

ECONOMIC ANALYSIS AND RESEARCH

Compendium of industrial statistics, 2012



**Statistics
South Africa**



your leading partner in quality statistics

Compendium of industrial statistics

2nd Edition, 2012

Discussion document

D0406

Published by Statistics South Africa, Private Bag X44, Pretoria 0001

© Statistics South Africa, 2012

Users may apply or process this data, provided Statistics South Africa (Stats SA) is acknowledged as the original source of the data; that it is specified that the application and/or analysis is the result of the user's independent processing of the data; and that neither the basic data nor any reprocessed version or application thereof may be sold or offered for sale in any form whatsoever without prior permission from Stats SA.

Discussion document: Compendium of industrial statistics, 2nd Edition, 2012 (D0406)/Statistics South Africa. Pretoria: Statistics South Africa, March 2012

Discussion document (D0406)

Title continuous in English only

Statistics South Africa

A complete set of Stats SA publications is available at Stats SA Library and the following libraries:

- National Library of South Africa, Pretoria Division
- National Library of South Africa, Cape Town Division
- Library of Parliament, Cape Town
- Bloemfontein Public Library
- Natal Society Library, Pietermaritzburg
- Johannesburg Public Library
- Eastern Cape Library Services, King William's Town
- Central Regional Library, Polokwane
- Central Reference Library, Nelspruit
- Central Reference Collection, Kimberley
- Central Reference Library, Mmabatho

This discussion document is available on the Stats SA website: www.statssa.gov.za

Preface

The Compendium of Industrial Statistics provides experimental facts and figures on economic progress in the South African manufacturing sector. As such it is designed to inform public discussion of the overall picture of economic activity within and across industries comprising this sector. Information included in this document is for the reference period 2003-2010.

The Compendium data offers many analytical possibilities in the context of studying the South African manufacturing sector. Depending on users' preferences it can be used to study:

- the potential of industries to innovate;
- the impact of innovation on industry development;
- the competitive performance of industries;
- the impact of productivity on industry performance;
- the sources of productive efficiency in industries;
- how the sources of productive efficiency affect the production pattern of industries;
- the evolution of concentration and its impact on industry performance; and
- the size and development of non-observed economic activity in industries.

The Compendium is not a scorecard for government policy. It is an experimental publication, which in keeping pace with meeting user needs, is intended to develop and evolve over time as part of a regular industrial statistics programme.

Contents

| | |
|---|-----|
| Preface | i |
| Contents | ii |
| List of key indicators reported and their interpretation | iii |
| List of symbols and abbreviations | iv |
| List of tables | v |
| Guide to the publication's data | vii |
| Section 1: Ownership composition | 1 |
| Section 2: Employment environment | 8 |
| Section 3: Production situation | 25 |
| Section 4: Production efficiency | 32 |
| Section 5: Pricing conditions | 41 |
| Technical note | 46 |
| Glossary of terms | 51 |
| References | 55 |
| Questionnaire | 57 |

List of key indicators reported and their interpretation

| Indicator | Interpretation |
|---|--|
| Ownership | Legal right of control to an enterprise by private individuals; the State; or a combination of the two |
| Index of gross output in real terms | Growth in output |
| Index of value added in real terms | Growth in output beneficiation |
| Index of gross capital in real terms | Growth in all forms of capital held |
| Index of gross remuneration in real terms | Growth in labour costs |
| Total employment index | Growth in job creation |
| Employment index for information-type employees | Growth in job creation for workforce with potential to innovate |
| Employment index for non-information type employees | Growth in job creation for workforce with no potential to innovate |
| Employment index for knowledge-based employees | Growth in job creation for workforce with expertise to create knowledge |
| Employment index for data-handling employees | Growth in job creation for workforce with expertise to process knowledge |
| Employment index for goods-producing employees | Growth in job creation for workforce with expertise to use knowledge |
| Employment index for services-producing employees | Growth in job creation for workforce with expertise to transmit knowledge |
| Labour productivity index | Growth in effectiveness of the workforce to create output beneficiation |
| Capital productivity index | Growth in effectiveness of capital stock usage to create output beneficiation |
| Multifactor productivity index | Growth in effectiveness of the combined use of capital stock and labour to create output beneficiation |
| Index of capital intensity | Growth in extent to which capital stock exceeds labour as a factor of production |
| Fisher price index | General price level showing growth in average price changes resistant to price volatility |
| Gini concentration ratio | Extent to which enterprises have equal market shares |
| Average growth rate | The trend of a growth path |

List of symbols and abbreviations

| | |
|----------|---|
| , | decimal separator |
| (:) | data are not available or not reported |
| .. | amount is nil or negligible |
| G.C.S. | gross capital stock in 2003, at 2003 prices in Rand million |
| G.O. | gross output in 2003, at 2003 prices in Rand million |
| G.R. | gross remuneration in 2003, at 2003 prices in Rand million |
| n.a. | not applicable |
| N.D.E. | number of data-handling employees as at 2003 |
| N.G.E. | number of goods-producing employees as at 2003 |
| n.e.c. | not elsewhere classified |
| n.e.s. | not elsewhere specified |
| N.I.E. | number of information-type employees as at 2003 |
| N.K.E. | number of knowledge-based employees as at 2003 |
| N.N.I.E. | number of non-information type employees as at 2003 |
| N.S.E. | number of services-producing employees as at 2003 |
| r | average growth rate per annum in percent |
| R&D | research and development |
| T.N.E. | total number of employed as at 2003 |
| V.A. | value added in 2003, at 2003 prices in Rand million |

List of tables

| | |
|---|----|
| Table 1.1: Enterprise control by private sector, 2003-2010 | 2 |
| Table 1.1: Enterprise control by private sector, 2003-2010 (concluded) | 3 |
| Table 1.2: Enterprise control by public sector, 2003-2010 | 4 |
| Table 1.2: Enterprise control by public sector, 2003-2010 (concluded) | 5 |
| Table 1.3: Mixed control of enterprises, 2003-2010 | 6 |
| Table 1.3: Mixed control of enterprises, 2003-2010 (concluded) | 7 |
| Table 2.1: Changes in total employment, 2003-2010 | 9 |
| Table 2.1: Changes in total employment, 2003-2010 (concluded) | 10 |
| Table 2.2: Changes in employment of information-type employees, 2003-2010 | 11 |
| Table 2.2: Changes in employment of information-type employees, 2003-2010 (concluded) | 12 |
| Table 2.3: Changes in employment of non-information type employees, 2003-2010 | 13 |
| Table 2.3: Changes in employment of non-information type employees, 2003-2010 (concluded) | 14 |
| Table 2.4: Changes in employment of knowledge-based employees, 2003-2010 | 15 |
| Table 2.4: Changes in employment of knowledge-based employees, 2003-2010 (concluded) | 16 |
| Table 2.5: Changes in employment of data-handling employees, 2003-2010 | 17 |
| Table 2.5: Changes in employment of data-handling employees, 2003-2010 (concluded) | 18 |
| Table 2.6: Changes in employment of goods-producing employees, 2003-2010 | 19 |
| Table 2.6: Changes in employment of goods-producing employees, 2003-2010 (concluded) | 20 |
| Table 2.7: Changes in employment of services-producing employees, 2003-2010 | 21 |
| Table 2.7: Changes in employment of services-producing employees, 2003-2010 (concluded) | 22 |
| Table 2.8: Changes in gross remuneration in real terms, 2003-2010 | 23 |
| Table 2.8: Changes in gross remuneration in real terms, 2003-2010 (concluded) | 24 |
| Table 3.1: Changes in gross output in real terms, 2003-2010 | 26 |
| Table 3.1: Changes in gross output in real terms, 2003-2010 (concluded) | 27 |
| Table 3.2: Changes in value added in real terms, 2003-2010 | 28 |
| Table 3.2: Changes in value added in real terms, 2003-2010 (concluded) | 29 |
| Table 3.3: Changes in gross capital stock in real terms, 2003-2010 | 30 |
| Table 3.3: Changes in gross capital stock in real terms, 2003-2010 (concluded) | 31 |
| Table 4.1: Changes in labour productivity, 2003-2010 | 33 |
| Table 4.1: Changes in labour productivity, 2003-2010 (concluded) | 34 |
| Table 4.2: Changes in capital productivity, 2003-2010 | 35 |
| Table 4.2: Changes in capital productivity, 2003-2010 (concluded) | 36 |
| Table 4.3: Changes in multifactor productivity, 2003-2010 | 37 |
| Table 4.3: Changes in multifactor productivity, 2003-2010 (concluded) | 38 |
| Table 4.4: Changes in capital intensity, 2003-2010 | 39 |
| Table 4.4: Changes in capital intensity, 2003-2010 (concluded) | 40 |

| | |
|---|----|
| Table 5.1: Movements in general price levels, 2003-2010 | 42 |
| Table 5.1: Movements in general price levels, 2003-2010 (concluded) | 43 |
| Table 5.2: Movements in concentration levels, 2003-2010 | 44 |
| Table 5.2: Movements in concentration levels, 2003-2010 (concluded) | 45 |

Guide to the publication's data

The Compendium of Industrial Statistics aims to provide a standard set of indicators on the economic progress of the industries comprising the South African manufacturing sector. The data provided in this edition of the Compendium trace the major developments of ownership, employment, production, efficiency, and pricing that characterise this sector over the period of 2003 to 2010. The indicators' calculation procedures and related technical aspects are discussed in the Technical note to the Compendium, and their definitions in the Glossary section of the Compendium.

Classifications employed in the Compendium and the resultant grouping of information this creates are intended for interpretational convenience of the data and do not express a judgment about the state reached by a particular industry in its degree of development or regarding its economic system. In this respect:

- **Industries** are classified according to their economic activity as per the second revision of the International Standard Industrial Classification of All Economic Activities, followed by a regrouping dividing them into R&D intensive and non-R&D intensive clusters in terms of the technological status of their production processes.
- **Employment** is classified according to the knowledge-based classification of the workforce, which gives a composition of the workforce based on the occupations that have the expertise to create, process, use, and transmit knowledge in industry development.
- **Ownership** is classified according to the institutional sector classification in terms of which the legal status of control in an enterprise delineates the possession of enterprises in industries as that falling in the private sector, public sector, or some mixture between the two.

The data in the Compendium derive from samples, which by specification are not designed at the three-digit, i.e. branch level of the manufacturing sector. The data are drawn from various annual sources within Statistics South Africa including the annual financial survey, labour force survey, quarterly labour force survey, the statistical release on the producer price index, as well as unpublished records of price statistics and national accounts for the 2003 to 2010 period.

Information is either expressed in amount totals, counts, ratios or percentages as indicated. The currency of monetary values is the Rand. Numbers representing sub-totals and totals of indices,

percentages, and ratios are given as an unweighted average. Numbers representing sub-totals and totals for counts and monetary values are given as sums.

This edition of the Compendium is divided into five key sections, each with its own distinct information:

- **Ownership composition:** Gives details within and across industries on the proprietorship of enterprises looking at what proportion of enterprises constitutes the private sector, public sector, and mixed forms of proprietary holdings.
- **Employment environment:** Gives details within and across industries on overall employment, its gross remuneration, and its breakdown by knowledge decomposition looking at changes in the overall employment number, its gross remuneration, as well as the changes in employment numbers relating to knowledge decomposition.
- **Production situation:** Gives details within and across industries on the production state of affairs looking at changes in gross output, value added, and gross capital stock.
- **Production efficiency:** Gives details within and across industries on the efficiency with which production is carried out looking at changes in the labour productivity index, capital productivity index, capital intensity, and multifactor productivity index.
- **Pricing conditions:** Gives details within and across industries on inflation and concentration looking at changes in the general price level, and the concentration levels created by enterprises.

Because the information in the Compendium is on the economic *progress* of industries, reporting is concentrated more on the changes and less on the levels of indicators. To portray the uninterrupted evolution of time series, 2003 is selected as the base period from which changes are tracked. As part of keeping the focus on changes, for the series of employment, gross remuneration, gross output, and gross capital stock, levels are only reported for the 2003 base period. In the event a yearly level is needed this can be obtained simply by dividing by 100 the product between the 2003 baseline level and the corresponding yearly index value. As the index series on gross remuneration, gross output, value added and gross capital stock are in real terms this will yield levels in real terms for these indicators. If nominally priced levels are required instead, then the levels in real terms must be reflatd by dividing by 100 the product between the yearly level in real

terms and the corresponding yearly value of the general price level index as reported in the Pricing conditions section.

There are a number of important improvements in this Compendium edition compared to the 2008 edition, namely:

- **Delivering new information.** This edition of the Compendium gives updated information by extending the provision of data to 2010. In terms of this, new information is published on the series carried over from the first edition, now with time coverage from 2003 to 2010. In addition the initial estimates of the series are revised by incorporating newer information unavailable at the time of the first compilation. Inevitably producing estimates with the best available information prevailing at a time means that as more recent information becomes available revisions to the initial estimates will follow. In response revisions are not to be seen as a sign of weakness in the original series. They are done in order to include the changes that become known about the series. In this way the actual evolution in a series is reported as closely as possible.
- **Series influenced by assumptions are removed.** In the 2008 edition the series of the price-marginal cost margin, real net exports, elasticity of demand, undistributed profit, rate of return, and interest cover were all derived from the implicitly made or underlying assumptions that supply by enterprises is neither expanding nor contracting, their products are completely substitutable within but not across industries, and their factors of production are fixed. In compiling the 1992 Australian Input-Output Tables, the Australian Bureau of Statistics (1996: 7) observed that these assumptions are "...progressively...weakened by changes in product mix (and consequent changes in inputs), introduction of new products and/or materials, ... substitution of imports for local production and vice versa, ... economies of scale, technological change or substitution of factors (e.g. more capital, less labour)." In short the compilation of series derived out of such assumptions is best avoided since it does not capture the actual, i.e. occurring fluctuations in the economic activities it is meant to reflect because of neglecting the effects of innovation. For this reason the derivation of these series is not pursued in the current Compendium edition.
- **Aligning to standard reporting practices.** This concerns the series on industry concentration and multifactor productivity. In the 2008 edition industry concentration was reported by the Rosenbluth index as well as the number of enterprises operating in industries. However the UNIDO 2005 Industrial Development Report (2005: 130-131)

indicates that conventionally the Gini concentration ratio is the indicator to report for industry concentration, as apart from informing analyses and formulation on industrial policy it equally fulfils the same role in studying the competitive performance of industries. In the case of multifactor productivity, the 2008 System of National Accounts (2009: 412) advises that its derivation must take account of the contributions of both capital and labour to growth in value added. On the other hand, in the 2008 Compendium edition, multifactor productivity was determined from the contributions of capital, labour, and all intermediate inputs. This edition of the Compendium meets these reporting practices in two ways. Firstly it replaces the Rosenbluth index and the number of firms with the Gini concentration ratio as the reportable measure of industry concentration. Secondly it reports multifactor productivity from re-estimation as a productivity measure that accounts for the dual contributions of capital and labour to growth in value added.

- **Avoiding inappropriate treatment of concepts.** The percentage ratio of gross operating surplus to gross value added is called the profit share or the gross profit share. As Lequiller and Blades (2006: 188) indicate the gross profit share is regarded as a reliable depiction of the operating profit rate of enterprises on the aggregate. As a consequence the operating profit series in the 2008 edition of the Compendium refers to gross operating surplus. However the 2008 System of National Accounts (2009: 325) makes clear that such treatment is inappropriate because gross operating surplus represents the contribution of capital to the generation of value added, and as such it constitutes a measure of capital income. In response this edition of the Compendium does not report the “operating profit” series from gross operating surplus.
- **Streamlining information.** The 2008 edition of the Compendium contained 39 indicators the number of which retards or compromises the assimilation of reported information. The majority of the reported indicators in that edition involved the same indicators appearing in different representations. This Compendium edition cuts out the repetitions in the 2008 edition, giving clearer representation of the reported indicators.

With the aforementioned amendments in place the data are presented next in hard copy. For easier use and viewing, the Compendium is accompanied by a soft copy of the data.

Section 1: Ownership composition

Table 1.1: Enterprise control by private sector, 2003-2010

Table 1.2: Enterprise control by public sector, 2003-2010

Table 1.3: Mixed control of enterprises, 2003-2010

Table 1.1: Enterprise control by private sector, 2003-2010

| Industry | ISIC code | Private sector enterprises as proportion of all enterprises (percentage) | | | |
|---|-----------|--|--------------|--------------|--------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 96,08 | 96,23 | 97,14 |
| Industrial chemicals | 351 | 99,04 | 98,91 | 99,25 | 98,81 |
| Other chemicals | 352 | 100,00 | 100,00 | 100,00 | 98,58 |
| Petroleum and related products | 353/4 | 100,00 | 100,00 | 93,75 | 97,83 |
| Plastic products | 356 | 100,00 | 100,00 | 100,00 | 98,04 |
| Iron and steel | 371 | 98,72 | 99,07 | 97,12 | 99,11 |
| Non-ferrous metals | 372 | 100,00 | 100,00 | 100,00 | 98,25 |
| Non-electrical machinery | 382 | 98,23 | 98,17 | 99,01 | 99,17 |
| Electrical machinery | 383 | 98,21 | 98,80 | 98,25 | 98,25 |
| Transport equipment | 384 | 99,42 | 97,55 | 97,38 | 97,19 |
| Professional and scientific equipment | 385 | 98,15 | 98,11 | 100,00 | 96,60 |
| R&D intensive industries | | 99,25 | 98,79 | 98,27 | 98,09 |
| Food products | 311/2 | 97,99 | 99,14 | 99,59 | 98,50 |
| Beverages | 313 | 90,00 | 98,44 | 97,10 | 97,06 |
| Tobacco | 314 | 100,00 | 92,31 | 100,00 | 92,31 |
| Textiles | 321 | 100,00 | 100,00 | 100,00 | 98,66 |
| Wearing apparel, except footwear | 322 | 97,37 | 100,00 | 98,61 | 99,15 |
| Leather and fur products | 323 | 98,04 | 98,36 | 100,00 | 96,00 |
| Footwear, except rubber or plastic | 324 | 100,00 | 100,00 | 100,00 | 100,00 |
| Wood products, except furniture | 331 | 100,00 | 100,00 | 99,15 | 96,91 |
| Furniture and fixtures, excluding metal | 332 | 96,43 | 100,00 | 97,33 | 99,32 |
| Paper and products | 341 | 91,53 | 93,75 | 92,86 | 100,00 |
| Rubber products | 355 | 97,75 | 100,00 | 99,04 | 97,67 |
| Non-metallic mineral products | 361/9 | 96,36 | 96,67 | 98,55 | 98,50 |
| Glass and products | 362 | 96,24 | 98,90 | 96,77 | 100,00 |
| Fabricated metal products | 381 | 99,35 | 98,80 | 96,49 | 96,95 |
| Other manufacturing industries | 390 | 100,00 | 100,00 | 100,00 | 97,86 |
| Non-R&D intensive industries | | 97,40 | 98,42 | 98,37 | 97,93 |
| Manufacturing | | 98,33 | 98,61 | 98,32 | 98,01 |

Table 1.1: Enterprise control by private sector, 2003-2010 (concluded)

| Industry | ISIC code | Private sector enterprises as proportion of all enterprises (percentage) | | | |
|---|-----------|--|--------------|--------------|--------------|
| | | 2007 | 2008 | 2009 | 2010 |
| Printing and publishing | 342 | 100,00 | 99,35 | 99,19 | 96,88 |
| Industrial chemicals | 351 | 98,90 | 100,00 | 99,13 | 99,02 |
| Other chemicals | 352 | 98,44 | 99,69 | 98,76 | 99,12 |
| Petroleum and related products | 353/4 | 97,87 | 98,48 | 98,00 | 98,23 |
| Plastic products | 356 | 99,15 | 100,00 | 99,09 | 100,00 |
| Iron and steel | 371 | 99,08 | 99,38 | 99,16 | 98,99 |
| Non-ferrous metals | 372 | 98,21 | 98,73 | 98,34 | 98,52 |
| Non-electrical machinery | 382 | 98,17 | 99,47 | 98,70 | 99,42 |
| Electrical machinery | 383 | 99,28 | 100,00 | 99,21 | 99,13 |
| Transport equipment | 384 | 99,26 | 99,78 | 98,91 | 100,00 |
| Professional and scientific equipment | 385 | 98,25 | 100,00 | 98,27 | 100,00 |
| R&D intensive industries | | 98,78 | 99,54 | 98,80 | 99,03 |
| Food products | 311/2 | 97,14 | 99,22 | 97,93 | 100,00 |
| Beverages | 313 | 100,00 | 98,40 | 98,96 | 97,62 |
| Tobacco | 314 | 100,00 | 95,85 | 97,28 | 100,00 |
| Textiles | 321 | 98,90 | 100,00 | 99,10 | 100,00 |
| Wearing apparel, except footwear | 322 | 100,00 | 99,31 | 99,65 | 99,54 |
| Leather and fur products | 323 | 100,00 | 100,00 | 99,08 | 100,00 |
| Footwear, except rubber or plastic | 324 | 97,44 | 100,00 | 98,62 | 100,00 |
| Wood products, except furniture | 331 | 100,00 | 100,00 | 99,29 | 100,00 |
| Furniture and fixtures, excluding metal | 332 | 98,77 | 99,43 | 99,05 | 100,00 |
| Paper and products | 341 | 100,00 | 99,40 | 99,86 | 100,00 |
| Rubber products | 355 | 100,00 | 100,00 | 99,47 | 100,00 |
| Non-metallic mineral products | 361/9 | 97,22 | 99,66 | 98,08 | 100,00 |
| Glass and products | 362 | 100,00 | 99,26 | 99,83 | 100,00 |
| Fabricated metal products | 381 | 97,31 | 99,64 | 97,76 | 100,00 |
| Other manufacturing industries | 390 | 94,78 | 99,25 | 96,51 | 100,00 |
| Non-R&D intensive industries | | 98,77 | 99,29 | 98,70 | 99,81 |
| Manufacturing | | 98,78 | 99,41 | 98,75 | 99,42 |

