

BACH USERGUIDE SUMMARY

2024



BANK FOR THE ACCOUNTS OF COMPANIES HARMONIZED

www.bach.banque-france.fr

Austria | Belgium | Croatia | Denmark | France | Germany | Hungary | Italy |

Luxembourg | Poland | Portugal | Slovakia | Spain | Turkey

MEMBER COUNTRIES

Austria | Oesterreichische Nationalbank

Belgium | Banque Nationale de Belgique

Croatia | Hrvatska Narodna Banka

Denmark | Danmarks Nationalbank

France | Banque de France

Germany | Deutsche Bundesbank

Hungary | Magyar Nemzeti Bank

Italy | Cerved Group and Banca d'Italia

Luxembourg | STATEC

Poland | Narodowy Bank Polski

Portugal | Banco de Portugal

Slovakia | Národná Banka Slovenska

Spain | Banco de España

Turkey | Türkiye Cumhuriyet Merkez Bankası

HISTORICAL BACKGROUND

BACH has been created under the aegis of the European Committee of Central Balance-Sheet Data Offices (ECCBSO). The ECCBSO is an informal body whose members consist of experts either from Central Balance-Sheet Data Offices belonging to or associated with the National Central Banks (NCB) of the European Community, or from National Statistical Institutions.

The BACH project was launched in 1985 by the General Directorate Economic and Financial Affairs (DGecFin) of the European Commission. BACH was created in order to analyze the financial structures and performances of European companies. The BACH project was based on the idea of exploiting information supplied by the national Balance Sheet Data Offices, which use companies' individual accounts and therefore provide more detailed information than that available in National Accounts.

The database was developed in close co-operation with the European Committee of Central Balance Sheet Data Offices set up in 1987 at the initiative of the Banque de France, Banque Nationale de Belgique and Italian Centrale dei Bilanci.


In the late nineties it was created another database – European Sectoral references Database (ESD) – to provide financial ratios of non-financial companies. The aim was to provide sectoral benchmarks to compare companies' performances. It was based on dispersion' statistics (quartiles) and has been primarily developed as an additional tool for credit and financial institutions' risk analysis.

NEW BACH DATABASE

... A more harmonized and friendly database

In 2010, national providers have decided to propose a single application with both complementary databases. However, following the joint effort of harmonization, the two databases were completely merged in a more friendly and comparable framework. The aim of the Working Group responsible for the BACH database was very straightforward: “Architecture of the new BACH must comprise a perfect marriage between the database and the users’ needs. In that sense, straight focus should be put on harmonization of the data and on a Userguide more friendly and integrated!”

In short, the new database includes:

- **12 European countries:** Austria, Belgium, Croatia, France, Germany, Hungary, Italy, Luxembourg, Poland, Portugal, Slovakia, Spain.
 In the near future: Turkey
- Comparable information on the financial statements of companies and economic-financial ratios aggregated by **sector** and by **size class**.

I. DATABASE CONTENTS | Templates: Income statement

INCOME STATEMENT (in % of net turnover)		GENERAL CONTENTS
I1	Net turnover	Includes sales of goods and services net of returns, deductions and rebates. Sales are net of VAT and Excise taxes.
I2	Variation in stocks of finished goods and work in progress	Includes change in inventories of production recognized in the income statement.
I3	Capitalised production	Includes costs capitalized by the entity recognized as income in the period.
I4	Other income	Includes other income not identified in previous items (I1, I2 and I3).
I41	Of which: Operating subsidies and supplementary operating income	Details of other income relating to operating subsidies and supplementary operating income.
I42	Of which: Financial income	Details of other income relating to financial income.
I43	Of which: Extraordinary income	Details of other income relating to extraordinary income.
I5	Cost of goods sold, materials and consumables	Includes cost of materials and consumables used and the cost of goods sold in the period.
I6	External supplies and services	Includes expenses with external supplies and services in the period.
I7	Staff costs	Includes expenses with the staff recognized in the period.
I8	Other expenses	Includes other expenses not identified in previous items (I5, I6 and I7).
I81	Of which: Operating taxes and other operating charges	Details of other expenses relating to operating taxes and other operating charges.
I82	Of which: Provisions (net of reverseals)	Details of other expenses relating to Provisions (net of reversals).
I83	Of which: Financial expenses other than interests on financial debt	Details of other expenses relating to financial expenses, except interests on financial debts (included in I10).
I84	Of which: Extraordinary expenses and impairments (net of reversals), except on inventories and receivables	Details of other expenses relating to extraordinary expenses and reduction/increase in fair value and impairment charges (net of reversals), except impairments (net of reversals) included in I85.
I85	Of which: Impairments (net of reversals) on inventories and receivables	Details of other expenses relating to impairment charges (net of reversals) on inventories and receivables.
I9	Depreciation and amortization on intangible and tangible fixed assets	Includes depreciation and amortization of assets included in the items A11 and A12 recognized in the period.
I10	Interests on financial debts	Includes financing costs recognized in the period.
I11	Tax on profit	Includes income taxes recognized in the period.
It1	Total income	(I1+I2+I3+I4)
It2	Total expenses	(I5+I6+I7+I8+I9+I10+I11)
It3	Net profit or loss for the period	(It1-It2)
Ic1	Dividends paid	Payments to shareholders, corresponding to dividends on account of the current year plus dividends approved by the shareholder for the previous year, deducted of dividends on account of the previous year.

