are not necessarily endorsed by the Department of Industry, Trade and Commerce.



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Christian Marfels

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List of Symbols

The following symbols are used in this study:

- .. figures not available
- ... figures not appropriate or not applicable
- nil or zero
- amount too small to be expressed
- x confidential to meet secrecy requirements of the Statistics Act
- \$M millions of dollars
- \$B billions of dollars

Summary

1. In its policy towards greater decentralization, the Federal Government has indicated its firm support for a small firm development strategy to pursue and enlarge the role of small business. Fundamental to an understanding of this role is an assessment of the structure of industries in inter-industry and intertemporal analysis. To this end, the present study gives an operational overview of the structural importance of small business in the Canadian economy for the period from 1965 to 1974.

2. From the appr. 614,000 businesses in Canada in 1974, 85% has sales of less than \$250,000, and they accounted for less than 10% of all sales. When splitting the business population by type of legal organization, one finds that 97% of the *unincorporated* businesses were in this size group and held 75% of sales of all unincorporated businesses. This indicates that small business has its domain in the legal form of individual ownerships, partnerships, and cooperatives.

3. An analysis of the anatomy of Canadian business by industrial division reveals the following array in order of declining importance of small firms by division: Agriculture/Forestry/Fishing, Services, Construction, Trade, Manufacturing, Mining, Finance, and Utilities. With the exception of Agriculture/Forestry/Fishing, a similar pattern prevails: small firms, although vast in number, control a more or less insignificant and ever-declining fraction of business activity.

4. In order to determine the space left to small firms in manufacturing industries, 'anti-concentration' ratios (ACR) for enterprises outside the top-4 and the top-20 have been calculated. It can be safely assumed that the higher the ACR the greater are the chances for survival and/or increased participation of small business from a structural point of view.
5. The concept of divergence between enterprise concentration and establishment concentration is employed in order to show the excess of ownership concentration (enterprises) over technology concentration (establishments) in manufacturing industries. An increasing spread between enterprise concentration and establishment concentration may be viewed as an indicator of the squeeze on small business being forced by the oligopoly nucleus of dominant firms in an industry to its competitive fringe. Thus, divergence may serve as a policy device to determine in which industries enterprise concentration levels could be reduced without harm to technological efficiency.
6. The structural analysis of small business in manufacturing industries is supplemented with estimates of labour productivity of small vs. large establishments. Labour productivity is measured in terms of net output for the years 1965 and 1969, and in terms of gross output for the years 1965, 1969, and 1974. Contrary to popular belief, small establishments had a higher than average productivity in 45 of the 147 industries and even significantly outperformed large establishments in 7 industries (as of 1969).

7. Combining the three indicators, *viz.* 'anti-concentration ratios', divergence, and labour productivity, business conditions seem to be good to excellent for small business in 27 industries. On the other hand, a 'hostile' environment was found to exist in 21 industries.

Introduction

The increasing centralization of the socio-economic environment is one of the most obvious tendencies of our time. Reference is often made to 'big government', 'big business', and 'big labour' as indicators of the encroachment of individual decision-making. Nowhere becomes this more evident than in the anatomy of the structure of the Canadian economy. For example, in 1973 the 200 largest non-financial corporations accounted for almost one-half of corporate assets, leaving the other half to the 'remainder' of approx. 180,000 non-financial corporations [10, p.44]. Moreover, the corporate advancement is on an increasing scale: large corporations with more than \$100 M in assets increased their territory from 50% of corporate assets to 60% during 1965/1973 [10, p.42].

Under these conditions one may wonder whether there is room left for small business or whether it is simply doomed to disappear if the present trend continues. Small firms come under persistent pressure in modern industrial organization; particularly the squeeze from monopolistic and monopsonistic market power and the difficult access to financial markets come to mind. Since we owe much of our present standard of living to small business the maintenance and--where necessary--creation of a business environment conducive to the needs of small firms must be a priority for public policy.

In its policy towards greater decentralization, the Federal Government has indicated its firm support for a small firm development strategy to preserve and enlarge the role of small business [4, p.29]. Instrumental to this policy device was the creation of the Small Business Secretariat (SBS) within the Department of Industry, Trade and Commerce.

Fundamental to an understanding of the role of small business is an assessment of the structure of industries in interindustry and intertemporal analysis. To this end, the present study gives an overview of the structural importance of small business in the Canadian economy for the period from 1965 to 1974. With the exception of some tentative estimates of the share of small business in divisions other than manufacturing the analysis pertains to the manufacturing division only since size class data for other divisions are not available for unincorporated businesses. This is a serious handicap for an analysis of small business which has its domain in the legal organizations of individual ownerships, partnerships, and cooperatives. The years 1965 and 1974 were selected since they represent the earliest and the latest year, respectively, for which comprehensive tabulations of concentration data are available for Canadian manufacturing industries.

Concentration of dominant firms in many sectors of the Canadian economy represents the foremost problem to small business. Consequently, the impact of concentration on small firms in manufacturing industries will be structurally assessed in two steps, *viz.* (i) an explicit account of the space left for firms outside the oligopoly nucleus will be determined with the help of so-called 'anti-concentration ratios', and (ii) the implicit effect of concentration on small business will be evaluated in terms of the divergence between enterprise concentration and establishment concentration in individual industries. This procedure indicates the spread between ownership concentration (enterprises) and technology concentration (establishments) and, thus, may serve as a policy device to determine in which industries enterprise concentration levels could be reduced without harm to technological efficiency.

Anti-concentration ratios and divergence taken together present an operational formula for the assessment of the competitive environment to small business. To supplement this procedure with a performance indicator, a comprehensive tabulation is provided of various measures of labour productivity of small establishments in manufacturing industries.

1. Structural Aspects of Small Business

1.1 Definition of Smallness

Similar to the problem of the delineation of the extent of fewness in terms of how many firms constitute 'a few', the question of how small a firm has to be in order to be classified as 'small' cannot be answered universally. Unless particular characteristics of the division or industry under investigation are taken into account, this will remain a more or less arbitrary procedure. This was the reason for the Small Business Administration (SBA) in the United States [18] and for the Bolton Committee [16, p.3] to redefine 'small' business by division and/or industry. In the former case, this procedure is of utmost importance since it enables a firm to benefit from financial assistance and to participate in special programs of the SBA designed for small business.

Since the present study is governed by interdivisional and/or inter-industry comparability of the importance of small business the more operational definition of the SBS was adopted, where applicable in terms of availability of data. The SBS defines small business as "manufacturing firms employing fewer than 100 workers, and firms in other sectors employing fewer than 50 workers" [5, p.5]. In the case of non-employment-based data, the upper and the lower end of the firm size distribution are presented. This procedure is self-explanatory and avoids an arbitrary division between big and small [cf. 6, p.2].¹

¹For an extensive discussion of a definition of small business in the Canadian economy, *vid.* [11, pp.61-64].

1.2 Small Business in the Canadian Economy

In a recent study for the SBS the number of businesses in Canada in 1974 was estimated at 614,000 with total sales of \$294 B [6, Table 2.1]. If sales of up to \$250,000 are selected as a criterion for smallness 85% of all businesses were in this category but they accounted for 9.5% of total sales only; when raising the criterion to \$1 M the figures read 95% and 20%, respectively [6, Table 2.1]. This indicates that the overwhelming majority of the business population in Canada is in the small end of the firm size distribution.

With the exception of manufacturing, a structural analysis of the importance of small business by industrial division is seriously impeded by a lack of information on data for unincorporated businesses. Financial figures by size of firm are published only for corporations from financial statements in T2 tax returns [13; 14]. Not unexpectedly, unincorporated businesses such as individual ownerships, partnerships and cooperatives have their domain in the small end of the firm size distribution: when splitting the Canadian business population by type of legal organization one finds that in the non-corporate segment 97% of businesses had sales of less than \$250,000 in 1974 and they accounted for 75% of sales; this compares to 67% of all corporations in this size group with a scant 5% of corporate sales [6, Table 2.1]. To pursue this lopsided size distribution a bit further, Exhibit 1 presents Canadian manufacturing establishments by type of legal organization and by number of persons employed. In 1974, unincorporated 'small' businesses (with less than 100 persons employed) accounted for 29% of all small establishments, 6% of employees and 5% of total value added in small establishments, down by 14, 4.5, and 4 percentage points, respectively, from 1965 levels. On the

Exhibit 1. Legal Organization and Size of Establishments in
Canadian Manufacturing, by Total Employed, 1965 and 1974

Size Group by Total Employed	Number of Est.		Total Employees		Total Value Added (\$M)	
	1965	1974	1965	1974	1965	1974
<u>Individual Ownerships and Partnerships</u>						
- 99	12,232	7,613	39,805	21,770	293.5	307.8
100 - 499	17	19	2,925	3,519	18.2	49.5
<u>Cooperatives</u>						
- 99	646	332	8,505	6,735	66.6	135.8
100 - 199	20	21	3,065	3,146	27.5	61.5
200 - 1,499 ^a	9	14	2,785	4,344	23.4	79.9
Head Offices, etc. ...	...	...	601	328	1.1	0.6
<u>Corporations</u>						
- 99	17,412	19,843	416,115	456,558	3,537.8	8,031.4
100 - 499	2,537	3,185	516,932	656,178	5,219.8	13,892.9
500 - 999	295	347	203,308	237,191	2,383.9	5,974.9
1,000 -	142	161	311,501	320,276	4,128.9	8,480.9
Head Office, etc. ...	...	...	64,757	75,932	84.3	639.1
Total	33,310	31,535	1,570,299	1,785,977	15,785.3 ^b	37,654.5 ^b

a. 1974: 999.

b. Total does not add due to roundings.

Source: Special Tabulation, Manufacturing and Primary Industries Division,
Statistics Canada, Ottawa, 1978.

other hand, 'large' establishments (with more than 500 persons employed) are virtually non-existent for unincorporated businesses except for a handful of cooperatives. This indicates the declining importance of the non-corporate organization of businesses but it also shows that the struggle for survival of small business is not limited to a specific business organization. Separating, again, corporate and non-corporate businesses, 99% of all establishments were 'small' in the latter category and they held 72% of employees and 70% of total value added. In the former category, 'small' establishments made 84% of all establishments with 26% of employees and 22% of total value added.

The inroads of corporate businesses are not exclusive to Manufacturing. In order to provide estimates for other divisions of the Canadian economy, Exhibit 2 presents an attempt to match tax data for corporations and for unincorporated businesses by industrial division. Although the results have to be treated with some caution, it is indicative for the trend towards the corporate economy to see corporations accounting for 26% of all businesses but for almost 98% of total income in 1974 (*vid.* Charts 1 and 2). A breakdown by division in Charts 3 and 4 displays Agriculture/Forestry/Fishing as the only division where unincorporated businesses are still dominant; elsewhere, with the possible exception of Services, unincorporated businesses are condemned to a more or less marginal existence only. A divisional breakdown of businesses by size of sales in the aforementioned study for SBS [6] put the relative importance of firms with less than \$250,000 in sales in 1974 as follows (with the figures in brackets representing the respective shares in the total number of firms and total sales): Manufacturing (61%;2%), Construction (87%;20%), Trade (78%;11%), Finance (90%;12%), and Services (92%;32%) [6, Tables 2.13-2.20].

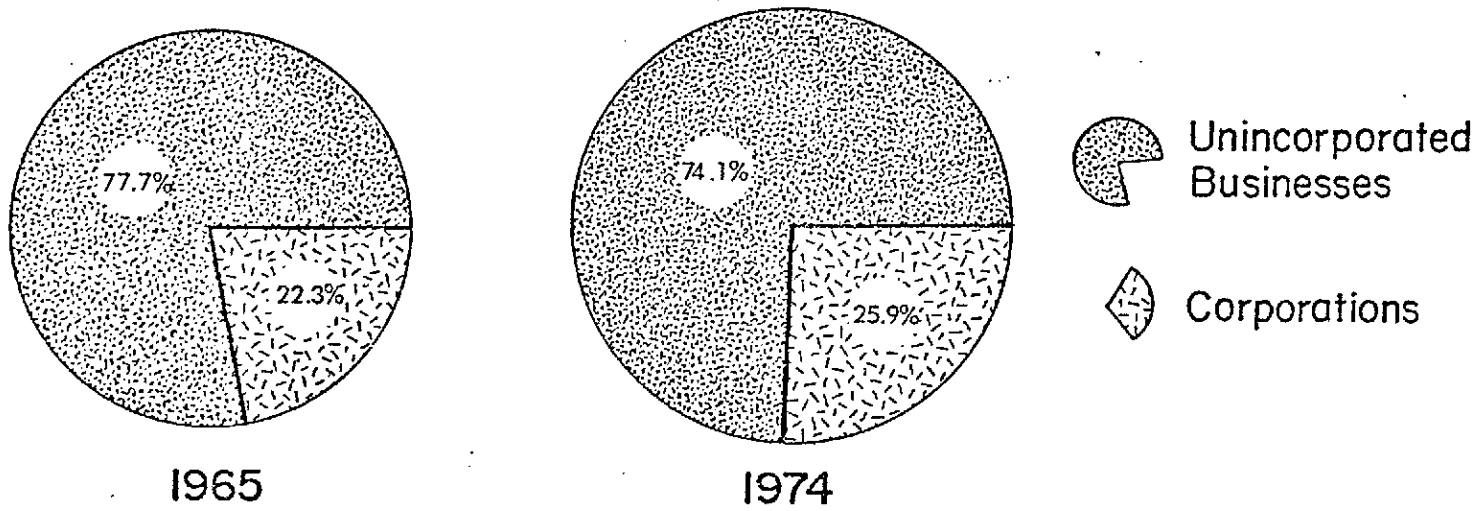
Exhibit 2. Unincorporated Businesses as Per Cent
of Total Business Activity,
by Division, 1965 and 1974

<u>Division</u>	<u>Year</u>	<u>Number</u>	<u>Total Income</u>
Agriculture/ Forestry/ Fishing	1965	98.2	57.1
	1974	96.9	50.2
Mining	1965	15.0 ^a	0.2 ^a
	1974	26.3	0.2
Manufacturing	1965	42.4	0.2
	1974	31.1	0.1
Construction	1965	75.2	3.7
	1974	70.1	3.8
Utilities	1965	82.4	2.1
	1974	81.7	1.8
Trade	1965	74.8	2.2
	1974	64.7	1.4
Finance	1965	15.9	0.9
	1974	12.2	0.6
Services	1965	80.9	10.6
	1974	72.5	6.2
All Industries	1965	77.7	2.5
	1974	74.1	2.1
All Non-Financial Industries	1965	83.0	2.6
	1974	77.7	2.3

^aTaxable returns only for unincorporated businesses.

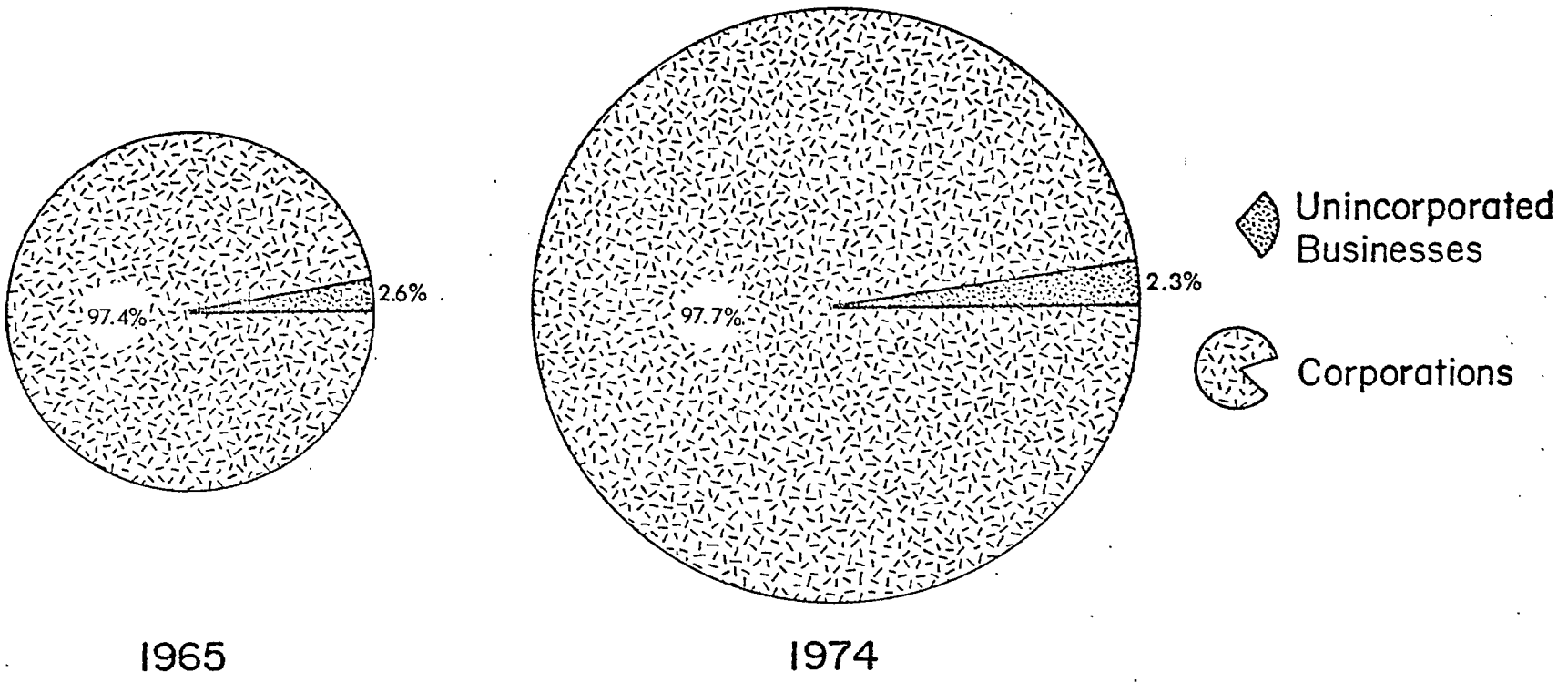
Sources: Canada, Department of Consumer and Corporate Affairs, Concentration in the Manufacturing Industries of Canada, Ottawa, 1971, p. 14; Statistics Canada, Corporation Financial Statistics, 1974, Cat. No. 61-207 Annual, Ottawa, 1977, pp. 110-185; Canada, Department of National Revenue, 1967 Taxation Statistics, Cat. No. Rv 44-1967, Ottawa, 1967, pp. 26-31; Revenue Canada, Taxation, Taxation Statistics, 1976 Edition, Ottawa, 1976, pp. 40-51; figures for "Mining Operations" for unincorporated businesses were communicated direct by the Statistics Section of Revenue Canada.

