

PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES

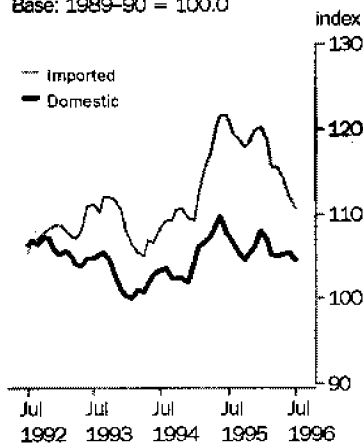
AUSTRALIA

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JULY KEY FIGURES

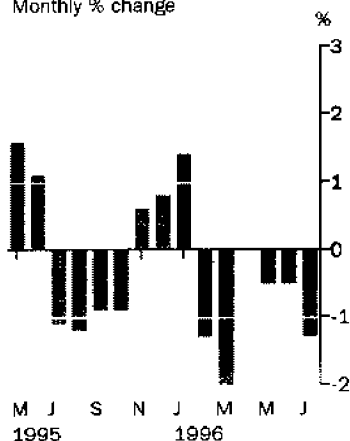
Manufacturing Division

Base: 1989-90 = 100.0



Manufacturing Division

Monthly % change



	% change Jun 96 to Jul 96	% change Jul 95 to Jul 96
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Manufacturing Division	-1.3	-5.6
Imported materials	-1.0	-8.7
Domestic materials	-1.7	-3.8

JULY KEY POINTS

MANUFACTURING DIVISION INDEX

- Lower prices for milk, wheat and metal ores were the main contributors to the decrease in the Manufacturing division index.
- A further strengthening in the value of the Australian dollar against the Japanese yen was the main contributor to price decreases of imported materials.

Indexes have been
REVIEWED and REBASED
see "Changes in this
issue" on Page 2.

MAJOR MOVEMENTS

- Prices of milk decreased due to seasonal factors.
- Wheat prices fell.
- Metal ore prices fell due to lower world prices.

INQUIRIES

- For further information about these and related statistics, contact Mark Dickson on 06 252 5541, or any ABS Office.

NOTES

FORTHCOMING ISSUES

<i>ISSUE</i>	<i>RELEASE DATE</i>
August 1996	17 October 1996
September 1996	15 November 1996
October 1996	16 December 1996

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CHANGES IN THIS ISSUE

The Price Indexes of Materials Used in Manufacturing Industries (MUMI), contained in this publication, have been revised. This follows a review of the index structure and weighting pattern to reflect the current Australian manufacturing profile and the materials being used. The underlying weighting pattern of MUMI has been revised and the indexes have been rebased to the reference year 1989-90 = 100.0. This period was chosen to align the reference base of the index with other important sets of statistics. Appendix A of this publication provides details of the weighting patterns used for the new price indexes.

The previous MUMI indexes were classified by the Australian Standard Industrial Classification - 1983 (ASIC). This classification has now been replaced by the Australian and New Zealand Standard Industrial Classification - 1993 (ANZSIC).

Although the reclassification from ASIC to ANZSIC has introduced some minor changes to almost all groupings, comparability between most of the previous price index series and the new price index series has been maintained. Appendix B of this publication provides conversion factors which may be used to convert index numbers on the new reference base (1989-90 = 100.0) to the previously published reference base (1984-85 = 100.0) and vice versa.

The Explanatory Notes included in this publication have been modified to reflect the changes made to the MUMI Price indexes.

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W. McLennan
Australian Statistician

MANUFACTURING DIVISION INDEX (a)

<i>Period</i>	<i>Manufacturing Division</i>	<i>Imported Materials</i>	<i>Domestic materials</i>
1993-94	104.7	108.8	102.5
1994-95	107.6	112.7	104.9
1995-96	110.0	117.6	105.9
1995			
May	112.6	120.1	108.6
June	113.8	121.5	109.6
July	112.6	121.5	107.8
August	111.2	119.5	106.6
September	110.2	118.8	105.4
October	109.2	117.9	104.4
November	109.9	118.4	105.3
December	110.8	119.6	106.2
1996			
January	112.4	120.2	108.1
February	110.9	118.6	106.8
March	108.7	115.5	105.1
April	108.7	115.6	104.9
May	108.2	114.0	105.1
June	107.7	112.0	105.5
July	106.3	110.9	103.7

(a) Base of each index 1989-90 = 100.0

MANUFACTURING DIVISION INDEX, Percentage Changes

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PERCENTAGE CHANGE (from previous year)

<i>Period</i>	<i>Manufacturing Division</i>	<i>Imported Materials</i>	<i>Domestic Materials</i>
1993-94	-1.6	0.9	-3.0
1994-95	2.8	3.6	2.3
1995-96	2.2	4.3	1.0

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PERCENTAGE CHANGE (from corresponding month of previous year)

1995			
May	8.8	12.3	6.9
June	9.2	13.9	6.5
July	7.1	12.2	4.3
August	5.4	9.4	2.9
September	5.3	8.9	2.9
October	3.9	6.9	2.1
November	4.4	7.0	2.9
December	5.9	9.2	4.1
1996			
January	6.0	10.2	3.7
February	2.4	5.6	0.7
March	-0.9	0.3	-1.5
April	-1.9	-1.4	-2.3
May	-3.9	-5.1	-3.2
June	-5.4	-7.8	-3.7
July	-5.6	-8.7	-3.8

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PERCENTAGE CHANGE (from previous month)

1995			
May	1.6	2.5	1.1
June	1.1	1.2	0.9
July	-1.1	0.0	-1.6
August	-1.2	-1.6	-1.1
September	-0.9	-0.6	-1.1
October	-0.9	-0.8	-0.9
November	0.6	0.4	0.9
December	0.8	1.0	0.9
1996			
January	1.4	0.5	1.8
February	-1.3	-1.3	-1.2
March	-2.0	-2.6	-1.6
April	0.0	0.1	-0.2
May	-0.5	-1.4	0.2
June	-0.5	-1.8	0.4
July	-1.3	-1.0	-1.7