I. DATABASE CONTENTS | Templates: Balance sheet – Assets

ASSETS (in % of total balance sheet)		GENERAL CONTENTS
A1	Fixed assets	(A11+A12+A13)
A11	Intangible fixed assets	Includes brands, patents, copyrights, licenses, etc., even if such assets are held under finance lease contracts. This item also includes the Goodwill recognized separately.
A12	Tangible fixed assets	Includes Lands, buildings, machineries, administration and transport equipment, etc., even if such assets are held under finance lease contracts. This item also includes the bearer biological assets and investment properties.
A13	Financial fixed assets	Includes holdings of shares in the capital of other entities on a continuing basis, as well as loans made to such entities.
A131	of which: Shares in affiliated undertakings and participating interests	Details of financial fixed assets relating to investments in (holdings of shares in the capital of) associates, subsidiaries and jointly controlled entities.
A2	Inventories	Includes raw materials and consumables, goods, work in progress and finished products, as well as consumable biological assets.
A21	of which: Payments on account	Details of inventories relating to payments on account.
A3	Trade receivables	Includes credit granted to customers for sales or services net of advances received (except for payments received on account of orders, included in L5).
A4	Other receivables	Includes other accounts receivables (except trade receivables), mainly non remunerated amounts owed by affiliated undertakings, staff receivables, tax receivables, other debtors and active dividends to be received, as well as non-current assets held for sale.
A41	Current	Other receivables which are expected to be realized within 12 months after the reporting period.
A42	Non-current	Other receivables which are not expected to be realized within 12 months after the reporting period.
A5	Deferred assets	Includes expenses to be recognized in future periods, also including deferred tax assets.
A51	Current ¹	
A52	Non-current ¹	
A6	Other financial assets, current	Includes financial assets held for trading and derivatives.
A7	Cash and bank	Includes the amount available in cash, demand deposits and other deposits in financial institutions.
A	TOTAL BALANCE SHEET	(A1+A2+A3+A4+A5+A6+A7)=E+L

I. DATABASE CONTENTS | Templates: Balance sheet – Equity and Liabilities

EQUITY AND LIABILITIES (in % of total balance sheet)		GENERAL CONTENTS
E1	Capital, reserves, earnings and other equity instruments	Includes paid capital, reserves, treasury stock and other equity instruments. Subscribed capital but not paid is deducted from this item. This item also includes the cumulative net income of prior periods, the net income for the period as well as dividends paid in advance.
E11	Of which: Paid capital	Amount of capital "paid in" by investors during common or preferred stock issuances, including the par value of the shares themselves. Paid-in capital represents the funds raised by the business from selling its equity and not from ongoing operations.
E12	Of which: Reserves other than revaluations, adjustments on financial investments and other comprehensive income	Accumulated capital surplus of a company reinvested in the company. It includes both legal reserves and voluntary reserves.
E2	Revaluations, adjustments on financial investments and other comprehensive income	Includes surplus revaluation of tangible and intangible assets, adjustments on financial assets recognized in equity and other changes in equity.
E	TOTAL EQUITY	(E1+E2)
Lp	Provisions	Includes all provisions.
Lp1	of which: Provisions for pensions and similar obligations	Details of provisions relating to liability for post-employment benefits.
L1	Bonds and similar obligations	Includes bonds and similar securities issued by the entity.
L11	Current	Bonds and similar securities due to be settled within 12 months after the reporting period.
L12	Non-current	Bonds and similar securities not due to be settled within 12 months after the reporting period.
L2	Amounts owed to credit institutions	Includes debt of the entity vis-à-vis credit institutions (includes financial leasing).
L21	Current	Amounts owed to credit institutions due to be settled within 12 months after the reporting period.
L22	Non-current	Amounts owed to credit institution not due to be settled within 12 months after the reporting period.
L3	Other creditors	(L31+L32)
L31	Other financial creditors	Includes the remaining funding from other financial creditors not identified in L1 and L2, mainly intra-group debt.
L311	Current	Funding from other financial creditors due to be settled within 12 months after the reporting period.
L312	Non-current	Funding from other financial creditors not due to be settled within 12 months after the reporting period.
L32	Other non-financial creditors	Includes other accounts payables (except trade payables and payables to other financial creditors), mainly tax and social security payables, staff debt and active dividends to be paid.
L321	Current	Funding from other non-financial creditors due to be settled within 12 months after the reporting period.
L322	Non-current	Funding from other non-financial creditors not due to be settled within 12 months after the reporting period.
L4	Trade payables	Includes debts to suppliers of goods and services, net of advances made (except for payments on account, included in A21).
L5	Payments received on account of orders, current	Includes payments received by the entity on account of orders.
L6	Deferred liabilities	Includes income to be recognized in future periods, including deferred tax liabilities.
L61	Current ²	
L62	Non-current ²	
L	TOTAL LIABILITIES	(Lp+L1+L2+L3+L4+L5+L6)