Chart 1. Percentage Distribution of Number of Unincorporated Businesses and Corporations in the Canadian Economy, 1965 and 1974



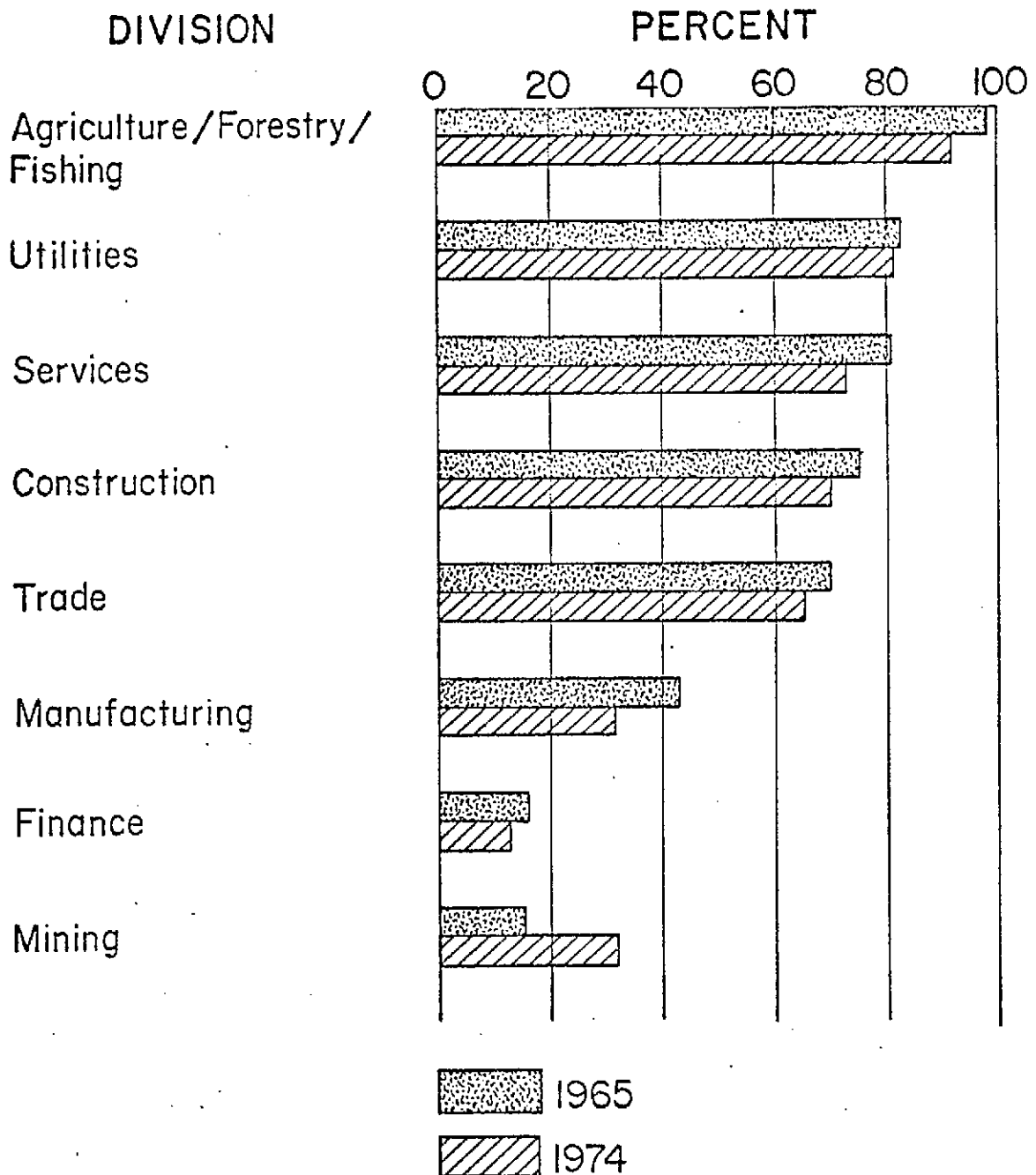
Source: Exhibit 2.

Chart 2. Percentage Distribution of Total Income of Unincorporated Businesses and Corporations in the Canadian Economy, 1965 and 1974



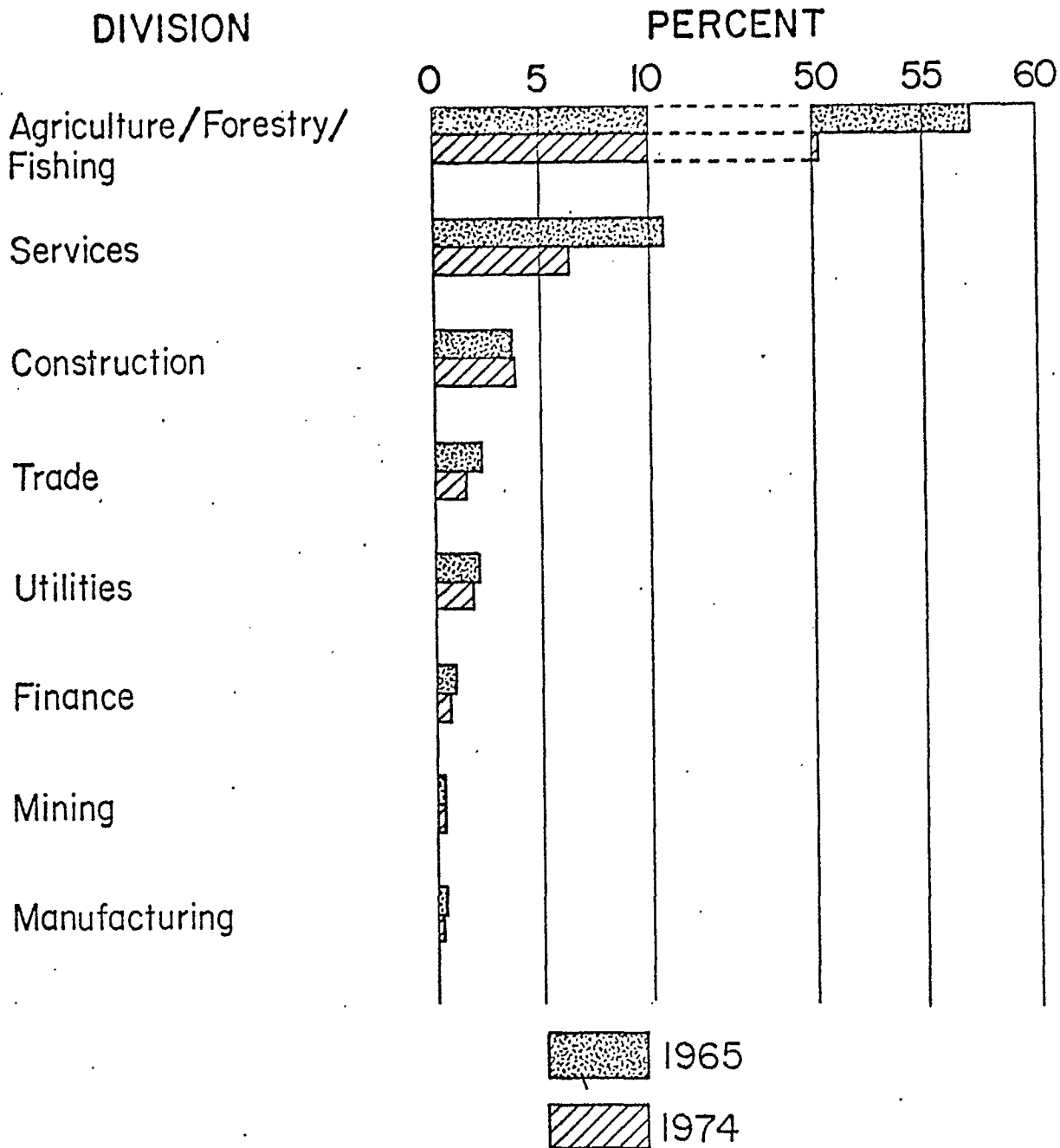
Source: Exhibit 2.

Chart 3. Percentage Distribution of Number of Unincorporated Businesses in Various Divisions of the Canadian Economy, 1965 and 1974



Source: Exhibit 2.

Chart 4. Percentage Distribution of Total Income of Unincorporated Businesses in Various Divisions of the Canadian Economy, 1965 and 1974



Source: Exhibit 2.

Turning to the corporate sector of the Canadian economy, financial statistics are by asset size of corporations. In order to prevent an arbitrary cut-off point for small corporations, the two lowest size groups by division are presented in Table 1 along with the two highest size groups.² Cumulative percentage shares rather than the actual size group populations are used to facilitate a perspective interdivisional-intertemporal comparison. To begin with, Charts 5 and 6 show that in 1974 73% of all corporations had less than \$250,000 in assets and accounted for less than 4% of corporate assets, down by 3 percentage points from 1965 levels. This compares to 41 giants (0.01%) which controlled 38% of corporate assets in 1974, up by 12.5 percentage points from 1965 levels.³

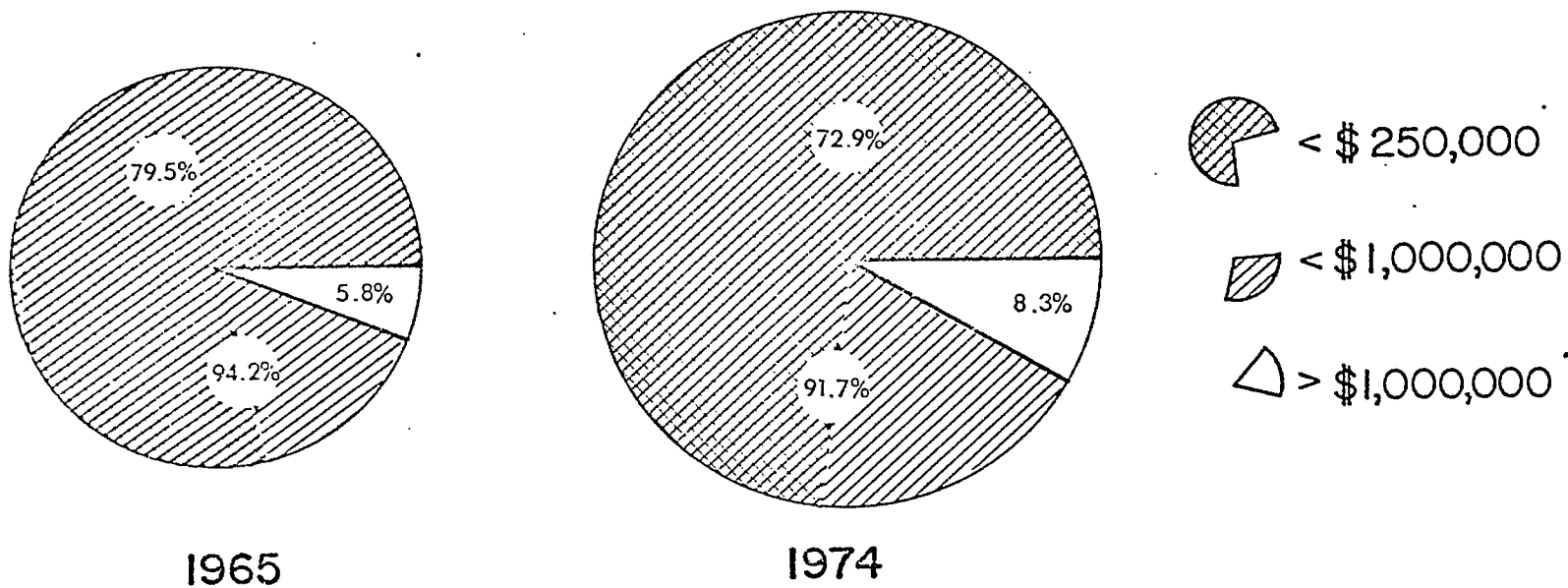
According to Charts 7 and 8, small corporations still play an important role in Agriculture/Forestry/Fishing, Services, Construction, and Trade but with a marked decline during 1965/1974. In Manufacturing, Finance, Mining, and Utilities small corporations are more or less insignificant. This coincides with findings of an earlier study which classified the divisions of the Canadian economy according to concentration levels and inequality in descending order as follows [10, pp.80-83]:

- (i) Highly Concentrated Divisions
 - Utilities
 - Finance
 - Mining

² For a comprehensive discussion of size distributions of Corporations with particular emphasis on large corporations, *vid.* [10].

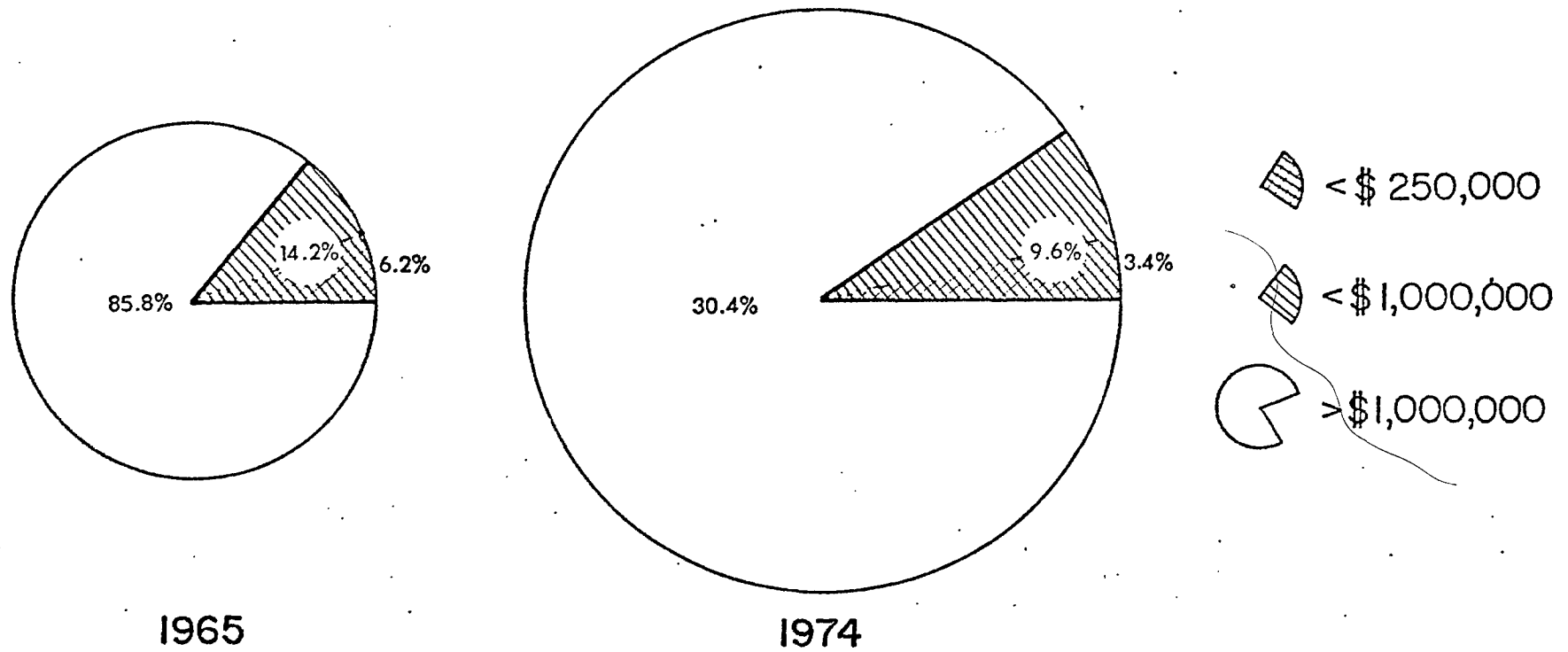
³ It should be noted that these figures are based on 'unconsolidated' corporations only, *i.e.* without taking majority (or minority) control into account. Thus, the 'real' figures can be expected to be much higher [*cf.* 10, pp.20-22]. Only recently, the CALURA Division of Statistics Canada published financial data including concentration ratios on a 'consolidated' basis for 1975 [14].

Chart 5. Percentage Distribution of Number of Corporations in the Canadian Economy, by Asset Size, 1965 and 1974



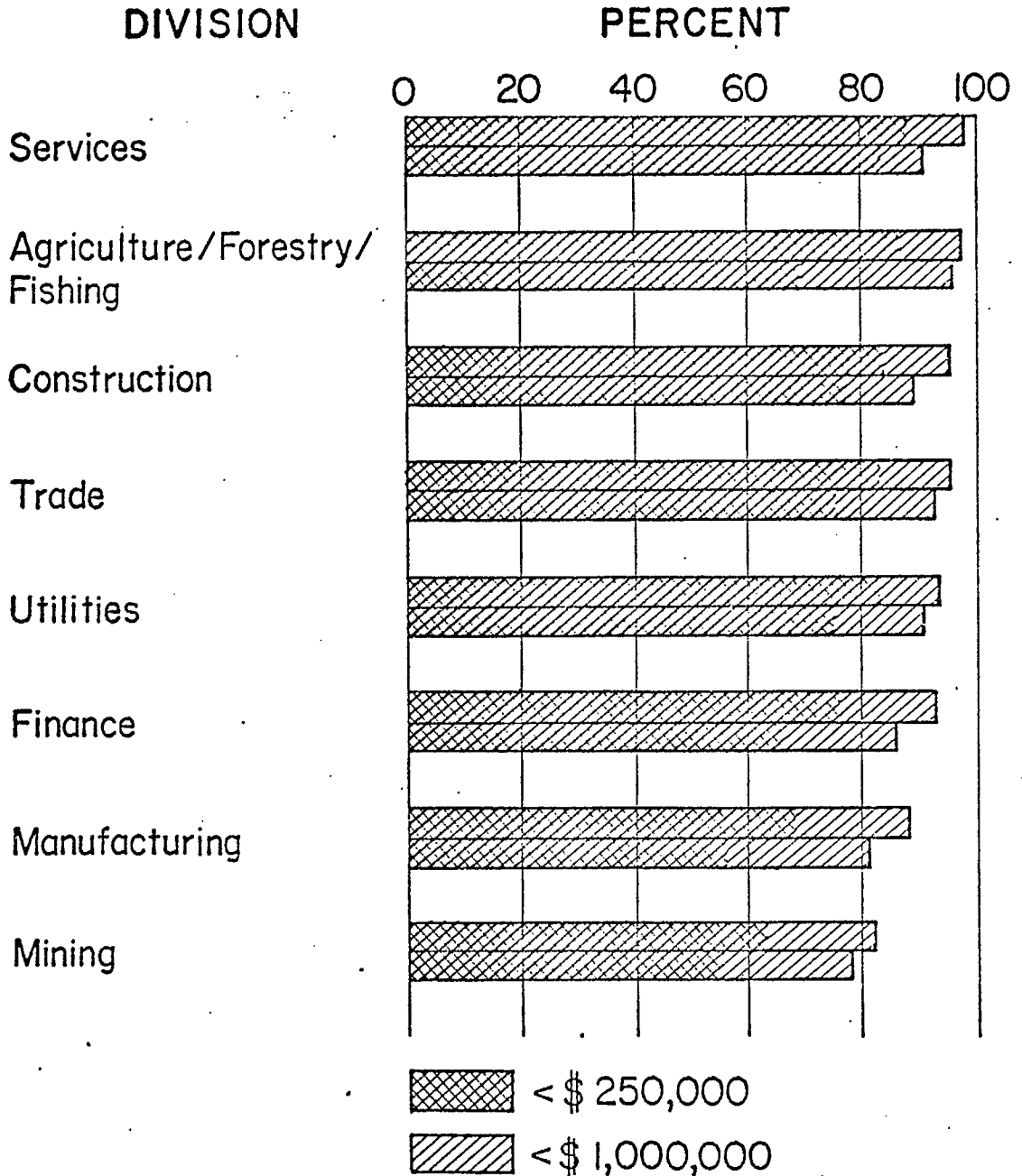
Source: Table 1.