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MANUFACTURING DIVISION INDEX, Contribution of Materials by ANZSIC Industry of Origin (a)

Industry of Origin	June 1996	July 1996	Change
Manufacturing Division	107.7	106.3	-1.4
Agriculture	29.80	28.71	-1.09
Horticulture and fruit growing	2.41	2.41	0.00
Grain, sheep and beef cattle farming	15.12	14.80	-0.32
Dairy cattle farming	6.00	5.20	-0.80
Poultry farming	1.67	1.67	0.00
Other livestock farming	1.75	1.76	0.01
Other crop growing	2.83	2.83	0.00
Forestry and logging	1.44	1.47	0.03
Coal mining	0.88	0.92	0.04
Oil and gas extraction	12.34	12.54	0.20
Metal ore mining	8.92	8.62	-0.30
Other mining	4.39	4.39	0.00
Construction material mining	2.66	2.65	-0.01
Other mining	1.73	1.74	0.01
Textile, clothing, footwear and leather manufacturing	5.88	5.78	-0.10
Textile, fibre, yarn and woven fabric manufacturing	5.25	5.15	-0.10
Knitting mills	0.27	0.27	0.00
Leather and leather product manufacturing	0.35	0.35	0.00
Wood and paper product manufacturing	4.85	4.70	-0.15
Log sawmilling and timber dressing	1.04	1.03	-0.01
Other wood product manufacturing	0.36	0.36	0.00
Paper and paper product manufacturing	3.45	3.31	-0.14
Petroleum, coal, chemical and associated product manufacturing	11.24	11.11	-0.13
Basic chemical manufacturing	6.30	6.20	-0.10
Other chemical product manufacturing	1.84	1.82	-0.02
Rubber product manufacturing	1.09	1.09	0.00
Plastic product manufacturing	2.03	2.02	-0.01
Non-metallic mineral product manufacturing	0.73	0.73	0.00
Glass and glass product manufacturing	0.73	0.73	0.00
Metal product manufacturing	5.51	5.46	-0.05
Iron and steel manufacturing	3.42	3.42	0.00
Non-ferrous basic metal product manufacturing	0.59	0.59	0.00
Fabricated metal product manufacturing	1.50	1.45	-0.05
Machinery and equipment manufacturing	10.65	10.60	-0.05
Motor vehicle and part manufacturing	4.88	4.83	-0.05
Other transport equipment	0.24	0.24	0.00
Photographic and scientific equipment manufacturing	0.96	0.96	0.00
Electronic equipment manufacturing	1.73	1.73	0.00
Electrical equipment and appliance manufacturing	1.33	1.32	-0.01
Industrial machinery and equipment manufacturing	1.52	1.53	0.01
Electricity and gas supply	11.11	11.24	0.13
Electricity supply	4.59	4.65	0.06
Gas supply	6.52	6.60	0.08

(a) For an explanation of this table see paragraph 18 of the Explanatory Notes.

MANUFACTURING ANZSIC SUBDIVISION AND GROUP INDEXES (a)

Period	Food, beverages and tobacco (21)	Textiles and textile products (221,222)	Knitting mills and clothing (223,224)	Footwear (225)	Leather and leather products (226)	Sawmilling and timber products (231,232)	Paper and paper products (233)	Printing and publishing (24)	Petroleum and coal products (251,252)
1993-94	107.7	89.9	107.7	102.4	99.6	115.3	89.7	102.7	101.9
1994-95	111.0	103.0	109.2	109.5	101.9	111.3	95.8	101.1	100.2
1995-96	111.7	100.9	111.4	111.7	95.1	114.0	108.3	114.1	103.5
1995									
May	115.1	108.3	112.2	112.4	104.8	114.9	101.9	103.3	108.3
June	117.4	108.3	113.6	112.4	100.8	115.4	104.4	105.0	105.5
July	115.3	107.6	113.3	112.4	98.3	115.1	105.9	111.3	100.1
August	114.4	104.7	112.6	112.4	93.7	114.9	110.6	112.5	97.7
September	113.4	105.0	112.0	111.0	94.9	114.6	110.7	114.1	96.1
October	112.1	102.0	111.6	111.3	95.4	113.8	111.3	115.4	94.9
November	112.7	100.6	111.4	111.3	96.5	114.1	111.3	115.7	97.4
December	111.6	101.4	112.1	111.2	98.2	114.5	113.8	115.4	103.0
1996									
January	111.6	100.5	111.9	111.8	96.6	114.7	112.5	114.9	112.7
February	110.6	100.3	111.1	111.3	95.6	114.2	112.1	115.3	109.1
March	107.8	98.9	110.9	111.7	92.8	114.0	105.5	114.9	110.3
April	108.9	97.2	110.2	112.4	93.5	113.4	105.0	114.0	108.7
May	110.4	95.9	109.9	112.4	93.9	112.4	102.4	112.5	106.1
June	111.8	96.3	109.8	111.6	91.3	112.6	98.1	113.1	105.4
July	108.5	95.0	108.3	111.7	93.3	112.6	98.5	110.0	107.2

