

BANCO DE ESPAÑA'S DATA POINT MODEL FOR COLLECTING DATA FOR BSI/MIR STATISTICS USING XBRL

(ECB/2008/32 and ECB/2001/18 as amended by ECB/2009/7).

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DIRECTORATE GENERAL BANKING REGULATION



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INTRODUCTION



Banco de España (BdE) applies an integrated approach for collecting data for statistical and supervisory purposes, and for the primary public financial statements.

In 2005 BdE took the strategic decision to use XBRL for collecting all financial reporting.

BdE is currently using XBRL for collecting: public financial statements and COREP data on credit institutions, any data on the rest of the supervised institutions, and data on non-financial corporations for the Central Balance Sheet Data Office.

BdE has developed XBRL taxonomies for collecting (on a compulsory basis) data for the ECB's statistics concerning the balance sheet of the MFIs sector (BSI statistics) and interest rates (MIR statistics) as from the information for June 2010.

The BdE's XBRL taxonomies for collecting data for BSI/MIR statistics have been developed using a multidimensional Data Point Model (DPM) that it is consistent with the [draft] DPM developed by CEBS for modeling the FINREP framework.



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WHY XBRL TAXONOMIES?



BdE has decided to use XBRL taxonomies because XBRL is an international IT standard that enables:

- *Data to be sent in an instance irrespective of the tables in which they are found. This allows the internal consistency of all reported data to be checked. Tables are simply views of the data.*
- *The data points (cells) to be defined using dimensions. This allows for an exact definition of the data to be reported and, consequently, for an increase in their quality.*
- *Formula linkbases to be used. This allows for quality control of the data at their inception and for their automatic rejection when the quality checks defined do not hold.*
- *Error messages to be automatically sent to the reporting entities, explaining the mistakes or advising on potential inconsistencies*
- *Qualitative information to be added to any cell.*
- *Translations of the financial concepts represented in multiple languages to be provided. (Enabling the information to be read in the languages for which the labels are translated).*
- *Legal or other references to be attached to the data.*
- *Greater international collaboration publishing and re-using taxonomies in www.eurofiling.info*



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DATA POINT MODEL (DPM) USED BY BANCO DE ESPAÑA (BdE)

- ❑ A DPM is a systematic representation of the data of a reporting framework.
- ❑ The BdE’s DPM is an intermediate step between the data included in the tables and the XBRL taxonomies, although it could be used for facilitating the development of any IT Taxonomy.
- ❑ The DPM used by BdE represents every single data (cell) of the reporting tables using the values of the “BASE” and “DIMENSIONS” that characterise them. It therefore follows a multidimensional approach [See following slides].
- ❑ It does not add or delete any of the cells of the tables. These are simple views of the data points (cells).

DATA POINT (Cell)	BASE	DIMENSIONS					
		Main category	Counterparty Sectors	Currency	Residence counterparty	Location of the activity of the reporting entity	Amount type
Cash (Euros)	Assets	Assets: Cash on hand	Not specified	Euro	Not allocated	Domestic	Outstanding



IDENTIFICATION OF A DATA POINT (CELL) (I)

- ❑ A data point (cell) is represented using the values of the “BASE” and “DIMENSIONS” that characterise it.
- ❑ The same data point is defined only once, regardless of whether it is included in more than one table.

BASE	<ul style="list-style-type: none"> ▪ Business/User point of view: Basic [financial/supervisory/statistical] meaning (nature) of the data from a conceptual point of view (e.g. Assets, Liabilities, etc.). ▪ IT point of view: Its “values “ are the “primary items”.
DIMENSION	<ul style="list-style-type: none"> ▪ Each of the different “characteristics/breakdowns/disaggregations/attributes” that identify the information included in the data points (e.g., Currency of the instruments, Counterparty, etc.). ▪ Every “dimension” must have two or more possible values (members). ▪ It is possible to use more than one “dimension” of a “domain” to identify a data point (cell) (e.g. “Original maturity”, “Remaining maturity” and “Revision of interest rate” of the domain “Time interval”). ▪ It is not possible to use more than one “member” of a “dimension” to identify a data point (cell).
MEMBER	<ul style="list-style-type: none"> ▪ Each “value” or part of a single dimension/domain (e.g. “Loans”, “Shares and other equity,” etc. are “members “of the dimension “Assets”). ▪ A “member” can be used in more than one dimension when it has the same meaning (e.g. the member 0% is used in several dimensions of the domain “Percentage interval”).
DOMAIN	<ul style="list-style-type: none"> ▪ IT point of view: All possible values (members) that can be assigned to a dimension or a set of dimensions that share members (e.g. “Original maturity”, “Remaining maturity” and “Revision of interest rate” are included in the domain “Time interval”, because their members are intervals of time).