Chart 6. Percentage Distribution of Total Assets of Corporations in the Canadian Economy, by Asset Size, 1965 and 1974



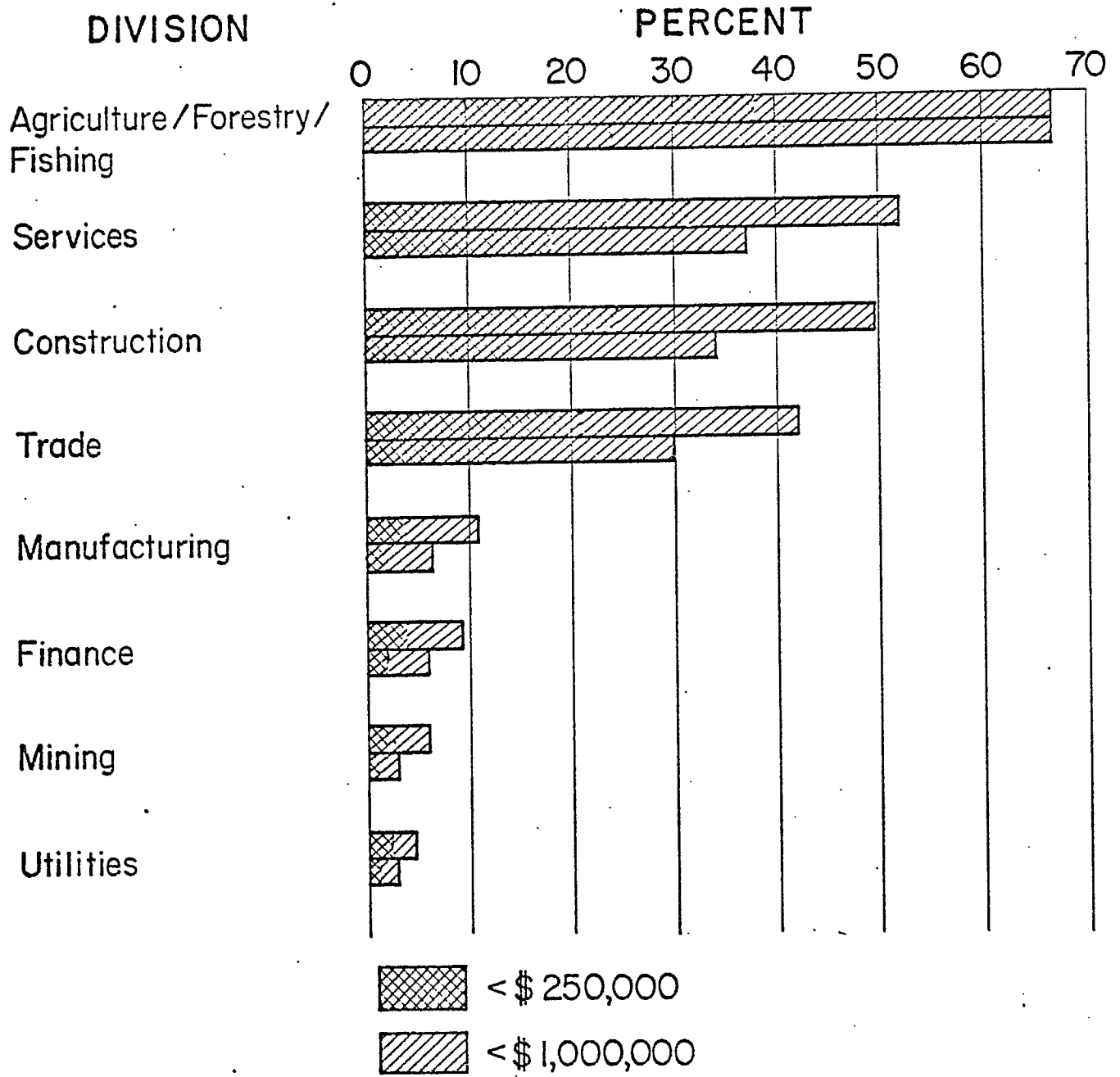
Source: Table 1.

Chart 7. Percentage Distribution of Number of Corporations in Various Divisions of the Canadian Economy, by Asset Size, 1965 and 1974



Source: Table 1.

Chart 8. Percentage Distribution of Total Assets of Corporations in Various Divisions of the Canadian Economy, by Asset Size, 1965 and 1974



Source: Table 1:

(ii) Moderately Concentrated Divisions

Manufacturing

Trade

Construction

(iii) Divisions of Low Concentration

Services

Agriculture/Forestry/Fishing

1.3 Small Business in Manufacturing

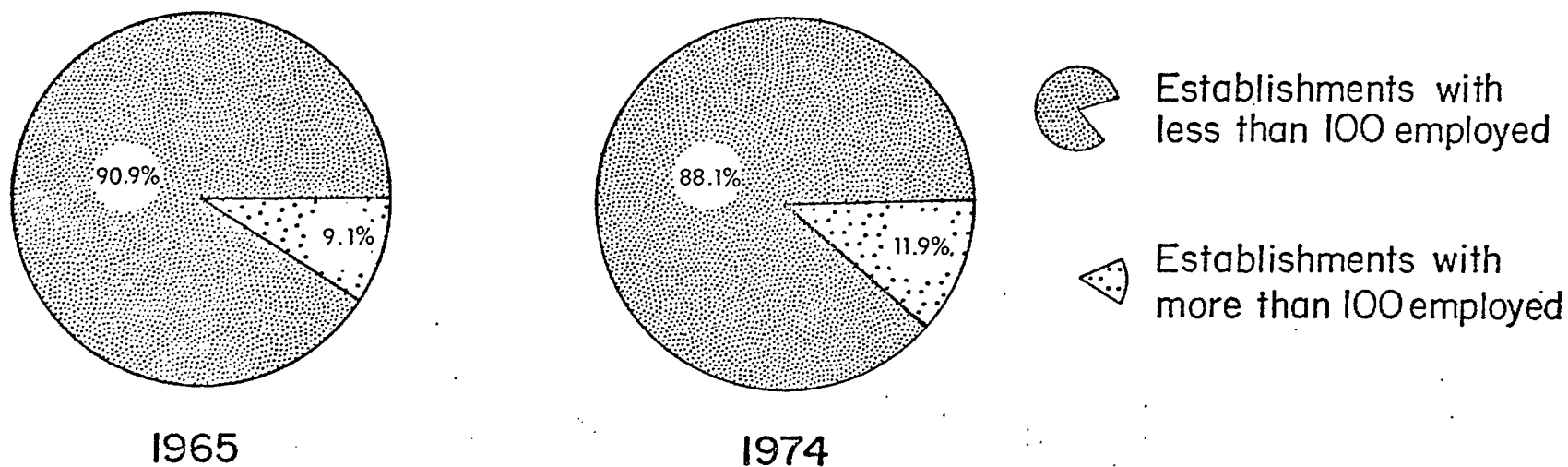
In comparison to other divisions, size class statistics in Manufacturing are available in abundance for all businesses regardless of legal organization from the regular Census of Manufactures.

Charts 9 and 10 depict the declining importance of small establishments during 1965/1974: their share in the total number of establishments decreased by almost 3 percentage points to 88% and their corresponding share in manufacturing shipments declined by 2 percentage points to 24%. Despite this decline, it is remarkable that almost one quarter of manufacturing activity is still performed in small establishments.

For a determination of the potential space left for small business in manufacturing industries, the cumulative market shares of firms outside the oligopoly nucleus can be employed. Based upon the published concentration ratios, an 'anti-concentration ratio' (ACR) for, *e.g.*, firms outside the top-4 is given by

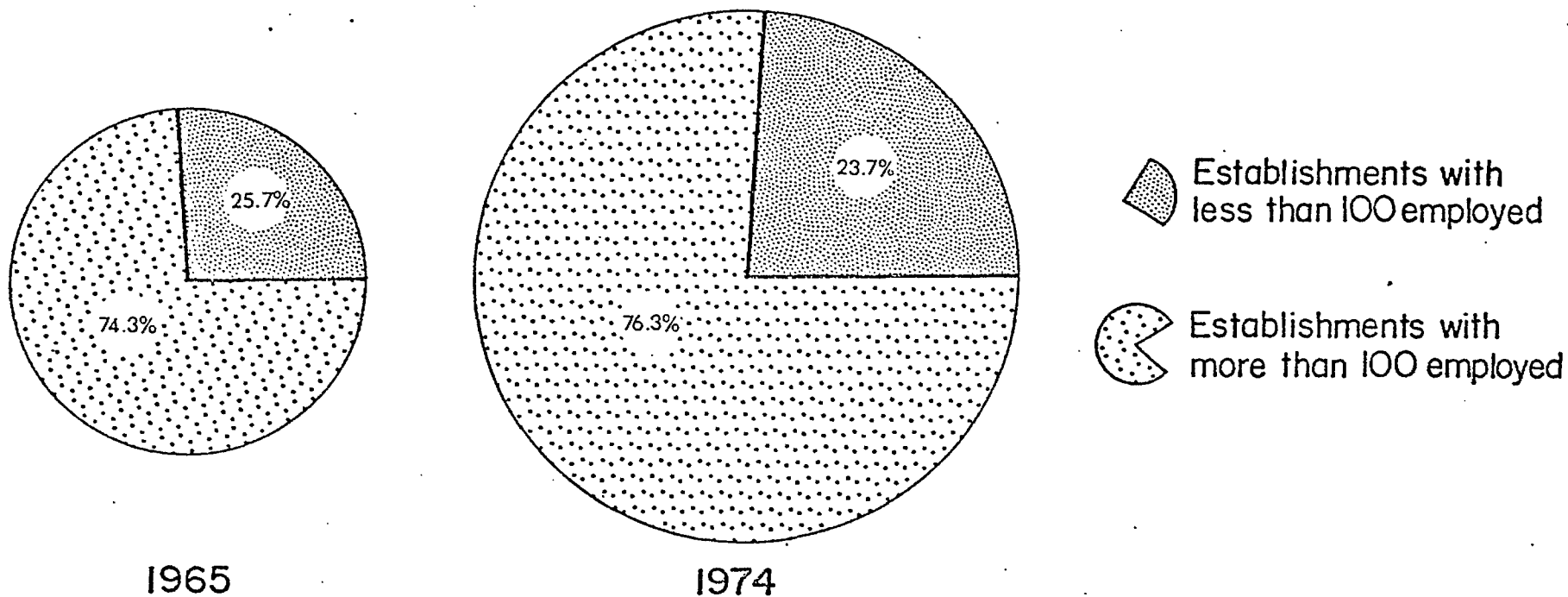
$$ACR_4 = [1 - (\sum_{i=1}^4 x_i / \sum_{i=1}^n x_i)] 100$$

Chart 9. Percentage Distribution of Number of Establishments in the Manufacturing Division of the Canadian Economy, by Number of Total Employed, 1965 and 1974



Sources: Dominion Bureau of Statistics, Type of Organization and Size of Establishments, 1965 and 1966, Cat. 31-210, Ottawa, 1971, p. 16; Statistics Canada, do., 1974, Cat. 31-210, Ottawa, 1977, p. 18.

Chart 10. Percentage Distribution of Value of Manufacturing Shipments of Establishments in the Manufacturing Division of the Canadian Economy, by Number of Total Employed, 1965 and 1974



Sources: vid. Chart 9.

The larger the ACR the better the chances for the survival of small business from a structural point of view. In Table 2, ACR_4 's and ACR_{20} 's are presented for 129 comparable manufacturing industries in 1965 and 1974. It can very well be assumed that in an industry with an ACR_4 of less than 10% small business is doomed to vanish because of the tight oligopoly situation.⁴ In 1974, industries with this structure included Tobacco Products Mfrs., Cotton Yarn and Cloth Mills, Breweries, Glass Mfrs., Cane and Beet Sugar Processors, Aluminum Rolling, Casting and Extruding, and Motor Vehicle Mfrs. With the exception of Glass Mfrs. and Motor Vehicle Mfrs., ACR_4 declined even further during 1965/1974, which is an indicator of the continuing squeeze on the non-largest firms. In an industry with an ACR_{20} of more than 50% chances for small business participation may be viewed as good to excellent.⁴ In 1974, there were 15 industries in this category, *viz.* Women's Clothing Factories, Machine Shops, Women's Clothing Contractors, Misc. Machinery and Equipment Mfrs., Dental Laboratories, Plastics Fabricating Industries, Men's Clothing Factories, Misc. Metal Fabricating Industries, Commercial Printing, Platemaking, Typesetting and Trade Bindery Industry, Misc. Furniture and Fixtures Mfrs., Signs and Displays Industry, Sawmills and Planing Mills, Men's Clothing Contractors, and Children's Clothing Industry.

In addition to concentration ratios, inequality has been calculated in Table 2 from Hirschman-Herfindahl indexes.⁵ The measurement of inequality

⁴This threshold serves merely illustrative purposes since no generalization of this nature can be made without knowledge of further industry-specific criteria.

⁵The conversion formula for the inequality measure, K_I , is

$$K_I = 1 - (1/nC) \quad 0 \leq K_I < 1$$

where C is the Hirschman-Herfindahl index and n is the number of firms [*vid.* 9, p.756].

is important in the present context since it relates to the differences in a given size distribution. Thus, inequality is zero if all firms in an industry have the same size, and it approaches unity for monopolistic or near-monopolistic markets. Unlike a concentration measure, measures of inequality are independent of the number of firms. This explains why high inequality does not necessarily coincide with high concentration. A case in point is Cane and Beet Sugar Processors where the top-4 enterprises accounted for 92% of shipments in 1974 but since there were only 8--presumably not too great--size differences in all, inequality is less than 0.5. Consequently, inequality can be expected to be high when a medley of small firms is present. As can be seen from Table 2 this applies to the majority of Canadian manufacturing industries.

2. Divergence between Enterprise Concentration and Establishment Concentration

2.1 Meaning and Measurement of Divergence

An establishment or plant as the smallest Census unit is usually regarded as the technological entity in the production process. On the level of financial decision-making and control, an enterprise links establishments by common ownership as an indicator of multiplant operations. Consequently, establishment concentration is determined by technology aspects such as production techniques and returns to scale. This way, establishment concentration as the lower limit of enterprise concentration has to be regarded as the inevitable result of present technology requirements [2, pp.102-103]. In a study on divergence, the Federal Trade Commission concluded in 1950 that "... the larger the average size of plant (and the smaller the number of larger plants) the higher tends to be the level of company concentration Similarly, the greater the extent of multiple-plant operations (and the greater the centralization of such operations within the industry's leading concerns) the higher tends to be the level of company concentration" [17, p.29]. To put it another way, the reasons for an excess of enterprise concentration over and above establishment concentration have to be looked for in factors other than technology, most notably in market power and related phenomena. Thus, the deviation of ownership-oriented concentration (enterprises) from technology-oriented concentration (establishments) may very well be viewed as an indicator of the squeeze on small business being forced by the oligopoly nucleus of dominant firms in an industry to its competitive fringe.

The geometry of the divergence between enterprise concentration and establishment concentration is represented by the area between the two respective concentration curves in an industry. Employing the 'standard sequence' of Census concentration ratios (*i.e.* 4, 8, 20, and 50), the trapezium formula yields the following measure for this area [8, p.3427]

$$A = \{ [0.5(CR_4^* - CR_4') + (CR_8^* - CR_8') + (CR_{20}^* - CR_{20}') + 0.5(CR_{50}^* - CR_{50}')] / 0.5 CR_4^* + CR_8^* + CR_{20}^* + 0.5 CR_{50}^* \} 100$$

where CR^* denotes a concentration ratio for enterprises and CR' a concentration ratio for establishments. By its relation to the area underneath the concentration curve for enterprises, A is standardized to the range $< 0, 1 >$: in an industry with single-establishment enterprises divergence is zero, and it approaches unity when the two concentration curves are far apart. In an industry with less than 20 or 8 enterprises, respectively, the formula for A has to be adjusted accordingly. According to Blair [2, p.103], the following classification of divergence levels is suggested⁶ (in percentage points):

Narrow Divergence:	< 10
Moderate Divergence:	10 - 20
Wide Divergence:	20 - 40
Extreme Divergence:	> 40

Narrow divergence can be expected in an industry with many single-establishment enterprises; similarly, wide or extreme divergence will most probably

⁶ Blair related this classification to the difference between the top-8 ratios for enterprises and establishments [1, p.1547]; because of its indicative value, the classification was adopted here.

occur in an industry with many multi-establishment enterprises. Empirical studies have shown that there exists no necessary correlation between divergence levels and enterprise concentration levels [cf. 1, p.1547; 10, pp.140-150]: narrow divergence, *e.g.*, may occur both in an industry with high enterprise concentration and in an industry with low enterprise concentration; the same is true for moderate divergence and, to a lesser extent, for wide and extreme divergence. In order to avoid this invariance, an evaluation of divergence levels should be linked to a classification of top-4 enterprise concentration as suggested by Blair [1, p.1547], *viz.* "high" (>60%), "medium" (30%-60%), and "low" (< 30%).

2.2 Divergence Levels and Trends in Canadian Manufacturing Industries

In Table 3, divergence between enterprise concentration and establishment concentration has been calculated for 129 comparable manufacturing industries in 1965 and 1974. A classification of 1974 divergence levels yields the following distribution:

Extreme Divergence:	12 industries
Wide Divergence:	24 industries
Moderate Divergence:	31 industries
Narrow Divergence:	49 industries
Zero Divergence:	13 industries

Extreme divergence is mainly found in industries⁷ with high top-4 enterprise concentration (6) but it occurs also in industries with medium (3) and low

⁷In terms of decreasing divergence (1974): Pulp and Paper Mills, Ready-Mix Concrete Mfrs., Cement Mfrs., Feed Ind., Ophthalmic Goods Mfrs., Cotton Yarn and Cloth Mills, Breweries, Petroleum Refining, Mfrs. of Mixed Fertilizers, Corrugated Box Mfrs., Commercial Printing, and Sawmills and Planing Mills.

concentration (3). The number of establishments per enterprise in these industries ranges from a high of 7.7 in Breweries to a low of 1.04 in Commercial Printing. It can be safely assumed that in the six industries with high top-4 enterprise concentration in this group, *viz.* Breweries, Cotton Yarn and Cloth Mills, Cement Mfrs., Petroleum Refining, Mfrs. of Mixed Fertilizers, and Ophthalmic Goods Mfrs., the well-being and survival of small business seems to be seriously endangered from a structural point of view. Apart from the fact that there is virtually no space left for small businesses (*vid.* Table 2), the spread between ownership concentration (enterprises) and technology concentration (establishments) is in the range of 40-60 percentage points.⁸ According to the previous discussion, this spread has to be attributed to factors other than technology. To put it another way, enterprise concentration levels in these industries could be reduced without detrimental effects on technical efficiency and optimum plant size [*cf.* 2, p.103].

At the other end of the spectrum, there were 13 industries with single-establishment enterprises in 1974 and, consequently, zero divergence.⁹ Among them were 8 industries with high top-4 enterprise concentration, 2 with medium, and 3 with low concentration. Narrow divergence was found to exist in 49 industries. As was to be expected, the number of establishments per enterprise in these industries is close to unity. There were 17 industries

⁸ The difference between top-4 enterprise concentration levels and top-4 establishment concentration levels in 1974 is (in percentage points): Breweries (57.6), Mfrs. of Mixed Fertilizers (56.6), Cement Mfrs. (51.9), Ophthalmic Goods Mfrs. (50.8), Cotton Yarn and Cloth Mills (49.6), and Petroleum Refining (44.4).

⁹ Misc. Leather Products Mfrs., Fur Goods Ind., Stone Products Mfrs., Fibre Processing Mills, Hat and Cap Ind., Cordage and Twine Ind., Pressed and Punched Felt Mills, Automobile Fabric Accessories Ind., Fabric Glove Mfrs., Hardwood Flooring Plants, Clock and Watch Mfrs., Orthopaedic and Surgical Appliance Mfrs., and Fur Dressing and Dyeing.

with high top-4 enterprise concentration, 25 with medium, and 7 with low concentration. As mentioned earlier, enterprise concentration levels in these two divergence categories could not be reduced without serious harm to technical efficiency.

To summarize, the structural environment for small business is best in the constellation

Divergence: Zero to Narrow

Top-4 Enterprise Concentration: Low

On the other hand, the most 'hostile' structural environment for small business will be found in the constellation

Divergence: Wide to Extreme

Top-4 Enterprise Concentration: High

In 1974, 10 industries qualified for the former group,¹⁰ and 13 for the latter one.¹¹

¹⁰ Stone Products Mfrs., Misc. Leather Products Mfrs., Fur Goods Ind., Machine Shops, Boatbuilding and Repair, Men's Clothing Contractors, Hosiery Mills, Children's Clothing Ind., Heating Equipment Mfrs., Embroidery, Pleating and Hemstitching Mfrs.

¹¹ Cement Mfrs., Ophthalmic Goods Mfrs., Cotton Yarn and Cloth Mills, Breweries, Petroleum Refining, Mfrs. of Mixed Fertilizers, Mfrs. of Electric Wire and Cable, Battery Mfrs., Glass Mfrs., Smelting and Refining, Wineries, Leather Tanneries, and Abrasives Mfrs.