I. DATABASE CONTENTS | Templates: Ratios

R1	Financial Structure Ratios (%)	Definition	Contents	
R11	Assets to Equity ratio	Total balance sheet / Total equity	Numerator:	A
			Denominator:	E
R12	Liabilities to Equity ratio	Total liabilities / Total equity	Numerator:	L
			Denominator:	E
R13	Current assets / Total assets (strict sense definition) ³	Current assets / Total balance sheet	Numerator:	(A2+A3+A41+A51+A6+A7)
			Denominator:	A
R130	Current assets / Total assets (broad definition) ³	Current assets / Total assets	Numerator:	(A2+A3+A4+A51+A6+A7)
			Denominator:	A
R14	Other financial assets and cash and bank / Total assets	Other financial assets and cash and bank / Total balance sheet	Numerator:	(A6+A7)
			Denominator:	A
R15	Non-current liabilities / Total assets (strict sense definition)	Non-current debt / Total balance sheet	Numerator:	(L12+L22+L312+L322+L62)
			Denominator:	A
R16	Current liabilities / Total assets (strict sense definition)	Current debt / Total balance sheet	Numerator:	(L11+L21+L311+L321+L4+L5+L61)
			Denominator:	A
R17	Current ratio (strict sense definition)	Current assets / Current liabilities	Numerator:	(A2+A3+A41+A511+A6+A7)
			Denominator:	(L11+L21+L311+L321+L4+L5+L61)
R18	Change in equity ⁴	Variation on equity / Equity (N-1)	Numerator:	E (N) - E (N-1)
			Denominator:	E (N-1)
R19	Balance sheet annual variation rate ⁴	Variation on assets / Assets (N-1)	Numerator:	A (N) - A (N-1)
			Denominator:	A (N-1)

R2	Financial and Debt Service Ratios (%)	Definition	Contents	
			Numerator:	Denominator:
R21	Financial income net of charges other than interest over EBITDA	Financial income net of charges other than interest / EBITDA	Numerator:	(I42-I83)
			Denominator:	(I1+I2+I3+I41+I42-I5-I6-I7-I81-I83)
R22	EBITDA over Interest on financial debt	EBITDA / Interest on financial debt	Numerator:	(I1+I2+I3+I41+I42-I5-I6-I7-I81-I83)
			Denominator:	I10
R23	Interest burden	EBT / EBIT	Numerator:	(I1+I2+I3+I4 -I5-I6-I7-I8-I9-I10)
			Denominator:	(I1+I2+I3+I4-I5-I6-I7-I8-I9)
R24	Interest and similar charges / Net turnover	Interest and similar charges / Net turnover	Numerator:	(I83+I10)
			Denominator:	I1
R25	Interest and similar charges / Gross operating profit	Interest and similar charges / Gross operating profit	Numerator:	(I83+I10)
			Denominator:	(I1+I2+I3+I41-I5-I6-I7-I81)
R26	Net financial income / Gross operating profit	Financial income net of charges / Gross operating profit	Numerator:	(I42-I83-I10)
			Denominator:	(I1+I2+I3+I41-I5-I6-I7-I81)
R27	Gross operating profit / Total net debt	Gross operating profit / Total net debt	Numerator:	(I1+I2+I3+I41-I5-I6-I7-I81)
			Denominator:	(L1+L2+L3+L4+L5+L6-A6-A7)
R28	Credit institutions net indebtedness ratio	Net amounts owed to credit institutions / Total balance sheet	Numerator:	(L2 - A7)
			Denominator:	A
R29	Financing cost (estricted sense definition) ⁴	Interest expenses / Financial liabilities (estricted sense definition)	Numerator:	I10
			Denominator:	(L1+L2+L31)
R290	Financing cost (broad definition) ⁴	Interest expenses / Financial liabilities (broad definition)	Numerator:	I10
			Denominator:	(L1+L2+L3)