Table 1.2: Enterprise control by public sector, 2003-2010

| | | <i>Public sector enterprises as proportion of all enterprises (percentage)</i> | | | |
|---|------------------|--|-------------|-------------|-------------|
| Industry | ISIC code | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 0,00 | 1,96 | 1,89 | 0,00 |
| Industrial chemicals | 351 | 0,00 | 0,00 | 0,00 | 1,19 |
| Other chemicals | 352 | 0,00 | 0,00 | 0,00 | 0,00 |
| Petroleum and related products | 353/4 | 0,00 | 0,00 | 0,00 | 0,00 |
| Plastic products | 356 | 0,00 | 0,00 | 0,00 | 1,96 |
| Iron and steel | 371 | 0,00 | 0,00 | 0,96 | 0,89 |
| Non-ferrous metals | 372 | 0,00 | 0,00 | 0,00 | 0,00 |
| Non-electrical machinery | 382 | 1,77 | 0,00 | 0,00 | 0,00 |
| Electrical machinery | 383 | 1,34 | 0,60 | 0,00 | 0,58 |
| Transport equipment | 384 | 0,00 | 0,00 | 0,00 | 1,05 |
| Professional and scientific equipment | 385 | 0,00 | 0,00 | 0,00 | 0,00 |
| R&D intensive industries | | 0,28 | 0,23 | 0,26 | 0,52 |
| Food products | 311/2 | 2,01 | 0,00 | 0,00 | 0,75 |
| Beverages | 313 | 2,50 | 0,00 | 2,90 | 1,47 |
| Tobacco | 314 | 0,00 | 0,00 | 0,00 | 0,00 |
| Textiles | 321 | 0,00 | 0,00 | 0,00 | 0,00 |
| Wearing apparel, except footwear | 322 | 0,00 | 0,00 | 0,00 | 0,00 |
| Leather and fur products | 323 | 0,00 | 0,00 | 0,00 | 0,00 |
| Footwear, except rubber or plastic | 324 | 0,00 | 0,00 | 0,00 | 0,00 |
| Wood products, except furniture | 331 | 0,00 | 0,00 | 0,00 | 0,00 |
| Furniture and fixtures, excluding metal | 332 | 0,89 | 0,00 | 0,00 | 0,00 |
| Paper and products | 341 | 3,39 | 0,00 | 0,00 | 0,00 |
| Rubber products | 355 | 2,25 | 0,00 | 0,96 | 2,33 |
| Non-metallic mineral products | 361/9 | 1,82 | 1,67 | 0,00 | 0,00 |
| Glass and products | 362 | 1,50 | 0,00 | 0,00 | 0,00 |
| Fabricated metal products | 381 | 0,00 | 0,00 | 0,58 | 1,53 |
| Other manufacturing industries | 390 | 0,00 | 0,00 | 0,00 | 0,00 |
| Non-R&D intensive industries | | 0,96 | 0,11 | 0,30 | 0,40 |
| Manufacturing | | 0,62 | 0,17 | 0,28 | 0,46 |

Table 1.2: Enterprise control by public sector, 2003-2010 (concluded)

| Industry | ISIC code | Public sector enterprises as proportion of all enterprises (percentage) | | | |
|---|-----------|---|-------------|-------------|-------------|
| | | 2007 | 2008 | 2009 | 2010 |
| Printing and publishing | 342 | 0,00 | 0,00 | 0,00 | 3,13 |
| Industrial chemicals | 351 | 1,10 | 0,00 | 0,87 | 0,00 |
| Other chemicals | 352 | 0,00 | 0,00 | 0,00 | 0,00 |
| Petroleum and related products | 353/4 | 0,00 | 0,00 | 0,00 | 0,00 |
| Plastic products | 356 | 0,85 | 0,00 | 0,91 | 0,00 |
| Iron and steel | 371 | 0,92 | 0,00 | 0,70 | 0,00 |
| Non-ferrous metals | 372 | 0,00 | 1,27 | 0,29 | 0,00 |
| Non-electrical machinery | 382 | 0,00 | 0,00 | 0,00 | 0,58 |
| Electrical machinery | 383 | 0,00 | 0,00 | 0,13 | 0,87 |
| Transport equipment | 384 | 0,00 | 0,00 | 0,24 | 0,00 |
| Professional and scientific equipment | 385 | 0,00 | 0,00 | 0,00 | 0,00 |
| R&D intensive industries | | 0,26 | 0,12 | 0,29 | 0,42 |
| Food products | 311/2 | 1,43 | 0,00 | 0,94 | 0,00 |
| Beverages | 313 | 0,00 | 0,00 | 0,34 | 0,00 |
| Tobacco | 314 | 0,00 | 0,00 | 0,00 | 0,00 |
| Textiles | 321 | 1,10 | 0,00 | 0,59 | 0,00 |
| Wearing apparel, except footwear | 322 | 0,00 | 0,00 | 0,00 | 0,00 |
| Leather and fur products | 323 | 0,00 | 0,00 | 0,00 | 0,00 |
| Footwear, except rubber or plastic | 324 | 2,56 | 0,00 | 1,38 | 0,00 |
| Wood products, except furniture | 331 | 0,00 | 0,00 | 0,00 | 0,00 |
| Furniture and fixtures, excluding metal | 332 | 0,00 | 0,00 | 0,00 | 0,00 |
| Paper and products | 341 | 0,00 | 0,00 | 0,00 | 0,00 |
| Rubber products | 355 | 0,00 | 0,00 | 0,53 | 0,00 |
| Non-metallic mineral products | 361/9 | 0,93 | 0,00 | 0,50 | 0,00 |
| Glass and products | 362 | 0,00 | 0,00 | 0,00 | 0,00 |
| Fabricated metal products | 381 | 0,00 | 0,00 | 0,35 | 0,00 |
| Other manufacturing industries | 390 | 0,75 | 0,00 | 0,40 | 0,00 |
| Non-R&D intensive industries | | 0,45 | 0,00 | 0,34 | 0,00 |
| Manufacturing | | 0,36 | 0,06 | 0,31 | 0,21 |

Table 1.3: Mixed control of enterprises, 2003-2010

| Industry | ISIC code | <i>Mixed enterprises as proportion of all enterprises (percentage)</i> | | | |
|---|-----------|--|-------------|-------------|-------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 0,00 | 1,96 | 1,89 | 2,86 |
| Industrial chemicals | 351 | 0,96 | 1,09 | 0,75 | 0,00 |
| Other chemicals | 352 | 0,00 | 0,00 | 0,00 | 1,42 |
| Petroleum and related products | 353/4 | 0,00 | 0,00 | 6,25 | 2,17 |
| Plastic products | 356 | 0,00 | 0,00 | 0,00 | 0,00 |
| Iron and steel | 371 | 1,28 | 0,93 | 1,92 | 0,00 |
| Non-ferrous metals | 372 | 0,00 | 0,00 | 0,00 | 1,75 |
| Non-electrical machinery | 382 | 0,00 | 1,83 | 0,99 | 0,83 |
| Electrical machinery | 383 | 0,45 | 0,60 | 1,75 | 1,17 |
| Transport equipment | 384 | 0,58 | 2,45 | 2,62 | 1,75 |
| Professional and scientific equipment | 385 | 1,85 | 1,89 | 0,00 | 3,40 |
| R&D intensive industries | | 0,47 | 0,98 | 1,47 | 1,40 |
| Food products | 311/2 | 0,00 | 0,86 | 0,41 | 0,75 |
| Beverages | 313 | 7,50 | 1,56 | 0,00 | 1,47 |
| Tobacco | 314 | 0,00 | 7,69 | 0,00 | 7,69 |
| Textiles | 321 | 0,00 | 0,00 | 0,00 | 1,34 |
| Wearing apparel, except footwear | 322 | 2,63 | 0,00 | 1,39 | 0,85 |
| Leather and fur products | 323 | 1,96 | 1,64 | 0,00 | 4,00 |
| Footwear, except rubber or plastic | 324 | 0,00 | 0,00 | 0,00 | 0,00 |
| Wood products, except furniture | 331 | 0,00 | 0,00 | 0,85 | 3,09 |
| Furniture and fixtures, excluding metal | 332 | 2,68 | 0,00 | 2,67 | 0,68 |
| Paper and products | 341 | 5,08 | 6,25 | 7,14 | 0,00 |
| Rubber products | 355 | 0,00 | 0,00 | 0,00 | 0,00 |
| Non-metallic mineral products | 361/9 | 1,82 | 1,67 | 1,45 | 1,50 |
| Glass and products | 362 | 2,26 | 1,10 | 3,23 | 0,00 |
| Fabricated metal products | 381 | 0,65 | 1,20 | 2,92 | 1,53 |
| Other manufacturing industries | 390 | 0,00 | 0,00 | 0,00 | 2,14 |
| Non-R&D intensive industries | | 1,64 | 1,46 | 1,34 | 1,67 |
| Manufacturing | | 1,05 | 1,22 | 1,40 | 1,53 |

Table 1.3: Mixed control of enterprises, 2003-2010 (concluded)

| Industry | ISIC code | <i>Mixed enterprises as proportion of all enterprises (percentage)</i> | | | |
|---|-----------|--|-------------|-------------|-------------|
| | | 2007 | 2008 | 2009 | 2010 |
| Printing and publishing | 342 | 0,00 | 0,65 | 0,81 | 0,00 |
| Industrial chemicals | 351 | 0,00 | 0,00 | 0,00 | 0,98 |
| Other chemicals | 352 | 1,56 | 0,31 | 1,24 | 0,88 |
| Petroleum and related products | 353/4 | 2,13 | 1,52 | 2,00 | 1,77 |
| Plastic products | 356 | 0,00 | 0,00 | 0,00 | 0,00 |
| Iron and steel | 371 | 0,00 | 0,62 | 0,14 | 1,01 |
| Non-ferrous metals | 372 | 1,79 | 0,00 | 1,37 | 1,48 |
| Non-electrical machinery | 382 | 1,83 | 0,53 | 1,30 | 0,00 |
| Electrical machinery | 383 | 0,72 | 0,00 | 0,66 | 0,00 |
| Transport equipment | 384 | 0,74 | 0,22 | 0,85 | 0,00 |
| Professional and scientific equipment | 385 | 1,75 | 0,00 | 1,73 | 0,00 |
| R&D intensive industries | | 0,96 | 0,35 | 0,92 | 0,56 |
| Food products | 311/2 | 1,43 | 0,78 | 1,12 | 0,00 |
| Beverages | 313 | 0,00 | 1,60 | 0,71 | 2,38 |
| Tobacco | 314 | 0,00 | 4,15 | 2,72 | 0,00 |
| Textiles | 321 | 0,00 | 0,00 | 0,31 | 0,00 |
| Wearing apparel, except footwear | 322 | 0,00 | 0,69 | 0,35 | 0,46 |
| Leather and fur products | 323 | 0,00 | 0,00 | 0,92 | 0,00 |
| Footwear, except rubber or plastic | 324 | 0,00 | 0,00 | 0,00 | 0,00 |
| Wood products, except furniture | 331 | 0,00 | 0,00 | 0,71 | 0,00 |
| Furniture and fixtures, excluding metal | 332 | 1,23 | 0,57 | 0,95 | 0,00 |
| Paper and products | 341 | 0,00 | 0,60 | 0,14 | 0,00 |
| Rubber products | 355 | 0,00 | 0,00 | 0,00 | 0,00 |
| Non-metallic mineral products | 361/9 | 1,85 | 0,34 | 1,42 | 0,00 |
| Glass and products | 362 | 0,00 | 0,74 | 0,17 | 0,00 |
| Fabricated metal products | 381 | 2,69 | 0,36 | 1,89 | 0,00 |
| Other manufacturing industries | 390 | 4,48 | 0,75 | 3,08 | 0,00 |
| Non-R&D intensive industries | | 0,78 | 0,71 | 0,97 | 0,19 |
| Manufacturing | | 0,87 | 0,53 | 0,94 | 0,37 |

Section 2: Employment environment

Table 2.1: Changes in total employment, 2003-2010

Table 2.2: Changes in employment of information-type employees, 2003-2010

Table 2.3: Changes in employment of non-information type employees, 2003-2010

Table 2.4: Changes in employment of knowledge-based employees, 2003-2010

Table 2.5: Changes in employment of data-handling employees, 2003-2010

Table 2.6: Changes in employment of goods-producing employees, 2003-2010

Table 2.7: Changes in employment of services-producing employees, 2003-2010

Table 2.8: Changes in gross remuneration in real terms, 2003-2010

Table 2.1: Changes in total employment, 2003-2010

| Industry | ISIC code | T.N.E. | <i>Total employment index</i> (2003=100) | | | |
|---|--------------|------------------|---|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 61 298 | 100,00 | 107,95 | 119,25 | 124,41 |
| Industrial chemicals | 351 | 8 242 | 100,00 | 121,21 | 141,91 | 152,46 |
| Other chemicals | 352 | 76 022 | 100,00 | 97,99 | 97,92 | 90,71 |
| Petroleum and related products | 353/4 | 33 378 | 100,00 | 109,78 | 119,83 | 116,61 |
| Plastic products | 356 | 51 164 | 100,00 | 101,43 | 104,04 | 98,00 |
| Iron and steel | 371 | 89 629 | 100,00 | 104,23 | 109,59 | 112,99 |
| Non-ferrous metals | 372 | 28 630 | 100,00 | 94,07 | 91,91 | 84,87 |
| Non-electrical machinery | 382 | 65 266 | 100,00 | 106,80 | 112,49 | 113,95 |
| Electrical machinery | 383 | 57 278 | 100,00 | 111,76 | 124,84 | 134,35 |
| Transport equipment | 384 | 90 184 | 100,00 | 117,64 | 138,66 | 149,49 |
| Professional and scientific equipment | 385 | 4 886 | 100,00 | 118,87 | 140,20 | 151,30 |
| R&D intensive industries | | 565 979 | 100,00 | 108,34 | 118,24 | 120,83 |
| Food products | 311/2 | 186 566 | 100,00 | 110,47 | 112,84 | 107,38 |
| Beverages | 313 | 56 167 | 100,00 | 104,19 | 108,70 | 113,32 |
| Tobacco | 314 | 12 317 | 100,00 | 93,19 | 91,01 | 89,18 |
| Textiles | 321 | 90 763 | 100,00 | 104,26 | 102,82 | 98,63 |
| Wearing apparel, except footwear | 322 | 199 203 | 100,00 | 96,40 | 98,06 | 100,03 |
| Leather and fur products | 323 | 7 946 | 100,00 | 106,77 | 114,22 | 124,79 |
| Footwear, except rubber or plastic | 324 | 22 180 | 100,00 | 93,48 | 91,94 | 93,34 |
| Wood products, except furniture | 331 | 73 363 | 100,00 | 105,88 | 118,27 | 131,16 |
| Furniture and fixtures, excluding metal | 332 | 39 441 | 100,00 | 119,59 | 139,81 | 153,18 |
| Paper and products | 341 | 32 766 | 100,00 | 114,22 | 134,40 | 154,44 |
| Rubber products | 355 | 21 885 | 100,00 | 98,53 | 101,63 | 103,63 |
| Non-metallic mineral products | 361/9 | 79 880 | 100,00 | 112,51 | 123,09 | 133,46 |
| Glass and products | 362 | 19 866 | 100,00 | 94,17 | 96,81 | 105,71 |
| Fabricated metal products | 381 | 121 873 | 100,00 | 109,46 | 128,93 | 150,53 |
| Other manufacturing industries | 390 | 44 146 | 100,00 | 110,51 | 118,24 | 133,00 |
| Non-R&D intensive industries | | 1 008 362 | 100,00 | 104,91 | 112,05 | 119,45 |
| Manufacturing | | 1 574 341 | 100,00 | 106,62 | 115,15 | 120,14 |

Table 2.1: Changes in total employment, 2003-2010 (concluded)

| Industry | ISIC code | Total employment index (2003=100) | | | | | r |
|---|-----------|--------------------------------------|---------------|---------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 129,70 | 131,85 | 123,34 | 113,64 | 1,61 | |
| Industrial chemicals | 351 | 158,60 | 158,00 | 144,67 | 131,60 | 3,49 | |
| Other chemicals | 352 | 85,94 | 85,43 | 75,71 | 65,78 | -5,10 | |
| Petroleum and related products | 353/4 | 105,56 | 95,71 | 86,80 | 79,98 | -2,75 | |
| Plastic products | 356 | 92,94 | 92,94 | 89,71 | 84,37 | -2,10 | |
| Iron and steel | 371 | 115,43 | 108,25 | 91,94 | 81,14 | -2,58 | |
| Non-ferrous metals | 372 | 73,73 | 64,03 | 57,07 | 52,82 | -7,67 | |
| Non-electrical machinery | 382 | 125,27 | 134,35 | 119,18 | 101,87 | 0,23 | |
| Electrical machinery | 383 | 137,17 | 121,82 | 93,73 | 76,30 | -3,32 | |
| Transport equipment | 384 | 147,45 | 130,23 | 105,63 | 91,36 | -1,12 | |
| Professional and scientific equipment | 385 | 153,23 | 141,75 | 115,07 | 95,93 | -0,52 | |
| R&D intensive industries | | 120,46 | 114,94 | 100,26 | 88,62 | -1,50 | |
| Food products | 311/2 | 107,24 | 110,49 | 99,53 | 89,36 | -1,40 | |
| Beverages | 313 | 125,11 | 132,20 | 111,30 | 93,75 | -0,80 | |
| Tobacco | 314 | 86,31 | 80,01 | 65,61 | 56,61 | -6,86 | |
| Textiles | 321 | 96,02 | 92,59 | 76,42 | 63,86 | -5,45 | |
| Wearing apparel, except footwear | 322 | 99,31 | 88,79 | 67,75 | 56,24 | -6,94 | |
| Leather and fur products | 323 | 143,44 | 161,15 | 159,52 | 153,78 | 5,53 | |
| Footwear, except rubber or plastic | 324 | 102,32 | 109,39 | 91,95 | 76,54 | -3,29 | |
| Wood products, except furniture | 331 | 139,95 | 135,37 | 107,83 | 89,19 | -1,42 | |
| Furniture and fixtures, excluding metal | 332 | 155,08 | 136,64 | 100,41 | 81,26 | -2,56 | |
| Paper and products | 341 | 172,68 | 170,79 | 139,60 | 120,43 | 2,35 | |
| Rubber products | 355 | 110,52 | 112,41 | 86,17 | 66,10 | -5,04 | |
| Non-metallic mineral products | 361/9 | 144,13 | 137,18 | 106,75 | 87,86 | -1,60 | |
| Glass and products | 362 | 114,07 | 109,26 | 86,04 | 71,68 | -4,08 | |
| Fabricated metal products | 381 | 164,68 | 157,05 | 121,90 | 100,03 | 0,00 | |
| Other manufacturing industries | 390 | 161,05 | 172,90 | 145,88 | 123,55 | 2,68 | |
| Non-R&D intensive industries | | 128,13 | 127,08 | 104,44 | 88,68 | -1,49 | |
| Manufacturing | | 124,29 | 121,01 | 102,35 | 88,65 | -1,49 | |