3. Productivity of Small Establishments in Manufacturing Industries

3.1 Methodology

Productivity in the general sense is the performance of a single input factor in the quantity of goods and services produced, *i.e.* output. It is either measured as a ratio between output and the respective single input factor or it relates output to a composite of inputs to reflect their relative importance. According to the input factor employed in the denominator, labour productivity and capital productivity are obtained. Only labour productivity will be considered in this study since the data in the annual publication "Type of Organization and Size of Establishments" [12] are employment-based.

With regard to the numerator of a productivity measure, net output is preferable to gross output since the former represents the contribution to net national product and, thus, facilitates interindustry comparison.¹² Based upon the net concept, two productivity measures are employed in this study, *viz.* (i) Manufacturing Value Added per Production Worker, and (ii) Total Value Added per Person Employed; the latter includes value added from non-manufacturing activity. With regard to the coverage of the period 1965/1974, a serious problem of comparability of productivity measures for small establishments arises from the introduction of the revision of the so-called 'Short Form' in the 1970 Census of Manufactures.¹³ The revision affected

¹²For a recent discussion of productivity concepts with regard to Canadian data, *vid.* [3;7].

¹³The 'Short Form' is mailed to small firms and requests only a limited range of information. The 1970 revision was intended to facilitate the reporting procedure. For details, refer to [15].

mainly the value-added statistics for small establishments which are lower than they would be otherwise [15, p.4]. Consequently, the two 'net' productivity measures are calculated only for 1965 and 1969 to indicate a trend for part of the entire period under consideration. As a proxy, Value of Manufacturing Shipments per Production Worker was employed for the entire period. This 'gross' measure of labour productivity cannot be interpreted in inter-industry comparison but only in intra-industry analysis to allow for implicit conclusions on the probable trend for the 'net' productivity measures during 1965/1974.

In addition to the productivity measures for small establishments (less than 100 persons employed), the other end of the spectrum was included where possible. The selection of the threshold of more than 500 persons employed as a criterion for a 'large' establishment was done for operationality reasons as a middle road between the other available alternatives of 200 and 1,000 persons employed.

3.2 Results

The three productivity measures for small and large establishments have been calculated (i) for the manufacturing sector as a whole, (ii) for the 20 major industrial groups, and (iii) for 147 industries. Exhibits 3 and 4 summarize the detailed information provided in Table 4. Labour productivity of small establishments relative to labour productivity of all establishments has been recorded on a percentage point scale: a figure of, *e.g.*, 81 indicates that the productivity of small establishments is 19 points *below* the average productivity; similarly, a figure of, *e.g.*, 129 means that small establishments are 29 points *above* the average productivity.

Exhibit 3. Labour Productivity in Small Establishments in Terms of Average Productivity for 20 Major Industrial Groups in Canadian Manufacturing, by Number of Major Groups, 1965, 1969, and 1974

Range in Perc. Points	<u>Man. Value Added</u> Production & Rel. Workers		<u>Total Value Added</u> Total Employed		<u>Value of Man. Shipments</u> Production & Rel. Workers		
	1965	1969	1965	1969	1965	1969	1974
<u>Below Average:</u>	18	18	15	15	12	12	12
- 50	-	-	-	-	-	-	3
51 - 70	4	3	1	2	3	3	-
71 - 80	2	3	3	2	1	2	1
81 - 85	-	2	2	1	3	1	3
86 - 90	7	2	3	4	2	4	3
91 - 95	1	3	2	3	2	1	1
96 - 99	4	5	4	3	1	1	1
Average	-	-	-	-	2	2	-
<u>Above Average:</u>	2	2	5	5	6	6	8
101 - 104	-	1	2	2	3	3	4
105 - 109	2	1	2	2	2	2	2
110 - 114	-	-	-	-	1	-	1
115 - 119	-	-	-	-	-	-	1
120 - 129	-	-	-	1	-	1	-
130 - 149	-	-	1	-	-	-	-

Source: Table 4.

Exhibit 4. Labour Productivity in Small Establishments in Terms of Average Industry Productivity for 147 Canadian Manufacturing Industries, by Number of Industries, 1965, 1969, and 1974

Range in Perc. Points	<u>Man. Value Added</u> Production & Rel. Workers		<u>Total Value Added</u> Total Employed		<u>Value of Man. Shipments</u> Production & Rel. Workers		
	1965	1969	1965	1969	1965	1969	1974
<u>Below Average:</u>	96	94	89	88	80	76	68
- 50	1	1	1	-	2	1	2
51 - 70	11	14	4	8	6	10	9
71 - 80	16	16	11	11	14	9	10
81 - 85	8	8	9	9	12	8	8
86 - 90	20	15	23	14	14	12	7
91 - 95	21	15	25	16	14	18	15
96 - 99	19	24	16	29	18	17	17
Range Unknown	-	1	-	1	-	1	-
Average	10	13	15	13	11	13	13
<u>Above Average:</u>	38	38	41	45	53	56	63
101 - 104	15	16	15	12	14	23	21
105 - 109	10	7	15	17	16	10	13
110 - 114	5	2	4	7	6	5	6
115 - 119	2	7	2	2	4	7	5
120 - 129	2	3	-	1	5	3	7
130 - 149	2	2	3	5	5	7	9
150 -	1	1	1	1	2	1	2
Range Unknown	1	-	1	-	1	-	-
No Information	3	2	2	1	3	2	3

Source: Table 4.

As can be seen from Exhibit 3, productivity of small establishments is lower than average productivity for the majority of industry groups, and this holds true for all of the three productivity measures: productivity in terms of manufacturing value added places 90% of the industry groups in this category, total value-added productivity 75%, and value-of-manufacturing-shipments productivity 60%. This distribution remained unaltered during 1965/1969 and 1965/1974, respectively. Notable exceptions to this rule are Knitting Mills and Clothing Industries where the productivity of small establishments is significantly higher than average productivity. In Petroleum and Coal Products and Chemical and Chemical Products Industries this applies only to total value-added productivity.

The distribution for individual industries in Exhibit 4 displays a distinctly better picture for small establishments. In terms of manufacturing value-added productivity, 26% of industries showed an above average productivity vs. 65% with below average productivity. The corresponding figures for total value-added productivity read 30% and 60%, and for value-of-manufacturing shipments 40% and 52%, respectively. The list of industries where small establishments significantly outperformed large establishments includes Slaughtering and Meat Processors, Men's Clothing Factories, Knitting Mills, Railroad Rolling Stock Industry, Mfrs. of Electric Wire and Cable, Mfrs. of Industrial Chemicals, and Misc. Chemical Industries. It should be noted that the 'true' list is longer since productivity for large establishments could be determined for 46 of the 147 industries only, mainly because of confidentiality reasons.

Turning to an interindustry comparison of productivity in absolute terms, Exhibits 5 and 6 provide rankings of the 20 industries with highest

Exhibit 5. 20 Canadian Manufacturing Industries
with the Highest Labour Productivity
of Small Establishments, 1965 and 1969

No. ^a	SIC	Industry ^b	Total Value Added/Total Employed \$ '000	
			<u>1969</u>	<u>1965</u>
1.	352	Cement Manufacturers (1)	42.0	47.9
2.	3652	Manufacturers of Lubricating Oils and Greases (2)	37.8	34.8
3.	378	Manufacturers of Industrial Chemicals (4)	31.3	26.7
4.	1093	Breweries (6)	26.6	19.1
5.	1092	Distilleries (5)	25.5	26.6
6.	1094	Wineries (8)	24.0	18.3
7.	326	Railroad Rolling Stock Industry (..)	23.0	x
8.	3651	Petroleum Refining (3)	22.2	27.8
9.	373	Manufacturers of Plastics and Synthetic Resins (7)	21.7	19.0
10.	376	Manufacturers of Soap and Cleaning Compounds (12)	21.2	14.9
11.	377	Manufacturers of Toilet Preparations (25)	21.2	12.1
12.	272	Asphalt Roofing Manufac- turers (18)	21.0	14.1
13.	338	Manufacturers of Electric Wire and Cable (9)	20.0	16.3
14.	1082	Cane and Beet Sugar Proces- sors (..)	19.2	x
15.	374	Manufacturers of Pharma- ceuticals and Medicines (17)	19.2	14.2
16.	369	Miscellaneous Petroleum and Coal Products Industries (10)	19.0	16.1

17.	372	Manufacturers of Mixed Fertilizers (29)	18.9	11.5
18.	334	Manufacturers of Household Radio and Television Receivers (84)	18.3	7.7
19.	379	Miscellaneous Chemical Industries (11)	17.9	15.7
20.	3599	Miscellaneous Non-Metallic Mineral Products Industries, n.e.s. (16)	17.7	14.3

a. 1969 rank.

b. Figure in parentheses indicates 1965 rank.

Source: Table 4.

Exhibit 6. 20 Canadian Manufacturing Industries
with the Lowest Labour Productivity
of Small Establishments, 1965 and 1969

No. ^a	SIC	Industry ^b	Total Value Added/Total Employed \$ '000	
			1969	1965
1.	2442	Women's Clothing Contractors (1)	4.0	3.1
2.	2432	Men's Clothing Contractors (2)	4.3	3.3
3.	248	Foundation Garment Industry (7)	4.9	4.9
4.	181	Cotton Yarn and Cloth Mills (29)	5.3	6.4
5.	175	Leather Glove Factories (5)	5.9	4.6
6.	2492	Hat and Cap Industry (10)	6.2	4.9
7.	2491	Fabric Glove Manufacturers (3)	6.2	4.6
8.	1799	Miscellaneous Leather Products Manufacturers (9)	6.2	4.9
9.	231	Hosiery Mills (11)	6.4	5.0
10.	245	Children's Clothing Industry (4)	6.5	4.6
11.	174	Shoe Factories (6)	6.5	4.7
12.	1893	Embroidery, Pleating and Hem- stitching Manufacturers (8)	6.7	4.9
13.	2542	Hardwood Flooring Plants (19)	6.9	5.8
14.	3512	Clay Products Manufacturers (from imported clays) (32)	6.9	6.6
15.	2431	Men's Clothing Factories (14)	6.9	5.2
16.	102	Fish Products Industry (17)	7.0	5.6
17.	2499	Miscellaneous Clothing Industries, n.e.s. (13)	7.0	5.2
18.	1892	Narrow Fabric Mills (28)	7.1	6.4
19.	256	Wooden Box Factories (12)	7.1	5.0
20.	1072	Bakeries (21)	7.2	5.9

a. 1969 rank.

b. Figure in parentheses indicates 1965 rank.

Source: Table 4.

and lowest total value-added productivity for small establishments in 1969 and their respective rankings in 1965. Comparing the 'first' and the 'last' industry on the two lists, it can be seen that in 1969 productivity in Cement Mfrs. was 10.5 times higher than that in Women's Clothing Contractors. During 1965/1969, productivity increased, respectively, in 15 and 18 of the 20 industries on the two lists. Moreover, the productivity increase of small establishments during that period was slightly ahead of large establishments, *viz.* 30.9% *vs.* 28.6% (*vid.* Table 4).

4. Recommendations

As mentioned earlier, a categorization of industries by levels of concentration and divergence yields two groups at both ends of the spectrum. Despite the arbitrariness of any categorical delineation of this kind, the respective identification of industries may be viewed as instrumental to determine the likelihood of beneficial effects of programs of the SBS and other agencies to aid small business.

An environment 'hostile' to the survival of small business may be expected to exist predominantly in highly concentrated industries where divergence between enterprise concentration and establishment concentration is more than 20 percentage points. To go a step further, a structural setting of top-4 enterprise concentration reaching the upper decile *per se* squeezes small firms to the outer limits of the competitive fringe. Industries in the two indicated subsets include (with the number of asterisks indicating the occurrences in the subsequent listings):

(i) Wide to Extreme Divergence/High Top-4 Enterprise Concentration (1974)

- * Cement Mfrs. (54.2/83.1)
- * Ophthalmic Goods Mfrs. (49.1/67.8)
- *** Cotton Yarn and Cloth Mills (47.6/97.5)
- ** Breweries (46.5/96.5)
- * Petroleum Refining (46.5/67.8)
- * Mfrs. of Mixed Fertilizers (45.5/76.3)

- * Mfrs. of Electric Wire and Cable (37.6/80.2)
- * Battery Mfrs. (33.2/77.1)
- ** Glass Mfrs. (28.1/95.2)

- * Smelting and Refining (25.9/75.0)
- * Wineries (23.5/74.1)
- * Leather Tanneries (21.3/81.8)
- * Abrasives Mfrs. (20.9/88.8)

(ii) $ACR_4 < 10\%$ (1974)

- ** Tobacco Products Mfrs. (2.3)
- *** Cotton Yarn and Cloth Mills (2.5)
- ** Breweries (3.5)
- ** Glass Mfrs. (4.8)
- * Cane and Beet Sugar Processors (8.0)
- * Aluminum Rolling, Casting and Extruding (8.7)
- ** Motor Vehicle Mfrs. (9.9)

To supplement these listings with net output per person employed as a performance indicator, small establishments are at the bottom of the distribution in the following industries:

(iii) Labour Productivity of Small Establishments of more than 30% *below*

Average Productivity (1969)

- ** Motor Vehicle Mfrs. (39^a) a. 1965
- * Iron and Steel Mills (54)
- ** Tobacco Products Mfrs. (55)
- * Distilleries (61)
- * Clay Products Mfrs. - Imported Clays (61)
- *** Cotton Yarn and Cloth Mills (64)
- * Office and Store Machinery Mfrs. (67)

Among these industries, Cotton Yarn and Cloth Mills, Motor Vehicle Mfrs., Tobacco Products Mfrs., Glass Mfrs., and Breweries seem to be most inimical to small business participation.

In contrast to the former groupings, industries with divergence of up to 10 percentage points and top-4 enterprise concentration of up to 30% may be regarded as the 'close-to-ideal' setting for small business.

(i) Zero to Narrow Divergence/Low Top-4 Enterprise Concentration (1974)

- * Stone Products Mfrs. (0/23.7)
- * Misc. Leather Products (0/27.8)
- * Fur Goods Ind. (0/29.7)

- ** Machine Shops (1.3/8.3)
- * Boatbuilding and Repair (4.7/24.8)
- ** Men's Clothing Contractors (5.6/14.1)
- * Hosiery Mills (5.8/24.8)
- ** Children's Clothing Ind. (6.8/16.5)
- * Heating Equipment Mfrs. (7.8/27.8)
- * Embroidery, Pleating and Hemstitching Mfrs. (9.1/30.0)

To enlarge this area which is most fertile to small business-oriented programs, industries with top-20 enterprise concentration of less than 50% and industries with high labour productivity of small establishments are:

(ii) $ACR_{20} > 50\%$ (1974)

- * Women's Clothing Factories (79.0)
- ** Machine Shops (74.9)
- * Women's Clothing Contractors (73.7)
- * Misc. Machinery and Equipment Mfrs. (66.4)
- * Dental Laboratories (65.6)
- * Plastics Fabricating Ind., n.e.s. (64.2)
- * Men's Clothing Factories (64.1)
- * Misc. Metal Fabricating Ind. (60.5)
- * Commercial Printing (58.7)

- * Platemaking, Typesetting and Trade Bindery Ind. (58.3)
- * Misc. Furniture and Fixtures Mfrs. (57.9)
- * Signs and Displays Ind. (56.0)
- * Sawmills and Planing Mills (55.0)
- ** Men's Clothing Contractors (52.7)
- ** Children's Clothing Ind. (52.1)

(iii) Labour Productivity of Small Establishments of more than 30% *above*
Average Productivity (1969)

- * Railroad Rolling Stock Ind. (159)
- * Mfrs. of Household Radio and Television Receivers (137)
- * Cement Mfrs. (135)
- * Mfrs. of Industrial Chemicals (133)
- * Mfrs. of Electric Wire and Cable (131)
- * Metal Rolling, Casting and Extruding, n.e.s. (130)

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Table 1. The Lower and the Upper End of the Corporate Size Distribution in the Various Divisions of the Canadian Economy, by Asset Size, 1965 and 1974

AGRICULTURE/FORESTRY/FISHING

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	86.0	38.1	50.5
	1974	69.1	24.4	30.0
< 1	1965	98.0	67.3	77.6
	1974	96.7	67.2	67.8
> 100	1965	-	-	-
	1974	-	-	-
> 1,000	1965	-	-	-
	1974	-	-	-

Table 1. (cont.)

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MINING

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	63.6	1.8	2.4
	1974	54.8	0.7	1.0
< 1	1965	82.8	6.0	7.2
	1974	78.2	2.8	3.0
> 100	1965	0.4	37.1	44.2
	1974	1.2	64.0	69.1
> 1,000	1965	-	-	-
	1974	--	14.1 ^a	11.9 ^a

Table 1. (cont.)

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MANUFACTURING

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	67.7	3.7	6.3
	1974	56.4	1.8	2.8
< 1	1965	88.0	10.3	16.8
	1974	81.3	6.4	9.5
> 100	1965	0.2	40.4	32.2
	1974	0.4	49.2	41.9
> 1,000	1965	-	-	-
	1974	--	12.4	12.7

Table 1. (cont.)

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CONSTRUCTION

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	83.5	23.6	30.2
	1974	77.1	14.2	23.4
< 1	1965	96.6	49.7	58.3
	1974	94.3	34.2	50.8
> 100	1965	--	2.9 ^a	1.1 ^a
	1974	--	6.5	2.0
> 1,000	1965	-	-	-
	1974	-	-	-

Table 1. (cont.)

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UTILITIES

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	82.9	2.3	9.7
	1974	75.1	1.2	6.4
< 1	1965	93.7	4.6	17.3
	1974	91.0	2.8	13.1
> 100	1965	0.2	72.7	52.0
	1974	0.5	84.9	59.2
> 1,000	1965	--	50.4 ^a	32.0 ^a
	1974	0.1	57.2	33.9

Table 1. (cont.)

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TRADE

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	83.3	20.7	22.8
	1974	75.3	12.3	13.8
< 1	1965	96.4	42.0	45.5
	1974	93.5	30.1	24.9
> 100	1965	--	10.9	11.4
	1974	--	22.2	16.9
> 1,000	1965	-	-	-
	1974	--	6.8 ^a	2.7 ^a

Table 1. (cont.)

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FINANCE

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	76.1	3.7	14.7
	1974	65.6	2.1	7.9
< 1	1965	93.0	9.4	26.8
	1974	86.0	6.0	16.3
> 100	1965	0.1	64.8	41.4
	1974	0.2	73.5	59.4
> 1,000	1965	--	43.3	21.9
	1974	--	54.9	43.5

Table 1. (cont.)

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SERVICES

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	88.5	31.8	47.0
	1974	83.1	17.7	30.6
< 1	1965	97.9	59.2	75.0
	1974	96.1	37.3	53.1
> 100	1965	-	-	-
	1974	--	9.5	8.8
> 1,000	1965	-	-	-
	1974	-	-	-

Table 1. (cont.)

-51-

ALL INDUSTRIES

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25	1965	79.5	6.2	15.4
	1974	72.9	3.4	9.8
< 1	1965	94.2	14.2	31.5
	1974	91.7	9.6	20.1
> 100	1965	0.1	50.4	24.2
	1974	0.2	61.4	33.3
> 1,000	1965	--	25.5	3.2
	1974	--	37.9	12.1

Table 1. (cont.)

-52-

ALL NON-FINANCIAL INDUSTRIES

Asset Size \$M	Year	Percent of		
		No. of Corp.	Assets	Sales
< 0.25				
	1965	80.9	8.4	15.5
	1974	75.9	5.1	10.0
< 1				
	1965	94.6	18.3	31.8
	1974	94.1	13.0	20.5
> 100				
	1965	0.1	37.9	23.3
	1974	--	50.0	30.9
> 1,000				
	1965	--	10.2	2.1
	1974	--	21.8	9.1

^a Estimates

Sources: Canada, Department of Consumer and Corporate Affairs, Concentration in the Manufacturing Industries of Canada, Ottawa, 1971, p. 14; communication of the Business Finance Division of Statistics Canada.