R3	Profitability Ratios (%)	Definition	Contents	
R31	Gross value added / Net turnover	Gross value added / Net turnover	Numerator:	(I1+I2+I3+I41-I5-I6-I81)
			Denominator:	I1
R32	Gross operating profit / Net turnover (ROS)	Gross operating profit / Net turnover	Numerator:	(I1+I2+I3+I41-I5-I6-I7-I81)
			Denominator:	I1
R33	EBITDA / Net turnover	EBITDA / Net turnover	Numerator:	(I1+I2+I3+I41+I42-I5-I6-I7-I81-I83)
			Denominator:	I1
R34	Net operating profit / Net turnover	Net operating profit / Net turnover	Numerator:	(I1+I2+I3+I41-I5-I6-I7-I81-I82-I85-I9)
			Denominator:	I1
R35	EBIT / Net turnover	EBIT / Net turnover	Numerator:	(I1+I2+I3+I4-I5-I6-I7-I8-I9)
			Denominator:	I1
R36	EBT / Net turnover	EBT / Net turnover	Numerator:	(I1+I2+I3+I4 -I5-I6-I7-I8-I9-I10)
			Denominator:	I1
R37	Net financial income / Net turnover	Net financial income / Net turnover	Numerator:	(I42-I83-I10)
			Denominator:	I1
R38	Return on equity	Net profit or loss for the period / Total equity	Numerator:	It3
			Denominator:	E
R39	Net operating profit / Total assets	Net operating profit / Total balance sheet	Numerator:	(I1+I2+I3+I41-I5-I6-I7-I81-I82-I85-I9)
			Denominator:	A
R310	Profit or loss of the year before taxes / Equity	Profit or loss of the year before taxes / Total equity	Numerator:	It3+I11
			Denominator:	E
R311	EBITDA - Return on investments	EBITDA / Total assets	Numerator:	(I1+I2+I3+I41+I42-I5-I6-I7-I81-I83)
			Denominator:	A
R312	Return on sales	EBT / Turnover	Numerator:	(It3+I11)
			Denominator:	I1
R313	Net Turnover annual growth rate ⁴	Variation on turnover / Turnover (N-1)	Numerator:	I1(N)-I1(N-1)
			Denominator:	I1(N-1)

R4	Activity and Technical Ratios (%)	Definition	Contents	
R41	Asset turnover ratio	Net turnover / Total balance sheet	Numerator:	I1
			Denominator:	A
R42	Coefficient Employee expenses over Gross value added	Staff costs / Gross value added	Numerator:	I7
			Denominator:	(I1+I2+I3+I41-I5-I6-I81)

R5	Working Capital Ratios (%)	Definition	Contents	
R51	Inventories / Net turnover	Inventories / Net turnover	Numerator:	A2
			Denominator:	I1
R52	Trade receivables / Net turnover	Trade receivables / Net turnover	Numerator:	A3
			Denominator:	I1
R53	Trade payables / Net turnover	Trade payables / Net turnover	Numerator:	L4
			Denominator:	I1
R54	Operating working capital / Net turnover	Operating working capital / Net turnover	Numerator:	(A2+A3-L4-L5)
			Denominator:	I1
R55	Days Sales Outstanding		Numerator:	360*(A3-L5)
			Denominator:	I1
R56	Days Payables Outstanding		Numerator:	360*(L4-A21)
			Denominator:	(I5+I6)

Notes:

General note: This set of information is completed with the structures provided in the BS and IS. All ratios are calculated if denominator > 0. Some ratios are not computed for Holdings. EBITDA is calculated without provisions, impairments and extraordinary items; EBIT and EBT are calculated with these items.

- (1) A51 and A52 are used from 2000 to 2015; from 2016 onwards, A5 is used instead of A51.
- (2) L61 and L62 are used from 2000 to 2015; from 2016 onwards, L6 is used instead of L61.
- (3) Due to the fact that A4 breakdown is not available for all the countries, two definitions are included: a strict sense definition (R13), that uses A41, which is provided by the countries with A4 breakdown available, and a broader definition (R130) that uses A4 instead of A41, provided by all the countries.
- (4) Change rate calculated with the sliding sample.
- (5) Due to the fact that L3 breakdown is not available for all the countries, two definitions are included: a strict sense definition (R29), that uses L31, which is provided by the countries with L3 breakdown available, and a broader definition (R290) that uses L3 instead of L31, provided by all the countries.