IDENTIFICATION OF A DATA POINT (CELL) (II)

FAMILY OF DIMENSIONS	<ul style="list-style-type: none">▪ Business/User point of view: Group of “domains/dimensions” that have a similar function in the model (e.g. “Main category “ is a family of dimensions of different domains: “Assets”, “Liabilities”, etc.).▪ These groups simplify the understanding of the data model from a business/user point of view.
KEY DIMENSIONS	<ul style="list-style-type: none">▪ Dimensions that must be fulfilled for all data points (cells) of a reporting framework (e.g. “Main category” and “Amount type”), even though the value to be reported could be “Not specified”/“Not applicable”.
OTHER DIMENSIONS	<ul style="list-style-type: none">▪ Dimensions that must be fulfilled for those data points (cells) for which they are necessary for identifying specific content, but not for the rest of the data points (e.g. “Remaining maturity” must be included only in the data points (cells) with data on loans for which the remaining maturity is one of their attributes).



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RECONCILING THE “BSI STATISTICS” AND THE “BdE” STATISTICS

- ❑ The scope of application and definitions of instruments, sectors ..., used in Banco de España’s (BdE) statistics (see Circular 4/2004, as amended by Circulars 6/2008 and 2/2010) are the same as in the ECB statistics concerning the balance sheet of the MFIs sector (BSI statistics, see ECB/2008/32).

- ❑ The main differences between both reporting frameworks are:
 - *The design of the tables is different, but this is not relevant for the DPM.*
 - *BdE statistics include a “Summary balance sheet” table (UEM.1), with totals for all instruments and with the items “Total assets” and “Total liabilities”.*
 - *In BdE statistics, the type of currency requested is “foreign currencies” instead of “all currencies” for some data.*
 - *In some BdE tables, the data on “NPISHs” is requested separately from “Households”.*
 - *The data on “Other financial intermediaries and financial auxiliaries” are split into “Investment funds” and “Other”. Additionally, for residents in Spain, these data are also split by subsector.*
 - *In BdE statistics, some data are requested monthly instead of quarterly.*



BASE

Basic meaning (nature) of every data point from a financial point of view

□ ***For the BSI statistics, the values are:***

- **Assets**
- **Liabilities**
- **Equity and liabilities**
- **Changes in assets** *(for data on revaluations)*
- **Changes in liabilities** *(for data on revaluations)*
- **Managed assets, custody assets and assets involved in services provided by the entity** *(for data on loans serviced in securitisations)*



DIMENSIONS

Key dimensions

- ❑ **Main category (*)**:
 - *Assets (Cash, Loans, ...)*
 - *Liabilities (Deposits, Debt securities issued, ..)*
 - *Liabilities and equities (Capital and reserves)*
 - *Managed assets (Securitisation activities)*
- ❑ **Counterparty**:
 - *Sectors (MFIs, Non-MFIs, ...)*
- ❑ **Currency of instrument** (*Euro, Foreign curr., ...*)
- ❑ **Geographical area**
 - *Residence of counterparty (Spain, Other EMU States,...)*
 - *Location of the activity of the reporting entity (Domestic)*
- ❑ **Amount type** (*Outstanding, Revaluation adjustments, Net flows*)

(*) For each data point, only the relevant dimension(s) must be reported (e.g. Assets or Liabilities)

(**) Loans, securities other than shares, deposits and debt instruments issued

Other dimensions

For all debt instruments held or issued ():**

- ❑ **Time interval**:
 - *Original maturity*

Dimensions to be included only when necessary:

- ❑ **Collateral / guarantees**
- ❑ **Counterparty**:
 - *Securitisations and transfer partners (FVCs, ...)*
- ❑ **Geographical area**:
 - *Securitisations and transfer partners (EMU, Total)*
- ❑ **Loan type by purpose**
- ❑ **Percentage interval**:
 - *Loan to value (100%)*
- ❑ **Time interval**:
 - *Remaining maturity*
 - *Revision of interest rate*
- ❑ **Transfer** (*Entirely recognised, Entirely derecog., ...*)

XBRL PRESENTATION TREE

The screenshot displays the Microsoft Excel interface with the 'XBRL Generator AddIn' ribbon. The main spreadsheet shows the financial statement for 'BANCO DE ESPAÑA' under the heading 'Eurosistema'. The table is titled 'BALANCE I' and is organized into columns for 'ENTIDAD', 'ACTIVO', and 'Total'. The 'ACTIVO' column is further divided into sub-categories like 'Efectivo (a)', 'Préstamos y créditos', and 'Valores distintos de acciones (+/-)'. The 'Préstamos y créditos' row is highlighted in orange. The 'XBRL Presentation Tree' window on the right shows a hierarchical structure of the data, including nodes for 'uem1', 'Z Axis', 'Column', and 'Row', with specific values and descriptions for each level.

ENTIDAD	ACTIVO	Total
	1. Efectivo (a).....	0001
	2. Préstamos y créditos.....	0005
	2.1. Instituciones monetarias financieras (IFM).....	0006
	2.2. Administración Central.....	0007
	2.3. Otras Administraciones Públicas.....	0008
	2.4. Otros sectores.....	0009
	3. Valores distintos de acciones (+/-).....	0010

COORDINATE VALUES OF THE CELL 0006

BANCO DE ESPAÑA
Eurosistema

BALANCE

Correspondiente al _____

ENTIDAD _____

ACTIVO	Total	
1. Efectivo (a).....	0001	
2. Préstamos y créditos.....	0005	
2.1. Instituciones monetarias financieras (IFM).....	0006	
2.2. Administración Central.....	0007	
2.3. Otras Administraciones Públicas.....	0008	
2.4. Otros sectores.....	0009	
3. Valores distintos de acciones (+/-).....	0010	

Coordinate Values

ZAxis coordinate values:
 Amount type : Outstanding
 Location of the activity of the reporting entity : Spain

Row coordinate values:
 Assets : Loans
 Base financial meaning (nature) : Assets
 Counterparty [Sectors] : Monetary Financial Institutions [MFIs]
 Original maturity : All

Column coordinate values:
 Currency of instrument : All currencies/Not applicable
 Residence [Counterparty] : Not allocated / Total

Cell code: 6

COORDINATE VALUES OF THE CELL 0051

Coordinate Values

ZAxis coordinate values:
Currency of instrument : All currencies/Not applicable
Location of the activity of the reporting entity : Spain

Row coordinate values:
Assets : Loans
Counterparty [Sectors] : Central government
Original maturity : All
Residence [Counterparty] : Spain

Column coordinate values:
Amount type : Net flows
Base financial meaning (nature) : Changes in assets
Counterparty [Securitisation and transfer partners] : Financial vehicle corporations [FVCs]
Residence [Securitisation partner] : Economic and Monetary Union [EMU]
Transfer : Entirely derecognised

Cell code: 51

PRÉSTAMOS Y CRÉDITOS		Con impacto en saldos comunicados (c)		Otras contrap
		Contraparte sociedades y fondos de titulización		
		Total	Del que: zona del euro	
RESIDENTES EN ESPAÑA				
Administración Central.....	0001	0051	0101	
Otras Administraciones Públicas.....	0002	0052	0102	
Otros sectores.....	0003	0053	0103	
Auxiliares financieros y otros intermediarios financieros.....	0004	0054	0104	
Seguros y fondos de pensiones.....	0005	0055	0105	
Sociedades no financieras.....	0006	0056	0106	
Hogares e ISFLSH.....	0007	0057	0107	
RESIDENTES EN OTROS ESTADOS UEM				