Table 2. Market Shares of Enterprises Outside the Top-4 (ACR_4) and the Top-20 (ACR_{20}) and Inequality among Enterprises in Canadian Manufacturing Industries, by Value of Shipments, 1965 and 1974

SIC	Industry	ACR_4			ACR_{20}			Inequality		
		1965	1974	Δ	1965	1974	Δ	1965	1974	$\Delta\%$
1011	Slaughtering and Meat Processors	38.2	49.8	11.6	22.7	27.7	5.0	0.9793	0.9743	-0.5
1012	Poultry Processors	73.1	66.1	-7.0	34.5	20.4	-14.1	0.7688	0.7441	-3.2
102	Fish Products Industry	64.4	55.5	-8.9	33.5	25.7	-7.8	0.9354	0.9491	1.5
106	Feed Industry	71.2	72.6	1.4	47.8	47.8	-	0.9517	0.9352	-1.7
1071	Biscuit Manufacturers	32.8	29.0	-3.8	3.1	0.7	-2.4	0.8206	0.8022	-2.2
1072	Bakeries	67.8	63.0	-4.8	44.5	38.7	-5.8	0.9870	0.9860	-0.1
1081	Confectionery Manufacturers	53.4	47.8	-5.6	15.5	7.6	-7.9	0.9345	0.8878	-5.0
1082	Cane and Beet Sugar Processors	11.5 ^a	8.0	-3.5	...	...	-	0.4811	0.4253	-11.6
1083	Vegetable Oil Mills	17.0 ^a	24.5 ^a	7.5	...	...	-	0.5935	0.4447 ^a	-25.1
1089	Miscellaneous Food Processors, n.e.s.	67.2 ^a	60.5	-6.7	32.6	25.2	-7.4	0.9216	0.9231	0.2
1091	Soft Drink Manufacturers	59.2	49.6	-9.6	40.6	28.6	-12.0	0.9585	0.9604	0.2
1092	Distilleries	15.8	17.4	1.6	...	...	-	0.7096	0.7212	1.6
1093	Breweries	5.5	3.5 ^a	-2.0	...	...	-	0.7301	0.5179 ^a	-29.1
1094	Wineries	28.9	25.9	-3.0	...	-	-	0.5572	0.6656	19.4
151	Leaf Tobacco Processors	7.7	10.7 ^a	3.0	...	...	-	0.7018	0.5420 ^a	-22.8

Table 2. (cont.)

153	Tobacco Products Manufacturers	8.7	2.3	-6.4	...	...	-	0.7222	0.6418	-11.1
165	Plastics Fabricating Industry, n.e.s.	77.4	88.7	11.3	51.1	64.2	13.1	0.8256	0.8351	1.1
172	Leather Tanneries	30.3	18.2	-12.1	3.1	-	-3.1	0.8137	0.7156	-12.1
174	Shoe Factories	79.8	75.7	-4.1	53.2	38.3	-14.9	0.7524	0.7508	-0.2
175	Leather Glove Factories	60.2	56.0 ^a	-4.2	12.8	8.9	-3.9	0.6993	0.6449	-7.8
1792	Boot and Shoe Findings Manufacturers	51.5	51.9	-0.4	4.6	3.4	-1.2	0.6558	0.6292	-4.1
1799	Miscellaneous Leather Products Manufacturers	79.4	72.2	-7.2	44.8	38.5	-6.3	0.7608	0.7997	5.1
181	Cotton Yarn and Cloth Mills	15.4 ^a	2.5 ^a	-12.9	...	...	-	0.8651	0.8136 ^a	-5.9
184	Cordage and Twine Industry	25.7 ^a	23.1	-2.6	...	-	-	0.7373	0.6977	-5.4
1851	Fibre Processing Mills	49.0 ^a	40.3	-8.7	2.3	...	-	0.6650	0.5559	-16.4
1852	Pressed and Punched Felt Mills	18.7 ^a	28.4	9.7	...	...	-	0.3465	0.5859	69.1
186	Carpet, Mat and Rug Industry	43.0	60.7	17.7	0.4	1.1	0.7	0.5911	0.4927	-16.6
1871	Cotton and Jute Bags Manufacturers	46.6	70.0 ^a	23.4	2.1	...	-2.1	0.7080	0.7601	7.4
1872	Canvas Products Manufacturers	67.0	63.8 ^a	-3.2	30.3	32.8	2.5	0.8381	0.8521	1.7
188	Automobile Fabric Accessories Industry	30.1 ^a	16.7 ^a	-13.4	0.8 ^a	-0.8	-	0.8416	0.7766	-7.7
1891	Thread Mills	25.8	19.0 ^a	-6.8	...	...	-	0.6388	0.6931	8.5
1892	Narrow Fabric Mills	32.7	51.2	18.5	6.4	8.9	2.5	0.8351	0.6808	-18.5
1893	Embroidery, Pleating and Hemstitching Manufacturers	74.8 ^a	70.0	-4.8	41.4	30.1	-11.3	0.7018	0.7394	5.3

Table 2. (cont.)

1894	Textile Dyeing and Finishing Plants	65.2	45.0 ^a	-20.2	17.2	13.1	-4.1	0.7022	0.8648	23.1
1899	Miscellaneous Textile Industries, n.e.s.	66.3	66.8	0.5	37.6	33.2	-4.4	0.8953	0.9123	1.9
231	Hosiery Mills	81.9	75.2	-6.7	48.4	28.1	-20.3	0.6035	0.5871	-2.7
2431	Men's Clothing Factories	88.9	87.3	-1.6	68.0	64.1	-3.9	0.7464	0.7894	5.8
2432	Men's Clothing Contractors	83.4	85.9	2.5	52.9	52.7	-0.2	0.5912	0.5861	-0.9
2441	Women's Clothing Factories	93.6	92.5	-1.1	81.3	79.0	-2.3	0.6085	0.6349	4.3
2442	Women's Clothing Contractors	92.1	89.3	-2.8	71.6	73.7	2.1	0.4520	0.5642	24.8
245	Children's Clothing Industry	86.4	83.5	-2.9	57.3	52.1	-5.2	0.6076	0.5736	-5.6
246	Fur Goods Industry	81.6	70.3 ^a	-11.3	61.2	47.9	-13.3	0.8421	0.9065	7.6
248	Foundation Garment Industry	58.0	41.4	-16.6	6.7	0.1	-6.6	0.6383	0.6573	3.0
2491	Fabric Glove Manufacturers	53.7	29.3	-24.4	...	...	-	0.3786	0.3899	3.0
2492	Hat and Cap Industry	76.6	62.3	-14.3	40.9	21.5	-19.4	0.6892	0.7281	5.6
2511	Shingle Mills	55.7	61.5 ^a	5.8	8.3 ^a	18.3	10.0	0.7862	0.7563	-3.8
2513	Sawmills and Planing Mills	83.2	81.2	-2.0	63.1	55.0	-8.1	0.9664	0.9577	-0.9
252	Veneer and Plywood Mills	56.2	53.5	-2.7	17.4	16.6	-0.8	0.7996	0.7739	-3.2
2542	Hardwood Flooring Plants	43.3 ^a	38.0 ^a	-5.3	-	...	-	0.6180	0.4972	-19.5
256	Wooden Box Factories	55.3	63.0	7.7	21.8	34.5	12.7	0.9299	0.9196	-1.1
258	Coffin and Casket Industry	49.4	56.8	7.4	13.9	10.3	-3.6	0.8120	0.6064	-25.3

Table 2. (cont.)

2591	Wood Preservation Industry	10.7	14.2	3.5	-	0.6	0.6	0.8425	0.8637	2.5
2592	Wood Handles and Turning Industry	69.2	48.4	-20.8	23.2	7.2	-16.0	0.6376	0.6934	8.7
264	Office Furniture Manufacturers	50.4	66.3	15.9	5.6	17.6	12.0	0.7205	0.7084	-1.7
266	Miscellaneous Furniture and Fixtures Manufacturers	81.9	81.3	-0.6	59.9	57.9	-2.0	0.8530	0.8533	--
268	Electric Lamp and Shade Manufacturers	71.0 ^a	69.4 ^a	-1.6	20.2	18.9	-1.3	0.6540	0.6683	2.2
271	Pulp and Paper Mills	63.1	66.0	2.9	13.7	23.6	9.9	0.6729	0.6680	-0.7
2731	Folding Carton and Set-up Box Manu- facturers	54.0	53.5	-0.5	21.7	19.0	-2.7	0.8657	0.8347	-3.6
2732	Corrugated Box Manufacturers	41.8	48.1	6.3	0.6	3.5	2.9	0.6578	0.7653	16.3
2733	Paper and Plastic Bag Manufacturers	52.4	64.0	11.6	10.0	22.5	12.5	0.7648	0.7234	-5.4
274	Miscellaneous Paper Converters	70.6	65.8	-4.8	34.9	32.8	-2.1	0.8390	0.8685	3.5
286	Commercial Printing	86.5	79.1	-7.4	65.5	58.7	-6.8	0.9444	0.9695	2.7
287	Platemaking, Typesetting and Trade Bindery Industry	74.5	84.3	9.8	51.8	58.3	6.5	0.8746	0.8299	-5.1
288	Publishing Only	68.5	61.9	-6.6	44.7	30.3	-14.4	0.9356	0.9662	3.3
289	Publishing and Printing	71.3	51.3	-20.0	32.8	17.9	-14.9	0.9569	0.9757	2.0
291	Iron and Steel Mills	21.2	23.2	2.0	1.4	1.2	-0.2	0.8423	0.8435	--
292	Steel Pipe and Tube Mills	21.8	18.6	-3.2	...	-	-	0.6917	0.7591	9.7
294	Iron Foundries	55.3	50.0	-5.3	20.5	14.5	-6.0	0.9056	0.8935	-1.3

Table 2. (cont.)

295	Smelting and Refining	19.4	25.0	5.6	...	...	-	0.7446	0.6629	-11.0
296	Aluminum Rolling, Casting and Extruding	11.9	8.7	-3.2	1.2	1.6	0.4	0.9378	0.9503 ^a	1.3
297	Copper and Copper Alloy Rolling, Casting and Extruding	13.9 ^a	15.6	1.7	1.8	0.8	-1.0	0.9430	0.8996	-4.6
298	Metal Rolling, Casting and Extruding, n.e.s.	40.9	55.8	14.9	9.3	12.8	3.5	0.8903	0.7883	-11.4
301	Boiler and Plate Works	50.9	44.0 ^a	-6.9	13.6 ^a	17.3	3.7	0.8136	0.8733	7.3
302	Fabricated Structural Metal Industry	53.1	56.0	2.9	15.0	27.0	12.0	0.8699	0.9054	4.1
305	Wire and Wire Products Manufacturers	51.7	52.1	0.4	22.6	25.2	2.6	0.9620	0.9536	-0.9
307	Heating Equipment Manufacturers	70.2	72.2	2.0	31.5	29.7	-1.8	0.7426	0.6362	-14.3
308	Machine Shops	91.7	91.7	-	77.5	74.9	-2.6	0.7903	0.7976	0.9
309	Miscellaneous Metal Fabricating Industries	80.0	86.6	6.6	54.0	60.5	6.5	0.8639	0.8193	-5.2
311	Agricultural Implement Industry	38.4	37.7 ^a	-0.7	5.8	14.3	8.9	0.9287	0.9469	2.0
315	Miscellaneous Machinery and Equipment Manufacturers	85.0	87.3	2.3	58.5	66.4	7.9	0.8453	0.8625	2.0
316	Commercial Refrigeration and Air Conditioning Equipment Manufacturers	48.5	46.2	-2.3	6.0	4.4	-1.6	0.6796	0.7625	12.2
321	Aircraft and Aircraft Parts Manufacturers	23.2	24.5 ^a	0.8	4.7	7.0	2.3	0.9324	0.8948	-4.0
323	Motor Vehicle Manufacturers	6.7	9.9	3.2	-	...	-	0.8435	0.7825	-7.2
325	Motor Vehicle Parts and Accessories Manufacturers	45.8	53.8	8.0	19.3	23.2	3.9	0.9511	0.9265	-2.6

Table 2. (cont.)

326	Railroad Rolling Stock Industry	13.6	17.8 ^a	4.2	...	...	-	0.5560	0.5691	2.3
327	Shipbuilding and Repair	34.5	32.1	-2.4	7.2	6.2	-1.0	0.8834	0.8620	-2.4
328	Boatbuilding and Repair	78.5	75.2	-3.3	44.2	44.9	0.7	0.8171	0.8450	3.4
329	Miscellaneous Vehicle Manufacturers	15.0	13.4 ^a	-1.6	...	0.6	0.6	0.8644	0.9350	8.2
331	Manufacturers of Small Electrical Appliances	49.6	55.2	5.6	12.8	8.7	-4.1	0.7958	0.7163	-10.0
332	Manufacturers of Major Appliances (Electric and Nonelectric)	53.9	41.3	-12.6	2.0	0.2	-1.8	0.5955	0.6260	5.1
334	Manufacturers of Household Radio and Television Receivers	46.6	40.9	-5.7	0.2	...	-0.2	0.6216	0.5439	-12.5
336	Manufacturers of Electrical Industrial Equipment	35.7	49.3	13.6	11.9	21.4	9.5	0.9421	0.9175	-2.6
338	Manufacturers of Electric Wire and Cable	25.1	19.8	-5.3	...	...	-	0.6188	0.7196	16.3
3391	Battery Manufacturers	16.4	22.9	6.5	...	...	-	0.6487	0.6661	2.7
3511	Clay Products Manufacturers (From Domestic Clays)	58.6	57.6	-1.0	17.7	9.6	-8.1	0.8095	0.7184	-11.2
3512	Clay Products Manufacturers (From Imported Clays)	35.7	31.1	-4.6	2.8	0.5	-2.3	0.8113	0.7806	-3.8
352	Cement Manufacturers	23.3	16.9	-6.4	...	...	-	0.6008	0.4390	-26.9
353	Stone Products Manufacturers	78.1	76.3	-1.8	43.1 ^a	39.6	-3.5	0.6787	0.5725	-15.6
355	Ready-mix Concrete Manufacturers	69.4	51.6	-17.8	29.4	33.6	4.2	0.8846	0.9481	7.2
3561	Glass Manufacturers	2.0 ^a	4.8	2.8	...	...	-	0.6723	0.6274	-6.7

Table 2. (cont.)

357	Abrasives Manufacturers	17.7	11.2	-6.5	...	...	-	0.7480	0.7240	-3.2
358	Lime Manufacturers	21.4	29.9	8.5	...	...	-	0.7385	0.5008	-32.2
3591	Refractories Manufacturers	19.0	27.5	8.5	...	...	-	0.8192	0.7008	-14.0
3651	Petroleum Refining	15.2	32.2	17.0	...	...	-	0.6151	0.5807	-5.6
3652	Manufacturers of Lubricating Oils and Greases	7.7	14.3	6.6	...	...	-	0.7832	0.6743	-13.9
369	Miscellaneous Petroleum and Coal Products Industries	55.4	59.7	4.3	5.2	4.4	-0.8	0.5390	0.4884	-9.4
372	Manufacturers of Mixed Fertilizers	37.8	23.7	-14.1	3.9	0.1	-3.8	0.7988	0.7436	-6.9
373	Manufacturers of Plastics and Synthetic Resins	38.3	43.7	5.4	0.9	3.5	2.6	0.6964	0.7177	3.1
374	Manufacturers of Pharmaceuticals and Medicines	73.9	74.4	0.5	29.3	32.1	2.8	0.8147	0.7653	-6.1
375	Paint and Varnish Manufacturers	54.0	64.0	10.0	21.4	20.3	-1.1	0.8952	0.8297	-7.3
376	Manufacturers of Soap and Cleaning Compounds	21.0	31.1	10.1	5.1	4.5	-0.6	0.9588	0.9273	-3.3
377	Manufacturers of Toilet Preparations	53.2	50.2	-3.0	9.7	12.3	2.6	0.7961	0.7823	-1.7
3791	Manufacturers of Printing Inks	37.2	36.2	-1.0	1.6	1.0	-0.6	0.6947	0.7314	5.3
3912	Clock and Watch Manufacturers	31.2	21.0 ^a	-10.2	-	...	-	0.6999	0.7261	3.7
3913	Orthopaedic and Surgical Appliance Manufacturers	40.5	29.5	-11.0	6.3	4.3	-2.0	0.7873	0.8328	5.8
3914	Ophthalmic Goods Manufacturers	24.4	32.2	7.8	3.2	9.7	6.5	0.8887	0.9143	2.9

Table 2. (cont.)

3915	Dental Laboratories	84.3	83.3	-1.0	66.8	65.6	-1.2	0.8578	0.8447	-1.5
392	Jewellery and Silverware Industry	64.0	56.2	-7.8	39.3	32.2	-7.1	0.9146	0.9465	3.5
3931	Sporting Goods Manufacturers	53.3	48.2	-5.1	20.1	18.7	-1.4	0.9064	0.9298	2.6
3932	Toys and Games Manufacturers	72.9	53.1	-19.8	23.8	10.8	-13.0	0.6866	0.7541	9.8
397	Signs and Displays Industry	78.4	80.0	1.6	51.0	56.0	5.0	0.8873	0.8645	-2.6
3991	Broom, Brush and Mop Manufacturers	61.6	59.4 ^a	-2.2	13.2	12.0	-1.2	0.8629	0.7183	-16.7
3992	Button, Buckle and Fastener Manufacturers	31.1	37.3	6.2	3.0 ^a	2.4	-0.6	0.8125	0.7197	-11.4
3994	Sound Recording and Musical Instrument Manufacturers	32.9	45.6	12.7	0.2 ^a	2.0	1.8	0.7392	0.7253	-1.9
3995	Stamp and Stencil (Rubber and Metal) Manufacturers	69.9	67.6	-2.3	25.5	22.8	-2.7	0.6286	0.7147	13.7
3996	Pen and Pencil Manufacturers	45.3 ^a	36.3	-9.0	...	-	-	0.5171	0.5829	12.7
3997	Typewriter Supplies Manufacturers	26.2 ^a	23.4	-2.8	...	...	-	0.5479	0.4883	-10.9
3998	Fur Dressing and Dyeing	34.4	37.5	3.1	...	...	-	0.5662	0.5961	5.3

a. Estimates

Sources: Statistics Canada, Industrial Organization and Concentration in the Manufacturing, Mining and Logging Industries, 1968, Cat. 31-514 Occasional, Ottawa, 1973, Table 6; concentration figures for 1974 were communicated direct from the Manufacturing and Primary Industries Division of Statistics Canada, Ottawa.

Table 3. Divergence Between Enterprise and Establishment Concentration in Canadian Manufacturing Industries, 1965 and 1974

SIC	Industry	Divergence			Classification of Divergence	
		1965	1974	Change (Perc. Pts.)	1974 Level	1965/74 Trend
1011	Slaughtering and Meat Processors	32.1 ^a	37.9 ^a	5.8	Wide	Widening
1012	Poultry Processors	15.0	24.2	9.2	Wide	Widening
102	Fish Products Industry	40.9	33.5	-7.4	Wide	Narrowing
106	Feed Industry	45.4	50.9	5.5	Extreme	Widening
1071	Biscuit Manufacturers	13.5	15.9 ^a	2.4	Moderate	Widening
1072	Bakeries	47.1	39.4	-7.7	Wide	Narrowing
1081	Confectionery Manufacturers	12.7	11.7 ^a	-1.0	Moderate	Narrowing
1082	Cane and Beet Sugar Processors	16.6 ^a	17.1 ^a	0.5	Moderate	Widening
1083	Vegetable Oil Mills	2.7 ^a	0.6	-2.1	Narrow	Narrowing
1089	Miscellaneous Food Processors, n.e.s.	22.1 ^a	27.2 ^a	5.1	Wide	Widening
1091	Soft Drink Manufacturers	39.1	35.8 ^a	-3.3	Wide	Narrowing
1092	Distilleries	11.4	18.8 ^a	7.4	Moderate	Widening
1093	Breweries	41.6	46.5 ^a	4.9	Extreme	Widening
1094	Wineries	9.9	23.5	13.6	Wide	Widening
151	Leaf Tobacco Processors	9.5	1.1	-8.4	Moderate	Narrowing

Table 3. (cont.)