I. DATABASE CONTENTS | Deviations: Income statement

	AT	BE	DE	ES	FR	HR	HU	IT	LU	PL	PT	SK
I1		I							I			
I2		P_N/A										
I3		P_N/A	I						I	I	I	I
I4	D											
I41	D	I										N/A
I42				D		D						D
I43	N/A			D						P_N/A	N/A	N/A
I5		I	D									D
I6		P_N/A	N/A									
I7												
I8	D									I		D
I81	D			D				N/A		I		N/A
I82	N/A		N/A	P_N/A	D				N/A			N/A
I83		P_N/A		D								D
I84	N/A			D						P_N/A	D	N/A
I85	N/A			P_N/A	D							D
I9												
I10		D	I								I	I
I11												
It1												
It2												
It3												

Legend:

- Additional information to the user - see the corresponding explanation sheet
- Possible deviation from defined concept - see the corresponding explanation sheet
- Partial not available (e.g. not available for one size class) - see the corresponding explanation sheet
- Not available - see the corresponding explanation sheet

I. DATABASE CONTENTS | Deviations: Balance sheet - Assets

	AT	BE	DE	ES	FR	HR	HU	IT	LU	PL	PT	SK
A1												
A11	D	D	D		D				D	D		
A12					D							
A13				D						D		
A131		P_N/A		D						P_N/A		
A2												
A21		P_N/A		D								
A3			D		D							D
A4			D	D								
A41	D		D	D	D						D	
A42	N/A		N/A	I	N/A						D	
A5												
A51	N/A	N/A	D	D	D				I		D	D
A52	N/A	N/A		D	D				N/A			D
A6											I	
A7												
A												

Legend:

- Additional information to the user - see the corresponding explanation sheet
- Possible deviation from defined concept - see the corresponding explanation sheet
- Partial not available (e.g. not available for one size class) - see the corresponding explanation sheet
- Not available - see the corresponding explanation sheet

I
D
P_N/A
N/A

I. DATABASE CONTENTS | Deviations: Balance sheet – Equity and Liabilities

	AT	BE	DE	ES	FR	HR	HU	IT	LU	PL	PT	SK
E1			D								D	
E2	N/A		N/A		D						D	
E			-									
Lp			D									
Lp1				P_N/A	N/A							N/A
L1		N/A		P_N/A						I		
L11		N/A		P_N/A						I	D	N/A
L12		N/A		P_N/A						I	D	
L2										I	I	
L21					D							
L22					D						D	
L3				D								
L31	N/A	D	D	D						I		N/A
L311	N/A		D	D						N/A		N/A
L312	N/A	D		D	D					I	D	N/A
L32	N/A		N/A									D
L321	N/A		N/A									D
L322	N/A		N/A	I	N/A						D	D
L4			D									
L5				D								N/A
L6			D		D							
L61	N/A	N/A	N/A	D	D				I	N/A	D	D
L62	N/A	N/A	N/A	D	N/A				N/A	N/A		D
L												

Legend:

Additional information to the user - see the corresponding explanation sheet

Possible deviation from defined concept - see the corresponding explanation sheet

Partial not available (e.g. not available for one size class) - see the corresponding explanation sheet

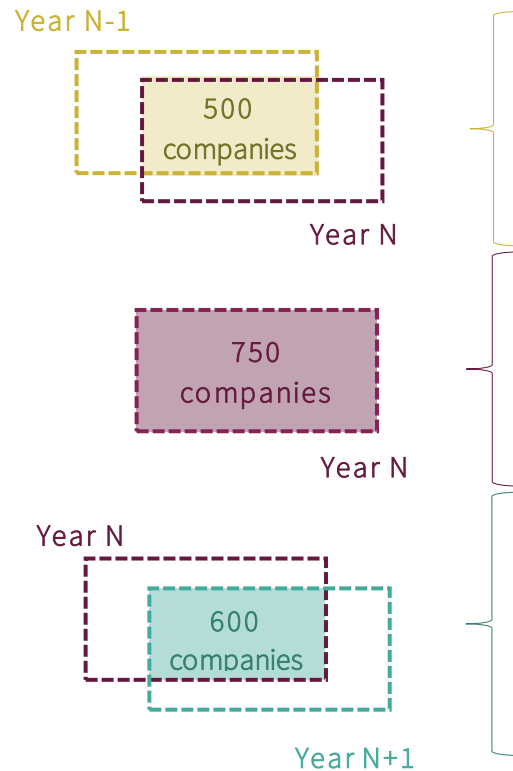
Not available - see the corresponding explanation sheet