(a) Base of each index 1989-90 = 100.0

MANUFACTURING ANZSIC SUBDIVISION AND GROUP INDEXES (a) *continued*

<i>Period</i>	<i>Chemicals (253,254)</i>	<i>Rubber and plastics (255,256)</i>	<i>Non-metallic mineral products (26)</i>	<i>Basic metal products (271,273)</i>	<i>Fabricated metal products (274,276)</i>	<i>Transport equipment and parts (281,282)</i>	<i>Electronic equipment and other machinery (283,286)</i>	<i>Other manufacturing (29)</i>
1993-94	103.5	106.9	109.8	87.6	100.8	115.0	102.7	111.5
1994-95	107.8	118.8	114.3	94.0	104.4	116.2	106.4	112.3
1995-96	113.8	122.0	113.6	99.4	108.7	115.1	107.8	112.9
1995								
May	113.7	129.6	115.7	98.2	107.0	120.7	109.4	114.4
June	114.9	129.8	116.0	99.8	106.8	121.0	109.7	114.8
July	116.2	131.1	113.1	101.6	107.3	121.0	110.3	114.4
August	114.9	128.2	113.0	100.6	107.0	119.5	109.5	114.1
September	115.0	126.0	112.9	100.3	107.3	117.0	109.1	113.3
October	114.6	122.6	112.9	100.3	109.1	115.7	108.9	112.9
November	114.7	122.6	113.1	100.1	109.7	115.1	108.9	113.1
December	115.0	121.5	113.2	101.0	110.1	115.6	109.3	113.3
1996								
January	115.1	121.1	113.1	100.7	109.7	114.7	108.2	113.3
February	113.8	120.3	114.2	99.8	109.5	114.5	107.3	112.6
March	111.0	117.4	114.3	98.7	109.2	113.3	106.8	112.6
April	112.2	117.9	114.6	97.8	108.8	112.4	105.9	112.0
May	111.7	118.1	114.7	97.0	108.8	111.9	105.1	111.7
June	111.8	116.8	114.5	95.1	108.3	110.3	103.9	110.9
July	111.8	115.7	114.4	93.5	107.6	110.0	103.3	110.6

(a) Base of each index 1989-90 = 100.0

INDEXES OF METALLIC MATERIALS USED IN THE FABRICATED METAL PRODUCTS INDUSTRY (a)

<i>Period</i>	<i>Iron & Steel</i>	<i>Aluminium</i>	<i>Copper & Brass</i>	<i>Zinc</i>
1993-94	104.4	85.6	98.1	77.2
1994-95	105.5	94.5	119.3	76.8
1995-96	110.1	100.8	123.3	77.1
1995				
May	106.2	105.6	124.0	78.0
June	106.3	102.4	126.9	77.7
July	106.4	103.6	130.3	77.1
August	106.5	102.0	127.6	77.4
September	106.9	103.7	125.8	79.1
October	110.0	102.6	124.7	75.5
November	111.1	101.6	125.0	75.5
December	111.6	101.8	127.1	78.2
1996				
January	111.6	100.9	124.0	78.2
February	111.6	100.7	120.8	78.1
March	111.6	100.1	119.7	77.8
April	111.4	98.6	118.1	77.4
May	111.3	97.6	119.3	76.1
June	111.2	96.0	116.7	75.3
July	111.2	95.5	112.1	74.7

(a) Base of each index 1989-90 = 100.0

EXPLANATORY NOTES

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INTRODUCTION

1 This publication presents index numbers that are based on materials used by establishments classified to designated 'sectors' of Australian manufacturing industry — the Price Indexes of Materials Used in Manufacturing Industries (MUMI). They are calculated on the reference base 1989-90 = 100.0.

2 Index numbers for the current month and the previous month are preliminary and subject to revision.

SCOPE

3 The indexes are on a 'net sector' basis; that is, each relates only to those materials which are used in the defined 'sector' of Australian manufacturing industry and which have been produced by establishments outside that 'sector'. These establishments are either Australian manufacturing establishments classified to other manufacturing 'sectors' or to other divisions of Australian industry (eg 'Agriculture, Forestry and Fishing' or 'Mining') or are overseas producers (including overseas manufacturing establishments).

CLASSIFICATION

4 The Manufacturing Division index measures changes in the prices of materials used by establishments classified to Australian and New Zealand Standard Industrial Classification (ANZSIC) Division C, Manufacturing, which have been purchased or transferred in from establishments outside the Manufacturing Division. It excludes semi-processed materials which have been produced by establishments within the Manufacturing Division and sold or transferred to other establishments within the Manufacturing Division. The index reflects purchases of materials at the point of entry to the Manufacturing Division.

5 The indexes for ANZSIC Subdivisions and Groups measure changes in prices of materials used by establishments classified to each defined ANZSIC manufacturing 'sector' which have been purchased or transferred in from establishments outside that 'sector'. These exclude semi-processed materials which have been produced by establishments within the specific 'sector' and sold or transferred to establishments in the same 'sector'. The pricing and weights for these net 'sector' indexes therefore reflect purchases and transfers in at the point of entry to the respective ANZSIC Subdivision or Groups.

6 The coverage of the ANZSIC Subdivision and Group price indexes shown in Table 4 of this publication is as follows:-

- Food, beverages and tobacco — ANZSIC Subdivision 21 Food, Beverage and Tobacco Manufacturing;
- Textiles and textile products — ANZSIC Group 221 Textile, Fibre, Yarn and Woven Fabric Manufacturing and Group 222 Textile Product Manufacturing;
- Knitting mills and clothing — ANZSIC Group 223 Knitting Mills and Group 224 Clothing Manufacturing;
- Footwear — ANZSIC Group 225 Footwear Manufacturing;
- Leather and leather products — ANZSIC Group 226 Leather and Leather Product Manufacturing;
- Sawmilling and timber products — ANZSIC Group 231 Log Sawmilling and Timber Dressing and Group 232 Other Wood Product Manufacturing;
- Paper and paper products — ANZSIC Group 233 Paper and Paper Product Manufacturing;
- Printing and publishing — ANZSIC Subdivision 24 Printing, Publishing and Recorded Media;
- Petroleum and coal products — ANZSIC Group 251 Petroleum Refining and Group 252 Petroleum and Coal Product Manufacturing n.e.c.;