153	Tobacco Products Manufacturers	16.5	11.3	-5.2	Moderate	Narrowing
165	Plastics Fabricating Industry, n.e.s.	15.3	22.9	7.6	Wide	Widening
172	Leather Tanneries	13.4	21.3 ^a	7.9	Wide	Widening
174	Shoe Factories	27.5	17.8	-9.7	Moderate	Narrowing
175	Leather Glove Factories	9.7 ^a	6.6 ^a	-3.1	Narrow	Narrowing
1792	Boot and Shoe Findings Manufacturers	7.9	8.2 ^a	0.3	Narrow	Widening
1799	Miscellaneous Leather Products Manufacturers	-	-	-	-	-
181	Cotton Yarn and Cloth Mills	36.4 ^a	47.6 ^a	11.2	Extreme	Widening
184	Cordage and Twine Industry	-	-	-	-	-
1851	Fibre Processing Mills	-	-	-	-	-
1852	Pressed and Punched Felt Mills	-	-	-	-	-
186	Carpet, Mat and Rug Industry	1.1	6.7 ^a	5.6	Narrow	Widening
1871	Cotton and Jute Bags Manufacturers	11.9	12.5 ^a	0.6	Moderate	Widening
1872	Canvas Products Manufacturers	1.6	3.2 ^a	1.6	Narrow	Widening
188	Automobile Fabric Accessories Industry	-	-	-	-	-
1891	Thread Mills	-	3.4 ^a	3.4	Narrow	Widening
1892	Narrow Fabric Mills	6.8	5.6 ^a	-1.2	Narrow	Narrowing
1893	Embroidery, Pleating and Hemstitching Manufacturers	3.4 ^a	9.1 ^a	5.7	Narrow	Widening

Table 3. (cont.)

1894	Textile Dyeing and Finishing Plants	1.2	4.5 ^a	3.3	Narrow	Widening
1899	Miscellaneous Textile Industries, n.e.s.	0.9	2.1 ^a	1.2	Narrow	Widening
231	Hosiery Mills	1.8	5.8 ^a	4.0	Narrow	Widening
2431	Men's Clothing Factories	6.8	22.5	15.7	Wide	Widening
2432	Men's Clothing Contractors	0.3	5.6	5.3	Narrow	Widening
2441	Women's Clothing Factories	9.0	15.4	6.4	Moderate	Widening
2442	Women's Clothing Contractors	3.3	17.4	14.1	Moderate	Widening
245	Children's Clothing Industry	3.0	6.8 ^a	3.8	Narrow	Widening
246	Fur Goods Industry	-	-	-	-	-
248	Foundation Garment Industry	1.7	9.3 ^a	7.6	Narrow	Widening
2491	Fabric Glove Manufacturers	-	-	-	-	-
2492	Hat and Cap Industry	-	-	-	-	-
2499	Miscellaneous Clothing Industries, n.e.s.	-	3.7 ^a	3.7	Narrow	Widening
2511	Shingle Mills	-	6.0 ^a	6.0	Narrow	Widening
2513	Sawmills and Planing Mills	29.1	41.1	12.0	Extreme	Widening
252	Veneer and Plywood Mills	17.3	29.2	11.9	Wide	Widening
2542	Hardwood Flooring Plants	-	-	-	-	-
256	Wooden Box Factories	5.7	7.5 ^a	1.8	Narrow	Widening
258	Coffin and Casket Industry	18.3	14.2	-4.1	Moderate	Narrowing

Table 3. (cont.)

2591	Wood Preservation Industry	27.1	16.4 ^a	-10.7	Moderate	Narrowing
2592	Wood Handles and Turning Industry	-	3.2 ^a	3.2	Narrow	Widening
264	Office Furniture Manufacturers	8.5	10.4	1.9	Moderate	Widening
266	Miscellaneous Furniture and Fixtures Manufacturers	13.3	21.5	8.2	Wide	Widening
268	Electric Lamp and Shade Manufacturers	-	1.3 ^a	1.3	Narrow	Widening
271	Pulp and Paper Mills	49.8	54.4	4.6	Extreme	Widening
2731	Folding Carton and Set-up Box Manu- facturers	24.1	18.6	-5.5	Moderate	Narrowing
2732	Corrugated Box Manufacturers	30.1	42.2	12.1	Extreme	Widening
2733	Paper and Plastic Bag Manufacturers	24.6	25.0	0.4	Wide	Widening
274	Miscellaneous Paper Converters	19.8	27.7	7.9	Wide	Widening
286	Commercial Printing	22.9	41.2	18.3	Extreme	Widening
287	Platemaking, Typesetting and Trade Bindery Industry	15.6	10.1 ^a	-5.5	Moderate	Narrowing
288	Publishing Only	-	10.9	10.9	Moderate	Widening
289	Publishing and Printing	9.2 ^a	29.7	20.5	Wide	Widening
291	Iron and Steel Mills	5.2	7.7	2.5	Narrow	Widening
292	Steel Pipe and Tube Mills	14.7	15.9 ^a	1.2	Moderate	Widening
294	Iron Foundries	11.8	18.3	6.5	Moderate	Widening

Table 3. (cont.)

295	Smelting and Refining	18.2 ^a	25.9 ^a	7.7	Wide	Widening
296	Aluminum Rolling, Casting and Extruding	7.6	15.2 ^a	7.6	Moderate	Widening
297	Copper and Copper Alloy Rolling, Casting and Extruding	2.4 ^a	3.7 ^a	1.3	Narrow	Widening
298	Metal Rolling, Casting and Extruding, n.e.s.	16.9	18.1 ^a	1.2	Moderate	Widening
301	Boiler and Plate Works	-	1.6 ^a	1.6	Narrow	Widening
302	Fabricated Structural Metal Industry	27.1	31.7	4.6	Wide	Widening
305	Wire and Wire Products Manufacturers	19.3	31.1 ^a	11.8	Wide	Widening
307	Heating Equipment Manufacturers	0.9	7.8 ^a	6.9	Narrow	Widening
308	Machine Shops	4.4	1.3	-3.1	Narrow	Narrowing
309	Miscellaneous Metal Fabricating Industries	12.4 ^a	17.0	4.6	Moderate	Widening
311	Agricultural Implement Industry	9.0	5.2	-3.8	Narrow	Narrowing
315	Miscellaneous Machinery and Equipment Manufacturers	8.8 ^a	11.5	2.7	Moderate	Widening
316	Commercial Refrigeration and Air Conditioning Equipment Manufacturers	2.8	2.4 ^a	-0.4	Narrow	Narrowing
321	Aircraft and Aircraft Parts Manufacturers	4.9	13.0 ^a	8.1	Moderate	Widening
323	Motor Vehicle Manufacturers	-	1.8 ^a	1.8	Narrow	Widening
325	Motor Vehicle Parts and Accessories Manufacturers	8.9	15.6 ^a	6.7	Moderate	Widening

Table 3. (cont.)

326	Railroad Rolling Stock Industry	4.9	3.3 ^a	-1.6	Narrow	Narrowing
327	Shipbuilding and Repair	7.8	6.2	-1.6	Narrow	Narrowing
328	Boatbuilding and Repair	-	4.7 ^a	4.7	Narrow	Widening
329	Miscellaneous Vehicle Manufacturers	-	1.9 ^a	1.9	Narrow	Widening
331	Manufacturers of Small Electrical Appliances	4.2	3.6 ^a	-0.6	Narrow	Narrowing
332	Manufacturers of Major Appliances (Electric and Nonelectric)	7.5	9.2 ^a	1.7	Narrow	Widening
334	Manufacturers of Household Radio and Television Receivers	-	1.6 ^a	1.6	Narrow	Widening
336	Manufacturers of Electrical Industrial Equipment	15.5	32.2	16.7	Wide	Widening
338	Manufacturers of Electric Wire and Cable	14.6	37.6	23.0	Wide	Widening
3391	Battery Manufacturers	13.2	33.2	20.0	Wide	Widening
3511	Clay Products Manufacturers (From Domestic Clays)	11.8	15.7 ^a	3.9	Moderate	Widening
3512	Clay Products Manufacturers (From Imported Clays)	3.6	4.7 ^a	1.1	Narrow	Widening
352	Cement Manufacturers	28.5	54.5	26.0	Extreme	Widening
353	Stone Products Manufacturers	-	-	-	-	-
355	Ready-mix Concrete Manufacturers	21.2	54.3	33.1	Extreme	Widening
3561	Glass Manufacturers	29.2 ^a	28.1 ^a	-1.1	Wide	Narrowing

Table 3. (cont.)

357	Abrasives Manufacturers	11.8	20.9 ^a	9.1	Wide	Widening
358	Lime Manufacturers	16.9 ^a	6.3 ^a	-10.6	Narrow	Narrowing
3591	Refractories Manufacturers	4.8 ^a	7.5 ^a	2.7	Narrow	Widening
3651	Petroleum Refining	46.3	46.5	0.2	Extreme	Widening
3652	Manufacturers of Lubricating Oils and Greases	5.5 ^a	8.2 ^a	2.7	Narrow	Widening
369	Miscellaneous Petroleum and Coal Products Industries	4.6	17.2	12.6	Moderate	Widening
372	Manufacturers of Mixed Fertilizers	27.8	45.5	17.7	Extreme	Widening
373	Manufacturers of Plastics and Synthetic Resins	5.4	12.7	7.3	Moderate	Widening
374	Manufacturers of Pharmaceuticals and Medicines	8.8	14.8	6.0	Moderate	Widening
375	Paint and Varnish Manufacturers	24.1	26.7	2.6	Wide	Widening
376	Manufacturers of Soap and Cleaning Compounds	5.4	5.5 ^a	0.1	Narrow	Widening
377	Manufacturers of Toilet Preparations	8.1	4.2 ^a	-3.9	Narrow	Narrowing
3791	Manufacturers of Printing Inks	13.4	17.9	4.5	Moderate	Widening
3912	Clock and Watch Manufacturers	-	-	-	-	-
3913	Orthopaedic and Surgical Appliance Manufacturers	0.04	-	-0.04	-	Narrowing
3914	Ophthalmic Goods Manufacturers	35.6	49.1	13.5	Extreme	Widening

Table 3. (cont.)

3915	Dental Laboratories	3.3	18.1	14.8	Moderate	Widening
392	Jewellery and Silverware Industry	-	4.1 ^a	4.1	Narrow	Widening
3931	Sporting Goods Manufacturers	-	5.7	5.7	Narrow	Widening
3932	Toys and Games Manufacturers	-	8.7 ^a	8.7	Narrow	Widening
397	Signs and Displays Industry	13.2	19.3	6.1	Moderate	Widening
3991	Broom, Brush and Mop Manufacturers	6.6 ^a	1.9 ^a	-4.7	Narrow	Narrowing
3992	Button, Buckle and Fastener Manufacturers	0.6 ^a	6.2 ^a	5.6	Narrow	Widening
3994	Sound Recording and Musical Instrument Manufacturers	0.1 ^a	0.2	0.1	Narrow	Widening
3995	Stamp and Stencil (Rubber and Metal) Manufacturers	3.9 ^a	1.0	-2.9	Narrow	Narrowing
3996	Pen and Pencil Manufacturers	-	4.7 ^a	4.7	Narrow	Widening
3997	Typewriter Supplies Manufacturers	-	2.5 ^a	2.5	Narrow	Widening
3998	Fur Dressing and Dyeing	-	-	-	-	-

a. Estimates

Sources: Canada, Department of Consumer and Corporate Affairs, Concentration in the Manufacturing Industries of Canada, Ottawa, 1971, Tables A-1 and A-3; Statistics Canada, Industrial Organization and Concentration in the Manufacturing, Mining and Logging Industries 1968, Cat. 31-514 Occasional, Ottawa, 1973, Tables 1-4; do., 1970, Cat. 31-402 Biennial, Ottawa, 1975, Tables 1 and 3; do., 1972, Cat. 31-402 Biennial, Ottawa, 1977, Table 2 and Appendix I; Dominion Bureau of Statistics, Annual Census of Manufacturers 1966, Sub-Groups 32-47, Cat. 32-221--47-207, Ottawa, 1968/69; Statistics Canada, Type of Organization and Size of Establishments 1972, Cat. 31-210 Annual, Ottawa, 1975, Table 9; concentration ratios for 1974 were communicated direct by the Manufacturing and Primary Industries Division of Statistics Canada, Ottawa.

Table 4. Labour Productivity in Small and Large Establishments
in Canadian Manufacturing Industries, by Total Employed,
1965, 1969, and 1974

SIC	Division, Industry Group, and Industry	Size Group (Total Employed)	Year	Man. Value Added		Total Value Added		Value of Man. Shipments	
				Production & Related Workers		Total Employed		Production & Related Workers	
				\$ '000	Average=100	\$ '000	Average=100	\$ '000	Average=100
1-3	Manufacturing	<100	1965	10.8	81	8.1	81	25.3	83
			1969	13.8	82	10.6	83	31.6	82
			1974	...	...	...	..	51.9	82
		>500	1965	16.1	120	12.6	126	35.4	116
			1969	20.7	122	16.2	127	47.3	122
			1974	...	...	...	...	74.5	117
10	Food and Beverage Industries	<100	1965	14.0	86	8.6	84	47.7	100
			1969	16.7	83	11.0	83	58.3	100
			1974	...	..	...	...	108.6	106
		>500	1965	19.5	120	11.2	110	52.2	110
			1969	26.5	132	18.4	139	66.3	113
			1974	...	...	...	...	105.1	103
1011	Slaughtering and Meat Processors	<100	1965	13.7	111	9.8	105	77.3	117
			1969	16.4	103	12.2	101	95.0	105
			1974	...	...	...	...	163.3	110
		>500	1965	12.1	98	9.1	98	66.0	100
			1969	16.1	101	11.9	98	85.7	94
			1974	...	...	...	...	136.4	92

Table 4. (c .)

1012	Poultry Processors	<100	1965	6.5	106	5.9	105	34.4	93
			1969	8.0	87	7.3	89	40.5	88
			1974	...	...	...	...	65.9	100
102	Fish Products Industry.	<100	1965	6.2	98	5.6	102	21.0	112
			1969	7.4	104	7.0	99	24.2	117
			1974	...	...	...	...	36.9	104
103	Fruit and Vegetable Processing Industries	<100	1965	9.3	79	8.0	86	25.6	88
			1969	10.7	72	9.3	78	32.3	88
			1974	...	...	...	...	56.1	96
	>500	1965	15.6	132	10.5	113	35.2	120	
		1969	20.5	138	15.6	131	44.4	122	
		1974	...	...	...	...	x	x ^c	
104	Dairy Products Industry	<100	1965	16.4	89	8.2	98	72.4	99
			1969	18.9	79	10.6	88	92.2	98
			1974	...	...	...	...	166.1	103
105	Flour and Breakfast Cereal Products Industry	<100	1965	17.2	78	12.1	86	92.3	110
			1969	20.2	79	15.9	89	112.2	136
			1974	...	...	...	...	187.9	130
106	Feed Industry	<100	1965	16.1	96	11.0	99	82.0	98
			1969	20.5	93	14.2	97	101.5	100
			1974	...	...	...	...	224.8	102
1071	Biscuit Manufacturers	<100	1965	8.5	75	6.6	79	17.8	84
			1969	12.0	90	10.2	98	22.7	90
			1974	...	...	...	...	36.7	87

Table 4. (cont.)

1072	Bakeries	<100	1965	11.9	94	5.9	88	23.6	94
			1969	13.9	96	7.2	89	26.1	95
			1974	...	...	...	...	35.1	80
	>500	1965	13.6	107	8.3	124	26.3	105	
		1969	15.3	106	10.2	126	30.3	110	
		1974	...	...	...	...	58.3	132	
1081	Confectionery Manufacturers	<100	1965	8.9	82	7.2	85	20.6	92
			1969	10.7	75	8.9	82	24.8	87
			1974	...	...	...	...	54.2	100
	>500	1965	11.0	101	8.6	101	22.3	100	
		1969	14.6	102	11.2	103	28.1	99	
		1974	...	...	...	...	60.1	111	
1082	Cane and Beet Sugar Processors	<100	1965	x	x	x	x	x	x
			1969	21.6	74	19.2	87	76.9	99
			1974	...	...	...	...	286.7	94
1083	Vegetable Oil Mills	<100	1965	19.1	79	14.4	82	159.5	73
			1969	21.2	70	16.4	74	178.7	83
			1974	...	...	...	...	758.0	143
1089	Miscellaneous Food Processors, n.e.s.	<100	1965	19.5	73	13.4	78	64.4	93
			1969	22.5	77	16.4	83	63.2	92
			1974	...	...	...	...	115.9	95
1091	Soft Drink Manufacturers	<100	1965	23.7	86	9.9	93	39.3	90
			1969	28.9	88	12.5	95	51.5	88
			1974	...	...	...	...	99.2	96
1092	Distilleries	<100	1965	35.3	65	26.6	79	58.5	74
			1969	35.9	47	25.5	61	70.0	67
			1974	...	...	...	...	172.1	121

Table 4. (cont.)

1093	Breweries	<100	1965	28.8	68	19.1	83	42.2	71
			1969	36.8	69	26.6	90	54.7	74
			1974	...	...	...	...	60.4	66
		>500	1965	43.4	103	20.3	89	58.5	99
			1969	59.8	112	28.6	97	78.8	107
			1974	...	...	...	...	111.2	122
1094	Wineries	<100	1965	28.2	96	18.3	105	52.9	97
			1969	38.2	99	24.0	110	70.3	97
			1974	...	...	...	...	98.4	91
		>500	1965	12.2	61	10.3	66	32.6	68
			1969	17.4	64	12.6	62	40.4	61
			1974	...	...	...	...	47.7	47
15	Tobacco Products Industries	>500	1965	19.6	98	17.0	109	40.0	83
			1969	28.7	105	24.5	121	57.0	86
			1974	...	...	...	...	87.3	86
		<100	1965	10.4	92	8.9	89	33.7	47
			1969	18.3	90	14.5	84	51.1	48
			1974	...	...	...	...	48.1	28
151	Leaf Tobacco Processors	<100	1965	18.1	82	14.6	87	28.6	66
			1969	16.9	58	11.5	55	34.1	60
			1974	...	...	...	...	47.4	54
		>500	1965	19.5	89	17.0	102	40.0	93
			1969	28.7	99	20.0	96	57.0	99
			1974	...	...	...	...	87.3	100
153	Tobacco Products Manufacturers	<100	1965	10.0	79	7.9	83	20.8	85
			1969	13.8	75	11.4	89	27.1	77
			1974	...	...	...	...	48.1	104
		>500	1965	10.0	79	7.9	83	20.8	85
			1969	13.8	75	11.4	89	27.1	77
			1974	...	...	...	...	48.1	104
16	Rubber and Plastics Products Industries ^e	<100	1965	10.0	79	7.9	83	20.8	85
		1969	13.8	75	11.4	89	27.1	77	
		1974	...	...	...	...	48.1	104	

Table 4. (c .)