I
D
P_N/A
N/A

I. DATABASE CONTENTS | National templates

	COUNTRY	BRIEF DESCRIPTION OF NATIONAL TEMPLATES	HYPERLINK(S) TO NATIONAL TEMPLATE(S)
AT	AUSTRIA	The data collected are the product of a cooperation between the Oesterreichische Nationalbank and the Austrian Institute for SME Research.	No hyperlink is available for Austria. For a summarized pdf of the National Template, please contact Oesterreichische Nationalbank (icas@oenb.at)
BE	BELGIUM	Standard models for the filing of annual accounts of undertakings, to be published in accordance with the IVth Directive provisions: large undertakings use the full model, small undertakings use the abbreviated model, micro undertakings use the micro model.	https://www.nbb.be/en/central-balance-sheet-office/drawing/models/models-enterprises
DE	GERMANY	The financial statements (including balance sheet and income statement) are collected from different sources. They can be compiled either according to German GAAP or according to German tax law.	No hyperlink is available for Germany. For a summarized pdf of the National Template, please contact presse-information@bundesbank.de
ES	SPAIN	The data collected and questionnaires are based on two sources: Banco de España survey and Commercial Registries (Administrative source).	http://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesAnuales/CentralBalances/15/Fich/cb15sm.pdf
FR	FRANCE	The data collected are based on the tax returns (balance sheets, income statements and additional information on some balance sheet and income statement items).	https://www.impots.gouv.fr/sites/default/files/formulaires/2050-liasse/2024/2050-liasse_4594.pdf
HR	CROATIA		
HU	HUNGARY	The data is based on the annual reported balance sheet and income statement of non-financial corporation.	https://sta.mnb.hu/Reports/powerbi/STA-PSZF/NemPenzugyiVallalatok_EN?rs:embed=true
IT	ITALY		No hyperlink is available for Italy. For a summarized pdf of the National Template, please contact Cerved Group.
LU	LUXEMBOURG	The data is based on the annual reported financial accounts.	https://ecdf.b2g.etat.lu/ecdf/forms?t=1533712763609
PL	POLAND	The data based on the annual statistical financial statements collected by Statistics Poland. The survey comprises enterprises of more than 9 employees.	https://form.stat.gov.pl/formularze/2023/passive/SP.pdf SP (stat.gov.pl)
PT	PORTUGAL	Annual data of the Central Balance-Sheet Database is gathered from Annex A of IES - Simplified Corporate Information (Informação Empresarial Simplificada, in the Portuguese acronym).	http://info.portaldasfinancas.gov.pt/pt/apoio_contribuinte/modelos_formularios/Pages/default.aspx
SK	SLOVAKIA	The data based on the annual statistical financial statements collected by Ministry of Finance. The survey comprises enterprises with double-entry bookkeeping.	https://www.finance.gov.sk/Default.aspx?CatID=4070 https://www.finance.gov.sk/Default.aspx?CatID=4071

II. METHODOLOGY AND WARNINGS | Sample types



Year		Sample	Number of companies	Turnover
Year N-1	SLIDING	-1	500	80 M€
Year N		1	500	78 M€
Year N	VARIABLE	0	750	95 M€
Year N	SLIDING	-1	600	83 M€
Year N+1		1	600	86 M€

Sliding samples allow to study the same set of firms over two subsequent years. Thus, from the example above, for a given combination of country * sector * company size, 3 records are available for a given Year N:

- **Sample = 0** : The variable sample of Year N includes all the companies for which balance sheet is available in Year N (750 units).
- **Sample = 1** : The sliding sample of Year N and N-1 contains the companies for which balance sheet is available both for Year N AND Year N-1 (500 units).
- **Sample = - 1** : The sliding sample of Year N and N+1 contains the companies for which balance sheet is available both in Year N AND in Year N+1 (600 units).

II. METHODOLOGY AND WARNINGS | Criteria for aggregation

BY SECTOR OF ACTIVITY		
Z0	Total NACE (includes M701, but excludes K 642)	
Zc	Total NACE (without K642 and M701)	
A	Agriculture, forestry and fishing	01, 02, 03
B	Mining and quarrying	05, 06, 07, 08, 09
C	Manufacturing	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33
D	Electricity, gas, steam and air conditioning supply	35
E	Water supply, sewerage, waste management and remediation act.	36, 37, 38, 39
F	Construction	41, 42, 43
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	45, 46, 47
H	Transportation and storage	49, 50, 51, 52, 53
I	Acommodation and food service activities	55, 56
J	Information and communication	58, 59, 60, 61, 62, 63
K 642	Activities of holding companies	642
L	Real estate activities	68
M	Professional, scientific and technical activities	69, 70, 71, 72, 73, 74, 75
Mc	Total M (without M701)	
M 701	Activities of head offices	701
M702	Management consultancy activities	702
N	Administrative and support service activities	77, 78, 79, 80, 81, 82
P	Education	85
Q	Human health and social work services	86, 87, 88
R	Arts, entertainment and recreation	90, 91, 92, 93
S	Other service activities	94, 95, 96

BY SIZE CLASS		
0	All sizes	
1a	Small	Turnover < 10 million €
1b	Medium	10 million € ≤ Turnover < 50 million €
1	SME	Turnover < 50 million €
2	Large	Turnover ≥ 50 million €

Note:

For Poland, Croatia and Hungary, values of total assets were converted into EUR using exchange rate as at the end of the year, whereas the values of turnover and gross value added were converted into EUR using annual average exchange rate.

