STATISTICS ESTONIA

Formulas of ratios used when publishing financial statistics of enterprises

When publishing the financial statistics of enterprises, ratios are calculated in addition to absolute figures.

The annual indicators collected are more numerous and also more detailed compared with the quarterly ones. Therefore, a greater number of ratios can be calculated for a year and more detailed indicators can be used.

The ratios calculated on the basis of annual data are published along with absolute values in the statistical database tables

EM001: FINANCIAL STATISTICS OF ENTERPRISES BY ECONOMIC ACTIVITY AND NUMBER OF PERSONS EMPLOYED,

EM003: FINANCIAL STATISTICS OF ENTERPRISES BY COUNTY

Quarterly data with ratios are published in the table

EM041: FINANCIAL DATA OF ENTERPRISES BY ECONOMIC ACTIVITY AND NUMBER OF PERSONS EMPLOYED (QUARTERLY)

More information on the annual and quarterly financial statistics of enterprises is available in the ESMS (Euro-SDMX Metadata Structure) metadata section

Financial statistics of enterprises (annual) (statistical activity 20300)

Financial statistics of enterprises (quarterly) (statistical activity 20007)

Productivity measures on the basis of turnover

Ratio	Formula for annual data	Formula for quarterly data
Labour productivity (thousand euros) (2005–2017)	$\frac{\text{turnover + subsidies}}{\text{number of persons employed}}$	$\frac{\text{turnover}}{\text{number of persons employed}}$
Labour productivity (thousand euros) (since 2018)	$\frac{\text{turnover + subsidies}}{\text{number of employees}}$	$\frac{\text{turnover}}{\text{number of persons employed}}$
Hour productivity (euros)	$\frac{\text{turnover + subsidies}}{\text{number of hours worked by employees}}$	$\frac{\text{turnover}}{\text{number of hours worked by employees}}$
Productivity of personnel costs	$\frac{\text{turnover + subsidies}}{\text{personnel expenses}}$	$\frac{\text{turnover}}{\text{personnel expenses}}$

Ratio	Formula for annual data	Formula for quarterly data
Total productivity	turnover + subsidies ———————————— costs total (adjusted by stocks of work-in-progress and finished goods (not sold yet) and capitalised self-constructed assets)	turnover ———————————— costs total
Total profit (loss)	–	turnover – costs total
Total profit to turnover	–	turnover – costs total ———————— turnover

Productivity measures on the basis of value added

Ratio	Formula for annual data	Formula for quarterly data
Value added	turnover + change in stocks of work-in-progress and finished goods (stocks at the end minus stocks at the beginning of the reference year) + capitalised self-constructed assets + other revenue (without profit from the sale and revaluation of tangible assets, grants related to assets) – other expenses (without loss from the sale of tangible assets) – costs of merchandise, materials, supplies, intermediate goods, electricity, fuel, power, laid-out work – duties and taxes linked to production – taxes on products	turnover – costs + personnel expenses
Labour productivity (thousand euros) (2005–2017)	value added ———————————— number of persons employed	value added ———————————— number of persons employed
Labour productivity (thousand euros) (since 2018)	value added ———————————— number of employees	value added ———————————— number of persons employed
Hour productivity (euros)	value added ———————————— number of hours worked by employees	value added ———————————— number of hours worked by employees
Productivity of personnel costs	value added ———————— personnel expenses	value added ———————— personnel expenses
Total productivity	value added ———————— costs total (adjusted by stocks of work-in-progress and finished goods (not sold yet) and capitalised self-constructed assets)	value added ———————— costs total
Production value	turnover + other revenue (without profit from the sale and revaluation of tangible assets, subsidies) – costs of merchandise, services and real estate purchased for resale – payments to subcontractors + change in stocks of work-in-progress and finished goods (stocks at the end minus stocks at the beginning of the reference year) + capitalised self-constructed assets	–

Formulas for ratios (annual data)

Ratio	Formula
Return on equity (ROE) (%)	$\frac{\text{net profit}}{\text{average equity}} \times 100$
Return on assets (ROA) (%)	$\frac{\text{net profit}}{\text{average assets total}} \times 100$
Profit margin (%)	$\frac{\text{net profit}}{\text{turnover + subsidies}} \times 100$
Working capital to assets (%)	$\frac{\text{current assets – current liabilities}}{\text{assets total}} \times 100$
Current ratio (times)	$\frac{\text{current assets}}{\text{current liabilities}}$
Quick ratio (times)	$\frac{\text{current assets – inventories}}{\text{current liabilities}}$
Equity multiplier (times)	$\frac{\text{average assets}}{\text{average equity}}$
Capitalisation ratio (times)	$\frac{\text{long-term liabilities}}{\text{long-term liabilities + equity}}$
Equity assets ratio (times)	$\frac{\text{equity}}{\text{equity + liabilities}}$
Average interest rate (%)	$\frac{\text{interest expenses}}{\text{average total debt}} \times 100$
Operating margin (%)	$\frac{\text{operating profit}}{\text{turnover + subsidies}} \times 100$
Profit from normal operations	turnover + other revenue + financial income (costs) – costs – other expenses
Profit from normal operations to turnover (%)	$\frac{\text{profit from normal operations}}{\text{turnover + subsidies}} \times 100$
Profit before taxes	turnover + other revenue + financial income (costs) – costs – other expenses
Profit before taxes and interest expenses to turnover (%)	$\frac{\text{profit before taxes + interest expenses}}{\text{turnover + subsidies}} \times 100$
Assets turnover (times per year)	$\frac{\text{turnover}}{\text{average assets}}$

Ratio	Formula
Inventory turnover (times per year)	$\frac{\text{turnover}}{\text{average inventories}}$
Tangible assets turnover (times per year)	$\frac{\text{turnover}}{\text{average tangible assets (original cost less depreciation)}}$
Working capital to turnover (%)	$\frac{\text{working capital}}{\text{turnover}} \times 100$
Interest coverage ratio (times)	$\frac{\text{earnings before taxes + interest expenses}}{\text{interest expenses}}$
Debt to equity (times)	$\frac{\text{average total debt}}{\text{average equity}}$
Growth rate of assets (%)	$\frac{\text{change in assets}}{\text{assets in the beginning of the year}} \times 100$