16	Rubber and Plastics Products Industries ^e	>500	1965	13.9	109	11.4	120	26.2	107
			1969	19.5	105	15.7	123	50.9	144
			1974	...	...	...	...	48.9	106
162	Rubber Products Industries	<100	1965	11.8	87	9.2	93	23.9	92
			1969	15.5	79	12.1	80	32.2	86
			1974	...	...	...	...	52.8	109
	>500	1965	13.9	102	11.4	115	26.2	100	
		1969	19.3	98	16.0	105	38.2	102	
		1974	...	...	...	...	50.7	105	
165	Plastics Fabricating Industry, n.e.s.	<100	1965	9.8	91	8.0	93	20.0	93
			1969	13.6	97	11.2	97	26.3	99
			1974	...	...	...	...	47.4	107
17	Leather Industries	<100	1965	5.8	97	5.1	98	11.8	97
			1969	7.5	96	6.5	97	14.8	95
			1974	...	...	...	...	24.4	98
172	Leather Tanneries	<100	1965	7.7	104	6.7	102	19.4	98
			1969	9.0	92	7.7	93	23.0	89
			1974	...	...	...	...	40.6	88
174	Shoe Factories	<100	1965	5.4	95	4.7	94	10.9	97
			1969	7.4	97	6.5	100	14.8	103
			1974	...	...	...	...	21.8	97
175	Leather Glove Factories	<100	1965	5.2	106	4.6	109	10.5	107
			1969	6.4	98	5.9	98	13.0	100
			1974	...	...	...	...	20.2	104
1792	Boot and Shoe Findings Manufacturers	<100	1965	7.2	103	6.2	100	13.8	100
			1969	10.5	112	8.8	114	18.0	101
			1974	...	...	...	...	31.6	101

Table 4. (c ..)

1799	Miscellaneous Leather Products Manufacturers	<100	1965	5.7	97	4.9	94	11.0	96
			1969	7.0	91	6.2	92	13.4	95
			1974	...	...	...	...	22.4	97
18	Textile Industries	<100	1965	8.1	88	6.7	91	19.5	92
			1969	10.7	86	8.8	88	24.4	85
			1974	...	...	...	...	34.8	84
	>500	1965	10.5	114	8.6	116	22.7	108	
		1969	15.5	124	12.4	124	32.8	114	
		1974	...	...	...	...	45.2	109	
181	Cotton Yarn and Cloth Mills	<100	1965	7.5	93	6.4	96	26.4	131
			1969	6.2	59	5.3	64	13.8	53
			1974	...	...	...	...	24.6	58
	>500	1965	8.5	105	7.3	109	21.3	105	
		1969	12.1	115	10.1	122	30.3	117	
		1974	...	...	...	...	42.3	99	
182	Wool Yarn and Cloth Mills	<100	1965	7.2	96	6.1	94	17.6	105
			1969	12.0	111	9.6	108	22.8	109
			1974	...	...	...	...	31.9	100
183	Man-Made Fibre, Yarn and Cloth Mills	<100	1965	9.8	91	8.1	95	24.2	103
			1969	13.3	94	11.1	100	30.3	100
			1974	...	...	...	...	47.8	113
	>500	1965	12.2	113	9.6	113	23.6	100	
		1969	17.7	125	13.9	125	32.6	107	
		1974	...	...	...	...	43.7	104	
184	Cordage and Twine Industry	<100	1965	10.4	116	7.9	107	35.5	122
			1969	10.2	116	7.6	97	28.5	128
			1974	...	...	...	...	60.6	147

Table 4. (c .)

1851	Fibre Processing Mills	<100	1965	9.6	108	8.0	105	25.6	111
			1969	13.8	109	11.6	106	30.7	107
			1974	...	...	...	...	48.2	104
1852	Pressed and Punched Felt Mills	<100	1965	9.2	91	8.0	94	22.3	83
			1969	9.7	75	7.7	72	19.9	71
			1974	...	...	...	...	45.3	100 ^a
186	Carpet, Mat and Rug Industry	<100	1965	10.8	88	9.1	90	38.5	131
			1969	17.5	107	14.2	107	47.3	116
			1974	...	...	...	...	60.8	97
1871	Cotton and Jute Bags Manufacturers	<100	1965	8.1	96	7.3	95	34.7	100
			1969	10.4	100	9.0	98	39.5	103
			1974	...	...	...	...	44.0	77
1872	Canvas Products Manufacturers	<100	1965	7.3	99	5.5	98	16.2	99
			1969	9.3	104	7.9	108	19.2	101
			1974	...	...	...	...	29.1	99
188	Automobile Fabric Accessories Industry	<100	1965	8.5	86	7.2	91	22.2	91
			1969	13.1	79	11.3	80	33.1	79
			1974	...	...	...	...	46.3	102
1891	Thread Mills	<100	1965	12.4	103	9.3	108	35.3	146
			1969	9.8	68	9.3	89	31.3	100
			1974	...	...	...	...	55.7	138
1892	Narrow Fabric Mills	<100	1965	7.2	97	6.4	97	13.5	91
			1969	8.8	92	7.1	99	16.7	88
			1974	...	...	...	...	25.4	90
1893	Embroidery, Pleating and Hemstitching Manufacturers	<100	1965	6.2	105	4.9	102	9.1	107
			1969	8.0	101	6.7	106	11.8	103
			1974	...	...	...	...	15.9	101

Table 4. (cont.)

1894	Textile Dyeing and Finishing Plants	<100	1965	7.8	86	6.8	87	13.5	93
			1969	9.4	92	8.3	94	16.6	75
			1974	...	...	...	...	21.3	79
1899	Miscellaneous Textile Industries, n.e.s	<100	1965	7.8	80	6.6	86	16.9	80
			1969	9.5	79	8.0	83	21.8	81
			1974	...	...	...	...	32.6	79
23	Knitting Mills	<100	1965	6.7	105	5.9	105	16.9	114
			1969	9.0	107	7.9	108	23.1	124
			1974	...	...	...	...	29.8	111
	>500	1965	5.0	78	4.2	75	10.5	71	
		1969	x	x	x	x	x	x	
		1974	...	...	...	...	18.4	69	
231	Hosiery Mills	<100	1965	5.5	92	5.0	93	11.8	102
			1969	7.0	93	6.4	94	15.1	101
			1974	...	...	...	...	21.1	101
239	Knitting Mills (except Hosiery Mills)	<100	1965	7.3	112	6.2	111	19.7	125
			1969	10.2	116	8.7	114	28.0	136
			1974	...	...	...	...	32.6	115
	>500	1965	5.0	77	4.2	75	10.5	66	
		1969	x	x	x	x	x	x	
		1974	...	...	...	...	18.4	65	
24	Clothing Industries	<100	1965	6.1	105	5.2	104	13.6	108
			1969	7.4	101	6.5	102	16.2	106
			1974	...	...	...	...	25.3	109
	>500	1965	6.1	105	5.2	104	11.6	92	
		1969	7.5	103	6.7	105	12.8	84	
		1974	...	...	...	...	20.4	88	

Table 4. (cont.)

2431	Men's Clothing Factories	<100	1965	6.2	111	5.2	106	16.1	129
			1969	8.0	107	6.9	100	20.2	125
			1974	...	...	...	...	32.9	134
	>500	1965	5.8	104	5.0	102	11.2	90	
		1969	7.5	100	6.8	99	13.0	81	
		1974	...	...	...	...	20.0	82	
2432	Men's Clothing Contractors	<100	1965	3.6	90	3.3	103	4.1	108
			1969	4.6	107	4.3	102	5.1	104
			1974	...	...	...	...	8.3	106
2441	Women's Clothing Factories	<100	1965	7.1	107	5.7	102	16.1	107
			1969	8.5	104	7.3	101	19.0	104
			1974	...	...	...	...	32.8	113
2442	Women's Clothing Contractors	<100	1965	3.4	103	3.1	100	3.7	103
			1969	4.3	102	4.0	103	4.6	102
			1974	...	...	...	...	7.2	101
245	Children's Clothing Industry	<100	1965	5.4	104	4.6	102	13.3	106
			1969	7.4	104	6.5	105	18.6	109
			1974	...	...	...	...	28.1	105
246	Fur Goods Industry	<100	1965	11.1	100	8.6	109	29.4	99
			1969	12.2	95	9.8	101	31.3	92
			1974	...	...	...	...	56.3	97
248	Foundation Garment Industry	<100	1965	5.8	73	4.9	79	12.3	92
			1969	5.4	71	4.9	78	12.8	94
			1974	...	...	...	...	14.8	81
2491	Fabric Glove Manufacturers	<100	1965	5.1	98	4.6	107	9.8	97
			1969	6.9	97	6.2	107	12.3	98
			1974	...	...	...	...	26.3	122

Table 4. (cont.)

2492	Hat and Cap Industry	<100	1965	5.9	100	4.9	100	10.6	103
			1969	7.2	99	6.2	100	13.1	103
			1974	...	...	...	...	19.7	99
2499	Miscellaneous Clothing Industries, n.e.s.	<100	1965	6.0	100 ^a	5.2	100 ^a	13.4	100 ^a
			1969	7.8	100 ^a	7.0	100 ^a	17.3	100 ^a
			1974	...	...	...	...	26.3	104
25	Wood Industries	<100	1965	8.1	98	7.0	99	17.6	93
			1969	10.8	91	9.1	89	23.7	88
			1974	...	...	...	...	40.3	90
	>500	1965	9.4	113	8.3	117	23.2	122	
		1969	13.2	111	11.9	117	33.0	122	
		1974	...	...	...	...	49.4	111	
2511	Shingle Mills	<100	1965	7.4	103	7.0	103	17.0	95
			1969	10.9	96	9.7	93	25.7	94
			1974	...	...	...	...	34.9	99
2513	Sawmills and Planing Mills	<100	1965	8.2	95	6.8	92	17.7	88
			1969	10.7	86	9.2	84	22.9	80
			1974	...	...	...	...	39.0	82
	>500	1965	9.0	105	8.2	111	26.3	131	
		1969	14.8	118	13.5	123	39.0	137	
		1974	..	...	...	...	56.0	118	
252	Veneer and Plywood Mills	<100	1965	6.7	85	6.2	87	16.6	96
			1969	13.0	116	11.8	116	28.5	115
			1974	...	...	...	...	47.8	123
	>500	1965	9.4	119	8.2	115	20.0	116	
		1969	10.3	92	9.8	96	25.9	105 ^a	
		1974	...	...	...	...	x	x ^a	

Table 4. (cc .)

2541&	Sash, Door and Other		1965	8.5	99	6.7	99	19.2	98
2543	Millwork Plants,n.e.s. <100		1969	11.3	93	8.9	94	26.8	94
	& Manufacturers of Pre-		1974	...	...	...	...	47.9	94
	Fabricated Buildings								
	(Woodframe Construction)								
2542	Hardwood Flooring		1965	6.7	105	5.8	102	15.0	104
	Plants <100		1969	7.6	90	6.9	93	17.5	96
			1974	...	...	...	...	25.1	109
256	Wooden Box		1965	5.9	81	5.0	82	11.7	88
	Factories <100		1969	8.2	83	7.1	85	16.9	87
			1974	...	...	...	...	31.7	96
258	Coffin and Casket		1965	6.6	100	5.5	102	12.2	103
	Industry <100		1969	9.0	103	7.5	106	16.5	103
			1974	...	...	...	...	25.5	100 ^a
259	Miscellaneous		1965	8.4	101	7.0	101	18.0	100
	Wood Industries <100		1969	11.7	101	9.6	106	23.7	102
			1974	...	...	...	...	41.1	102
26	Furniture and Fixture		1965	8.1	99	6.8	105	16.5	102
	Industries <100		1969	10.5	97	8.3	97	20.8	103
			1974	...	...	...	...	31.8	101
			1965	x	x	x	x	x	x
	>500		1969	12.8	119	10.2	119	21.1	104
			1974	...	...	...	...	27.4	87
261	Household Furniture		1965	7.9	104	6.1	100	15.7	105
	Manufacturers <100		1969	10.1	103	7.8	99	19.5	106
			1974	...	...	...	...	29.6	102
264	Office Furniture		1965	9.8	93	8.0	100	16.9	95
	Manufacturers <100		1969	12.9	88	10.3	96	23.7	98
			1974	...	...	...	...	35.7	95

Table 4. (cont.)

266	Miscellaneous Furniture and Fixtures Manufac- turers	<100	1965	8.6	101	6.9	100	18.1	103
			1969	11.3	97	9.0	97	23.0	101
			1974	...	...	...	...	36.5	104
268	Electric Lamp and Shade Manufacturers	<100	1965	7.8	98	6.4	100	16.5	100
			1969	10.1	103	8.4	104	20.1	131
			1974	...	...	...	...	28.2	103
27	Paper and Allied Industries	<100	1965	11.2	70	8.9	72	27.6	80
			1969	14.1	75	11.2	78	33.5	80
			1974	...	...	...	...	58.7	76
	>500	1965	17.8	111	14.9	120	36.0	105	
		1969	19.8	106	16.6	116	42.8	102	
		1974	...	...	...	...	82.3	107	
271	Pulp and Paper Mills	<100	1965	12.1	68	10.3	69	27.4	76
			1969	15.4	76	13.7	81	32.5	73
			1974	...	...	...	...	71.1	83
	>500	1965	17.9	101	15.2	102	36.2	100	
		1969	19.7	98	16.7	99	42.7	96	
		1974	...	...	...	...	82.9	97	
272	Asphalt Roofing Manufacturers	<100	1965	17.9	89	14.1	90	46.8	105
			1969	26.8	106	21.0	111	63.5	118
			1974	...	...	...	...	97.0	87
2731	Folding Carton and Set-Up Box Manufac- turers	<100	1965	8.3	88	6.8	91	17.5	80
			1969	10.7	86	8.7	88	22.1	79
			1974	...	...	...	...	38.6	86
2732	Corrugated Box Manufacturers	<100	1965	13.1	106	9.4	106	36.5	105
			1969	15.9	100	11.8	104	42.2	101
			1974	...	...	...	...	65.9	108

Table 4. (c .)

2733	Paper and Plastic Bag Manufacturers	<100	1965	10.5	94	8.5	100	31.4	98
			1969	14.6	98	11.5	99	36.6	98
			1974	...	...	...	...	66.7	94
274	Miscellaneous Paper Converters	<100	1965	12.0	91	9.3	95	28.7	96
			1969	13.7	85	10.6	88	33.1	94
			1974	...	...	...	...	52.9	92
	>500	1965	15.7 ^b	119	11.1 ^b	113	36.8 ^b	123	
		1969	23.0	142	13.5	112	44.1	125	
		1974	...	...	...	...	x	x ^c	
28	Printing, Publishing and Allied Industries	<100	1965	13.0	79	8.0	86	20.0	83
			1969	17.0	82	10.3	88	26.8	86
			1974	...	...	...	...	40.0	83
	>500	1965	25.8	157	11.4	123	36.6	151	
		1969	32.7	157	14.2	121	45.0	145	
		1974	...	...	...	...	64.7	134	
286	Commercial Printing	<100	1965	11.2	94	7.8	93	18.4	94
			1969	14.4	95	10.1	95	23.8	96
			1974	...	...	...	...	35.8	95
	>500	1965	14.4	121	9.5	113	23.9	122	
		1969	18.4	122	11.4	108	27.2	110	
		1974	...	...	...	...	37.6	100	
287	Platemaking, Type- setting and Trade Bindery Industry	<100	1965	11.5	97	8.3	97	14.8	99
			1969	13.6	96	10.1	97	17.5	97
			1974	...	...	...	...	25.6	98
288	Publishing Only	<100	1965	...		11.5	93	...	
			1969	...		14.8	96	...	
			1974	...		...	...	...

Table 4. (c t.)

289	Publishing and Printing	<100	1965	12.5	57	7.0	70	16.2	56
			1969	16.2	58	9.0	71	21.5	57
			1974	...	...	...	...	31.4	55
	>500	1965	30.8	141	11.8	118	41.7	144	
		1969	38.1	136	14.6	115	51.7	138	
		1974	...	...	...	...	86.5	151	
29	Primary Metal Industries	<100	1965	10.8	68	9.2	72	29.6	87
			1969	14.0	72	11.7	78	42.4	99
			1974	...	...	...	...	80.3	116
	>500	1965	17.1	107	14.0	110	32.9	96	
		1969	20.9	108	16.2	107	42.4	99	
		1974	...	...	...	...	65.4	95	
291	Iron and Steel Mills	<100	1965	14.3	81	11.9	80	39.2	116
			1969	11.1	54	9.0	54	25.5	62
			1974	...	...	...	...	100.3	139
	>500	1965	18.2	103	15.2	103	33.2	98	
		1969	20.8	101	15.2	91	40.3	97	
		1974	...	...	...	...	69.7	97	
292	Steel Pipe and Tube Mills	<100	1965	17.7	113	13.9	113	57.6	107
			1969	16.9	88	14.4	98	62.2	97
			1974	...	...	...	...	172.5	188
	>500	1965	14.2	90	11.3	92	43.8	82	
		1969	18.3	95	14.7	100	53.7	84	
		1974	...	...	...	...	67.8	74	
294	Iron Foundaries	<100	1965	8.4	90	7.3	89	14.2	85
			1969	11.6	94	10.1	93	17.8	85
			1974	...	....	...	...	29.4	75
	>500	1965	9.7	104	8.3	101	17.4	104	
		1969	14.0	113	11.9	109	24.6	117	
		1974	...	...	...	...	46.7	120	

Table 4. (cc .)

295	Smelting and Refining	<100	1965	x	x	x	x	x	x
			1969	x	x	x	x	x	x
			1974	...	...	...	...	x	x
	>500	1965	17.4	104	14.0	104	31.7	100	
		1969	22.0	102	16.1	102	41.8	102	
		1974	...	...	...	...	54.0	99	
296	Aluminum Rolling, Casting and Extruding	<100	1965	11.7	89	9.6	103	34.1	74
			1969	14.3	79	11.6	84	55.7	104
			1974	...	...	...	...	104.0	102
297	Copper and Copper Alloy Rolling, Casting and Extruding	<100	1965	11.2	73	9.2	79	48.4	68
			1969	14.6	74	11.8	76	77.8	81
			1974	...	...	...	...	162.2	101
298	Metal Rolling, Casting and Extruding, n.e.s.	<100	1965	15.0	100	11.9	100	50.2	107
			1969	20.0	132	15.7	130	63.4	142
			1974	...	...	...	...	86.2	120
30	Metal Fabricating Industries (Except Machinery and Transpor- tation Equipment Industries)	<100	1965	10.9	89	8.6	90	21.1	85
			1969	14.4	93	11.3	94	27.0	90
			1974	...	...	...	...	42.6	86
	>500	1965	14.0	114	11.3	118	27.8	113	
		1969	18.3	118	14.4	120	35.6	119	
		1974	...	...	...	...	58.5	118	
301	Boiler and Plate Works	<100	1965	10.7	82	8.3	85	23.1	100
			1969	16.4	98	12.4	100	32.3	107
			1974	...	...	...	...	46.1	97
	>500	1965	16.0	122	12.3	126	23.2	101	
		1969	17.4	104	12.6	102	30.8	102	
		1974	...	...	...	...	55.7	117	

Table 4. (cont.)

302	Fabricated Structural Metal Industry	<100	1965	13.1	92	10.4	90	30.1	107
			1969	16.0	96	12.7	96	34.9	112
			1974	...	...	...	...	62.1	110
		>500	1965	14.9	105	12.0	104	26.6	94
			1969	17.4	105	13.6	103	27.7	89
			1974	...	...	...	...	57.5	92
304	Metal Stamping, Pressing and Coating Industry	<100	1965	10.5	83	8.8	86	21.2	75
			1969	14.6	90	11.9	92	28.8	80
			1974	...	...	...	...	41.2	73
		>500	1965	15.9	125	13.3	130	39.2	139
			1969	23.8	146	19.1	147	66.4	185
			1974	...	...	...	...	82.1	146
305	Wire and Wire Products Manufacturers	<100	1965	10.5	84	8.6	88	21.3	73
			1969	15.3	96	12.4	99	31.2	93
			1974	...	...	...	...	50.4	79
		>500	1965	11.0	88	8.6	88	29.8	102
			1969	15.7	99	11.8	94	29.2	87
			1974	...	...	...	...	55.6	87
306	Hardware, Tool and Cutlery Manufacturers	<100	1965	10.6	89	8.5	90	16.9	87
			1969	14.1	94	11.3	96	21.1	93
			1974	...	...	...	...	30.6	99
307	Heating Equipment Manufacturers	<100	1965	14.0	104	9.9	103	32.1	115
			1969	17.3	105	12.4	99	37.8	109
			1974	...	...	...	...	49.3	103
308	Machine Shops	<100	1965	9.7	98	7.5	99	15.5	99
			1969	13.2	100	10.2	100	19.7	99
			1974	...	...	...	...	30.9	100

Table 4. (cont.)