II. METHODOLOGY AND WARNINGS | Holdings and Head Offices

HOLDINGS & HEAD OFFICES

In order to preserve the harmonization of the BACH database and in order to ease sectoral analysis:

- Holdings and head offices do not have detail by NACE section or division neither by size
- It is provided an aggregated item of all companies without holdings and head offices
- NACE group 642 is excluded from division 64 since companies in this group are not considered as non-financial companies
- Ratios that involve the turnover of holdings and head offices are not available

Memo:

K 64 = 'Financial service activities, except insurance and pension funding'

M = 'Professional, scientific and technical activities'

M 701 = 'Activities of head offices'

M 702 = 'Management consultancy activities'

EDITION OF VALUES FOR HOLDINGS AND HEAD OFFICES BY NACE SECTOR AND SIZE

SIZE/ NACE SECTOR	K642	M701	M702	M70 = M701+M702	Mc (M without M701)	M (including 701)	Zc (without K642 and M701)	Z0 (including M701, not K642)
SMALL	No	No	Yes	No	Yes	No	Yes	No
MEDIUM	No	No	Yes	No	Yes	No	Yes	No
SME	No	No	Yes	No	Yes	No	Yes	No
LARGE	No	No	Yes	No	Yes	No	Yes	No
ALL SIZES	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

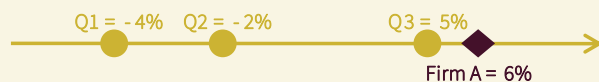
II. METHODOLOGY AND WARNINGS | Statistical measures

STATISTICAL MEASURES	
Absolute values	Total assets (€ thousands), value added (€ thousands), turnover (€ thousands), number of employees and number of enterprises (in the case of the Ratios, nbq = number of companies used to calculate Q1, Q2 and Q3).
Percentage of the Total Balance Sheet	Items of the balance sheet.
Percentage of the Net Turnover	Items of the Income Statement and the information on the notes.
Weighted mean (wm)	Ratios. Computed by aggregating the data of the numerator on the one hand, and the data of the denominator on the other hand. This measure provides a complementary approach and is influenced by the largest companies in each category (sector or size).
Q1 = First quartile*	Ratios. For each single ratio the observations of a certain sample are sorted in ascending order. This sample is then divided into four quarters. 25% of the enterprises have a ratio below this quartile and 75% have a ratio above.
Q2 = Second quartile*	Ratios. For each single ratio the observations of a certain sample are sorted in ascending order. This sample is then divided into four quarters. Middle value that cuts the data in half. It is also known as the median.
Q3 = Third quartile*	Ratios. For each single ratio the observations of a certain sample are sorted in ascending order. This sample is then divided into four quarters. 75% of the enterprises have a ratio below this quartile and 25% have a ratio above.

*IMPORTANCE of the QUARTILES

Advantage of this measure: values of very large enterprises and other extreme values cause no bias in the results. The relative weight of each ratio within the distribution is the same, irrespective of the relative importance of an enterprise and the existence of extreme values.

Example: Return on equity



In this sector, on the one hand, half of the companies have negative return on equity (Q2 = -2%). On the other hand, one quarter of the enterprises have a return on equity bigger than 5% (Q3 = 5%). Firm A have a return on equity superior to 75% of the enterprises of this sector.

II. METHODOLOGY AND WARNINGS | Confidentiality rules and Conventions

CONFIDENTIALITY RULES - minimum number of companies required for the edition of the data			
	WEIGHTED MEAN	Q2	Q1 and Q3
AT, HR, PL, PT	3	6	12
BE, ES, FR, IT, LU, SK	6		
DE	12	12	
HU	3	N/A	N/A

CONVENTIONS USED
▪ If there are not enough companies regarding the rules of confidentiality, the amounts and the ratios are not filled;
▪ Zero does not mean missing value (there is no default value like NA);
▪ The coverage rates are expressed in percentage (example: 98.54);
▪ The ratios are expressed in percentage;
▪ The number of firms used to calculate the weighted mean is the same for all the ratios, namely nb_firms.

II. METHODOLOGY AND WARNINGS | Limitations

DISCLAIMER

Condition of use agreement: redistribution of data is prohibited, even when this is done without charging. Users must indicate the data source in their documents as follow:

"BACH database: ECCBSO, Oesterreichische Nationalbank, National Bank of Belgium, Czech National Bank (in cooperation with the Czech Statistical Office), Deutsche Bundesbank, Danmarks Nationalbank, Banco de España, Banque de France, Centrale dei Bilanci - Cerved srl / Banca d'Italia, Statec Luxembourg, National Bank of Poland (calculations of National Bank of Poland on the basis of the data from the Statistics Poland), Banco de Portugal, National Bank of Slovakia (calculations based on data from the Ministry of Finance)".