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EXPLANATORY NOTES

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CLASSIFICATION (continued)

- Chemicals — ANZSIC Group 253 Basic Chemical Manufacturing and Group 254 Other Chemical Product Manufacturing;
- Rubber and plastics — ANZSIC Group 255 Rubber Product Manufacturing and Group 256 Plastic Product Manufacturing;
- Non-metallic mineral products — ANZSIC Subdivision 26 Non-Metallic Mineral Product Manufacturing;
- Basic metal products — ANZSIC Group 271 Iron and Steel Manufacturing; Group 272 Basic Non-Ferrous Metal Manufacturing and Group 273 Non-Ferrous Basic Metal Product Manufacturing;
- Fabricated metal products — ANZSIC Group 274 Structural Metal Product Manufacturing; Group 275 Sheet Metal Product Manufacturing and Group 276 Fabricated Metal Product Manufacturing;
- Transport equipment and parts — ANZSIC Group 281 Motor Vehicle and Part Manufacturing and Group 282 Other Transport Equipment Manufacturing;
- Electronic equipment and other machinery — ANZSIC Group 283 Photographic and Scientific Equipment Manufacturing; Group 284 Electronic Equipment Manufacturing; Group 285 Electrical Equipment and Appliance Manufacturing and Group 286 Industrial Machinery and Equipment Manufacturing;
- Other manufacturing — ANZSIC Subdivision 29 Other Manufacturing.

ITEMS AND WEIGHTS

7 The indexes are fixed weights indexes. The items included in the indexes were selected on the basis of the values of materials used in 1989-90. The selected items were allocated weights in accordance with the estimated value of manufacturing usage.

8 Many of the selected items carry not only the weight of directly priced materials but also the weight of unpriced materials whose prices are considered to move similarly to those of directly priced materials.

9 Materials have been grouped on the basis of ANZSIC industry of origin (i.e. the industry in which, in accordance with the classification rules of ANZSIC, the materials are primarily produced in Australia or the industry in which the materials would be classified had the materials been produced in Australia). Percentage contributions, in 1989-90, of individual materials to the Manufacturing Division as a whole and to the ANZSIC Subdivision and Group indexes are shown in Appendix A of this publication.

PRICE MEASUREMENT

10 For those materials subject to significant price variation throughout the month (e.g. agricultural materials, and metal ores and concentrates) average monthly prices are used in compiling these indexes. Other domestically produced materials are priced at the mid point of the month. Prices of these materials are generally obtained from suppliers (producers and wholesalers). Prices of imported materials are generally obtained from importers and relate to shipments arriving in Australia in the month.

11 In concept, pricing for these indexes is at the point at which the material physically enters the defined manufacturing 'sector'. Therefore, as far as possible prices are on a 'delivered into store' basis.

EXPLANATORY NOTES

12 Transfers which do not take place on the open market present problems for the measurement of price change. An example is where a vertically integrated enterprise extracts a mineral (mining activity) and also processes it (manufacturing activity). Since material is transferred from one part of the enterprise to another there is usually no transaction price. In such instances, various methods of imputing changes in market prices have been adopted. Depending on circumstances and the availability of data, these methods include using changes in opportunity cost (based, for example, on the price of the material in an established market) or changes in the cost (based on expenses actually incurred in obtaining the material). Imputations of this kind, for example, enter partly into price series for ores used in the manufacture of metal concentrates.

13 In the case of some seasonal materials such as fruit and vegetables, where deliveries do not occur over the whole year, the previous season's prices are repeated for the months outside the selling season until the subsequent season's prices become operative.

14 For some items, where prices are only determined annually, the final prices are sometimes not known until the relevant season or contract period has been at least partly completed. Estimates of the current season or contract period price are used in index calculations until the final price becomes available.

INDEX NUMBERS

15 Index numbers for financial years are simple averages of monthly index numbers.

REVISIONS

16 Index numbers for the current month and for the previous month are preliminary and subject to revisions. From time to time index numbers for earlier months may also be revised. This will occur whenever the ABS obtains more complete information or discovers that incorrect prices have been used.

ANALYSIS OF INDEX CHANGES

17 Care should be taken when interpreting month-to-month movements in the indexes as short-term movements do not necessarily indicate changes in trend.

18 Movements in indexes from one period to another can be expressed either as changes in 'index points' or as percentage changes. The following example illustrates the method of calculating index points changes and percentage changes between any two periods:

Manufacturing Division index numbers —

July 1996	106.3	(see Table 1)
July 1995	112.6	(see Table 1)
Change in index points	-6.30	
Percentage change	$\frac{-6.30}{112.6} \times 100 =$	-5.6

19 Table 3 provides an analysis of the contributions materials (classified by ANZSIC industry of origin) make to the total Manufacturing Division index. For example, Grain sheep and beef cattle farming contributed 14.80 index points to the total Manufacturing division index number of 106.3 for July 1996 and -0.32 index points to the net change of -1.40 index points.

FURTHER INFORMATION

20 Further information on the indexes is presented in the publication *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0).

EXPLANATORY NOTES

RELATED PUBLICATIONS

21 Users may also wish to refer to the following publications which are available from ABS Bookshops:

- *Price Index of Materials Used in Coal Mining, Australia (6415.0)*
- *Price Index of Copper Materials, Australia (6410.0)*
- *Price Index of Articles Produced by Manufacturing Industry, Australia (6412.0)*
- *Price Index of Materials Used in Building Other than House Building, Six State Capital Cities (6407.0)*
- *Price Index of Materials Used in House Building, Six State Capital Cities (6408.0)*
- *Import Price Index, Australia (6414.0)*
- *Export Price Index, Australia (6405.0)*

22 Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia (1101.0)*. The ABS also issues, on Tuesdays and Fridays, a *Release Advice (1105.0)* which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office

UNPUBLISHED STATISTICS

23 As well as the statistics included in this and related publications, the ABS may have other relevant unpublished data available. Inquiries should be made to Mark Dickson on 06 252 5541 or to any ABS office.