RECONCILING DATA FOR THE BSI STATISTICS WITH FINREP

- ❑ **The BSI data of each reporting entity will be reconciled via formulas with the data included in their individual /solo basis balance sheet referred to its domestic activity.**

- ❑ **The following information should be included in the FINREP formats (for individual/solo basis, domestic activity) for reconciling the data at the level of instruments with the BSI statistics:**
 - *For “Loans” and “Deposits”, the following values in the dimension “Amount type”: “Nominal”, “Accrual”, “Allowances” and “Cumulative change in fair value due to credit risk”.*

 - *In the item “Non-current assets and disposal groups classified as held for sale”, the following breakdown: “Loans”, “Debt securities held”, “Equity instruments held” and “Investments in subsidiaries, associates and joint ventures”.*

 - *In the item “Liabilities included in disposal groups classified as held for sale”, the following breakdown: “Deposits” and “Debt securities issued”.*

 - *Additionally, the following memorandum items: “Loans to FVCs related to financial assets derecognised by the reporting entity”, “Debt securities issued by FVCs related to financial assets derecognised” and “Debt securities issued with legal form of capital”.*



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This set of data is included among the BdE Statistics for collecting BSI data. Nevertheless, it is shown in this presentation as a separate taxonomy because it has a different aim:

- *To control the liabilities subject to minimum reserves and the minimum reserves to be held by the reporting entity (see last part of table UEM.1).*
- *To control the amounts of minimum reserves that a reporting entity, which is acting as an intermediary, must hold for each of the entities that have applied for permission to hold all their minimum reserves indirectly through it (see table UEM.10).*



BASE

Basic meaning (nature) of every data point from a financial point of view

□ For the *Minimum reserves data*, the values are:

- Liabilities
- Minimum reserves



DIMENSIONS

Key dimensions

- ❑ Main category (*)
 - *Liabilities*
- ❑ Currency of instrument
- ❑ Geographical area
 - *Location of the activity of the reporting entity (Domestic)*
- ❑ Amount type (*Outstanding, Deduction, Daily average*)

Other dimensions

For deposits and debt securities issued:

- ❑ Counterparty:
 - *Sectors*
- ❑ Geographical area
 - *Residence of counterparty*
- ❑ Related to minimum reserves (*Reserve base, Deduction,...*)
- ❑ Time interval:
 - *Original maturity*

For data related to intermediary activity

- ❑ Code:
 - *Institution for which the reporting entity acts as intermediary*

() As an exception, it is not necessary to use a dimension of the “Main category” for modeling the data “Minimum reserves to be held (daily average)”, because this data point can be identified perfectly by the “Base” (minimum reserves) and the “Amount type” (Daily average) .*

MINIMUM RESERVES TAXONOMY

COORDINATE VALUES OF CELL “MINIMUM RESERVES TO BE HELD (DAILY AVERAGE)”

The screenshot shows a Microsoft Excel window with the following elements:

- Excel Interface:** The ribbon includes 'Inicio', 'Insertar', 'Diseño de página', 'Fórmulas', 'Datos', 'Revisar', 'Vista', 'Opciones del Gestor Documental', 'Programador', and 'XBRL Generator AddIn'. The 'XBRL Generator AddIn' ribbon has buttons for 'Load', 'Export XBRL', 'Save', 'Save As', 'Extract from sheet', 'Edit domain list', 'Base financi...', 'Data points tree', 'Review Coord. Values', and 'Rendering'.
- Worksheet:** The worksheet is titled 'Anejo_VII_UEM10.xls [Sólo lectura] [Modo de compatibilidad]'. The visible data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	CR	S	T	U	V	W	X
26		B. TOTAL PASIVOS COMPUTABLES CON COEFICIENTE CER...																					
27		B.1. Depósitos a plazo a más de 2 años.....																					
28		B.2. Disponibles con preaviso a más de 2 años.....																					
29		B.3 Valores emitidos distintos de acciones a más de 2 años.....																					
30		B.4 Cesiones temporales de activos.....																					
31																							
32																							
33		RESERVAS MÍNIMAS A MANTENER (MEDIA DIARIA).....																					
34																							
35																							
36																							
37		(a) Código del registro del Banco de España de las entidades para las																					
38		entidades, incluida la propia entidad intermediaria. Cuando las entid																					
39		relativos a estas entidades se enviarán trimestralmente.																					
40																							
- Coordinate Values Pane:** This pane displays the following information:
 - ZAxis coordinate values:**
 - Institution for which reporting entity acts as intermediary : Code
 - Row coordinate values:**
 - Amount type : Daily average
 - Base financial meaning (nature) : Minimum reserves
 - Currency of instrument : Euro
 - Column coordinate values:**
 - Location of the activity of the reporting entity : Spain
 - Cell code: 100**