Table 2.2: Changes in employment of information-type employees, 2003-2010

| Industry | ISIC code | N.I.E. | <i>Employment index for information-type employees (2003=100)</i> | | | |
|---|--------------|----------------|---|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 24 471 | 100,00 | 99,49 | 122,89 | 123,94 |
| Industrial chemicals | 351 | 3 698 | 100,00 | 122,63 | 174,79 | 136,33 |
| Other chemicals | 352 | 36 842 | 100,00 | 126,49 | 94,70 | 73,31 |
| Petroleum and related products | 353/4 | 12 238 | 100,00 | 158,09 | 104,19 | 128,42 |
| Plastic products | 356 | 20 335 | 100,00 | 63,84 | 39,03 | 48,59 |
| Iron and steel | 371 | 22 088 | 100,00 | 117,73 | 95,05 | 119,30 |
| Non-ferrous metals | 372 | 6 969 | 100,00 | 109,00 | 99,41 | 103,69 |
| Non-electrical machinery | 382 | 35 765 | 100,00 | 99,89 | 84,03 | 88,94 |
| Electrical machinery | 383 | 26 050 | 100,00 | 81,11 | 97,56 | 110,91 |
| Transport equipment | 384 | 30 384 | 100,00 | 111,74 | 134,21 | 147,37 |
| Professional and scientific equipment | 385 | 1 971 | 100,00 | 152,10 | 122,83 | 184,49 |
| R&D intensive industries | | 220 812 | 100,00 | 112,92 | 106,24 | 115,03 |
| Food products | 311/2 | 41 459 | 100,00 | 111,29 | 112,68 | 112,98 |
| Beverages | 313 | 14 893 | 100,00 | 98,34 | 102,95 | 108,07 |
| Tobacco | 314 | 9 654 | 100,00 | 47,95 | 40,53 | 6,11 |
| Textiles | 321 | 14 052 | 100,00 | 101,22 | 109,84 | 73,06 |
| Wearing apparel, except footwear | 322 | 29 655 | 100,00 | 58,15 | 75,66 | 65,13 |
| Leather and fur products | 323 | 2 318 | 100,00 | 37,29 | 48,54 | 73,99 |
| Footwear, except rubber or plastic | 324 | 3 735 | 100,00 | 86,67 | 47,88 | 40,01 |
| Wood products, except furniture | 331 | 5 061 | 100,00 | 145,41 | 140,10 | 157,13 |
| Furniture and fixtures, excluding metal | 332 | 13 294 | 100,00 | 67,38 | 50,61 | 65,32 |
| Paper and products | 341 | 7 406 | 100,00 | 128,65 | 133,38 | 179,94 |
| Rubber products | 355 | 9 032 | 100,00 | 87,60 | 95,26 | 89,65 |
| Non-metallic mineral products | 361/9 | 12 281 | 100,00 | 115,66 | 149,09 | 136,07 |
| Glass and products | 362 | 9 707 | 100,00 | 24,04 | 67,80 | 90,59 |
| Fabricated metal products | 381 | 22 835 | 100,00 | 111,54 | 108,11 | 170,49 |
| Other manufacturing industries | 390 | 11 911 | 100,00 | 118,68 | 83,64 | 107,10 |
| Non-R&D intensive industries | | 207 294 | 100,00 | 89,32 | 91,07 | 98,38 |
| Manufacturing | | 428 106 | 100,00 | 101,12 | 98,66 | 106,70 |

Table 2.2: Changes in employment of information-type employees, 2003-2010 (concluded)

| Industry | ISIC code | Employment index for information type employees (2003=100) | | | | | r |
|---|--------------|--|---------------|---------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 139,00 | 130,44 | 110,59 | 120,85 | 2,40 | |
| Industrial chemicals | 351 | 184,32 | 159,14 | 153,07 | 156,63 | 5,77 | |
| Other chemicals | 352 | 68,88 | 80,96 | 70,36 | 69,22 | -4,49 | |
| Petroleum and related products | 353/4 | 107,20 | 116,04 | 110,38 | 96,12 | -0,49 | |
| Plastic products | 356 | 64,11 | 48,59 | 43,64 | 46,07 | -9,23 | |
| Iron and steel | 371 | 87,08 | 78,37 | 68,70 | 85,75 | -1,90 | |
| Non-ferrous metals | 372 | 66,97 | 82,91 | 69,48 | 47,97 | -8,77 | |
| Non-electrical machinery | 382 | 96,51 | 101,06 | 104,52 | 109,46 | 1,14 | |
| Electrical machinery | 383 | 136,88 | 104,72 | 100,62 | 87,63 | -1,64 | |
| Transport equipment | 384 | 131,84 | 125,58 | 104,17 | 84,58 | -2,07 | |
| Professional and scientific equipment | 385 | 169,79 | 192,16 | 145,50 | 155,14 | 5,64 | |
| R&D intensive industries | | 113,87 | 110,91 | 98,28 | 96,31 | -0,47 | |
| Food products | 311/2 | 112,91 | 137,95 | 113,51 | 107,36 | 0,89 | |
| Beverages | 313 | 103,21 | 124,07 | 114,18 | 98,91 | -0,14 | |
| Tobacco | 314 | 91,47 | 23,78 | 60,52 | 17,29 | -19,70 | |
| Textiles | 321 | 107,40 | 107,72 | 73,31 | 74,97 | -3,54 | |
| Wearing apparel, except footwear | 322 | 86,77 | 86,70 | 63,51 | 56,67 | -6,85 | |
| Leather and fur products | 323 | 76,93 | 146,62 | 185,03 | 104,79 | 0,59 | |
| Footwear, except rubber or plastic | 324 | 79,44 | 72,19 | 72,97 | 45,54 | -9,36 | |
| Wood products, except furniture | 331 | 200,13 | 174,48 | 149,90 | 108,38 | 1,01 | |
| Furniture and fixtures, excluding metal | 332 | 81,35 | 87,10 | 53,94 | 63,96 | -5,43 | |
| Paper and products | 341 | 249,22 | 223,58 | 178,63 | 145,38 | 4,79 | |
| Rubber products | 355 | 67,08 | 99,41 | 89,33 | 47,32 | -8,93 | |
| Non-metallic mineral products | 361/9 | 150,89 | 148,37 | 121,51 | 98,05 | -0,25 | |
| Glass and products | 362 | 48,50 | 75,86 | 65,94 | 54,90 | -7,22 | |
| Fabricated metal products | 381 | 165,47 | 159,53 | 129,55 | 106,54 | 0,80 | |
| Other manufacturing industries | 390 | 73,99 | 138,38 | 139,51 | 116,24 | 1,90 | |
| Non-R&D intensive industries | | 112,98 | 120,38 | 107,42 | 83,09 | -2,29 | |
| Manufacturing | | 113,43 | 115,64 | 102,85 | 89,70 | -1,35 | |

Table 2.3: Changes in employment of non-information type employees, 2003-2010

| Industry | ISIC code | N.N.I.E. | <i>Employment index for non- information type employees (2003=100)</i> | | | |
|---|--------------|------------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 36 827 | 100,00 | 116,42 | 115,62 | 124,89 |
| Industrial chemicals | 351 | 4 545 | 100,00 | 119,79 | 109,03 | 168,59 |
| Other chemicals | 352 | 39 180 | 100,00 | 69,48 | 101,15 | 108,10 |
| Petroleum and related products | 353/4 | 21 140 | 100,00 | 61,48 | 135,47 | 104,80 |
| Plastic products | 356 | 30 830 | 100,00 | 139,02 | 169,05 | 147,40 |
| Iron and steel | 371 | 67 541 | 100,00 | 90,74 | 124,13 | 106,68 |
| Non-ferrous metals | 372 | 21 661 | 100,00 | 79,14 | 84,42 | 66,05 |
| Non-electrical machinery | 382 | 29 501 | 100,00 | 113,71 | 140,95 | 138,95 |
| Electrical machinery | 383 | 31 228 | 100,00 | 142,40 | 152,11 | 157,80 |
| Transport equipment | 384 | 59 799 | 100,00 | 123,54 | 143,12 | 151,60 |
| Professional and scientific equipment | 385 | 2 916 | 100,00 | 85,65 | 157,57 | 118,12 |
| R&D intensive industries | | 345 167 | 100,00 | 103,76 | 130,24 | 126,63 |
| Food products | 311/2 | 145 107 | 100,00 | 109,64 | 112,99 | 101,77 |
| Beverages | 313 | 41 274 | 100,00 | 110,05 | 114,46 | 118,58 |
| Tobacco | 314 | 2 663 | 100,00 | 138,44 | 141,49 | 172,25 |
| Textiles | 321 | 76 710 | 100,00 | 107,29 | 95,79 | 124,19 |
| Wearing apparel, except footwear | 322 | 169 548 | 100,00 | 134,65 | 120,45 | 134,93 |
| Leather and fur products | 323 | 5 628 | 100,00 | 176,26 | 179,89 | 175,58 |
| Footwear, except rubber or plastic | 324 | 18 445 | 100,00 | 100,30 | 135,99 | 146,67 |
| Wood products, except furniture | 331 | 68 301 | 100,00 | 66,35 | 96,43 | 105,18 |
| Furniture and fixtures, excluding metal | 332 | 26 148 | 100,00 | 171,79 | 229,01 | 241,04 |
| Paper and products | 341 | 25 360 | 100,00 | 99,79 | 135,42 | 128,94 |
| Rubber products | 355 | 12 853 | 100,00 | 109,45 | 108,00 | 117,60 |
| Non-metallic mineral products | 361/9 | 67 601 | 100,00 | 109,37 | 97,10 | 130,85 |
| Glass and products | 362 | 10 159 | 100,00 | 164,30 | 125,83 | 120,84 |
| Fabricated metal products | 381 | 99 038 | 100,00 | 107,38 | 149,76 | 130,57 |
| Other manufacturing industries | 390 | 32 236 | 100,00 | 102,34 | 152,84 | 158,90 |
| Non-R&D intensive industries | | 801 071 | 100,00 | 120,49 | 133,03 | 140,53 |
| Manufacturing | | 1 146 239 | 100,00 | 112,13 | 131,63 | 133,58 |

Table 2.3: Changes in employment of non-information type employees, 2003-2010 (concluded)

| Industry | ISIC code | <i>Employment index for non-information type employees (2003=100)</i> | | | | | r |
|---|-----------|---|---------------|---------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 120,40 | 133,26 | 136,09 | 106,42 | 0,78 | |
| Industrial chemicals | 351 | 132,88 | 156,87 | 136,27 | 106,57 | 0,80 | |
| Other chemicals | 352 | 103,01 | 89,90 | 81,07 | 62,33 | -5,74 | |
| Petroleum and related products | 353/4 | 103,92 | 75,38 | 63,23 | 63,85 | -5,45 | |
| Plastic products | 356 | 121,76 | 137,29 | 135,78 | 122,67 | 2,59 | |
| Iron and steel | 371 | 143,79 | 138,12 | 115,19 | 76,52 | -3,29 | |
| Non-ferrous metals | 372 | 80,49 | 45,14 | 44,66 | 57,68 | -6,65 | |
| Non-electrical machinery | 382 | 154,03 | 167,63 | 133,84 | 94,28 | -0,73 | |
| Electrical machinery | 383 | 137,45 | 138,91 | 86,84 | 64,97 | -5,25 | |
| Transport equipment | 384 | 163,07 | 134,87 | 107,08 | 98,14 | -0,24 | |
| Professional and scientific equipment | 385 | 136,68 | 91,34 | 84,64 | 36,73 | -11,77 | |
| R&D intensive industries | | 127,04 | 118,97 | 102,24 | 80,92 | -2,61 | |
| Food products | 311/2 | 101,58 | 83,03 | 85,55 | 71,35 | -4,13 | |
| Beverages | 313 | 147,01 | 140,34 | 108,42 | 88,59 | -1,50 | |
| Tobacco | 314 | 81,15 | 136,23 | 70,70 | 95,94 | -0,52 | |
| Textiles | 321 | 84,65 | 77,47 | 79,54 | 52,74 | -7,69 | |
| Wearing apparel, except footwear | 322 | 111,85 | 90,88 | 71,99 | 55,81 | -7,03 | |
| Leather and fur products | 323 | 209,95 | 175,68 | 134,00 | 202,76 | 9,24 | |
| Footwear, except rubber or plastic | 324 | 125,20 | 146,59 | 110,94 | 107,54 | 0,91 | |
| Wood products, except furniture | 331 | 79,77 | 96,27 | 65,77 | 70,00 | -4,36 | |
| Furniture and fixtures, excluding metal | 332 | 228,81 | 186,18 | 146,88 | 98,56 | -0,18 | |
| Paper and products | 341 | 96,15 | 118,00 | 100,57 | 95,49 | -0,57 | |
| Rubber products | 355 | 153,95 | 125,41 | 83,01 | 84,87 | -2,03 | |
| Non-metallic mineral products | 361/9 | 137,37 | 126,00 | 91,99 | 77,66 | -3,11 | |
| Glass and products | 362 | 179,64 | 142,65 | 106,13 | 88,45 | -1,52 | |
| Fabricated metal products | 381 | 163,89 | 154,58 | 114,25 | 93,52 | -0,83 | |
| Other manufacturing industries | 390 | 248,12 | 207,42 | 152,25 | 130,86 | 3,42 | |
| Non-R&D intensive industries | | 143,27 | 133,78 | 101,47 | 94,28 | -0,73 | |
| Manufacturing | | 135,16 | 126,38 | 101,85 | 87,60 | -1,64 | |

Table 2.4: Changes in employment of knowledge-based employees, 2003-2010

| Industry | ISIC code | N.K.E. | <i>Employment index for knowledge-based employees (2003=100)</i> | | | |
|---|--------------|----------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 9 073 | 100,00 | 109,63 | 129,70 | 134,44 |
| Industrial chemicals | 351 | 2 069 | 100,00 | 120,08 | 195,11 | 136,07 |
| Other chemicals | 352 | 17 360 | 100,00 | 134,16 | 68,65 | 52,12 |
| Petroleum and related products | 353/4 | 6 469 | 100,00 | 135,79 | 66,25 | 75,30 |
| Plastic products | 356 | 10 791 | 100,00 | 70,30 | 28,04 | 21,12 |
| Iron and steel | 371 | 6 542 | 100,00 | 155,19 | 146,99 | 162,23 |
| Non-ferrous metals | 372 | 3 150 | 100,00 | 125,89 | 69,18 | 83,43 |
| Non-electrical machinery | 382 | 11 005 | 100,00 | 116,56 | 116,85 | 110,54 |
| Electrical machinery | 383 | 10 975 | 100,00 | 63,47 | 45,10 | 83,79 |
| Transport equipment | 384 | 9 836 | 100,00 | 114,67 | 177,12 | 220,82 |
| Professional and scientific equipment | 385 | 455 | 100,00 | 185,72 | 162,01 | 114,92 |
| R&D intensive industries | | 87 723 | 100,00 | 121,04 | 109,54 | 108,62 |
| Food products | 311/2 | 15 538 | 100,00 | 108,62 | 106,41 | 110,60 |
| Beverages | 313 | 4 240 | 100,00 | 71,93 | 118,14 | 167,49 |
| Tobacco | 314 | 4 191 | 100,00 | 54,53 | 63,30 | 24,51 |
| Textiles | 321 | 3 375 | 100,00 | 122,31 | 158,88 | 86,06 |
| Wearing apparel, except footwear | 322 | 10 242 | 100,00 | 55,68 | 80,78 | 55,14 |
| Leather and fur products | 323 | 814 | 100,00 | 106,78 | 122,37 | 113,69 |
| Footwear, except rubber or plastic | 324 | 1 447 | 100,00 | 117,47 | 82,60 | 82,44 |
| Wood products, except furniture | 331 | 1 618 | 100,00 | 229,67 | 153,58 | 207,57 |
| Furniture and fixtures, excluding metal | 332 | 4 682 | 100,00 | 94,43 | 65,38 | 114,62 |
| Paper and products | 341 | 4 836 | 100,00 | 49,76 | 65,08 | 82,50 |
| Rubber products | 355 | 4 504 | 100,00 | 80,29 | 86,76 | 83,23 |
| Non-metallic mineral products | 361/9 | 6 092 | 100,00 | 143,13 | 158,70 | 103,33 |
| Glass and products | 362 | 5 819 | 100,00 | 22,75 | 62,93 | 50,43 |
| Fabricated metal products | 381 | 7 749 | 100,00 | 150,47 | 113,42 | 228,21 |
| Other manufacturing industries | 390 | 2 698 | 100,00 | 179,27 | 130,49 | 155,70 |
| Non-R&D intensive industries | | 77 844 | 100,00 | 105,81 | 104,59 | 111,04 |
| Manufacturing | | 165 568 | 100,00 | 113,42 | 107,07 | 109,83 |

Table 2.4: Changes in employment of knowledge-based employees, 2003-2010 (concluded)

| Industry | ISIC code | Employment index for knowledge-based employees (2003=100) | | | | | r |
|---|--------------|---|---------------|---------------|---------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 207,77 | 168,90 | 172,85 | 211,92 | 9,84 | |
| Industrial chemicals | 351 | 145,35 | 124,00 | 75,94 | 102,64 | 0,33 | |
| Other chemicals | 352 | 43,91 | 71,63 | 56,78 | 64,81 | -5,28 | |
| Petroleum and related products | 353/4 | 81,83 | 137,70 | 108,40 | 84,88 | -2,03 | |
| Plastic products | 356 | 51,95 | 32,61 | 29,71 | 54,40 | -7,33 | |
| Iron and steel | 371 | 134,20 | 80,81 | 51,67 | 91,56 | -1,10 | |
| Non-ferrous metals | 372 | 63,27 | 58,89 | 41,60 | 22,85 | -16,85 | |
| Non-electrical machinery | 382 | 134,23 | 158,86 | 151,43 | 137,93 | 4,10 | |
| Electrical machinery | 383 | 209,16 | 157,59 | 148,81 | 70,45 | -4,28 | |
| Transport equipment | 384 | 185,62 | 149,64 | 124,10 | 91,16 | -1,15 | |
| Professional and scientific equipment | 385 | 205,19 | 127,94 | 175,48 | 179,15 | 7,56 | |
| R&D intensive industries | | 132,95 | 115,32 | 103,34 | 101,07 | 0,13 | |
| Food products | 311/2 | 74,55 | 130,42 | 72,47 | 88,24 | -1,55 | |
| Beverages | 313 | 96,33 | 148,36 | 136,08 | 126,41 | 2,97 | |
| Tobacco | 314 | 94,93 | 54,15 | 34,87 | 43,73 | -9,82 | |
| Textiles | 321 | 130,05 | 159,24 | 130,87 | 129,06 | 3,24 | |
| Wearing apparel, except footwear | 322 | 99,16 | 89,46 | 39,13 | 67,96 | -4,71 | |
| Leather and fur products | 323 | 131,16 | 122,51 | 151,94 | 98,50 | -0,19 | |
| Footwear, except rubber or plastic | 324 | 100,35 | 76,66 | 41,33 | 36,38 | -11,87 | |
| Wood products, except furniture | 331 | 239,04 | 226,41 | 224,61 | 156,32 | 5,74 | |
| Furniture and fixtures, excluding metal | 332 | 73,20 | 82,12 | 68,67 | 91,58 | -1,09 | |
| Paper and products | 341 | 145,72 | 138,03 | 85,30 | 51,60 | -7,94 | |
| Rubber products | 355 | 47,26 | 112,13 | 129,92 | 55,49 | -7,10 | |
| Non-metallic mineral products | 361/9 | 225,17 | 180,00 | 159,01 | 159,92 | 6,04 | |
| Glass and products | 362 | 46,79 | 48,94 | 41,25 | 37,28 | -11,60 | |
| Fabricated metal products | 381 | 238,18 | 214,25 | 149,65 | 138,97 | 4,20 | |
| Other manufacturing industries | 390 | 101,26 | 200,34 | 101,70 | 204,22 | 9,34 | |
| Non-R&D intensive industries | | 122,88 | 132,20 | 104,45 | 99,04 | -0,12 | |
| Manufacturing | | 127,91 | 123,76 | 103,90 | 100,06 | 0,01 | |