SYMBOLS AND OTHER USAGES

ANZSIC Australian and New Zealand Standard Industrial Classification
r figure or series revised since previous issue.

APPENDIX A

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REVIEW AND REBASING

INTRODUCTION

The Australian Bureau of Statistics (ABS) has undertaken a review of the Price Indexes of Materials Used in Manufacturing Industries (MUMI). This appendix outlines the results of the review. It sets out the index structure and weighting patterns for the rebased indexes and outlines the differences between the rebased and the previous indexes.

AIMS OF THE REVIEW

The main purpose of the review was to ensure that the index structure and weighting pattern reflect the current Australian manufacturing profile and the materials being used. The underlying weighting pattern of MUMI has been revised and the index has been rebased to the reference year 1989-90 = 100.0. This period was chosen to align the reference base of the index with other important sets of statistics.

LINKING SERIES

The rebased index number series have been linked (where possible) to the relevant existing index number series at July 1996. Appendix B sets out details of how index series on the previous reference base can be converted to the new reference base, and vice versa.

CLASSIFICATION USED

MUMI was previously classified by the Australian Standard Industry Classification—1983 (ASIC). Following this review, the classification has now been replaced by the Australian and New Zealand Standard Industrial Classification—1993 (ANZSIC).

Although the reclassification from ASIC to ANZSIC has introduced some minor changes to almost all groupings, comparability between most of the previous price index series and the new price index series has been maintained. However, although it has not been possible to provide linked series for the new ANZSIC Subdivision or Group indexes shown below and similar indexes in the old structure, it has been possible to retrospectively compile these series back to 1989-90. These series are included in table 4.

- ANZSIC Group 226—Leather and Leather Product Manufacturing;
- ANZSIC Groups 231—Log Sawmilling and Timber Dressing and 232—Other Wood Product Manufacturing;
- ANZSIC Group 233—Paper and Paper Product Manufacturing;
- ANZSIC Subdivision 24—Printing, Publishing and Recorded Media;
- ANZSIC Groups 255—Rubber Product Manufacturing and 256—Plastic Product Manufacturing;
- ANZSIC Subdivision 29—Other Manufacturing.

COMPOSITION AND WEIGHTING

Details of the composition and weighting for the revised indexes is shown in the following pages.

APPENDIX A

COMPOSITION AND WEIGHTING

MANUFACTURING DIVISION INDEX (a)

<i>Subdivision and Group</i>	<i>% contribution</i>
Agriculture	26.47
Horticulture and Fruit Growing	1.42
Grain, Sheep and Beef Cattle Farming	14.85
Dairy Cattle Farming	4.22
Poultry Farming	1.52
Other Livestock Farming	1.55
Other Crop Growing	2.91
Forestry and Logging	1.30
Coal Mining	0.84
Oil and Gas Extraction	11.59
Metal Ore Mining	9.27
Other Mining	4.14
Construction Material Mining	2.46
Other Mining	1.68
Textile, Clothing, Footwear and Leather Manufacturing	5.20
Textile Fibre, Yarn and Woven Fabric Manufacturing	4.54
Knitting Mills	0.27
Leather and Leather Product Manufacturing	0.39
Wood and Paper Product Manufacturing	4.64
Log Sawmilling and Timber Dressing	0.84
Other Wood Product Manufacturing	0.37
Paper and Paper Product Manufacturing	3.43
Petroleum, Coal, Chemical and Associated Product Manufacturing	10.81
Basic Chemical Manufacturing	6.05
Other Chemical Product Manufacturing	2.07
Rubber Product Manufacturing	0.96
Plastic Product Manufacturing	1.73
Non-Metallic Mineral Product Manufacturing	0.66
Glass and Glass Product Manufacturing	0.66
Metal Product Manufacturing	5.22
Iron and Steel Manufacturing	3.36
Non-Ferrous Basic Metal Product Manufacturing	0.57
Fabricated Metal Product Manufacturing	1.29
Machinery and Equipment Manufacturing	9.71
Motor Vehicle and Part Manufacturing	3.91
Other Transport Equipment Manufacturing	0.20
Photographic and Scientific Equipment Manufacturing	0.81
Electronic Equipment Manufacturing	2.21
Electrical Equipment and Appliance Manufacturing	1.31
Industrial Machinery and Equipment Manufacturing	1.27
Electricity and Gas Supply	10.15
Electricity Supply	4.21
Gas Supply	5.94
	100.00

(a) Domestically produced materials represent 60.30% of Total Net Manufacturing materials inputs and imported materials represent 39.70% of total materials inputs as at the reference period of 1989-90.