309	Miscellaneous Metal Fabricating Industries	<100	1965	13.1	108	10.2	106	28.1	118
			1969	15.6	105	12.1	106	33.3	113
			1974	...	...	...	...	51.3	108
	>500	1965	12.7	105	10.5	109	21.7	92	
		1969	19.3	130	15.3	134	30.3	103	
		1974	...	...	...	...	x	x	
31	Machinery Industries (Except Electrical Machinery)	<100	1965	14.6	99	10.9	96	29.4	102
			1969	17.5	97	12.9	91	36.1	101
			1974	...	...	...	...	49.1	94
	>500	1965	15.0	102	14.1	125	28.6	100	
		1969	18.1	101	20.3	143	35.1	99	
		1974	...	...	...	...	53.5	102	
311	Agricultural Implement Industry	<100	1965	11.1	93	8.8	90	21.0	80
			1969	13.4	99	10.7	99	28.0	87
			1974	...	...	...	...	45.6	95
	>500	1965	11.9	99	10.1	103	27.7	105	
		1969	13.9	102	11.5	106	34.8	108	
		1974	...	...	...	...	50.8	105	
315	Miscellaneous Machinery and Equipment Manufac- turers	<100	1965	15.2	103	11.2	106	30.6	109
			1969	18.1	97	13.2	99	37.0	104
			1974	...	...	...	...	49.8	96
	>500	1965	15.3	103	10.3	97	26.2	93	
		1969	18.7	100	13.9	105	32.5	91	
		1974	...	...	...	...	51.0	98	
316	Commercial Refrigeration and Air Conditioning Equipment Manufacturers	<100	1965	13.1	94	10.2	100	31.5	104
			1969	18.9	120	13.2	111	39.8	108
			1974	...	...	...	...	54.0	94

Table 4. (c t.)

318	Office and Store Machinery Manufac- turers	<100	1965	17.4	68	13.1	78	32.2	75
			1969	18.0	76	14.3	67	39.6	91
			1974	...	...	...	...	40.5	65
32	Transportation Equipment Industries	<100	1965	10.0	68	8.2	69	20.2	52
			1969	12.8	64	10.6	65	27.4	69
			1974	...	...	...	...	38.4	49
		>500	1965	15.7	107	13.1	111	43.4	112
			1969	22.8	113	18.0	110	66.7	119
			1974	...	...	...	...	95.7	123
321	Aircraft and Aircraft Parts Manufacturers	<100	1965	9.4	75	7.9	89	15.8	69
			1969	11.3	66	9.2	87	16.4	53
			1974	...	...	...	...	25.0	58
		>500	1965	13.0	104	9.2	103	24.1	105
			1969	17.9	105	10.7	101	33.3	108
			1974	...	...	...	...	50.8	118
323	Motor Vehicle Manufac- turers	<100	1965	7.8	37	6.8	39	22.3	32 ^d
			1969	x	x ^d	x	x ^d	x	x
			1974	...	...	...	...	x	x
		>500	1965	21.4	102	18.7	108	71.5	101
			1969	32.9	103	28.0	101	124.3	102
			1974	...	...	...	...	156.4	102
324	Truck Body and Trailer Manufacturers	<100	1965	9.7	90	8.1	96	21.6	85
			1969	12.2	102	10.0	101	28.1	95
			1974	...	...	...	...	42.4	89
325	Motor Vehicle Parts and Accessories Manufac- turers	<100	1965	11.2	88	8.9	86	23.8	81
			1969	15.8	88	13.4	90	38.0	96
			1974	...	...	...	...	43.6	79

Table 4. (cont.)

325	Motor Vehicle Parts and Accessories Manufac- turers	>500	1965	12.9	102	10.7	103	30.5	104
			1969	19.7	109	16.3	109	42.8	108
			1974	...	...	...	...	62.5	113
326	Railroad Rolling Stock Industry	<100	1965	x	x ^c	x	x ^c	x	x ^c
			1969	33.4	223	23.0	159	59.2	140
			1974	...	...	...	...	171.7	233
	>500	1965	11.3	92	10.3	95	34.6	101	
		1969	13.9	93	14.3	99	43.5	103	
		1974	...	...	...	...	74.4	101	
327	Shipbuilding and Repair	<100	1965	10.0	99	8.7	104	16.9	94
			1969	11.8	100	10.2	106	18.1	85
			1974	...	...	...	...	32.2	84
	>500	1965	10.5	104	8.6	102	18.7	104	
		1969	12.0	102	9.6	100	22.1	104	
		1974	...	...	...	...	40.3	105	
328	Boatbuilding and Repair	<100	1965	8.4	101	7.2	111	15.8	101
			1969	9.9	99	8.4	104	20.0	100
			1974	...	...	...	...	32.6	100
329	Miscellaneous Vehicle Manufacturers	<100	1965	10.8	92	8.6	86	25.8	92
			1969	13.2	63	10.6	63	25.6	57
			1974	...	...	...	...	34.6	63
33	Electrical Products Industries	<100	1965	12.3	89	9.1	98	27.2	100
			1969	15.2	96	11.5	102	32.3	100
			1974	...	...	...	...	44.5	90
	>500	1965	14.9	108	10.5	113	27.7	102	
		1969	16.7	106	12.1	107	33.1	102	
		1974	...	...	...	...	50.0	102	

Table 4. (c .)

331	Manufacturers of Small Electrical Appliances	<100	1965	12.6	87	9.0	83	29.8	108
			1969	15.2	84	11.9	90	33.8	97
			1974	...	...	...	...	49.7	119
332	Manufacturers of Major Appliances (Electric and Non-Electric)	<100	1965	7.7	64	6.6	73	25.2	76
			1969	10.3	64	9.5	80	28.1	76
			1974	...	...	...	...	56.9	112
	>500	1965	13.4	111	9.8	109	33.0	111	
		1969	18.5	116	13.5	113	41.0	111	
		1974	...	...	...	...	51.6	101	
334	Manufacturers of House- hold Radio and Tele- vision Receivers	<100	1965	9.1	68	7.7	71	28.8	83
			1969	14.4	96	18.3	137	42.8	95
			1974	...	...	...	...	75.0	131
	>500	1965	12.7	95	11.0	102	30.7	89	
		1969	15.6	104	14.6	109	45.5	101	
		1974	...	...	...	...	56.7	99	
335	Communications Equipment Manufac- turers	<100	1965	9.8	77	7.3	83	17.3	87
			1969	12.3	89	9.6	97	22.7	93
			1974	...	...	...	...	31.1	70
	>500	1965	14.0	110	9.5	108	21.4	108	
		1969	14.4	104	10.1	102	25.6	105	
		1974	...	...	...	...	49.5	111	
336	Manufacturers of Electrical Industrial Equipment	<100	1965	13.4	85	9.4	91	26.8	100
			1969	16.5	96	11.6	106	33.4	109
			1974	...	...	...	...	48.1	111
	>500	1965	17.5	111	11.2	109	28.0	104	
		1969	19.4	113	12.4	114	31.3	102	
		1974	...	...	...	...	44.9	104	

Table 4. (cont.)

338	Manufacturers of Electric Wire and Cable	<100	1965	19.8	117	16.3	131	63.0	129
			1969	24.9	115	20.0	131	67.0	111
			1974	...	...	...	...	82.5	94
	>500	1965	18.4	109	13.2	106	48.1	99	
		1969	24.4	112	16.1	105	62.0	102	
		1974	...	...	...	...	73.2	83	
3391	Battery Manufac- turers	<100	1965	17.6	111	12.9	114	40.4	117
			1969	17.1	98	13.3	99	41.4	115
			1974	...	...	...	...	64.4	116
3399	Manufacturers of Miscellaneous Elec- trical Products, n.e.s.	<100	1965	12.3	98	9.3	95	28.0	114
			1969	15.5	103	11.4	98	33.4	116
			1974	...	...	...	...	38.1	99
	>500	1965	12.6	100	11.1	113	21.4	87	
		1969	15.7	105	14.0	121	25.0	87	
		1974	...	...	...	...	38.4	100	
35	Non-Metallic Mineral Products Industries	<100	1965	13.5	89	10.8	92	27.4	101
			1969	17.7	91	14.1	96	34.0	101
			1974	...	...	...	...	54.3	102
	>500	1965	10.6	70	9.1	78	17.6	65	
		1969	15.8	81	13.6	93	24.0	71	
		1974	...	...	...	...	39.5	74	
3511	Clay Products Manu- facturers (from Domes- tic Clays)	<100	1965	9.3	87	7.8	89	13.2	90
			1969	11.8	89	9.9	91	16.6	92
			1974	...	...	...	...	26.9	87
3512	Clay Products Manufac- turers (from Imported Clays)	<100	1965	7.4	61	6.6	65	11.3	63
			1969	8.4	59	6.9	61	13.3	61
			1974	...	...	...	...	19.3	63

Table 4. (cont.)

352	Cement Manufacturers	<100	1965	67.8	172	47.9	177	96.1	175
			1969	58.3	124	42.0	135	86.5	131
			1974	...	...	...	...	139.6	133
353	Stone Products Manufacturers	<100	1965	11.3	107	8.1	109	18.1	106
			1969	13.3	100 ^a	9.3	100 ^a	20.9	100 ^a
			1974	...	...	...	...	28.4	100 ^a
354	Concrete Products Manufacturers	<100	1965	12.1	100	9.6	97	21.7	104
			1969	16.5	102	13.2	102	28.6	104
			1974	...	...	...	...	44.9	102
355	Ready-mix Concrete Manufacturers	<100	1965	16.4	99	13.5	100	44.7	101
			1969	19.9	102	16.1	104	47.7	100
			1974	...	...	...	...	69.0	98
356	Glass and Glass Products Manufacturers	<100	1965	9.6	91	7.7	87	21.7	116
			1969	12.9	83	10.1	78	26.0	103
			1974	...	...	...	...	35.8	91
	>500	1965	9.5	90	8.3	93	15.1	81	
		1969	15.3	98	13.4	104	22.4	86	
		1974	...	...	...	...	36.3	92	
357	Abrasives Manufacturers	<100	1965	14.1	93	10.5	96	25.1	84
			1969	16.3	96	12.8	102	30.5	89
			1974	...	...	...	...	44.9	89
358	Lime Manufacturers	<100	1965	16.4	98	14.3	107	24.1	96
			1969	17.8	99	15.3	105	31.4	102
			1974	...	...	...	...	74.9	107
3591	Refractories Manufacturers	<100	1965	19.9	80	14.1	85	40.5	85
			1969	21.2	70	16.1	88	44.0	81
			1974	...	...	...	...	81.3	119

Table 4. (cont.)

3599	Miscellaneous Non-Metallic Mineral Products Industries, n.e.s.	<100	1965	18.5	102	14.3	104	34.4	111
			1969	23.0	98	17.7	113	42.3	94
			1974	...	...	...	...	66.1	106
36	Petroleum and Coal Products Industries	<100	1965	33.6	86	25.3	134	137.0	65
			1969	32.7	68	25.2	121	135.6	52
			1974	...	...	...	...	267.7	40
	>500	1965	32.2	83	22.6	120	200.2	96	
		1969	35.3	73	24.7	119	238.1	91	
		1974	...	...	...	...	505.7	76	
3651	Petroleum Refining	<100	1965	37.1	94	27.8	99	169.2	78
			1969	26.7	54	22.2	64	178.6	64
			1974	...	...	...	...	352.9	47
	>500	1965	32.1	81	22.6	80	200.2	92	
		1969	35.3	72	24.7	72	238.1	86	
		1974	...	...	...	...	505.7	68	
3652	Manufacturers of Lubricating Oils and Greases	<100	1965	58.9	100 ^a	34.8	100 ^a	136.5	100 ^a
			1969	66.2	100 ^a	37.8	100 ^a	166.1	100 ^a
			1974	...	...	...	...	175.4	81
369	Miscellaneous Petroleum and Coal Products Industries	<100	1965	24.5	100 ^a	16.1	100 ^a	49.9	100 ^a
			1969	21.5	100 ^a	19.0	100 ^a	52.5	100 ^a
			1974	...	...	...	...	87.7	106
37	Chemical and Chemical Products Industries	<100	1965	27.3	93	16.3	104	59.0	105
			1969	34.0	98	20.3	107	69.8	108
			1974	...	...	...	...	116.5	103
	>500	1965	28.8	98	13.2	85	52.4	93	
		1969	37.5	108	21.9	115	67.2	104	
		1974	...	...	...	...	115.0	102	

Table 4. (c .)

372	Manufacturers of Mixed Fertilizers	<100	1965	17.2	98	11.5	96	71.5	98
			1969	28.5	100	18.9	107	86.6	100
			1974	...	...	...	...	156.0	100 ^a
373	Manufacturers of Plastics and Syn- thetic Resins	<100	1965	25.8	80	19.0	96	79.3	112
			1969	32.8	96	21.7	94	89.8	117
			1974	...	...	...	...	167.5	103
374	Manufacturers of Pharmaceuticals and Medicines	<100	1965	26.2	71	14.2	92	41.3	76
			1969	37.1	81	19.2	96	56.0	83
			1974	...	...	...	...	75.5	84
	>500	1965	25.5	69	9.9	64	41.3	76	
		1969	35.2	77	15.1	76	59.1	88	
		1974	...	...	...	...	80.3	89	
375	Paint and Varnish Manufac- turers	<100	1965	22.8	79	11.4	92	52.0	87
			1969	30.4	88	15.8	102	67.1	97
			1974	...	...	...	...	95.3	83
376	Manufacturers of Soap and Cleaning Compounds	<100	1965	24.8	58	14.9	78	50.1	61
			1969	34.3	63	21.2	86	65.6	66
			1974	...	...	...	...	98.4	76
	>500	1965	56.4	132	28.4	149	105.4	129	
		1969	72.2	132	39.6	160	127.3	129	
		1974	...	...	...	...	171.4	132	
377	Manufacturers of Toilet Preparations	<100	1965	20.5	66	12.1	72	38.6	84
			1969	36.1	100	21.2	105	58.0	105
			1974	...	...	...	...	76.4	100
378	Manufacturers of Industrial Chemicals	<100	1965	39.3	131	26.7	133	80.0	140
			1969	41.1	119	31.3	133	82.7	123
			1974	...	...	...	...	173.0	130

Table 4. (cont.)

378	Manufacturers of Industrial Chemicals	>500	1965	24.6	82	16.8	84	46.9	82
			1969	31.6	92	22.3	94	58.4	87
			1974	...	...	...	...	132.0	99
379	Miscellaneous Chemical Industries	<100	1965	27.6	131	15.7	118	57.2	136
			1969	31.1	130	17.9	115	65.4	138
			1974	...	...	...	...	108.5	124
	>500	1965	x	x	x	x	x	x	
		1969	14.5	61	12.8	82	25.8	55	
		1974	...	...	...	...	x	x ^d	
39	Miscellaneous Manufacturing Industries ^f	<100	1965	9.5	89	7.4	90	17.1	90
			1969	12.2	89	9.6	91	21.4	89
			1974	...	...	...	...	31.3	84
	>500	1965	14.9	139	10.5	128	25.4	134	
		1969	21.1	154	14.0	133	36.1	150	
		1974	...	...	...	...	46.0	124	
3911	Instrument and Related Products Manufacturers	<100	1965	12.9	76	9.3	91	25.1	85
			1969	17.1	77	12.3	93	32.2	85
			1974	...	...	...	...	37.5	71
	>500	1965	17.5	104	11.7	115	29.0	98	
		1969	26.5	120	15.7	119	42.9	114	
		1974	...	...	...	...	63.8	120	
3912	Clock and Watch Manufacturers	<100	1965	17.4	129	11.0	110	44.4	167
			1969	21.2	128	13.5	107	61.4	169
			1974	...	...	...	...	59.3	106
3913	Orthopaedic and Surgical Appliance Manufacturers	<100	1965	10.3	100 ^a	7.4	100 ^a	16.6	100 ^a
			1969	15.2	100 ^a	10.7	100 ^a	23.2	100 ^a
			1974	...	...	...	...	34.7	100 ^a

Table 4. (cont.)

3914	Ophthalmic Goods Manufacturers	<100	1965	7.6	109	6.3	109	14.5	113
			1969	9.4	116	8.5	112	16.8	107
			1974	...	...	...	...	24.4	106
3915	Dental Laboratories	<100	1965	9.8	101	8.5	133	13.1	102
			1969	12.0	101	9.9	125	15.8	102
			1974	...	...	...	...	22.8	101
392	Jewellery and Silver- ware Industry	<100	1965	9.2	96	6.9	95	19.2	89
			1969	11.6	98	8.9	96	23.4	88
			1974	...	...	...	...	42.8	85
3931	Sporting Goods Manufacturers	<100	1965	7.2	87	6.4	91	13.2	89
			1969	10.1	100	8.8	100	19.6	109
			1974	...	...	...	...	28.6	92
3932	Toys and Games Manufacturers	<100	1965	8.8	120	7.5	117	18.5	126
			1969	13.1	116	11.3	107	24.3	114
			1974	...	...	...	...	34.2	94
397	Signs and Dis- plays Industry	<100	1965	10.0	104	8.4	88	16.2	105
			1969	12.1	102	10.4	92	19.5	103
			1974	...	...	...	...	28.7	108
3991	Broom, Brush and Mop Manufacturers	<100	1965	8.9	85	6.9	96	17.4	89
			1969	10.4	85	8.5	88	20.2	87
			1974	...	...	...	...	31.9	100
3992	Button, Buckle and Fastener Manufacturers	<100	1965	8.0	94	6.8	101	14.9	103
			1969	10.9	94	9.2	98	19.9	103
			1974	...	...	...	...	30.2	121

Table 4. (cont.)

3994	Sound Recording and Musical Instrument Manufacturers	<100	1965	7.9	60	7.2	65	15.5	79
			1969	11.8	81	9.4	75	24.6	112
			1974	...	...	...	...	39.8	102
3995	Stamp and Stencil (Rubber and Metal) Manufacturers	<100	1965	9.0	100 ^a	6.7	100 ^a	13.2	100 ^a
			1969	12.0	100 ^a	8.7	100 ^a	16.6	100 ^a
			1974	...	...	...	...	16.5	93
3996	Pen and Pencil Manufacturers	<100	1965	11.1	80	7.8	83	21.2	87
			1969	15.0	95	10.3	94	28.4	92
			1974	...	...	...	...	51.8	120
3997	Typewriter Supplies Manufacturers	<100	1965	11.2	88	7.7	93	23.1	86
			1969	15.3	94	10.0	96	33.1	95
			1974	...	...	...	...	38.7	115

a. Industry has no establishments with more than 100 employed.

b. Estimates.

c. Above average.

d. Below average.

e. Incl. SIC 385.

f. Excl. SIC 385.

Sources: Dominion Bureau of Statistics, Annual Reports (of Individual Canadian Manufacturing Industries), 1965, Cat. Nos. 32-202--47-211 Annual, Ottawa, 1969; do., Manufacturing Industries of Canada, Sec. H, 1965/1966, Cat. No. 31-210 Annual, Ottawa, 1971; Statistics Canada, Type of Organization and Size of Establishments, 1969, Cat. No. 31-210 Annual, Ottawa, 1974; do., 1974, Ottawa, 1977; communications of the Manufacturing and Primary Industries Division of Statistics Canada.

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