Table 2.5: Changes in employment of data-handling employees, 2003-2010

| Industry | ISIC code | N.D.E. | Employment index for data- handling employees (2003=100) | | | |
|---|--------------|----------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 15 398 | 100,00 | 92,87 | 114,21 | 122,44 |
| Industrial chemicals | 351 | 1 629 | 100,00 | 121,98 | 147,39 | 126,65 |
| Other chemicals | 352 | 19 482 | 100,00 | 114,55 | 117,89 | 91,68 |
| Petroleum and related products | 353/4 | 5 770 | 100,00 | 159,52 | 116,89 | 177,92 |
| Plastic products | 356 | 9 544 | 100,00 | 60,83 | 58,33 | 86,60 |
| Iron and steel | 371 | 15 546 | 100,00 | 90,67 | 61,77 | 89,82 |
| Non-ferrous metals | 372 | 3 819 | 100,00 | 94,33 | 126,91 | 122,50 |
| Non-electrical machinery | 382 | 24 761 | 100,00 | 80,32 | 63,59 | 70,32 |
| Electrical machinery | 383 | 15 075 | 100,00 | 96,67 | 147,48 | 137,88 |
| Transport equipment | 384 | 20 550 | 100,00 | 106,57 | 105,12 | 102,85 |
| Professional and scientific equipment | 385 | 1 516 | 100,00 | 95,56 | 103,77 | 263,21 |
| R&D intensive industries | | 133 089 | 100,00 | 101,26 | 105,76 | 126,53 |
| Food products | 311/2 | 25 921 | 100,00 | 106,88 | 111,06 | 108,13 |
| Beverages | 313 | 10 654 | 100,00 | 118,83 | 96,63 | 67,64 |
| Tobacco | 314 | 5 463 | 100,00 | 40,58 | 28,15 | 0,00 |
| Textiles | 321 | 10 678 | 100,00 | 87,26 | 76,93 | 64,29 |
| Wearing apparel, except footwear | 322 | 19 413 | 100,00 | 59,31 | 74,03 | 73,35 |
| Leather and fur products | 323 | 2 318 | 100,00 | 21,04 | 39,93 | 58,30 |
| Footwear, except rubber or plastic | 324 | 2 288 | 100,00 | 56,97 | 62,82 | 50,13 |
| Wood products, except furniture | 331 | 3 443 | 100,00 | 68,74 | 120,07 | 120,82 |
| Furniture and fixtures, excluding metal | 332 | 6 412 | 100,00 | 73,54 | 66,97 | 60,00 |
| Paper and products | 341 | 2 570 | 100,00 | 229,73 | 220,38 | 300,39 |
| Rubber products | 355 | 4 528 | 100,00 | 90,58 | 99,11 | 94,84 |
| Non-metallic mineral products | 361/9 | 6 189 | 100,00 | 93,39 | 149,09 | 181,69 |
| Glass and products | 362 | 3 888 | 100,00 | 25,84 | 78,01 | 140,40 |
| Fabricated metal products | 381 | 15 086 | 100,00 | 91,56 | 107,83 | 124,13 |
| Other manufacturing industries | 390 | 9 214 | 100,00 | 76,99 | 64,32 | 87,90 |
| Non-R&D intensive industries | | 128 064 | 100,00 | 82,75 | 93,02 | 102,13 |
| Manufacturing | | 261 153 | 100,00 | 92,00 | 99,39 | 114,33 |

Table 2.5: Changes in employment of data-handling employees, 2003-2010 (concluded)

| Industry | ISIC code | <i>Employment index for data- handling employees (2003=100)</i> | | | | | r |
|---|--------------|---|---------------|---------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 87,77 | 110,63 | 73,57 | 61,90 | -5,82 | |
| Industrial chemicals | 351 | 222,43 | 169,54 | 203,07 | 189,29 | 8,30 | |
| Other chemicals | 352 | 91,78 | 81,91 | 75,63 | 67,85 | -4,73 | |
| Petroleum and related products | 353/4 | 115,91 | 80,50 | 105,03 | 92,30 | -1,00 | |
| Plastic products | 356 | 83,92 | 76,69 | 70,67 | 55,15 | -7,17 | |
| Iron and steel | 371 | 58,54 | 65,51 | 69,68 | 72,08 | -4,01 | |
| Non-ferrous metals | 372 | 99,45 | 100,31 | 91,27 | 65,76 | -5,11 | |
| Non-electrical machinery | 382 | 59,44 | 63,12 | 77,27 | 85,93 | -1,88 | |
| Electrical machinery | 383 | 80,61 | 82,03 | 76,09 | 99,49 | -0,06 | |
| Transport equipment | 384 | 100,94 | 117,58 | 93,33 | 76,29 | -3,33 | |
| Professional and scientific equipment | 385 | 150,84 | 198,44 | 103,39 | 103,29 | 0,41 | |
| R&D intensive industries | | 104,69 | 104,21 | 94,45 | 88,12 | -1,57 | |
| Food products | 311/2 | 136,30 | 134,92 | 141,13 | 119,24 | 2,22 | |
| Beverages | 313 | 101,28 | 115,68 | 101,32 | 79,75 | -2,79 | |
| Tobacco | 314 | 74,38 | 63,54 | 77,34 | 39,44 | -10,98 | |
| Textiles | 321 | 90,58 | 75,64 | 42,87 | 41,82 | -10,33 | |
| Wearing apparel, except footwear | 322 | 79,29 | 80,15 | 73,63 | 44,61 | -9,60 | |
| Leather and fur products | 323 | 59,82 | 120,33 | 104,32 | 67,28 | -4,83 | |
| Footwear, except rubber or plastic | 324 | 52,26 | 77,73 | 110,70 | 62,21 | -5,76 | |
| Wood products, except furniture | 331 | 169,51 | 126,36 | 80,95 | 68,16 | -4,68 | |
| Furniture and fixtures, excluding metal | 332 | 112,49 | 112,82 | 48,19 | 54,16 | -7,38 | |
| Paper and products | 341 | 364,09 | 323,76 | 294,14 | 263,60 | 12,88 | |
| Rubber products | 355 | 82,01 | 67,75 | 39,72 | 31,37 | -13,49 | |
| Non-metallic mineral products | 361/9 | 90,35 | 148,58 | 103,89 | 63,21 | -5,57 | |
| Glass and products | 362 | 93,12 | 120,85 | 103,04 | 79,99 | -2,75 | |
| Fabricated metal products | 381 | 110,15 | 115,05 | 112,15 | 77,06 | -3,20 | |
| Other manufacturing industries | 390 | 71,48 | 72,87 | 111,36 | 42,69 | -10,09 | |
| Non-R&D intensive industries | | 112,48 | 117,07 | 102,98 | 75,64 | -3,43 | |
| Manufacturing | | 108,58 | 110,64 | 98,72 | 81,88 | -2,47 | |

Table 2.6: Changes in employment of goods-producing employees, 2003-2010

| Industry | ISIC code | N.G.E. | <i>Employment index for goods- producing employees (2003=100)</i> | | | |
|---|--------------|----------------|---|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 14 624 | 100,00 | 108,41 | 134,46 | 84,10 |
| Industrial chemicals | 351 | 2 642 | 100,00 | 101,27 | 88,10 | 109,58 |
| Other chemicals | 352 | 21 643 | 100,00 | 38,09 | 88,80 | 92,30 |
| Petroleum and related products | 353/4 | 14 134 | 100,00 | 28,15 | 62,02 | 89,77 |
| Plastic products | 356 | 17 954 | 100,00 | 107,61 | 182,34 | 153,26 |
| Iron and steel | 371 | 34 692 | 100,00 | 80,11 | 101,45 | 83,12 |
| Non-ferrous metals | 372 | 10 357 | 100,00 | 59,25 | 89,43 | 66,74 |
| Non-electrical machinery | 382 | 8 667 | 100,00 | 144,07 | 139,47 | 160,32 |
| Electrical machinery | 383 | 11 559 | 100,00 | 141,27 | 120,34 | 140,01 |
| Transport equipment | 384 | 22 292 | 100,00 | 146,46 | 147,19 | 122,63 |
| Professional and scientific equipment | 385 | 749 | 100,00 | 162,02 | 141,60 | 45,59 |
| R&D intensive industries | | 159 311 | 100,00 | 101,52 | 117,75 | 104,31 |
| Food products | 311/2 | 39 256 | 100,00 | 128,46 | 132,87 | 120,35 |
| Beverages | 313 | 13 404 | 100,00 | 98,63 | 97,98 | 119,56 |
| Tobacco | 314 | 866 | 100,00 | 150,74 | 92,68 | 193,53 |
| Textiles | 321 | 41 723 | 100,00 | 77,38 | 48,18 | 77,62 |
| Wearing apparel, except footwear | 322 | 77 916 | 100,00 | 114,57 | 83,48 | 97,21 |
| Leather and fur products | 323 | 1 673 | 100,00 | 174,01 | 130,13 | 225,73 |
| Footwear, except rubber or plastic | 324 | 6 242 | 100,00 | 120,46 | 116,96 | 90,71 |
| Wood products, except furniture | 331 | 13 996 | 100,00 | 75,64 | 116,12 | 95,86 |
| Furniture and fixtures, excluding metal | 332 | 6 718 | 100,00 | 103,99 | 137,58 | 143,62 |
| Paper and products | 341 | 15 409 | 100,00 | 81,02 | 116,78 | 98,23 |
| Rubber products | 355 | 8 196 | 100,00 | 93,97 | 92,40 | 113,14 |
| Non-metallic mineral products | 361/9 | 18 662 | 100,00 | 81,82 | 78,21 | 99,02 |
| Glass and products | 362 | 3 210 | 100,00 | 164,26 | 109,99 | 117,86 |
| Fabricated metal products | 381 | 24 455 | 100,00 | 79,16 | 137,84 | 130,38 |
| Other manufacturing industries | 390 | 5 534 | 100,00 | 107,30 | 137,02 | 137,14 |
| Non-R&D intensive industries | | 277 258 | 100,00 | 110,09 | 108,55 | 124,00 |
| Manufacturing | | 436 569 | 100,00 | 105,81 | 113,15 | 114,15 |

Table 2.6: Changes in employment of goods-producing employees, 2003-2010 (concluded)

| Industry | ISIC code | Employment index for goods- producing employees (2003=100) | | | | | r |
|---|--------------|--|---------------|---------------|---------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 97,43 | 124,22 | 149,04 | 111,83 | 1,41 | |
| Industrial chemicals | 351 | 108,43 | 152,86 | 206,59 | 95,44 | -0,58 | |
| Other chemicals | 352 | 98,99 | 78,34 | 74,83 | 62,50 | -5,71 | |
| Petroleum and related products | 353/4 | 60,80 | 36,82 | 43,47 | 25,39 | -15,75 | |
| Plastic products | 356 | 110,17 | 120,46 | 143,52 | 129,94 | 3,33 | |
| Iron and steel | 371 | 104,04 | 110,87 | 111,19 | 72,27 | -3,98 | |
| Non-ferrous metals | 372 | 79,80 | 58,26 | 53,20 | 73,78 | -3,73 | |
| Non-electrical machinery | 382 | 210,80 | 191,98 | 134,13 | 110,64 | 1,27 | |
| Electrical machinery | 383 | 115,16 | 99,94 | 59,51 | 72,43 | -3,95 | |
| Transport equipment | 384 | 139,62 | 118,36 | 111,28 | 132,12 | 3,54 | |
| Professional and scientific equipment | 385 | 122,09 | 156,73 | 100,93 | 81,48 | -2,53 | |
| R&D intensive industries | | 113,39 | 113,53 | 107,97 | 87,98 | -1,59 | |
| Food products | 311/2 | 124,41 | 102,77 | 103,63 | 81,52 | -2,52 | |
| Beverages | 313 | 177,57 | 124,56 | 109,48 | 93,12 | -0,89 | |
| Tobacco | 314 | 128,18 | 128,02 | 109,14 | 96,31 | -0,47 | |
| Textiles | 321 | 49,03 | 52,37 | 57,49 | 30,07 | -13,95 | |
| Wearing apparel, except footwear | 322 | 88,76 | 93,68 | 93,69 | 65,86 | -5,09 | |
| Leather and fur products | 323 | 260,74 | 257,67 | 276,63 | 323,82 | 15,82 | |
| Footwear, except rubber or plastic | 324 | 179,75 | 198,79 | 137,22 | 132,48 | 3,58 | |
| Wood products, except furniture | 331 | 74,26 | 99,02 | 72,36 | 69,18 | -4,50 | |
| Furniture and fixtures, excluding metal | 332 | 201,30 | 163,99 | 170,38 | 90,70 | -1,21 | |
| Paper and products | 341 | 67,21 | 95,91 | 98,28 | 92,52 | -0,97 | |
| Rubber products | 355 | 127,50 | 125,26 | 87,30 | 101,60 | 0,20 | |
| Non-metallic mineral products | 361/9 | 109,42 | 86,28 | 76,35 | 47,79 | -8,82 | |
| Glass and products | 362 | 202,00 | 142,54 | 112,80 | 99,37 | -0,08 | |
| Fabricated metal products | 381 | 161,27 | 144,70 | 104,33 | 94,27 | -0,73 | |
| Other manufacturing industries | 390 | 205,00 | 200,29 | 204,69 | 125,79 | 2,91 | |
| Non-R&D intensive industries | | 143,76 | 134,39 | 120,92 | 102,96 | 0,37 | |
| Manufacturing | | 128,58 | 123,96 | 114,44 | 95,47 | -0,58 | |

Table 2.7: Changes in employment of services-producing employees, 2003-2010

| Industry | ISIC code | N.S.E. | <i>Employment index for services- producing employees (2003=100)</i> | | | |
|---|--------------|----------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 22 204 | 100,00 | 120,91 | 98,63 | 156,68 |
| Industrial chemicals | 351 | 1 903 | 100,00 | 141,52 | 137,06 | 237,52 |
| Other chemicals | 352 | 17 538 | 100,00 | 105,14 | 116,36 | 126,72 |
| Petroleum and related products | 353/4 | 7 006 | 100,00 | 115,68 | 234,17 | 123,46 |
| Plastic products | 356 | 12 876 | 100,00 | 166,96 | 147,46 | 131,02 |
| Iron and steel | 371 | 32 850 | 100,00 | 90,97 | 128,15 | 116,78 |
| Non-ferrous metals | 372 | 11 304 | 100,00 | 96,80 | 82,13 | 66,81 |
| Non-electrical machinery | 382 | 20 834 | 100,00 | 86,24 | 130,07 | 114,61 |
| Electrical machinery | 383 | 19 669 | 100,00 | 145,61 | 186,42 | 175,74 |
| Transport equipment | 384 | 37 507 | 100,00 | 102,86 | 125,22 | 151,65 |
| Professional and scientific equipment | 385 | 2 167 | 100,00 | 32,20 | 153,41 | 181,49 |
| R&D intensive industries | | 185 856 | 100,00 | 109,54 | 139,92 | 143,86 |
| Food products | 311/2 | 105 852 | 100,00 | 97,91 | 101,00 | 90,43 |
| Beverages | 313 | 27 870 | 100,00 | 127,38 | 122,06 | 98,61 |
| Tobacco | 314 | 1 797 | 100,00 | 126,92 | 179,90 | 138,67 |
| Textiles | 321 | 34 988 | 100,00 | 130,07 | 127,27 | 166,53 |
| Wearing apparel, except footwear | 322 | 91 632 | 100,00 | 156,03 | 153,93 | 174,42 |
| Leather and fur products | 323 | 3 142 | 100,00 | 125,26 | 164,42 | 101,41 |
| Footwear, except rubber or plastic | 324 | 12 203 | 100,00 | 79,03 | 105,37 | 150,07 |
| Wood products, except furniture | 331 | 54 305 | 100,00 | 49,48 | 83,29 | 100,37 |
| Furniture and fixtures, excluding metal | 332 | 21 630 | 100,00 | 206,39 | 289,31 | 294,49 |
| Paper and products | 341 | 9 951 | 100,00 | 96,37 | 135,35 | 136,65 |
| Rubber products | 355 | 4 657 | 100,00 | 129,26 | 128,25 | 123,29 |
| Non-metallic mineral products | 361/9 | 48 939 | 100,00 | 131,71 | 106,37 | 149,80 |
| Glass and products | 362 | 6 950 | 100,00 | 163,83 | 136,33 | 114,16 |
| Fabricated metal products | 381 | 74 584 | 100,00 | 116,65 | 156,65 | 119,41 |
| Other manufacturing industries | 390 | 26 702 | 100,00 | 78,50 | 141,13 | 151,26 |
| Non-R&D intensive industries | | 525 200 | 100,00 | 120,99 | 142,04 | 140,64 |
| Manufacturing | | 711 057 | 100,00 | 115,26 | 140,98 | 142,25 |

Table 2.7: Changes in employment of services-producing employees, 2003-2010 (concluded)

| Industry | ISIC code | Employment index for services-producing employees (2003=100) | | | | | r |
|---|-----------|--|---------------|--------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 125,85 | 123,64 | 97,89 | 68,90 | -4,55 | |
| Industrial chemicals | 351 | 158,18 | 185,61 | 93,08 | 139,04 | 4,21 | |
| Other chemicals | 352 | 109,10 | 109,82 | 95,62 | 67,94 | -4,72 | |
| Petroleum and related products | 353/4 | 163,70 | 127,83 | 90,31 | 117,36 | 2,02 | |
| Plastic products | 356 | 125,70 | 141,99 | 114,94 | 97,99 | -0,25 | |
| Iron and steel | 371 | 164,95 | 175,79 | 135,23 | 88,64 | -1,50 | |
| Non-ferrous metals | 372 | 52,41 | 38,65 | 42,21 | 48,92 | -8,55 | |
| Non-electrical machinery | 382 | 96,61 | 123,43 | 113,90 | 72,98 | -3,86 | |
| Electrical machinery | 383 | 143,74 | 147,70 | 90,51 | 62,83 | -5,64 | |
| Transport equipment | 384 | 163,63 | 135,32 | 93,81 | 65,87 | -5,08 | |
| Professional and scientific equipment | 385 | 134,80 | 83,89 | 80,46 | 19,82 | -18,32 | |
| R&D intensive industries | | 130,79 | 126,70 | 95,27 | 77,30 | -3,17 | |
| Food products | 311/2 | 93,72 | 73,85 | 80,91 | 68,43 | -4,63 | |
| Beverages | 313 | 125,27 | 140,21 | 98,32 | 75,72 | -3,42 | |
| Tobacco | 314 | 47,75 | 74,32 | 41,08 | 46,98 | -9,01 | |
| Textiles | 321 | 114,44 | 83,11 | 74,46 | 54,48 | -7,31 | |
| Wearing apparel, except footwear | 322 | 130,01 | 91,87 | 64,56 | 46,52 | -9,12 | |
| Leather and fur products | 323 | 122,04 | 144,09 | 105,18 | 125,52 | 2,88 | |
| Footwear, except rubber or plastic | 324 | 76,92 | 84,37 | 78,56 | 75,09 | -3,52 | |
| Wood products, except furniture | 331 | 76,98 | 89,70 | 53,41 | 63,11 | -5,59 | |
| Furniture and fixtures, excluding metal | 332 | 233,33 | 187,63 | 114,41 | 88,61 | -1,50 | |
| Paper and products | 341 | 113,71 | 125,45 | 80,70 | 74,02 | -3,69 | |
| Rubber products | 355 | 185,30 | 144,49 | 87,75 | 75,92 | -3,38 | |
| Non-metallic mineral products | 361/9 | 151,59 | 133,87 | 87,75 | 80,52 | -2,67 | |
| Glass and products | 362 | 114,38 | 124,70 | 87,06 | 70,08 | -4,35 | |
| Fabricated metal products | 381 | 149,13 | 154,20 | 121,47 | 89,84 | -1,33 | |
| Other manufacturing industries | 390 | 266,47 | 218,10 | 165,75 | 121,50 | 2,46 | |
| Non-R&D intensive industries | | 133,40 | 124,66 | 89,42 | 77,09 | -3,20 | |
| Manufacturing | | 132,09 | 125,68 | 92,35 | 77,19 | -3,18 | |