APPENDIX A

COMPOSITION AND WEIGHTING *continued*

SUBDIVISION AND GROUP INDEXES

<i>Subdivision and Group</i>	<i>% contribution</i>
Food, Beverage and Tobacco Manufacturing (21)	
Horticulture and Fruit Growing	4.78
Grain, Sheep and Beef Cattle Farming	46.13
Dairy Cattle Farming	11.10
Poultry Farming	4.92
Other Livestock Farming	4.85
Other Crop Growing	7.95
Marine Fishing	1.11
Oil and Fat Manufacturing	0.61
Other Food Manufacturing	0.90
Paper and Paper Product Manufacturing	3.09
Plastic Product Manufacturing	4.05
Glass and Glass Product Manufacturing	2.34
Sheet Metal Product Manufacturing	4.76
Electricity Supply	1.99
Gas Supply	1.24
Water Supply, Sewerage and Drainage Services	0.18
	100.00
Textile, Fibre, Yarn and Woven Manufacturing (221)	
Textile Product Manufacturing (222)	
Grain, Sheep and Beef Cattle Farming	18.26
Services to Agriculture	9.17
Textile Fibre, Yarn and Woven Fabric Manufacturing	45.21
Knitting Mills	2.11
Paper and Paper Product Manufacturing	1.48
Basic Chemical Manufacturing	9.05
Other Chemical Product Manufacturing	4.73
Plastic Product Manufacturing	3.67
Electricity Supply	3.36
Gas Supply	2.44
Water Supply, Sewerage and Drainage Services	0.52
	100.00
Knitting Mills (223)	
Clothing Manufacturing (224)	
Textile, Fibre, Yarn and Woven Fabric Manufacturing	88.70
Knitting Mills	5.40
Leather and Leather Product Manufacturing	1.50
Basic Chemical Product Manufacturing	2.20
Plastic Product Manufacturing	1.00
Electricity Supply	1.20
	100.00
Footwear Manufacturing (225)	
Textile Fibre, Yarn and Woven Fabric Manufacturing	8.25
Textile Product Manufacturing	2.88
Leather and Leather Product Manufacturing	75.67
Paper and Paper Product Manufacturing	2.27
Basic Chemical Manufacturing	1.21
Other Chemical Product Manufacturing	2.58
Rubber Product Manufacturing	2.77
Plastic Product Manufacturing	3.17
Electricity Supply	1.20
	100.00

APPENDIX A

COMPOSITION AND WEIGHTING *continued*

SUBDIVISION AND GROUP INDEXES

<i>Subdivision and Group</i>	<i>% contribution</i>
Leather and Leather Product Manufacturing (226)	
Meat and Meat Product Manufacturing	54.90
Textile Fibre, Yarn and Woven Fabric Manufacturing	4.49
Leather and Leather Product Manufacturing	23.04
Basic Chemical Manufacturing	9.39
Other Chemical Product Manufacturing	4.12
Plastic Product Manufacturing	0.97
Other Manufacturing	1.80
Electricity Supply	1.29
	100.00
Log Sawmilling and Timber Dressing (231)	
Other Wood Product Manufacturing (232)	
Forestry and Logging	25.52
Log Sawmilling and Timber Dressing	22.08
Other Wood Manufacturing	3.52
Petroleum Refining	2.41
Basic Chemical Manufacturing	3.79
Other Chemical Product Manufacturing	11.44
Plastic Product Manufacturing	3.60
Glass and Glass Product Manufacturing	1.27
Cement, Lime, Plaster and Concrete Product Manufacturing	2.09
Non-Metallic Mineral Product Manufacturing nec	2.14
Iron and Steel Manufacturing	1.22
Non-Ferrous Basic Metal Product Manufacturing	2.36
Structural Metal Product Manufacturing	8.76
Fabricated Metal Product Manufacturing	4.88
Electricity Supply	4.92
	100.00
Paper and Paper Product Manufacturing (233)	
Forestry and Logging	20.10
Coal Mining	1.50
Construction Material Mining	0.61
Paper and Paper Product Manufacturing	36.70
Basic Chemical Manufacturing	8.24
Other Chemical Product Manufacturing	8.07
Plastic Product Manufacturing	5.93
Electricity Supply	12.18
Gas Supply	4.95
Water Supply, Sewerage and Drainage Services	1.72
	100.00
Printing, Publishing and Recorded Media (24)	
Paper and Paper Product Manufacturing	76.93
Basic Chemical Manufacturing	3.41
Other Chemical Product Manufacturing	4.78
Plastic Product Manufacturing	3.93
Photographic and Scientific Equipment Manufacturing	5.92
Electronic Equipment Manufacturing	2.79
Electricity Supply	2.24
	100.00

APPENDIX A

COMPOSITION AND WEIGHTING *continued*

<i>Subdivision and Group</i>	<i>% contribution</i>
Petroleum Refining (251)	
Petroleum and Coal Product Manufacturing nec (252)	
Oil and Gas Extraction	82.10
Petroleum Refining	6.30
Basic Chemical Manufacturing	10.50
Other Chemical Product Manufacturing	1.10
	100.00
Basic Chemical Manufacturing (253)	
Other Chemical Product Manufacturing (254)	
Other Mining	10.89
Meat and Meat Product Manufacturing	5.70
Oil and Fat Manufacturing	2.85
Beverage and Malt Manufacturing	3.12
Paper and Paper Product Manufacturing	3.32
Petroleum Refining	1.22
Petroleum and Coal Product Manufacturing nec	2.98
Basic Chemical Manufacturing	28.03
Other Chemical Product Manufacturing	16.50
Plastic Product Manufacturing	7.49
Glass and Glass Product Manufacturing	1.34
Basic Non-Ferrous Metal Manufacturing	6.95
Sheet Metal Product Manufacturing	1.55
Electricity Supply	4.52
Gas Supply	2.92
Water Supply, Sewerage and Drainage Services	0.62
	100.00
Rubber Product Manufacturing (255)	
Plastic Product Manufacturing (256)	
Other Crop Growing	4.75
Textile Fibre, Yarn and Woven Fabric Manufacturing	5.52
Textile Product Manufacturing	2.05
Paper and Paper Product Manufacturing	3.30
Basic Chemical Manufacturing	65.92
Other Chemical Product Manufacturing	3.75
Plastic Product Manufacturing	5.20
Non-Ferrous Basic Metal Product Manufacturing	3.74
Fabricated Metal Product Manufacturing	1.71
Electricity Supply	4.06
	100.00
Non-Metallic Mineral Product Manufacturing (26)	
Coal Mining	1.07
Construction Material Mining	45.29
Other Mining	6.75
Paper and Paper Product Manufacturing	6.24
Basic Chemical Manufacturing	8.42
Other Chemical Product Manufacturing	0.56
Plastic Product Manufacturing	0.96
Glass and Glass Product Manufacturing	2.51
Cement, Lime, Plaster and Concrete Product Manufacturing	1.68
Iron and Steel Manufacturing	3.19
Structural Metal Product Manufacturing	3.92
Fabricated Metal Product Manufacturing	1.11
Electricity Supply	7.20
Gas Supply	10.31
Water Supply, Sewerage and Drainage Services	0.79
	100.00