WARNING 1 – Heterogeneous samples

The compilation methods used by the national authorities to produce the time series for both datasets (variable and sliding samples) are different. They depend on the degree of exhaustiveness or representativeness of the statistical base material available for the national financial statements.

Those countries which have an exhaustive survey (like Belgium, Italy and Portugal) are able to provide figures which are not affected by changes in the composition of the sample population and therefore can directly be compiled as time-series. These results are representative for the entire population of the firms included in the statistical survey and the observed changes in the ratios can only be interpreted as a result of economic changes.

For other countries the initial data collection is made for different purposes. In some of them the main target is to support credit policy in refinancing of the central bank. In others the objective is monitoring the economic system, helping in the analysis of non-financial enterprises and the effect of the decisions of the monetary policy on this sector. **Therefore, the selected companies represent neither a complete survey, nor a statistically representative sample. When this is the case, the use of the sliding samples is recommended to analyze the indicators' evolution.**

Furthermore, the composition of the sample population is changing every year and the compilation of time series from such samples can raise problems of analysis, as the changes in the results over time do not necessarily reflect primarily representative economically induced evolutions of the monitored variables or ratios but also fluctuations in the sample population. **This statistical error originating from differences in the sample population is called "sample composition bias".**

WARNING 2 – Harmonization process and comparability

Harmonization work has been at the centre of this project and comparability has remained its main target, occasionally at the cost of a reduction of detailed information. However, it has not been possible to harmonize the data fully owing to the special characteristics of the national accounting methodologies and the difficulty of drawing up accounting documents a posteriori using a common layout.

BACH provides the information necessary to analyze the remaining methodological differences and to decide whether an item could be compared or not. Database contents chapter of this userguide must be analyzed. **Nevertheless all responsibility for the application of the BACH data remains exclusively on the side of the user. The ECCBSO may not be blamed for inadequate empirical research results and their interpretation by users.**

III. RELEASE CALENDAR AND CONTACTS | Calendar

	COUNTRY	TYPE OF DATA	RELEASE CALENDAR
AT	AUSTRIA	Provisional	-
		Final	jul n+2
BE	BELGIUM	Provisional	nov n+1
		Final	mar n+2
DE	GERMANY	Provisional	feb n+2
		Final	nov n+2
ES	SPAIN	Provisional	dec n+1
		Final	jun n+2
FR	FRANCE	Provisional	dec n+1
		Final	dec n+2
HR	CROATIA	Provisional	-
		Final	jul n+1
HU	HUNGARY	Provisional	-
		Final	apr n+2
IT	ITALY	Provisional	nov n+1
		Final	mar n+2
LU	LUXEMBOURG	Provisional	dec n+1
		Final	dec n+2
PL	POLAND	Provisional	-
		Final	dec n+1
PT	PORTUGAL	Provisional	-
		Final	nov n+1
SK	SLOVAKIA	Provisional	-
		Final	oct n+1

III. RELEASE CALENDAR AND CONTACTS | National data providers and contacts

	COUNTRY	INSTITUTION	DEPARTMENT	MAIN OBJECTIVE	E-MAIL
AT	AUSTRIA	National Central Bank	Statistics	Risk assessment, Rating	icas@oenb.at
BE	BELGIUM	National Central Bank	Micro-economic information	Publication of micro-data	ba@nbb.be
DE	GERMANY	National Central Bank	Statistics	Statistics	presse-information@bundesbank.de
ES	SPAIN	National Central Bank	Statistics	Statistics	cenbalan@bde.es
FR	FRANCE	National Central Bank	Corporate	Risk assessment, Rating	1356-bach-ut@banque-france.fr
HR	CROATIA	National Central Bank	Financial stability	Risk assessment, Rating	tomislav.grebenar@hnb.hr
HU	HUNGARY	National Central Bank	Statistics	Financial accounts	valentinya@mnb.hu
IT	ITALY	Private company	-	Risk assessment, Rating	bachinfo.it@cerved.com
LU	LUXEMBOURG	National Statistical Institute	Central balance sheet data office	Statistics, Publication of micro-data	centralebilans@statec.etat.lu
PL	POLAND	National Central Bank	Statistics	Statistics	sekretariat.ds@nbp.pl
PT	PORTUGAL	National Central Bank	Statistics	Statistics	bach@bportugal.pt
SK	SLOVAKIA	National Central Bank	Statistics	Statistics, Risk assessment	info@nbs.sk

BACH USERGUIDE SUMMARY