Table 2.8: Changes in gross remuneration in real terms, 2003-2010

| Industry | ISIC code | G.R. | Index of gross remuneration in real terms (2003=100) | | | |
|---|--------------|----------------|---|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 5 722 | 100,00 | 103,50 | 100,80 | 94,84 |
| Industrial chemicals | 351 | 4 457 | 100,00 | 122,87 | 122,34 | 125,76 |
| Other chemicals | 352 | 7 986 | 100,00 | 92,03 | 77,16 | 66,70 |
| Petroleum and related products | 353/4 | 1 605 | 100,00 | 108,63 | 110,39 | 119,28 |
| Plastic products | 356 | 5 644 | 100,00 | 94,57 | 84,76 | 65,29 |
| Iron and steel | 371 | 5 082 | 100,00 | 119,47 | 129,34 | 126,79 |
| Non-ferrous metals | 372 | 1 579 | 100,00 | 94,58 | 102,79 | 106,55 |
| Non-electrical machinery | 382 | 6 897 | 100,00 | 102,05 | 107,05 | 71,74 |
| Electrical machinery | 383 | 1 168 | 100,00 | 93,65 | 97,49 | 100,66 |
| Transport equipment | 384 | 11 768 | 100,00 | 119,72 | 121,41 | 151,49 |
| Professional and scientific equipment | 385 | 491 | 100,00 | 106,44 | 111,04 | 117,35 |
| R&D intensive industries | | 52 399 | 100,00 | 105,23 | 105,87 | 104,22 |
| Food products | 311/2 | 11 504 | 100,00 | 111,69 | 124,21 | 123,47 |
| Beverages | 313 | 3 171 | 100,00 | 109,19 | 118,31 | 123,13 |
| Tobacco | 314 | 961 | 100,00 | 99,55 | 94,88 | 98,74 |
| Textiles | 321 | 2 450 | 100,00 | 102,69 | 96,17 | 147,61 |
| Wearing apparel, except footwear | 322 | 3 669 | 100,00 | 78,74 | 112,81 | 106,33 |
| Leather and fur products | 323 | 307 | 100,00 | 137,29 | 133,75 | 138,52 |
| Footwear, except rubber or plastic | 324 | 592 | 100,00 | 92,59 | 102,06 | 104,86 |
| Wood products, except furniture | 331 | 3 897 | 100,00 | 104,85 | 103,28 | 105,82 |
| Furniture and fixtures, excluding metal | 332 | 1 970 | 100,00 | 109,10 | 108,71 | 110,16 |
| Paper and products | 341 | 4 134 | 100,00 | 139,72 | 159,09 | 164,02 |
| Rubber products | 355 | 1 596 | 100,00 | 98,00 | 108,95 | 113,16 |
| Non-metallic mineral products | 361/9 | 1 893 | 100,00 | 106,27 | 116,19 | 79,26 |
| Glass and products | 362 | 874 | 100,00 | 111,27 | 133,23 | 99,61 |
| Fabricated metal products | 381 | 8 054 | 100,00 | 107,99 | 113,88 | 121,91 |
| Other manufacturing industries | 390 | 3 544 | 100,00 | 121,30 | 133,44 | 113,65 |
| Non-R&D intensive industries | | 48 616 | 100,00 | 108,68 | 117,26 | 116,68 |
| Manufacturing | | 101 015 | 100,00 | 106,96 | 111,57 | 110,45 |

Table 2.8: Changes in gross remuneration in real terms, 2003-2010 (concluded)

| Industry | ISIC code | Index of gross remuneration in real terms (2003=100) | | | | | r |
|---|-----------|--|---------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 117,02 | 127,23 | 123,85 | 131,83 | 3,51 | |
| Industrial chemicals | 351 | 141,80 | 151,11 | 173,41 | 200,85 | 9,11 | |
| Other chemicals | 352 | 56,53 | 56,39 | 52,40 | 63,37 | -5,54 | |
| Petroleum and related products | 353/4 | 96,55 | 83,33 | 101,30 | 118,16 | 2,11 | |
| Plastic products | 356 | 72,62 | 61,64 | 63,55 | 53,68 | -7,48 | |
| Iron and steel | 371 | 127,70 | 119,52 | 106,34 | 144,57 | 4,72 | |
| Non-ferrous metals | 372 | 72,08 | 68,80 | 55,77 | 62,07 | -5,79 | |
| Non-electrical machinery | 382 | 101,47 | 101,33 | 101,76 | 105,33 | 0,65 | |
| Electrical machinery | 383 | 133,06 | 143,12 | 134,16 | 147,25 | 4,96 | |
| Transport equipment | 384 | 158,75 | 164,75 | 152,91 | 153,88 | 5,54 | |
| Professional and scientific equipment | 385 | 129,80 | 161,20 | 146,82 | 185,53 | 8,03 | |
| R&D intensive industries | | 109,76 | 112,58 | 110,21 | 124,23 | 2,75 | |
| Food products | 311/2 | 104,45 | 107,40 | 117,65 | 139,61 | 4,26 | |
| Beverages | 313 | 114,26 | 131,91 | 120,84 | 144,24 | 4,69 | |
| Tobacco | 314 | 66,99 | 72,68 | 66,32 | 73,26 | -3,81 | |
| Textiles | 321 | 91,46 | 103,05 | 94,27 | 99,93 | -0,01 | |
| Wearing apparel, except footwear | 322 | 104,71 | 112,22 | 115,08 | 132,23 | 3,55 | |
| Leather and fur products | 323 | 132,71 | 171,91 | 166,26 | 212,29 | 9,87 | |
| Footwear, except rubber or plastic | 324 | 66,60 | 84,42 | 80,42 | 86,03 | -1,86 | |
| Wood products, except furniture | 331 | 97,82 | 117,62 | 117,28 | 139,28 | 4,23 | |
| Furniture and fixtures, excluding metal | 332 | 117,68 | 118,50 | 125,09 | 110,40 | 1,24 | |
| Paper and products | 341 | 166,86 | 197,60 | 186,52 | 222,08 | 10,49 | |
| Rubber products | 355 | 77,43 | 81,00 | 70,68 | 75,40 | -3,47 | |
| Non-metallic mineral products | 361/9 | 138,84 | 144,87 | 116,84 | 134,69 | 3,79 | |
| Glass and products | 362 | 130,57 | 150,33 | 139,08 | 147,00 | 4,93 | |
| Fabricated metal products | 381 | 132,56 | 119,45 | 122,92 | 124,82 | 2,81 | |
| Other manufacturing industries | 390 | 157,06 | 174,37 | 175,95 | 151,62 | 5,34 | |
| Non-R&D intensive industries | | 113,33 | 125,82 | 121,01 | 132,86 | 3,62 | |
| Manufacturing | | 111,55 | 119,20 | 115,61 | 128,54 | 3,19 | |

Section 3: Production situation

Table 3.1: Changes in gross output in real terms, 2003-2010

Table 3.2: Changes in value added in real terms, 2003-2010

Table 3.3: Changes in gross capital stock in real terms, 2003-2010

Table 3.1: Changes in gross output in real terms, 2003-2010

| Industry | ISIC code | G.O. | Index of gross output in real terms (2003=100) | | | |
|---|--------------|----------------|---|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 17 971 | 100,00 | 104,80 | 112,30 | 109,08 |
| Industrial chemicals | 351 | 54 415 | 100,00 | 97,12 | 97,14 | 104,38 |
| Other chemicals | 352 | 68 139 | 100,00 | 100,40 | 98,41 | 102,27 |
| Petroleum and related products | 353/4 | 64 769 | 100,00 | 111,04 | 106,31 | 110,13 |
| Plastic products | 356 | 23 476 | 100,00 | 95,31 | 92,47 | 92,04 |
| Iron and steel | 371 | 68 232 | 100,00 | 113,30 | 116,66 | 120,13 |
| Non-ferrous metals | 372 | 25 831 | 100,00 | 99,18 | 102,76 | 106,04 |
| Non-electrical machinery | 382 | 38 525 | 100,00 | 97,92 | 98,17 | 98,93 |
| Electrical machinery | 383 | 33 350 | 100,00 | 100,41 | 99,08 | 105,73 |
| Transport equipment | 384 | 126 872 | 100,00 | 106,88 | 116,12 | 125,92 |
| Professional and scientific equipment | 385 | 3 927 | 100,00 | 116,33 | 116,41 | 136,75 |
| R&D intensive industries | | 525 506 | 100,00 | 103,88 | 105,08 | 110,13 |
| Food products | 311/2 | 112 539 | 100,00 | 106,62 | 115,68 | 117,35 |
| Beverages | 313 | 29 802 | 100,00 | 106,72 | 112,50 | 113,12 |
| Tobacco | 314 | 8 825 | 100,00 | 90,13 | 86,72 | 89,20 |
| Textiles | 321 | 19 222 | 100,00 | 97,43 | 89,87 | 85,40 |
| Wearing apparel, except footwear | 322 | 16 179 | 100,00 | 99,15 | 93,17 | 93,69 |
| Leather and fur products | 323 | 4 534 | 100,00 | 116,06 | 117,40 | 120,31 |
| Footwear, except rubber or plastic | 324 | 3 606 | 100,00 | 101,25 | 97,11 | 98,79 |
| Wood products, except furniture | 331 | 18 461 | 100,00 | 105,76 | 108,45 | 114,76 |
| Furniture and fixtures, excluding metal | 332 | 10 884 | 100,00 | 108,02 | 105,28 | 107,23 |
| Paper and products | 341 | 39 958 | 100,00 | 113,23 | 137,96 | 147,76 |
| Rubber products | 355 | 8 903 | 100,00 | 101,53 | 110,32 | 122,98 |
| Non-metallic mineral products | 361/9 | 19 093 | 100,00 | 103,56 | 109,86 | 113,89 |
| Glass and products | 362 | 4 864 | 100,00 | 110,76 | 124,55 | 114,14 |
| Fabricated metal products | 381 | 40 895 | 100,00 | 103,62 | 107,21 | 116,61 |
| Other manufacturing industries | 390 | 13 407 | 100,00 | 108,34 | 116,24 | 115,03 |
| Non-R&D intensive industries | | 351 172 | 100,00 | 104,81 | 108,82 | 111,35 |
| Manufacturing | | 876 678 | 100,00 | 104,35 | 106,95 | 110,74 |

Table 3.1: Changes in gross output in real terms, 2003-2010 (concluded)

| Industry | ISIC code | Index of gross output in real terms (2003=100) | | | | | r |
|---|-----------|--|---------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 134,60 | 143,77 | 131,51 | 133,23 | 3,65 | |
| Industrial chemicals | 351 | 102,07 | 96,24 | 101,04 | 109,19 | 1,10 | |
| Other chemicals | 352 | 104,90 | 105,33 | 92,48 | 98,60 | -0,18 | |
| Petroleum and related products | 353/4 | 103,36 | 106,71 | 120,36 | 116,11 | 1,88 | |
| Plastic products | 356 | 100,46 | 86,71 | 81,58 | 78,08 | -3,04 | |
| Iron and steel | 371 | 107,43 | 107,86 | 86,27 | 101,46 | 0,18 | |
| Non-ferrous metals | 372 | 93,85 | 91,05 | 67,51 | 71,32 | -4,14 | |
| Non-electrical machinery | 382 | 107,19 | 119,42 | 117,68 | 119,21 | 2,22 | |
| Electrical machinery | 383 | 111,58 | 134,93 | 128,14 | 127,95 | 3,13 | |
| Transport equipment | 384 | 127,12 | 122,57 | 109,87 | 113,52 | 1,60 | |
| Professional and scientific equipment | 385 | 128,15 | 146,70 | 137,76 | 146,52 | 4,89 | |
| R&D intensive industries | | 110,97 | 114,66 | 106,75 | 110,47 | 1,25 | |
| Food products | 311/2 | 124,85 | 119,10 | 115,02 | 119,59 | 2,26 | |
| Beverages | 313 | 114,21 | 128,48 | 114,46 | 120,04 | 2,31 | |
| Tobacco | 314 | 92,76 | 108,67 | 86,04 | 80,97 | -2,60 | |
| Textiles | 321 | 84,83 | 103,35 | 100,38 | 98,93 | -0,13 | |
| Wearing apparel, except footwear | 322 | 95,19 | 119,55 | 121,27 | 124,47 | 2,77 | |
| Leather and fur products | 323 | 112,99 | 169,50 | 163,49 | 173,04 | 7,09 | |
| Footwear, except rubber or plastic | 324 | 104,61 | 125,96 | 112,52 | 106,28 | 0,76 | |
| Wood products, except furniture | 331 | 113,21 | 123,97 | 110,44 | 121,52 | 2,47 | |
| Furniture and fixtures, excluding metal | 332 | 125,58 | 154,37 | 140,63 | 142,83 | 4,56 | |
| Paper and products | 341 | 143,66 | 169,08 | 148,85 | 162,37 | 6,25 | |
| Rubber products | 355 | 95,95 | 101,45 | 90,49 | 90,66 | -1,22 | |
| Non-metallic mineral products | 361/9 | 125,36 | 124,34 | 100,39 | 105,94 | 0,72 | |
| Glass and products | 362 | 126,50 | 139,22 | 118,09 | 106,56 | 0,80 | |
| Fabricated metal products | 381 | 114,77 | 121,14 | 108,58 | 107,58 | 0,92 | |
| Other manufacturing industries | 390 | 119,91 | 130,91 | 119,80 | 113,73 | 1,62 | |
| Non-R&D intensive industries | | 112,96 | 129,27 | 116,70 | 118,30 | 2,12 | |
| Manufacturing | | 111,97 | 121,97 | 111,72 | 114,39 | 1,69 | |

Table 3.2: Changes in value added in real terms, 2003-2010

| Industry | ISIC code | V.A. | Index of value added in real terms (2003=100) | | | |
|---|--------------|----------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 15 398 | 100,00 | 103,27 | 98,82 | 102,40 |
| Industrial chemicals | 351 | 1 629 | 100,00 | 92,79 | 96,19 | 99,84 |
| Other chemicals | 352 | 19 482 | 100,00 | 103,72 | 108,63 | 114,05 |
| Petroleum and related products | 353/4 | 5 770 | 100,00 | 109,84 | 105,76 | 103,18 |
| Plastic products | 356 | 9 544 | 100,00 | 97,69 | 95,53 | 96,10 |
| Iron and steel | 371 | 15 546 | 100,00 | 113,20 | 121,74 | 136,86 |
| Non-ferrous metals | 372 | 3 819 | 100,00 | 101,69 | 108,13 | 117,48 |
| Non-electrical machinery | 382 | 24 761 | 100,00 | 100,17 | 104,08 | 112,23 |
| Electrical machinery | 383 | 15 075 | 100,00 | 96,25 | 100,64 | 104,58 |
| Transport equipment | 384 | 20 550 | 100,00 | 106,50 | 113,77 | 118,22 |
| Professional and scientific equipment | 385 | 1 516 | 100,00 | 106,01 | 114,42 | 144,31 |
| R&D intensive industries | | 133 089 | 100,00 | 102,83 | 106,15 | 113,57 |
| Food products | 311/2 | 25 921 | 100,00 | 108,04 | 118,50 | 124,25 |
| Beverages | 313 | 10 654 | 100,00 | 107,16 | 112,44 | 125,39 |
| Tobacco | 314 | 5 463 | 100,00 | 90,96 | 82,47 | 87,45 |
| Textiles | 321 | 10 678 | 100,00 | 105,06 | 98,01 | 92,46 |
| Wearing apparel, except footwear | 322 | 19 413 | 100,00 | 106,10 | 101,89 | 107,19 |
| Leather and fur products | 323 | 2 318 | 100,00 | 129,35 | 129,56 | 135,37 |
| Footwear, except rubber or plastic | 324 | 2 288 | 100,00 | 103,42 | 96,49 | 100,61 |
| Wood products, except furniture | 331 | 3 443 | 100,00 | 105,28 | 102,83 | 104,43 |
| Furniture and fixtures, excluding metal | 332 | 6 412 | 100,00 | 110,36 | 110,05 | 122,17 |
| Paper and products | 341 | 2 570 | 100,00 | 110,61 | 130,28 | 135,67 |
| Rubber products | 355 | 4 528 | 100,00 | 101,62 | 112,37 | 116,54 |
| Non-metallic mineral products | 361/9 | 6 189 | 100,00 | 102,60 | 105,05 | 111,73 |
| Glass and products | 362 | 3 888 | 100,00 | 109,77 | 124,81 | 119,80 |
| Fabricated metal products | 381 | 15 086 | 100,00 | 105,72 | 111,21 | 121,68 |
| Other manufacturing industries | 390 | 9 214 | 100,00 | 108,54 | 119,90 | 115,07 |
| Non-R&D intensive industries | | 128 064 | 100,00 | 106,97 | 110,39 | 114,65 |
| Manufacturing | | 261 153 | 100,00 | 104,90 | 108,27 | 114,11 |

Table 3.2: Changes in value added in real terms, 2003-2010 (concluded)

| Industry | ISIC code | Index of value added in real terms (2003=100) | | | | | r |
|---|-----------|---|---------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 114,10 | 115,31 | 114,03 | 117,71 | 2,06 | |
| Industrial chemicals | 351 | 87,07 | 88,67 | 88,80 | 95,68 | -0,55 | |
| Other chemicals | 352 | 119,73 | 118,66 | 107,44 | 115,38 | 1,80 | |
| Petroleum and related products | 353/4 | 114,03 | 112,10 | 123,29 | 118,22 | 2,11 | |
| Plastic products | 356 | 111,78 | 99,70 | 93,05 | 81,41 | -2,54 | |
| Iron and steel | 371 | 135,02 | 116,71 | 83,81 | 83,88 | -2,17 | |
| Non-ferrous metals | 372 | 99,42 | 104,00 | 71,53 | 66,11 | -5,04 | |
| Non-electrical machinery | 382 | 127,05 | 136,53 | 156,98 | 157,64 | 5,85 | |
| Electrical machinery | 383 | 115,37 | 116,64 | 113,20 | 111,72 | 1,40 | |
| Transport equipment | 384 | 127,07 | 124,84 | 111,26 | 109,32 | 1,12 | |
| Professional and scientific equipment | 385 | 132,75 | 127,98 | 120,41 | 128,02 | 3,14 | |
| R&D intensive industries | | 116,67 | 114,65 | 107,62 | 107,74 | 0,94 | |
| Food products | 311/2 | 124,88 | 125,01 | 131,01 | 139,48 | 4,25 | |
| Beverages | 313 | 131,59 | 133,55 | 109,22 | 127,42 | 3,08 | |
| Tobacco | 314 | 93,74 | 102,97 | 67,94 | 66,30 | -5,01 | |
| Textiles | 321 | 93,23 | 91,23 | 88,58 | 85,29 | -1,97 | |
| Wearing apparel, except footwear | 322 | 109,11 | 108,35 | 111,88 | 129,26 | 3,26 | |
| Leather and fur products | 323 | 139,52 | 117,70 | 96,52 | 90,90 | -1,19 | |
| Footwear, except rubber or plastic | 324 | 106,56 | 102,55 | 98,84 | 92,08 | -1,03 | |
| Wood products, except furniture | 331 | 99,41 | 98,04 | 81,59 | 85,12 | -1,99 | |
| Furniture and fixtures, excluding metal | 332 | 125,79 | 117,51 | 119,11 | 103,69 | 0,45 | |
| Paper and products | 341 | 134,06 | 133,77 | 114,40 | 116,19 | 1,89 | |
| Rubber products | 355 | 98,91 | 89,67 | 87,23 | 84,27 | -2,12 | |
| Non-metallic mineral products | 361/9 | 114,50 | 117,64 | 93,35 | 109,58 | 1,15 | |
| Glass and products | 362 | 129,56 | 131,54 | 114,22 | 104,87 | 0,60 | |
| Fabricated metal products | 381 | 131,73 | 138,11 | 120,88 | 111,86 | 1,41 | |
| Other manufacturing industries | 390 | 117,14 | 124,83 | 114,20 | 114,55 | 1,71 | |
| Non-R&D intensive industries | | 116,65 | 115,50 | 103,26 | 104,06 | 0,50 | |
| Manufacturing | | 116,66 | 115,07 | 105,44 | 105,90 | 0,72 | |

Table 3.3: Changes in gross capital stock in real terms, 2003-2010

| Industry | ISIC code | G.C.S. | Index of gross capital stock in real terms (2003=100) | | | |
|---|--------------|------------------|--|---------------|---------------|---------------|
| | | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 6 404 | 100,00 | 110,30 | 125,27 | 142,70 |
| Industrial chemicals | 351 | 92 303 | 100,00 | 102,10 | 115,95 | 132,09 |
| Other chemicals | 352 | 70 191 | 100,00 | 117,43 | 133,37 | 151,93 |
| Petroleum and related products | 353/4 | 184 379 | 100,00 | 120,11 | 127,26 | 118,95 |
| Plastic products | 356 | 23 607 | 100,00 | 112,41 | 127,67 | 145,44 |
| Iron and steel | 371 | 70 259 | 100,00 | 119,67 | 135,91 | 154,83 |
| Non-ferrous metals | 372 | 77 601 | 100,00 | 112,76 | 128,07 | 145,89 |
| Non-electrical machinery | 382 | 34 142 | 100,00 | 104,37 | 118,53 | 135,03 |
| Electrical machinery | 383 | 9 486 | 100,00 | 110,07 | 128,87 | 132,11 |
| Transport equipment | 384 | 96 734 | 100,00 | 116,24 | 132,01 | 150,39 |
| Professional and scientific equipment | 385 | 6 612 | 100,00 | 114,97 | 130,57 | 148,75 |
| R&D intensive industries | | 671 719 | 100,00 | 112,77 | 127,59 | 141,65 |
| Food products | 311/2 | 115 158 | 100,00 | 113,98 | 136,27 | 147,08 |
| Beverages | 313 | 74 186 | 100,00 | 116,36 | 133,55 | 142,70 |
| Tobacco | 314 | 23 301 | 100,00 | 97,53 | 111,94 | 119,60 |
| Textiles | 321 | 16 033 | 100,00 | 115,79 | 132,90 | 142,00 |
| Wearing apparel, except footwear | 322 | 10 991 | 100,00 | 108,14 | 117,36 | 146,13 |
| Leather and fur products | 323 | 4 230 | 100,00 | 133,48 | 153,20 | 163,69 |
| Footwear, except rubber or plastic | 324 | 6 317 | 100,00 | 107,79 | 123,71 | 132,18 |
| Wood products, except furniture | 331 | 19 308 | 100,00 | 115,94 | 133,08 | 142,19 |
| Furniture and fixtures, excluding metal | 332 | 7 268 | 100,00 | 125,04 | 143,51 | 153,34 |
| Paper and products | 341 | 61 727 | 100,00 | 120,69 | 138,53 | 148,01 |
| Rubber products | 355 | 7 694 | 100,00 | 115,57 | 144,22 | 147,95 |
| Non-metallic mineral products | 361/9 | 52 448 | 100,00 | 113,10 | 129,81 | 138,70 |
| Glass and products | 362 | 8 204 | 100,00 | 117,14 | 134,45 | 143,65 |
| Fabricated metal products | 381 | 42 131 | 100,00 | 109,71 | 125,92 | 134,54 |
| Other manufacturing industries | 390 | 142 661 | 100,00 | 112,82 | 129,49 | 138,36 |
| Non-R&D intensive industries | | 591 657 | 100,00 | 114,87 | 132,53 | 142,68 |
| Manufacturing | | 1 263 376 | 100,00 | 113,82 | 130,06 | 142,16 |