APPENDIX A

COMPOSITION AND WEIGHTING *continued*

SUBDIVISION AND GROUP INDEXES

<i>Subdivision and Group</i>	<i>% contribution</i>
Iron and Steel Manufacturing (271)	
Basic Non-Ferrous Metal Manufacturing (272)	
Non-Ferrous Basic Metal Product Manufacturing (273)	
Coal Mining	4.12
Metal Ore Mining	60.36
Construction Material Mining	1.22
Petroleum and Coal Product Manufacturing nec	1.16
Basic Chemical Manufacturing	4.66
Other Chemical Product Manufacturing	1.62
Iron and Steel Manufacturing	7.25
Electricity Supply	9.42
Gas Supply	10.19
	100.00
Structural Metal Product Manufacturing (274)	
Sheet Metal Product Manufacturing (275)	
Fabricated Metal Product Manufacturing (276)	
Basic Chemical Manufacturing	4.15
Other Chemical Product Manufacturing	2.58
Plastic Product Manufacturing	3.62
Glass and Glass Product Manufacturing	2.81
Iron and Steel Manufacturing	51.05
Basic Non-Ferrous Metal Manufacturing	10.29
Non-Ferrous Basic Metal Product Manufacturing	19.07
Fabricated Metal Product Manufacturing	4.46
Electricity Supply	1.97
	100.00
Motor Vehicle and Part Manufacturing (281)	
Other Transport Equipment Manufacturing (282)	
Textile Fibre, Yarn and Woven Fabric Manufacturing	1.76
Other Wood Product Manufacturing	2.65
Basic Chemical Manufacturing	5.00
Other Chemical Product Manufacturing	3.92
Rubber Product Manufacturing	7.39
Plastic Product Manufacturing	2.08
Glass and Glass Product Manufacturing	1.38
Iron and Steel Manufacturing	19.41
Basic Non-Ferrous Metal Manufacturing	2.04
Non-Ferrous Basic Metal Product Manufacturing	3.88
Structural Metal Product Manufacturing	2.85
Sheet Metal Product Manufacturing	1.50
Fabricated Metal Product Manufacturing	10.06
Motor Vehicle and Part Manufacturing	28.08
Other Transport Equipment Manufacturing	1.50
Electrical Equipment and Appliance Manufacturing	1.90
Industrial Machinery and Equipment Manufacturing	3.20
Electricity Supply	1.40
	100.00

APPENDIX A

COMPOSITION AND WEIGHTING *continued*

SUBDIVISION AND GROUP INDEXES

<i>Subdivision and Group</i>	<i>% contribution</i>
Photographic and Scientific Equipment Manufacturing (283)	
Electronic Equipment Manufacturing (284)	
Electrical Equipment and Appliance Manufacturing (285)	
Industrial Machinery and Equipment Manufacturing (286)	
Paper and Paper Product Manufacturing	1.04
Basic Chemical Manufacturing	4.85
Other Chemical Product Manufacturing	1.25
Rubber Product Manufacturing	2.63
Plastic Product Manufacturing	10.23
Iron and Steel Manufacturing	26.62
Basic Non-Ferrous Metal Manufacturing	7.21
Non-Ferrous Basic Metal Product Manufacturing	5.88
Structural Metal Product Manufacturing	1.95
Sheet Metal Product Manufacturing	2.29
Fabricated Metal Product Manufacturing	3.39
Photographic and Scientific Equipment Manufacturing	3.46
Electronic Equipment Manufacturing	15.57
Electrical Equipment and Appliance Manufacturing	7.75
Industrial Machinery and Equipment Manufacturing	4.19
Electricity Supply	1.69
	100.00
Other Manufacturing (29)	
Other Mining	7.00
Textile Fibre, Yarn and Woven Fabric Manufacturing	7.90
Leather and Leather Product Manufacturing	2.20
Log Sawmilling and Timber Dressing	12.00
Other Wood Product Manufacturing	15.20
Basic Chemical Manufacturing	2.50
Other Chemical Product Manufacturing nec	2.30
Rubber Product Manufacturing	1.50
Plastic Product Manufacturing	8.50
Glass and Glass Product Manufacturing	1.70
Iron and Steel Manufacturing	17.50
Basic Non-Ferrous Metal Manufacturing	2.50
Non-Ferrous Basic Metal Product Manufacturing	4.80
Structural Metal Product Manufacturing	4.30
Sheet Metal Product Manufacturing	1.00
Fabricated Metal Product Manufacturing	7.80
Electricity Supply	1.20
	100.00

CONVERSION FACTORS TO LINK INDEXES

INTRODUCTION

Following the review of the Price Indexes of Materials Used in Manufacturing Industries (MUMI), the reference base for the indexes has been updated to 1989-90 = 100.0. All index numbers in this issue are published on the new reference base.

The following demonstrates the method used by the ABS to calculate the conversion factors to convert index numbers from the old to the new reference base (and vice versa). The factors are shown on page 21.

- Manufacturing Division index number (on 1984-85 = 100.0 base) for 1989-90 = 119.0
- Factor to be used to convert the Manufacturing Division index number on the old reference base 1984-85 = 100.0, to the new reference base of 1989-90 = 100.0.

$$= \frac{100.0}{119.0} = 0.84034$$
- Factor to be used to convert the Manufacturing Division index number on the new reference base 1989-90 = 100.0, to the old reference base of 1984-85 = 100.0.

$$= \frac{119.0}{100.0} = 1.19000$$

To convert index numbers on the new reference base to the previously published reference base (1984-85 = 100.0), the conversion factors shown in the first column of the following table should be used.