Table 3.3: Changes in gross capital stock in real terms, 2003-2010 (concluded)

| Industry | ISIC code | Index of gross capital stock in real terms (2003=100) | | | | | r |
|---|-----------|--|---------------|---------------|--------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 128,25 | 130,69 | 103,79 | 96,47 | -0,45 | |
| Industrial chemicals | 351 | 118,72 | 120,97 | 96,07 | 89,30 | -1,41 | |
| Other chemicals | 352 | 136,55 | 139,14 | 110,50 | 102,71 | 0,33 | |
| Petroleum and related products | 353/4 | 127,21 | 135,59 | 126,83 | 126,92 | 3,02 | |
| Plastic products | 356 | 130,72 | 133,20 | 105,78 | 98,32 | -0,21 | |
| Iron and steel | 371 | 139,16 | 141,80 | 112,61 | 104,67 | 0,57 | |
| Non-ferrous metals | 372 | 131,12 | 133,61 | 106,11 | 98,63 | -0,17 | |
| Non-electrical machinery | 382 | 121,36 | 123,66 | 98,21 | 91,28 | -1,13 | |
| Electrical machinery | 383 | 130,93 | 121,20 | 110,77 | 84,42 | -2,09 | |
| Transport equipment | 384 | 135,16 | 137,73 | 109,38 | 101,67 | 0,21 | |
| Professional and scientific equipment | 385 | 133,69 | 136,23 | 108,19 | 100,56 | 0,07 | |
| R&D intensive industries | | 130,26 | 132,16 | 108,02 | 99,54 | -0,06 | |
| Food products | 311/2 | 146,60 | 152,49 | 130,41 | 128,16 | 3,15 | |
| Beverages | 313 | 137,87 | 127,35 | 84,39 | 72,64 | -3,92 | |
| Tobacco | 314 | 115,55 | 106,74 | 70,73 | 60,88 | -6,01 | |
| Textiles | 321 | 137,19 | 126,73 | 83,98 | 72,28 | -3,98 | |
| Wearing apparel, except footwear | 322 | 147,80 | 99,01 | 87,99 | 113,00 | 1,54 | |
| Leather and fur products | 323 | 158,15 | 146,09 | 96,81 | 83,33 | -2,25 | |
| Footwear, except rubber or plastic | 324 | 127,70 | 117,97 | 78,17 | 67,29 | -4,83 | |
| Wood products, except furniture | 331 | 137,37 | 126,90 | 84,09 | 72,38 | -3,96 | |
| Furniture and fixtures, excluding metal | 332 | 148,15 | 136,85 | 90,68 | 78,06 | -3,05 | |
| Paper and products | 341 | 143,00 | 132,09 | 87,53 | 75,34 | -3,48 | |
| Rubber products | 355 | 127,22 | 95,26 | 97,68 | 83,96 | -2,16 | |
| Non-metallic mineral products | 361/9 | 134,00 | 123,78 | 82,02 | 70,60 | -4,26 | |
| Glass and products | 362 | 138,79 | 128,20 | 84,95 | 73,13 | -3,84 | |
| Fabricated metal products | 381 | 129,98 | 120,07 | 79,57 | 68,49 | -4,62 | |
| Other manufacturing industries | 390 | 133,67 | 123,48 | 81,82 | 70,43 | -4,29 | |
| Non-R&D intensive industries | | 137,54 | 124,20 | 88,05 | 79,33 | -2,85 | |
| Manufacturing | | 133,90 | 128,18 | 98,04 | 89,44 | -1,39 | |

Section 4: Production efficiency

Table 4.1: Changes in labour productivity, 2003-2010

Table 4.2: Changes in capital productivity, 2003-2010

Table 4.3: Changes in multifactor productivity, 2003-2010

Table 4.4: Changes in capital intensity, 2003-2010

Table 4.1: Changes in labour productivity, 2003-2010

| Industry | ISIC code | Labour productivity index (2003=100) | | | |
|---|-----------|---|---------------|--------------|--------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 95,66 | 82,86 | 82,31 |
| Industrial chemicals | 351 | 100,00 | 76,55 | 67,78 | 65,49 |
| Other chemicals | 352 | 100,00 | 105,85 | 110,93 | 125,73 |
| Petroleum and related products | 353/4 | 100,00 | 100,05 | 88,26 | 88,48 |
| Plastic products | 356 | 100,00 | 96,31 | 91,82 | 98,06 |
| Iron and steel | 371 | 100,00 | 108,60 | 111,09 | 121,13 |
| Non-ferrous metals | 372 | 100,00 | 108,10 | 117,64 | 138,43 |
| Non-electrical machinery | 382 | 100,00 | 93,79 | 92,52 | 98,50 |
| Electrical machinery | 383 | 100,00 | 86,12 | 80,62 | 77,84 |
| Transport equipment | 384 | 100,00 | 90,53 | 82,05 | 79,08 |
| Professional and scientific equipment | 385 | 100,00 | 89,18 | 81,61 | 95,38 |
| R&D intensive industries | | 100,00 | 95,52 | 91,56 | 97,31 |
| Food products | 311/2 | 100,00 | 97,80 | 105,02 | 115,71 |
| Beverages | 313 | 100,00 | 102,85 | 103,44 | 110,65 |
| Tobacco | 314 | 100,00 | 97,61 | 90,62 | 98,06 |
| Textiles | 321 | 100,00 | 100,77 | 95,32 | 93,75 |
| Wearing apparel, except footwear | 322 | 100,00 | 110,07 | 103,91 | 107,15 |
| Leather and fur products | 323 | 100,00 | 121,15 | 113,44 | 108,48 |
| Footwear, except rubber or plastic | 324 | 100,00 | 110,63 | 104,95 | 107,79 |
| Wood products, except furniture | 331 | 100,00 | 99,43 | 86,95 | 79,62 |
| Furniture and fixtures, excluding metal | 332 | 100,00 | 92,28 | 78,71 | 79,76 |
| Paper and products | 341 | 100,00 | 96,84 | 96,94 | 87,84 |
| Rubber products | 355 | 100,00 | 103,14 | 110,57 | 112,46 |
| Non-metallic mineral products | 361/9 | 100,00 | 91,19 | 85,34 | 83,72 |
| Glass and products | 362 | 100,00 | 116,57 | 128,92 | 113,32 |
| Fabricated metal products | 381 | 100,00 | 96,58 | 86,26 | 80,83 |
| Other manufacturing industries | 390 | 100,00 | 98,21 | 101,40 | 86,52 |
| Non-R&D intensive industries | | 100,00 | 102,34 | 99,45 | 97,71 |
| Manufacturing | | 100,00 | 98,93 | 95,51 | 97,51 |

Table 4.1: Changes in labour productivity, 2003-2010 (concluded)

| Industry | ISIC code | Labour productivity index (2003=100) | | | | | r |
|---|-----------|---|---------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 87,97 | 87,46 | 92,45 | 103,58 | 0,44 | |
| Industrial chemicals | 351 | 54,90 | 56,12 | 61,38 | 72,71 | -3,91 | |
| Other chemicals | 352 | 139,31 | 138,90 | 141,90 | 175,42 | 7,28 | |
| Petroleum and related products | 353/4 | 108,02 | 117,12 | 142,04 | 147,81 | 5,01 | |
| Plastic products | 356 | 120,28 | 107,27 | 103,73 | 96,49 | -0,45 | |
| Iron and steel | 371 | 116,97 | 107,82 | 91,16 | 103,38 | 0,42 | |
| Non-ferrous metals | 372 | 134,83 | 162,43 | 125,34 | 125,15 | 2,84 | |
| Non-electrical machinery | 382 | 101,42 | 101,62 | 131,72 | 154,74 | 5,61 | |
| Electrical machinery | 383 | 84,11 | 95,75 | 120,77 | 146,43 | 4,88 | |
| Transport equipment | 384 | 86,18 | 95,86 | 105,33 | 119,66 | 2,27 | |
| Professional and scientific equipment | 385 | 86,63 | 90,28 | 104,65 | 133,44 | 3,67 | |
| R&D intensive industries | | 101,87 | 105,51 | 110,95 | 125,35 | 2,86 | |
| Food products | 311/2 | 116,45 | 113,14 | 131,63 | 156,10 | 5,72 | |
| Beverages | 313 | 105,17 | 101,02 | 98,13 | 135,91 | 3,91 | |
| Tobacco | 314 | 108,60 | 128,70 | 103,56 | 117,11 | 1,99 | |
| Textiles | 321 | 97,09 | 98,53 | 115,91 | 133,57 | 3,68 | |
| Wearing apparel, except footwear | 322 | 109,87 | 122,03 | 165,13 | 229,86 | 10,96 | |
| Leather and fur products | 323 | 97,27 | 73,04 | 60,51 | 59,11 | -6,36 | |
| Footwear, except rubber or plastic | 324 | 104,14 | 93,75 | 107,50 | 120,30 | 2,34 | |
| Wood products, except furniture | 331 | 71,03 | 72,42 | 75,67 | 95,44 | -0,58 | |
| Furniture and fixtures, excluding metal | 332 | 81,11 | 86,00 | 118,62 | 127,60 | 3,09 | |
| Paper and products | 341 | 77,64 | 78,33 | 81,95 | 96,48 | -0,45 | |
| Rubber products | 355 | 89,50 | 79,77 | 101,23 | 127,50 | 3,08 | |
| Non-metallic mineral products | 361/9 | 79,44 | 85,75 | 87,45 | 124,73 | 2,80 | |
| Glass and products | 362 | 113,58 | 120,40 | 132,75 | 146,31 | 4,87 | |
| Fabricated metal products | 381 | 79,99 | 87,94 | 99,16 | 111,82 | 1,41 | |
| Other manufacturing industries | 390 | 72,73 | 72,20 | 78,28 | 92,72 | -0,94 | |
| Non-R&D intensive industries | | 93,58 | 94,20 | 103,83 | 124,97 | 2,83 | |
| Manufacturing | | 97,72 | 99,86 | 107,39 | 125,16 | 2,84 | |

Table 4.2: Changes in capital productivity, 2003-2010

| Industry | ISIC code | Capital productivity index (2003=100) | | | |
|---|-----------|--|--------------|--------------|--------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 93,63 | 78,89 | 71,76 |
| Industrial chemicals | 351 | 100,00 | 90,89 | 82,96 | 75,58 |
| Other chemicals | 352 | 100,00 | 88,32 | 81,45 | 75,07 |
| Petroleum and related products | 353/4 | 100,00 | 91,45 | 83,11 | 86,74 |
| Plastic products | 356 | 100,00 | 86,90 | 74,83 | 66,07 |
| Iron and steel | 371 | 100,00 | 94,59 | 89,57 | 88,39 |
| Non-ferrous metals | 372 | 100,00 | 90,18 | 84,43 | 80,53 |
| Non-electrical machinery | 382 | 100,00 | 95,97 | 87,80 | 83,12 |
| Electrical machinery | 383 | 100,00 | 87,44 | 78,09 | 79,16 |
| Transport equipment | 384 | 100,00 | 91,62 | 86,18 | 78,61 |
| Professional and scientific equipment | 385 | 100,00 | 92,20 | 87,63 | 97,01 |
| R&D intensive industries | | 100,00 | 91,20 | 83,18 | 80,19 |
| Food products | 311/2 | 100,00 | 94,79 | 86,96 | 84,47 |
| Beverages | 313 | 100,00 | 92,10 | 84,19 | 87,87 |
| Tobacco | 314 | 100,00 | 93,27 | 73,68 | 73,12 |
| Textiles | 321 | 100,00 | 90,73 | 73,75 | 65,11 |
| Wearing apparel, except footwear | 322 | 100,00 | 98,12 | 86,82 | 73,35 |
| Leather and fur products | 323 | 100,00 | 96,91 | 84,57 | 82,70 |
| Footwear, except rubber or plastic | 324 | 100,00 | 95,95 | 77,99 | 76,11 |
| Wood products, except furniture | 331 | 100,00 | 90,80 | 77,27 | 73,44 |
| Furniture and fixtures, excluding metal | 332 | 100,00 | 88,26 | 76,68 | 79,67 |
| Paper and products | 341 | 100,00 | 91,65 | 94,05 | 91,66 |
| Rubber products | 355 | 100,00 | 87,93 | 77,92 | 78,77 |
| Non-metallic mineral products | 361/9 | 100,00 | 90,71 | 80,93 | 80,56 |
| Glass and products | 362 | 100,00 | 93,71 | 92,83 | 83,40 |
| Fabricated metal products | 381 | 100,00 | 96,36 | 88,32 | 90,44 |
| Other manufacturing industries | 390 | 100,00 | 96,20 | 92,59 | 83,17 |
| Non-R&D intensive industries | | 100,00 | 93,17 | 83,24 | 80,26 |
| Manufacturing | | 100,00 | 92,18 | 83,21 | 80,22 |

Table 4.2: Changes in capital productivity, 2003-2010 (concluded)

| Industry | ISIC code | Capital productivity index (2003=100) | | | | | r |
|---|-----------|--|--------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 88,96 | 88,23 | 109,86 | 122,02 | 2,52 | |
| Industrial chemicals | 351 | 73,34 | 73,30 | 92,43 | 107,15 | 0,87 | |
| Other chemicals | 352 | 87,68 | 85,28 | 97,23 | 112,34 | 1,47 | |
| Petroleum and related products | 353/4 | 89,64 | 82,68 | 97,21 | 93,15 | -0,88 | |
| Plastic products | 356 | 85,51 | 74,85 | 87,97 | 82,80 | -2,33 | |
| Iron and steel | 371 | 97,03 | 82,31 | 74,43 | 80,13 | -2,73 | |
| Non-ferrous metals | 372 | 75,82 | 77,84 | 67,41 | 67,03 | -4,88 | |
| Non-electrical machinery | 382 | 104,69 | 110,40 | 159,84 | 172,69 | 7,07 | |
| Electrical machinery | 383 | 88,12 | 96,23 | 102,19 | 132,34 | 3,56 | |
| Transport equipment | 384 | 94,01 | 90,64 | 101,72 | 107,53 | 0,91 | |
| Professional and scientific equipment | 385 | 99,30 | 93,94 | 111,30 | 127,31 | 3,06 | |
| R&D intensive industries | | 89,46 | 86,88 | 100,14 | 109,50 | 1,14 | |
| Food products | 311/2 | 85,18 | 81,98 | 100,46 | 108,84 | 1,06 | |
| Beverages | 313 | 95,44 | 104,87 | 129,42 | 175,41 | 7,28 | |
| Tobacco | 314 | 81,12 | 96,47 | 96,06 | 108,90 | 1,07 | |
| Textiles | 321 | 67,96 | 71,99 | 105,49 | 118,00 | 2,09 | |
| Wearing apparel, except footwear | 322 | 73,82 | 109,44 | 127,15 | 114,39 | 1,69 | |
| Leather and fur products | 323 | 88,22 | 80,56 | 99,70 | 109,09 | 1,09 | |
| Footwear, except rubber or plastic | 324 | 83,44 | 86,93 | 126,45 | 136,85 | 4,00 | |
| Wood products, except furniture | 331 | 72,36 | 77,26 | 97,03 | 117,60 | 2,05 | |
| Furniture and fixtures, excluding metal | 332 | 84,91 | 85,87 | 131,34 | 132,84 | 3,61 | |
| Paper and products | 341 | 93,75 | 101,27 | 130,70 | 154,21 | 5,56 | |
| Rubber products | 355 | 77,74 | 94,13 | 89,30 | 100,37 | 0,05 | |
| Non-metallic mineral products | 361/9 | 85,45 | 95,04 | 113,81 | 155,21 | 5,65 | |
| Glass and products | 362 | 93,35 | 102,60 | 134,45 | 143,41 | 4,61 | |
| Fabricated metal products | 381 | 101,34 | 115,02 | 151,92 | 163,33 | 6,32 | |
| Other manufacturing industries | 390 | 87,63 | 101,09 | 139,57 | 162,65 | 6,27 | |
| Non-R&D intensive industries | | 84,78 | 93,63 | 118,19 | 133,41 | 3,67 | |
| Manufacturing | | 87,12 | 90,26 | 109,17 | 121,45 | 2,46 | |

Table 4.3: Changes in multifactor productivity, 2003-2010

| Industry | ISIC code | Multifactor productivity index (2003=100) | | | |
|---|-----------|--|--------------|--------------|--------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 95,36 | 82,26 | 80,12 |
| Industrial chemicals | 351 | 100,00 | 85,39 | 77,03 | 71,75 |
| Other chemicals | 352 | 100,00 | 98,14 | 97,03 | 99,33 |
| Petroleum and related products | 353/4 | 100,00 | 92,39 | 83,69 | 86,95 |
| Plastic products | 356 | 100,00 | 94,73 | 88,70 | 91,35 |
| Iron and steel | 371 | 100,00 | 100,22 | 97,82 | 100,08 |
| Non-ferrous metals | 372 | 100,00 | 93,23 | 89,42 | 87,33 |
| Non-electrical machinery | 382 | 100,00 | 94,19 | 91,68 | 95,17 |
| Electrical machinery | 383 | 100,00 | 86,54 | 79,78 | 78,25 |
| Transport equipment | 384 | 100,00 | 90,90 | 83,42 | 78,93 |
| Professional and scientific equipment | 385 | 100,00 | 90,90 | 84,99 | 96,36 |
| R&D intensive industries | | 100,00 | 92,91 | 86,89 | 87,78 |
| Food products | 311/2 | 100,00 | 96,31 | 95,36 | 98,07 |
| Beverages | 313 | 100,00 | 95,27 | 89,49 | 93,97 |
| Tobacco | 314 | 100,00 | 94,66 | 79,50 | 79,99 |
| Textiles | 321 | 100,00 | 97,59 | 87,74 | 82,80 |
| Wearing apparel, except footwear | 322 | 100,00 | 107,78 | 100,45 | 99,16 |
| Leather and fur products | 323 | 100,00 | 107,32 | 96,51 | 93,56 |
| Footwear, except rubber or plastic | 324 | 100,00 | 102,06 | 89,53 | 89,02 |
| Wood products, except furniture | 331 | 100,00 | 94,96 | 81,87 | 76,44 |
| Furniture and fixtures, excluding metal | 332 | 100,00 | 91,46 | 78,31 | 79,74 |
| Paper and products | 341 | 100,00 | 93,82 | 95,27 | 90,00 |
| Rubber products | 355 | 100,00 | 95,54 | 92,71 | 94,26 |
| Non-metallic mineral products | 361/9 | 100,00 | 90,86 | 82,24 | 81,49 |
| Glass and products | 362 | 100,00 | 106,26 | 111,67 | 99,22 |
| Fabricated metal products | 381 | 100,00 | 96,55 | 86,60 | 82,43 |
| Other manufacturing industries | 390 | 100,00 | 96,62 | 94,28 | 83,86 |
| Non-R&D intensive industries | | 100,00 | 97,80 | 90,77 | 88,27 |
| Manufacturing | | 100,00 | 95,35 | 88,83 | 88,03 |