Similarly, to convert index numbers on the previously published reference base to the new reference base (1989-90 = 100.0), the conversion factors shown in the second column of the the following table should be used.

For further information about converting indexes to different reference bases, please contact Mark Dickson on (06) 252 5541.

APPENDIX B

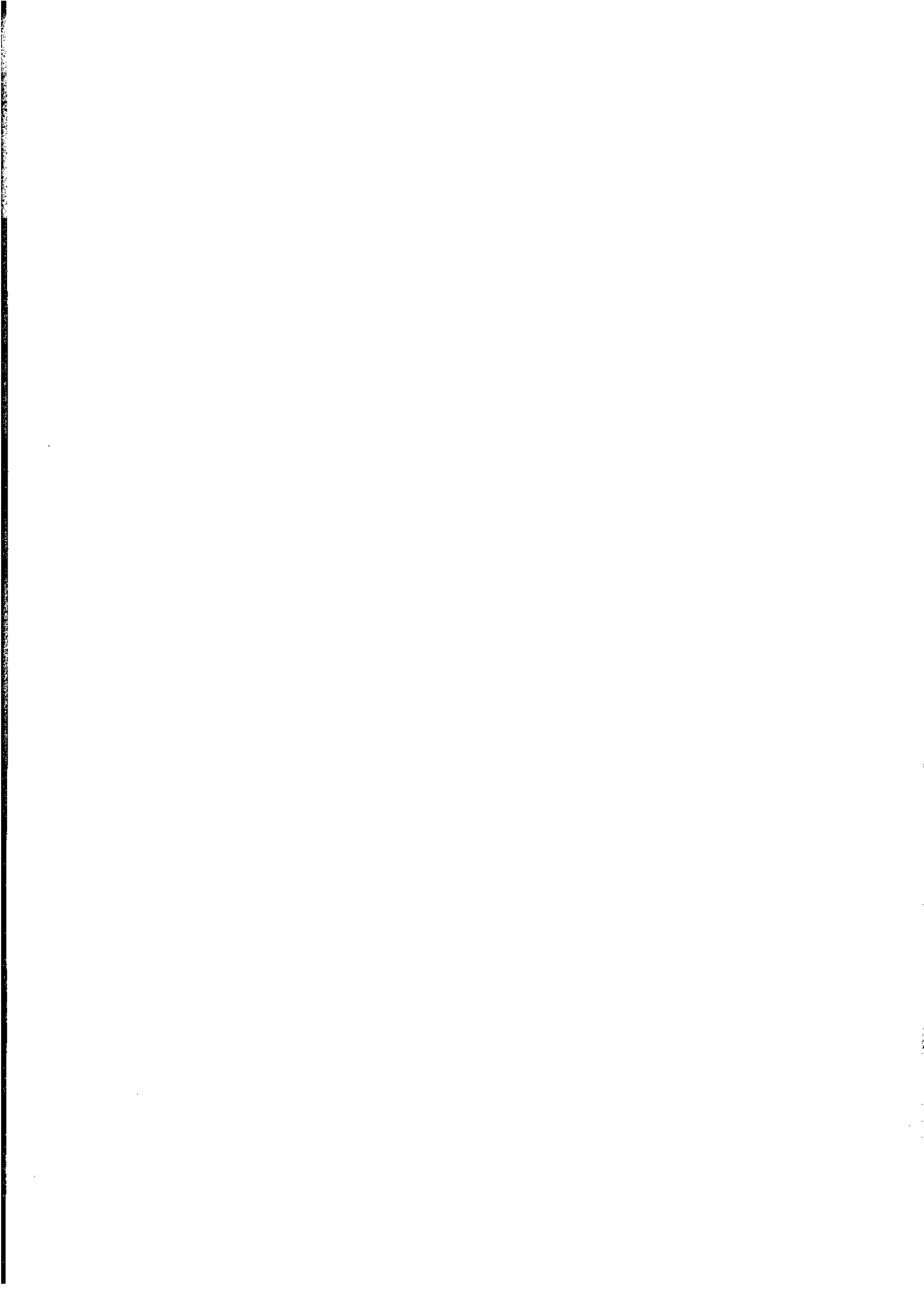
CONVERSION FACTORS TO LINK INDEXES

	<i>From NEW reference base 1989-90 = 100.0 to OLD reference base 1984-85 = 100.0</i>	<i>From OLD reference base 1984-85 = 100.0 to NEW reference base 1989-90 = 100.0</i>
Table 1		
Manufacturing Division	1.19000	0.84034
Imported materials	1.21100	0.82576
Domestically Produced materials	1.17900	0.84818
Table 4		
Food, beverages and tobacco	1.28800	0.77640
Textiles and textile products	1.45400	0.68776
Knitting mills and clothing	1.40000	0.71429
Footwear	1.43800	0.69541
Petroleum and coal products	0.72500	1.37931
Chemicals	1.29600	0.77160
Non-metallic mineral products	1.27800	0.78247
Basic metal products	1.43100	0.69881
Fabricated metal products	1.44900	0.69013
Transport equipment and parts	1.42600	0.70126
Electronic equipment and other machinery	1.40500	0.71174
Table 5		
Iron and steel	1.41000	0.70922
Aluminium	1.52800	0.65445
Copper and brass	1.71800	0.58207
Zinc	1.79600	0.55679

APPENDIX B

CONVERSION FACTORS TO LINK INDEXES

	<i>From NEW reference base 1989-90 = 100.0 to OLD reference base 1984-85 = 100.0</i>	<i>From OLD reference base 1984-85 = 100.0 to NEW reference base 1989-90 = 100.0</i>
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