Table 4.3: Changes in multifactor productivity, 2003-2010 (concluded)

| Industry | ISIC code | <i>Multifactor productivity index</i> (2003=100) | | | | | r |
|---|-----------|---|--------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 88,11 | 87,52 | 93,89 | 104,66 | 0,57 | |
| Industrial chemicals | 351 | 65,75 | 66,03 | 76,49 | 88,57 | -1,51 | |
| Other chemicals | 352 | 112,96 | 111,43 | 120,99 | 150,31 | 5,23 | |
| Petroleum and related products | 353/4 | 91,49 | 85,30 | 100,88 | 98,25 | -0,22 | |
| Plastic products | 356 | 113,16 | 98,90 | 101,70 | 94,28 | -0,73 | |
| Iron and steel | 371 | 104,80 | 92,63 | 83,35 | 97,52 | -0,31 | |
| Non-ferrous metals | 372 | 83,46 | 86,42 | 75,23 | 76,67 | -3,27 | |
| Non-electrical machinery | 382 | 102,02 | 103,64 | 140,11 | 160,07 | 6,06 | |
| Electrical machinery | 383 | 85,30 | 95,88 | 114,76 | 143,25 | 4,60 | |
| Transport equipment | 384 | 88,70 | 94,21 | 104,31 | 116,28 | 1,90 | |
| Professional and scientific equipment | 385 | 93,53 | 91,92 | 107,70 | 131,08 | 3,44 | |
| R&D intensive industries | | 93,57 | 92,17 | 101,76 | 114,63 | 1,72 | |
| Food products | 311/2 | 98,75 | 95,86 | 115,49 | 133,61 | 3,69 | |
| Beverages | 313 | 98,34 | 103,44 | 114,60 | 156,54 | 5,76 | |
| Tobacco | 314 | 88,54 | 105,08 | 99,31 | 112,95 | 1,53 | |
| Textiles | 321 | 86,22 | 92,16 | 113,29 | 130,86 | 3,42 | |
| Wearing apparel, except footwear | 322 | 101,24 | 120,52 | 159,64 | 205,01 | 9,39 | |
| Leather and fur products | 323 | 92,38 | 74,84 | 63,62 | 54,45 | -7,32 | |
| Footwear, except rubber or plastic | 324 | 92,21 | 91,10 | 113,94 | 124,60 | 2,79 | |
| Wood products, except furniture | 331 | 71,69 | 74,21 | 80,32 | 98,43 | -0,20 | |
| Furniture and fixtures, excluding metal | 332 | 81,83 | 85,98 | 119,75 | 128,03 | 3,14 | |
| Paper and products | 341 | 86,05 | 88,07 | 97,83 | 110,45 | 1,25 | |
| Rubber products | 355 | 84,39 | 83,70 | 96,36 | 117,52 | 2,04 | |
| Non-metallic mineral products | 361/9 | 83,51 | 91,93 | 103,89 | 144,25 | 4,69 | |
| Glass and products | 362 | 104,58 | 114,13 | 133,21 | 145,83 | 4,83 | |
| Fabricated metal products | 381 | 82,94 | 94,28 | 105,00 | 114,65 | 1,72 | |
| Other manufacturing industries | 390 | 83,93 | 92,77 | 116,92 | 140,18 | 4,31 | |
| Non-R&D intensive industries | | 89,11 | 93,87 | 108,88 | 127,82 | 3,12 | |
| Manufacturing | | 91,34 | 93,02 | 105,32 | 121,23 | 2,44 | |

Table 4.4: Changes in capital intensity, 2003-2010

| Industry | ISIC code | Index of capital intensity (2003=100) | | | |
|---|-----------|--|---------------|---------------|---------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 102,17 | 105,04 | 114,70 |
| Industrial chemicals | 351 | 100,00 | 84,23 | 81,70 | 86,64 |
| Other chemicals | 352 | 100,00 | 119,84 | 136,19 | 167,50 |
| Petroleum and related products | 353/4 | 100,00 | 109,40 | 106,20 | 102,00 |
| Plastic products | 356 | 100,00 | 110,83 | 122,71 | 148,41 |
| Iron and steel | 371 | 100,00 | 114,81 | 124,02 | 137,03 |
| Non-ferrous metals | 372 | 100,00 | 119,88 | 139,33 | 171,90 |
| Non-electrical machinery | 382 | 100,00 | 97,72 | 105,37 | 118,50 |
| Electrical machinery | 383 | 100,00 | 98,49 | 103,23 | 98,33 |
| Transport equipment | 384 | 100,00 | 98,81 | 95,20 | 100,60 |
| Professional and scientific equipment | 385 | 100,00 | 96,72 | 93,13 | 98,31 |
| R&D intensive industries | | 100,00 | 104,81 | 110,19 | 122,18 |
| Food products | 311/2 | 100,00 | 103,18 | 120,76 | 136,98 |
| Beverages | 313 | 100,00 | 111,68 | 122,86 | 125,92 |
| Tobacco | 314 | 100,00 | 104,65 | 123,00 | 134,12 |
| Textiles | 321 | 100,00 | 111,06 | 129,26 | 143,98 |
| Wearing apparel, except footwear | 322 | 100,00 | 112,19 | 119,68 | 146,08 |
| Leather and fur products | 323 | 100,00 | 125,01 | 134,13 | 131,18 |
| Footwear, except rubber or plastic | 324 | 100,00 | 115,30 | 134,56 | 141,62 |
| Wood products, except furniture | 331 | 100,00 | 109,50 | 112,52 | 108,41 |
| Furniture and fixtures, excluding metal | 332 | 100,00 | 104,56 | 102,65 | 100,10 |
| Paper and products | 341 | 100,00 | 105,66 | 103,07 | 95,84 |
| Rubber products | 355 | 100,00 | 117,30 | 141,91 | 142,77 |
| Non-metallic mineral products | 361/9 | 100,00 | 100,52 | 105,46 | 103,93 |
| Glass and products | 362 | 100,00 | 124,39 | 138,87 | 135,89 |
| Fabricated metal products | 381 | 100,00 | 100,23 | 97,66 | 89,38 |
| Other manufacturing industries | 390 | 100,00 | 102,09 | 109,52 | 104,03 |
| Non-R&D intensive industries | | 100,00 | 109,82 | 119,73 | 122,68 |
| Manufacturing | | 100,00 | 107,32 | 114,96 | 122,43 |

Table 4.4: Changes in capital intensity, 2003-2010 (concluded)

| Industry | ISIC code | Index of capital intensity (2003=100) | | | | | r |
|---|-----------|--|---------------|---------------|---------------|--------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 98,88 | 99,12 | 84,15 | 84,89 | -2,03 | |
| Industrial chemicals | 351 | 74,85 | 76,56 | 66,41 | 67,85 | -4,73 | |
| Other chemicals | 352 | 158,88 | 162,88 | 145,95 | 156,15 | 5,73 | |
| Petroleum and related products | 353/4 | 120,51 | 141,66 | 146,12 | 158,69 | 5,94 | |
| Plastic products | 356 | 140,65 | 143,32 | 117,92 | 116,54 | 1,93 | |
| Iron and steel | 371 | 120,55 | 131,00 | 122,48 | 129,01 | 3,23 | |
| Non-ferrous metals | 372 | 177,84 | 208,68 | 185,93 | 186,71 | 8,12 | |
| Non-electrical machinery | 382 | 96,88 | 92,05 | 82,40 | 89,61 | -1,36 | |
| Electrical machinery | 383 | 95,45 | 99,49 | 118,18 | 110,64 | 1,27 | |
| Transport equipment | 384 | 91,67 | 105,76 | 103,55 | 111,28 | 1,35 | |
| Professional and scientific equipment | 385 | 87,25 | 96,10 | 94,02 | 104,82 | 0,59 | |
| R&D intensive industries | | 114,86 | 123,33 | 115,19 | 119,65 | 2,27 | |
| Food products | 311/2 | 136,70 | 138,02 | 131,02 | 143,43 | 4,61 | |
| Beverages | 313 | 110,19 | 96,33 | 75,82 | 77,48 | -3,14 | |
| Tobacco | 314 | 133,88 | 133,41 | 107,81 | 107,54 | 0,91 | |
| Textiles | 321 | 142,87 | 136,87 | 109,88 | 113,20 | 1,56 | |
| Wearing apparel, except footwear | 322 | 148,83 | 111,51 | 129,87 | 200,94 | 9,11 | |
| Leather and fur products | 323 | 110,25 | 90,66 | 60,69 | 54,19 | -7,37 | |
| Footwear, except rubber or plastic | 324 | 124,81 | 107,84 | 85,01 | 87,91 | -1,60 | |
| Wood products, except furniture | 331 | 98,16 | 93,74 | 77,98 | 81,15 | -2,58 | |
| Furniture and fixtures, excluding metal | 332 | 95,53 | 100,15 | 90,31 | 96,06 | -0,50 | |
| Paper and products | 341 | 82,81 | 77,34 | 62,70 | 62,56 | -5,69 | |
| Rubber products | 355 | 115,12 | 84,75 | 113,36 | 127,03 | 3,04 | |
| Non-metallic mineral products | 361/9 | 92,97 | 90,23 | 76,84 | 80,36 | -2,70 | |
| Glass and products | 362 | 121,67 | 117,34 | 98,74 | 102,02 | 0,25 | |
| Fabricated metal products | 381 | 78,93 | 76,45 | 65,27 | 68,46 | -4,63 | |
| Other manufacturing industries | 390 | 83,00 | 71,42 | 56,09 | 57,01 | -6,78 | |
| Non-R&D intensive industries | | 111,71 | 101,74 | 89,43 | 97,29 | -0,34 | |
| Manufacturing | | 113,28 | 112,53 | 102,31 | 108,47 | 1,02 | |

Section 5: Pricing conditions

Table 5.1: Movements in general price levels, 2003-2010

Table 5.2: Movements in concentration levels, 2003-2010

Table 5.1: Movements in general price levels, 2003-2010

| Industry | ISIC code | Fisher price index (2003=100) | | | |
|---|-----------|-------------------------------|---------------|---------------|---------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 100,00 | 101,59 | 105,88 | 117,72 |
| Industrial chemicals | 351 | 100,00 | 107,11 | 113,47 | 118,80 |
| Other chemicals | 352 | 100,00 | 103,72 | 111,00 | 118,55 |
| Petroleum and related products | 353/4 | 100,00 | 98,08 | 108,95 | 118,83 |
| Plastic products | 356 | 100,00 | 108,57 | 117,26 | 129,24 |
| Iron and steel | 371 | 100,00 | 96,44 | 98,59 | 112,81 |
| Non-ferrous metals | 372 | 100,00 | 103,25 | 104,89 | 109,12 |
| Non-electrical machinery | 382 | 100,00 | 110,04 | 115,52 | 121,62 |
| Electrical machinery | 383 | 100,00 | 104,15 | 108,27 | 112,46 |
| Transport equipment | 384 | 100,00 | 101,29 | 102,42 | 103,67 |
| Professional and scientific equipment | 385 | 100,00 | 97,39 | 99,64 | 102,64 |
| R&D intensive industries | | 100,00 | 102,88 | 107,81 | 115,04 |
| Food products | 311/2 | 100,00 | 101,35 | 99,52 | 110,08 |
| Beverages | 313 | 100,00 | 109,43 | 113,77 | 124,17 |
| Tobacco | 314 | 100,00 | 115,54 | 136,05 | 150,91 |
| Textiles | 321 | 100,00 | 98,28 | 98,29 | 105,89 |
| Wearing apparel, except footwear | 322 | 100,00 | 96,91 | 95,64 | 96,86 |
| Leather and fur products | 323 | 100,00 | 86,41 | 81,00 | 80,50 |
| Footwear, except rubber or plastic | 324 | 100,00 | 97,22 | 95,62 | 96,19 |
| Wood products, except furniture | 331 | 100,00 | 99,37 | 103,15 | 103,75 |
| Furniture and fixtures, excluding metal | 332 | 100,00 | 104,29 | 105,73 | 110,55 |
| Paper and products | 341 | 100,00 | 87,61 | 78,16 | 77,38 |
| Rubber products | 355 | 100,00 | 103,31 | 101,81 | 97,42 |
| Non-metallic mineral products | 361/9 | 100,00 | 109,01 | 117,96 | 120,76 |
| Glass and products | 362 | 100,00 | 102,03 | 102,36 | 109,08 |
| Fabricated metal products | 381 | 100,00 | 105,75 | 110,31 | 114,33 |
| Other manufacturing industries | 390 | 100,00 | 96,91 | 95,88 | 101,38 |
| Non-R&D intensive industries | | 100,00 | 100,89 | 102,35 | 106,62 |
| Manufacturing | | 100,00 | 101,88 | 105,08 | 110,83 |

Table 5.1: Movements in general price levels, 2003-2010 (concluded)

| Industry | ISIC code | Fisher price index (2003=100) | | | | | r |
|---|-----------|-------------------------------|---------------|---------------|---------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 115,18 | 126,48 | 139,10 | 143,11 | 4,58 | |
| Industrial chemicals | 351 | 139,23 | 175,62 | 160,49 | 146,69 | 4,91 | |
| Other chemicals | 352 | 126,05 | 139,19 | 156,24 | 150,32 | 5,23 | |
| Petroleum and related products | 353/4 | 133,44 | 171,01 | 146,26 | 153,73 | 5,52 | |
| Plastic products | 356 | 129,17 | 155,34 | 159,76 | 158,01 | 5,88 | |
| Iron and steel | 371 | 149,89 | 165,47 | 195,47 | 151,53 | 5,33 | |
| Non-ferrous metals | 372 | 148,64 | 172,57 | 207,01 | 180,55 | 7,66 | |
| Non-electrical machinery | 382 | 129,99 | 146,31 | 154,97 | 155,88 | 5,71 | |
| Electrical machinery | 383 | 113,24 | 113,15 | 118,12 | 117,38 | 2,02 | |
| Transport equipment | 384 | 109,39 | 112,44 | 121,75 | 125,26 | 2,86 | |
| Professional and scientific equipment | 385 | 107,37 | 114,20 | 118,23 | 114,43 | 1,70 | |
| R&D intensive industries | | 127,42 | 144,71 | 152,49 | 145,17 | 4,77 | |
| Food products | 311/2 | 122,94 | 145,74 | 152,25 | 155,10 | 5,64 | |
| Beverages | 313 | 131,28 | 138,38 | 151,48 | 156,50 | 5,76 | |
| Tobacco | 314 | 168,44 | 180,30 | 205,11 | 218,97 | 10,29 | |
| Textiles | 321 | 117,06 | 114,30 | 117,80 | 115,53 | 1,82 | |
| Wearing apparel, except footwear | 322 | 98,88 | 95,34 | 93,08 | 93,14 | -0,88 | |
| Leather and fur products | 323 | 85,03 | 72,33 | 70,54 | 68,12 | -4,69 | |
| Footwear, except rubber or plastic | 324 | 98,67 | 100,76 | 111,60 | 117,34 | 2,02 | |
| Wood products, except furniture | 331 | 110,69 | 123,94 | 131,67 | 117,09 | 1,99 | |
| Furniture and fixtures, excluding metal | 332 | 116,60 | 108,01 | 115,53 | 114,21 | 1,67 | |
| Paper and products | 341 | 83,53 | 88,72 | 97,46 | 88,54 | -1,51 | |
| Rubber products | 355 | 113,30 | 136,74 | 153,90 | 148,31 | 5,05 | |
| Non-metallic mineral products | 361/9 | 133,00 | 152,16 | 183,95 | 188,97 | 8,28 | |
| Glass and products | 362 | 120,67 | 119,68 | 138,43 | 162,41 | 6,25 | |
| Fabricated metal products | 381 | 129,43 | 157,08 | 168,62 | 163,60 | 6,35 | |
| Other manufacturing industries | 390 | 109,35 | 115,13 | 121,81 | 128,06 | 3,14 | |
| Non-R&D intensive industries | | 115,92 | 123,24 | 134,22 | 135,72 | 3,89 | |
| Manufacturing | | 121,67 | 133,97 | 143,35 | 140,45 | 4,34 | |

Table 5.2: Movements in concentration levels, 2003-2010

| Industry | ISIC code | Gini concentration ratio | | | |
|---|-----------|--------------------------|-------------|-------------|-------------|
| | | 2003 | 2004 | 2005 | 2006 |
| Printing and publishing | 342 | 0,77 | 0,74 | 0,72 | 0,73 |
| Industrial chemicals | 351 | 0,81 | 0,81 | 0,80 | 0,80 |
| Other chemicals | 352 | 0,78 | 0,76 | 0,74 | 0,75 |
| Petroleum and related products | 353/4 | 0,87 | 0,86 | 0,87 | 0,87 |
| Plastic products | 356 | 0,75 | 0,72 | 0,69 | 0,68 |
| Iron and steel | 371 | 0,84 | 0,85 | 0,84 | 0,84 |
| Non-ferrous metals | 372 | 0,84 | 0,80 | 0,80 | 0,82 |
| Non-electrical machinery | 382 | 0,75 | 0,76 | 0,74 | 0,70 |
| Electrical machinery | 383 | 0,75 | 0,70 | 0,69 | 0,70 |
| Transport equipment | 384 | 0,83 | 0,82 | 0,81 | 0,82 |
| Professional and scientific equipment | 385 | 0,76 | 0,63 | 0,63 | 0,73 |
| R&D intensive industries | | 0,80 | 0,77 | 0,76 | 0,77 |
| Food products | 311/2 | 0,78 | 0,79 | 0,78 | 0,78 |
| Beverages | 313 | 0,85 | 0,84 | 0,84 | 0,84 |
| Tobacco | 314 | 0,85 | 0,70 | 0,70 | 0,73 |
| Textiles | 321 | 0,69 | 0,66 | 0,64 | 0,66 |
| Wearing apparel, except footwear | 322 | 0,74 | 0,72 | 0,70 | 0,72 |
| Leather and fur products | 323 | 0,72 | 0,74 | 0,72 | 0,72 |
| Footwear, except rubber or plastic | 324 | 0,65 | 0,66 | 0,66 | 0,73 |
| Wood products, except furniture | 331 | 0,80 | 0,66 | 0,65 | 0,71 |
| Furniture and fixtures, excluding metal | 332 | 0,75 | 0,70 | 0,67 | 0,69 |
| Paper and products | 341 | 0,81 | 0,80 | 0,81 | 0,81 |
| Rubber products | 355 | 0,75 | 0,80 | 0,77 | 0,78 |
| Non-metallic mineral products | 361/9 | 0,80 | 0,74 | 0,74 | 0,73 |
| Glass and products | 362 | 0,85 | 0,83 | 0,81 | 0,82 |
| Fabricated metal products | 381 | 0,74 | 0,73 | 0,71 | 0,67 |
| Other manufacturing industries | 390 | 0,78 | 0,76 | 0,69 | 0,72 |
| Non-R&D intensive industries | | 0,77 | 0,74 | 0,73 | 0,74 |
| Manufacturing | | 0,78 | 0,76 | 0,74 | 0,75 |

Table 5.2: Movements in concentration levels, 2003-2010 (concluded)

| Industry | ISIC code | Gini concentration ratio | | | | | r |
|---|-----------|--------------------------|-------------|-------------|-------------|-------------|---|
| | | 2007 | 2008 | 2009 | 2010 | | |
| Printing and publishing | 342 | 0,74 | 0,78 | 0,74 | 0,83 | 0,90 | |
| Industrial chemicals | 351 | 0,80 | 0,85 | 0,81 | 0,84 | 0,36 | |
| Other chemicals | 352 | 0,76 | 0,80 | 0,77 | 0,80 | 0,31 | |
| Petroleum and related products | 353/4 | 0,87 | 0,89 | 0,87 | 0,87 | 0,04 | |
| Plastic products | 356 | 0,67 | 0,75 | 0,69 | 0,75 | 0,10 | |
| Iron and steel | 371 | 0,84 | 0,86 | 0,84 | 0,83 | -0,10 | |
| Non-ferrous metals | 372 | 0,82 | 0,86 | 0,83 | 0,83 | -0,20 | |
| Non-electrical machinery | 382 | 0,74 | 0,79 | 0,74 | 0,81 | 0,90 | |
| Electrical machinery | 383 | 0,70 | 0,77 | 0,71 | 0,82 | 1,11 | |
| Transport equipment | 384 | 0,84 | 0,86 | 0,84 | 0,83 | -0,01 | |
| Professional and scientific equipment | 385 | 0,63 | 0,74 | 0,68 | 0,80 | 0,73 | |
| R&D intensive industries | | 0,76 | 0,81 | 0,78 | 0,82 | 0,37 | |
| Food products | 311/2 | 0,78 | 0,82 | 0,79 | 0,81 | 0,37 | |
| Beverages | 313 | 0,84 | 0,87 | 0,85 | 0,86 | 0,03 | |
| Tobacco | 314 | 0,70 | 0,72 | 0,71 | 0,87 | 0,33 | |
| Textiles | 321 | 0,63 | 0,75 | 0,66 | 0,78 | 1,55 | |
| Wearing apparel, except footwear | 322 | 0,68 | 0,69 | 0,69 | 0,90 | 2,49 | |
| Leather and fur products | 323 | 0,68 | 0,80 | 0,72 | 0,83 | 1,81 | |
| Footwear, except rubber or plastic | 324 | 0,67 | 0,71 | 0,69 | 0,79 | 2,48 | |
| Wood products, except furniture | 331 | 0,67 | 0,76 | 0,70 | 0,85 | 0,88 | |
| Furniture and fixtures, excluding metal | 332 | 0,67 | 0,71 | 0,68 | 0,85 | 1,53 | |
| Paper and products | 341 | 0,81 | 0,84 | 0,81 | 0,83 | 0,21 | |
| Rubber products | 355 | 0,77 | 0,83 | 0,79 | 0,82 | 1,08 | |
| Non-metallic mineral products | 361/9 | 0,75 | 0,80 | 0,76 | 0,83 | 0,48 | |
| Glass and products | 362 | 0,77 | 0,80 | 0,79 | 0,84 | -0,19 | |
| Fabricated metal products | 381 | 0,71 | 0,75 | 0,71 | 0,77 | 0,42 | |
| Other manufacturing industries | 390 | 0,73 | 0,78 | 0,74 | 0,84 | 0,91 | |
| Non-R&D intensive industries | | 0,72 | 0,78 | 0,74 | 0,83 | 0,93 | |
| Manufacturing | | 0,74 | 0,79 | 0,76 | 0,82 | 0,65 | |

Technical note

This note discusses the technical aspects dealing with the preparation of the Compendium indicators. Definitions of the indicators are discussed in the Glossary section. The processing of the data in compiling the Compendium indicators is done in three stages.

Stage 1: Ordering the data, revising old data, including new data, and making preparatory calculations of the main indicators.

To create order in the data, a number of classification systems are used as set out in the first edition of the Compendium (Stats SA, 2008: 60, 65, 69). In all cases the data are grouped according to economic activities as per the second revision of the International Standard Industrial Classification of All Economic Activities (ISIC). This is followed by the R&D-based classification, which decomposes industries into R&D intensive and non-R&D intensive clusters. In the case of ownership the institutional sector classification is used in terms of which an industry is divided into spheres of enterprise control determined from legal status, as to that belonging to the private sector or the public sector. Any form of enterprise control, which cannot be classified into these distinct categories is designated as mixed ownership, like for example public-private enterprise initiatives. In the case of employment the knowledge-based classification is used. In this classification the workforce is divided into information and non-information type employees. The former group consist of knowledge-creating and data-handling employees. The latter group consists of goods-producing and services-producing employees.

In the process of sorting the data according to the described classifications, the old data series of the 2003 to 2007 period from the first edition of the Compendium are examined for revisions due to changes and improvements in the data sources. Where changes have arisen, the values of an affected series are replaced by what is now the latest available information for them in that period. On the other hand, the incoming or new values of data for the 2007 to 2010 period are left as they are.

The preparatory calculations refer to the composition of ownership, employment numbers, gross remuneration, gross output, value added, gross capital stock, and the Fisher price index. The composition of ownership is determined in accordance with the institutional sector classification of ownership. It is derived as the proportional breakdown expressed in percent of the number of enterprises relative to all enterprises in an industry making up the private sector, public sector, and mixed ownership.

As per reported country practices by the International Labour Office (1995: 47), annual estimates on employment numbers are obtained as the average of the number of estimates on employment in a given year. This is done in respect of the total employment number for each industry, as well as the employment numbers associated with each employment grouping according to the knowledge-based classification of employment.

As per the 2008 System of National Accounts (2009: 95, 106, 108, 120, 139, 298, 419) the gross output of an industry is calculated as the sum of its total sales and changes in inventories; value added is the difference between its gross output and intermediate consumption where the latter is the difference between purchases of production material and changes in inventories; capital stock is the ratio of its capital income and a gross rate of return; gross remuneration is the sum of its salaries and wages in cash and in kind plus social contributions payable by its enterprises; and the Fisher price index is the geometric mean of the Laspeyres price index and the Paasche price index. In the present case the former refers to the producer price index of an industry, and the latter refers to its value added deflator which is the counterpart to the general GDP deflator. There is no chaining done to the Fisher price index, as a result of which its reported values in the Compendium give the total change in inflation between the base year and whatever subsequent period it is compared to.

The 2008 System of National Accounts (2009: 325, 418-419) further recommends that gross operating surplus be equated with capital income because it represents the contribution of capital to production. This is adopted in the present experimental calculation of capital stock where as discussed in Lequiller and Blades (2006: 28-29) gross operating surplus is estimated as the difference between value added and gross remuneration. This estimation procedure is the converse of a well known National Accounting identity in terms of which value is the sum of gross operating surplus and gross remuneration.

The 2008 System of National Accounts (2009: 419) makes no prescription on what gross rate of return to use in deriving capital stock except to firstly outline that no strong conclusion has been reached on this matter and that in practice solutions are governed by the available data; and secondly to advise that it is advantageous to use an external rate of return because this will confront the actual cost of capital with that of its observed benefits in terms of gross operating surplus. A suggestion on this has previously been made in the OECD Manual on Measuring Productivity (2001: 69-70) advising that this rate can be taken as the yield on long-term government bonds because it represents a relatively risk-less opportunity cost on investment. In the present calculations of capital stock this suggestion is followed through using the 10-yearly Government bond yield as reported in the South African Reserve Bank Quarterly Bulletin from its December 2004 to December 2011 issues.

To move to rates of change, the series on employment numbers, gross remuneration, gross output, value added, and capital stock, are converted into index numbers by taking the ratio of their respective current to base period values expressed in percent. In general, 2003 is chosen as the base period. This is done in order to have an uninterrupted representation of the evolution of each data series without a break in time, which would arise if an intermittent period between 2003 and 2010 were chosen instead. In the cases of employment numbers, gross remuneration, gross output, value added, capital stock, and the Fisher price index there are two types of series to work with. The one covering the 2003 to 2007 period, which represents the older series from the first edition of the Compendium whether it is revised or not. The other covering the 2007 to 2010 period reflecting all new information received. This is the newer series. The series have 2007 as a common point, which is used to join them by multiplying each index value of the old series with a joining factor. The joining factor is the reciprocal of the old index value at the common point expressed in percent. The resultant joint series have 2007 as their base. For consistency the joined series are rebased to 2003.

The calculation of the Gini concentration ratio involves grouped data and is done according to the procedure discussed in Schneider *et al* (2005: 12) using industry turnover in the present case. In terms of this procedure, for a number of cumulative intervals, which in this case involves 10 turnover deciles, the products between the consecutive subtractions in the cumulative proportion of the number of enterprises in an industry and the consecutive additions in the cumulative shares enterprises have in total industry turnover are determined first. Then the Gini concentration ratio is obtained as the absolute value of the sum of these products subtracted from 1. Due to its simplicity, this calculation procedure replaces the one in the 2008 Compendium edition (Stats SA, 2008: 76). Furthermore the calculation of the Gini concentration ratio in this Compendium edition is done with revised and new information on turnover unavailable at the time of compiling the ratio for the first edition.

Stage 2: Dealing with missing values, revealing patterns, and making intermediate calculations of the main indicators.

The data examined for missing values and patterns include the calculated series for ownership, Gini concentration ratio, and those of the index numbers on employment, gross remuneration, gross output, value added, and capital stock. Where a missing value is found it is imputed by an imputation algorithm discussed in Bloem *et al* (2001: 124). This algorithm imputes by assigning to the last three values preceding the missing observation in a series, weights of 0.50, 0.33, and 0.17 respectively, and summing the resultant products accordingly.

After imputation, the completed series are scanned for patterns irrespective of their shape. In the present case, volatile fluctuations appeared in all series except those on ownership, the Fisher price index, and the Gini concentration ratio. As a result further processing of these series is terminated. By contrast, for the remaining series where fluctuations prevented a clear reading of patterns irrespective of their shape, the Tukey-Hamming smoothing algorithm was used. The 2003 ISI Dictionary of Statistical Terms (2003: 178) advises that the algorithm can be applied to the data itself as opposed to its spectrum. This was implemented in the present case. The algorithm smooths the data by assigning each point in a series weights of 0.23, 0.54, and 0.23 to the preceding, current and succeeding observations respectively. Alternatively there is the Hanning smoothing algorithm to consider, which uses the weights of 0.25, 0.50, and 0.25. However Brillinger (2002: 1598) indicates that this weighing set is known to produce less accurate results to the first set of weights. Consequentially the Hanning smoothing algorithm is not used in the present case. Likewise the Winsorisation technique used in the first Compendium edition (Stats SA, 2008: 77) is not pursued in the present edition because it corrects for fluctuations by trimming and replacing extreme points with the next in line succeeding or preceding observations depending on whether they are at the beginning or the end of a series. This makes an extreme point take on the same value as its neighbours. By contrast the Tukey-Hamming smoothing algorithm keeps the extreme point by making its value consistent with the changes of its neighbours.

To deal with the end points in a series, the weights in the Tukey-Hamming smoothing algorithm are 0.46 and 0.54, applied respectively to the current and succeeding observation in the case of the opening point, and to the current and preceding observation in the case of the closing point. The series patterns are extracted by a double application of the Tukey-Hamming smoothing algorithm. This produces mild smoothing in the sense that once the shape in the pattern of a series is evident the algorithm is terminated immediately.

After the running of the Tukey-Hamming smoothing algorithm, no further processing is done to the index series on employment numbers. Further processing is done on the smoothed index series for gross remuneration, gross output, value added, and capital stock. These are converted from representing index movements based on nominal prices into index movements based on real terms by deflation. This is done by dividing each smoothed index series of nominally priced values by the Fisher price index, keeping 2003 as the base year for consistency.

Deflating by the Fisher price index adheres to the 2008 System of National Accounts (2009: 315), which recommends that the preferred measure of inflation and by default deflation should be the Fisher price index. This is borne out of the shortcomings that exist with the Laspeyres and Paasche price indices as to how they capture inflation. Specifically the Laspeyres price index exceeds its

Paasche counterpart if prices and quantities move in the opposite direction over time, and the Paasche price index exceeds its Laspeyers counterpart if prices and quantities move in the same direction over time. The Fisher price index compensates for these extremes by falling between the two indices and in this way excludes volatile price movements in either direction. After derivation, the deflated index series of gross remuneration, gross output, value added and capital stock are not processed further.

Stage 3: Finishing calculations on the main indicators, and finding average growth rates.

The index series on the total number of employed as well as the index series of value added and capital stock in real terms are used to construct the indices of labour productivity, capital productivity, capital intensity, and multifactor productivity. For consistency in all these cases 2003 is kept as the base year.

As per the 2008 System of National Accounts (2009: 412) the labour productivity index is calculated as the ratio of the index of value added in real terms to the index of the total number of employed expressed in percent; the capital productivity index is the ratio of the index of value added in real terms to the index of gross capital stock in real terms expressed in percent; capital intensity index is the ratio of the index of gross capital stock in real terms to the index of the total number of employed expressed in percent; and multifactor productivity is the ratio of the index of value added in real terms to the combined index made-up of the indices of the total number of employed and gross capital stock in real terms expressed in percent. This combined index is the weighted average of the indices of the total number of employed and gross capital stock in real terms with the weights being the proportions of gross remuneration and gross capital stock in value added in respect of each industry. All these are the derived indices for the assessment of production efficiency.

Whilst all index series give the yearly percentage changes in the levels of the Compendium indicators, average annual growth rates are also calculated for the index series of all Compendium indicators. These give the overall increase or decrease in a Compendium indicator from its baseline value. In the present case the average growth rate per annum is calculated as the ratio of the last to the first value in a series raised to the power of the reciprocal number of years, which is then subtracted from 1 and expressed in percent. This procedure is adopted from the 2007 World Information Society Report (ITU, 2007: 204). The average growth rates per annum show the trend in an index series. No average growth rate is calculated for the numbers on ownership as conceptually it is the control status and not its growth rate that is relevant to this indicator.

Glossary of terms

This section defines the Compendium indicators and their associated concepts in alphabetical order:

Aggregate: Data derived by aggregation.

Aggregation: The process of weighting, summing, and averaging raw data to obtain a statistic.

Average growth rate per annum: Constant rate of growth required in each year to achieve the same overall growth rate as that observed between two periods.

Capital intensity: The amount of capital used in production relative to that of labour.

Capital productivity: Output volume per capital stock used in production.

Classification system: Blueprint for meaningful and systematic arrangement of information into classes for the purpose of bringing order to data.

Current price: Price prevailing at a point in time. Sometimes it is referred to as nominal price.

Data-handling employees: Personnel in occupations of technicians, associate professionals, and clerks.

Deflation: Removal of the effect of inflation from a currently priced series by division with an aggregate price index. Sometimes the aggregate price index is referred to as a composite price index.

Employment: Total number of hired workers on the pay-roll of all enterprises.

Enterprise: Legal entity producing goods and services by direct control of its operations. Firm is a synonym.

Fisher price index: Aggregate price index measuring the average price change for a quantity basket of related goods and services from the base period and the current period.

Gini concentration ratio: Extent to which all enterprises have equal market shares on a continuum from equality denoted by the ratio being nil, to inequality denoted by the ratio taking the value of one.

Goods-producing employees: Personnel in occupation of plant and machine operators, assemblers, fishermen, and husbandry.

Gross capital stock: Total value of capital formation by all enterprises by means of producing tangible and intangible assets. It can also be referred to as capital stock.

Gross operating surplus: Total income earned by enterprises from capital stock holdings. Sometimes it is referred to as capital income.

Gross output: Total sales by enterprises of produced goods and services adjusted for changes in inventories.

Gross rate of return: Ratio of income earned to the value of capital invested. It is also referred to as the cost of capital if income is paid out in exchange for borrowed capital.

Gross remuneration: Total personnel cost of all enterprises.

Imputation: Obtaining an estimate for a current period in the absence of its actual data.

Index: Statistical measure of the effect of changes in a series in relation to time or generally any characteristic of interest.

Index of a series in real terms: Deflated currently priced series expressed as an index.

Industry: Group of enterprises engaged in similar or the same kinds of production activity as per the principal class of goods and services produced.

Information-type employees: That portion of the workforce that is divided into knowledge-creating and data-handling employees.

International standard industrial classification system: System that classifies enterprises according to the industry they belong to based on their economic activities independent of the country of operation.

Knowledge-based employment classification: System that classifies employment into information type and non-information type employees based on their occupation.

Knowledge-creating employees: Personnel in occupations of legislators, senior officials, managers, and professionals.

Labour productivity: Output volume per worker used in production.

Laspeyres price index: Aggregate price index measuring the average price change for a quantity basket of related items from a base period to a current period. Examples of this index include the consumer price index and the producer price index.

Market share: Proportion of an enterprise's turnover to total industry turnover.

Mixed ownership: That portion of an industry comprised of non-profit enterprises, public-private partnership enterprises, and community based enterprises.

Multifactor productivity: Rate of growth in production efficiency represented by change in output due to changes in the usage of capital and labour in production. It comprises the effects of change in technical progress and operational effectiveness. It is also referred to as total factor productivity.

Non-information type employees: That portion of the workforce that is divided into goods-producing and services-producing employees.

Non-R&D intensive industries: Industries with low tech, and low-medium tech technical processes in production.

Ownership: Legal right of control over an enterprise.

Ownership classification system: System that classifies ownership according to the institutional sector in which an enterprise operates.

Paasche price index: Aggregate price index measuring the average price change for a quantity basket of related items from a current period back to a base period. Examples of this index include the value added deflator or the GDP deflator.

Private sector: That portion of an industry comprised of micro enterprises, partnerships, non-government unlisted and listed companies, close corporations, and co-operative societies.

Production activity: Activity by which a homogenous set of products is produced. Sometimes it is referred to as industrial activity or economic production because it is an activity designed to produce goods and services regardless of whether they are homogenous.

Public sector: That portion of an industry comprised of Government enterprises and public corporations.

Research and development classification system: System that classifies industries into R&D intensive and non-R&D intensive according to the technological status of their technical processes of production.

R&D intensive industries: Industries with medium-high tech, and high-tech technical processes in production.

Services-producing employees: Personnel in occupations of service advisors, shop stewards, market sales agents and representatives, craftsmen, and artisans.

Smoother: An algorithm for reducing or removing fluctuations in the data to reduce differences in magnitude between adjacent numbers.

Turnover: Total value of market sales of goods and services by all enterprises.

Value added: Total output value of finished goods and services by all enterprises.

References

- ABS (1996). *Australian National Accounts: Input-Output Tables, 1992-93*. Canberra, Australia: Australian Bureau of Statistics
- Bloem, A.M. et al. (2001). *Quarterly National Accounts Manual: Concepts, Data Sources, and Compilation*. Washington, DC: International Monetary Fund
- Brillinger, D. (2002). John W. Tukey's Work on Time Series and Spectrum Analysis. *Annals of Statistics*, Vol.30, No.6, 1595-1618
- Dodge, Y., ed. (2003). *ISI Dictionary of Statistical Terms*. New York, USA: Oxford University Press
- Eurostat (1999). *Handbook on Quarterly National Accounts*. Luxembourg: European Union
- _____ (2006). *Methodology of Short-term Business Statistics: Interpretation and Guidelines*. Luxembourg: European Union
- Hoffmann, E. (1999). *International Statistical Comparisons of Occupational and Social Structures: Problems, Possibilities and the Role of ISCO-88*. Geneva, Switzerland: International Labour Office
- ILO (1995). *Sources and Methods: Labour Statistics*. Vol.2. Geneva, Switzerland: International Labour Office.
- ITU (2007). *World Information Society Report, 2007*. Geneva, Switzerland: International Telecommunication Union
- Lequiller, F. and Blades, D. (2006). *Understanding National Accounts*. Paris, France: Organisation for Economic Co-operation and Development
- Masse P., Roy R., and Gingras Y. (1999). *The Changing Skill Structure of Employment in Canada*. Hull, Canada: Human Resources and Social Development Canada
- Montaquila, J. and Ponikowski, C. (1995). *An Evaluation of Alternative Imputation Methods*. Washington DC, USA: Bureau of Labour Statistics
- OECD (2001). *Measuring Productivity*. Paris, France: Organization for Economic Co-operation and Development
- Schneider, M. et al. (2005). Methods for Measuring Health Inequalities. *Epidemiological Bulletin*, Vol.26, No.2, 12-15
- Scott, B. (1984). National Strategy for Stronger US Competitiveness. *Harvard Business Review*, Vol. 62.
- SARB (2004 – 2011). *Quarterly Bulletin*. Pretoria, South Africa: South African Reserve Bank
- Stats SA (2007). *Concepts and Definitions*. Pretoria, South Africa: Statistics South Africa
- _____ (2008). *Compendium of Industrial Statistics*. 1st Edition. Pretoria, South Africa: Statistics South Africa
- UN (2009). *System of National Accounts, 2008*. New York, USA: United Nations.
- UNIDO (2005). *Industrial Development Report, 2005*. Vienna, Austria: United Nations Industrial Development Organization

- Tatje, E. and Lovell, C. (1999). Profits and Productivity. *Management Science*, Vol.45, No.9, 1177-1193
- Triplett, J. (1992). Economic Theory and BEA's Alternative Quantity and Price Indexes. *Survey of Current Business*, Vol.72, No.4, 49-52
- _____ (1995). Note on Calculating Output and Price Indexes. In Landefeld, J. and Parker, R., Preview of the Comprehensive Revision of the National Income and Product Accounts: BEA's New Featured Measures of Output and Prices. *Survey of Current Business*, Vol.75, No.7, 31-38

Questionnaire

In order to improve the quality and relevance of the Compendium of Industrial Statistics it would be useful to receive the views of users of this publication. It would therefore be appreciated if you could complete the following questionnaire and return it by email or fax to:

Socio-Economic Integration Unit

Statistics South Africa

Pretoria

South Africa

E-mail: sei@statssa.gov.za

Fax: 086 535 2864 (Domestic); +27 86 535 2864 (International)

1. Name and address of respondent:

2. Which of the following describes your area of work?

Government__

Private enterprise__

Public enterprise__

Academic or research institution__

International organisation __

Media__

Not-for-profit organisation__

Other (specify) _____

3. How useful is this publication to your work?

Very useful__

Somewhat useful__

Irrelevant__

4. Please indicate the three things you liked best about this publication:

5. Please indicate the three things you liked least about this publication:

Thank you