MINIMUM RESERVES TAXONOMY



COORDINATE VALUES OF THE CELL “LIABILITIES SUBJECT TO MINIMUM RESERVES WITH POSITIVE RATIO”

Coordinate Values

ZAxis coordinate values:
Institution for which reporting entity acts as intermediary : Code

Row coordinate values:
Amount type : Outstanding
Base financial meaning (nature) : Liabilities
Counterparty [Sectors] : Total/Not specified
Currency of instrument : All currencies/Not applicable
Liabilities : Liabilities subject to minimum reserves
Original maturity : ≤ 2 years
Related to minimum reserve : Reserve base
Residence [Counterparty] : Not allocated / Total

Column coordinate values:
Location of the activity of the reporting entity : Spain

Cell code: 1



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RECONCILING “MIR STATISTICS” AND “BdE” STATISTICS

- ❑ The scope of application and definitions of instruments, sectors, interest rates,...., used in Banco de España’s (BdE) statistics (see Circular 1/2010) are the same as in the ECB statistics on interest rates (MIR statistics, see ECB/2001/18 as amended by ECB/2009/7).

- ❑ The differences between both reporting frameworks are:
 - *BdE statistics include the data on “Overnight deposits” and “Deposits redeemable at notice” in the table on “Outstanding amounts” instead of in the table on “New business”.*

 - *The data on “Repos” are split among “From households” and “From non-financial corporations” in BdE statistics .*

 - *In BdE statistics, the Annual Percentage Rate of Charge (APRC) is also requested for “Other lending” and for loans to “Non-financial corporations” by size of amount.*



BASE

Basic meaning (nature) of every data point from a financial point of view

□ ***For the MIR statistics, the values are:***

- Annual Percentage Rate of Charge (APRC)
- Narrowly Defined Effective Rate or Annualised Agreed Rate (NDER or AAR)
- Business activity

MIR TAXONOMY

DIMENSIONS

Key dimensions

- Main category (*)
 - *Assets (Loans, Revolving loans and overdrafts, etc.)*
 - *Liabilities (Deposits: overnight, with agreed maturity, redeemable at notice, repos)*
- Counterparty:
 - *Sectors (Hshlds. and NPISHs, Non-Finan. Co.)*
- Currency of instrument (*Euro*)
- Geographical area
 - *Residence counterparty (EMU)*
 - *Location of the activity of the reporting entity (Domestic)*
- Time interval:
 - *Original maturity*
- Amount type (*Outstanding, New business*)

Other dimensions

For loans:

- Amount interval:
 - *Size of the loans*
- Collateral / guarantees
- Loan type by purpose
- Percentage interval
 - *Loan to value ($\leq 100\%$)*
- Time interval
 - *Initial fixation rate*

(*) *For each data point, it must be reported only the relevant dimension (e.g. Assets or Liabilities)*

COORDINATE VALUES OF THE CELL 0004

BANCO DE ESPAÑA
Eurosistema

TIPOS DE INTERÉS DE LAS NUEVAS O
(Negocios en España)
Operaciones en euros con residentes en España y en los restantes Estados partic

ENTIDAD _____

	TIPO MEDIO PONDERADO (b)	TOTAL C	IMP
PRÉSTAMOS Y CRÉDITOS A los hogares (incluidas las instituciones sin fines de lucro al servicio de los hogares)			
Créditos renovables y descubiertos (e).....	0001		0076
Tarjetas de crédito de pago aplazado (e).....	0002		0077
Crédito a la vivienda (f).....			
Tipo flexible y hasta 1 año de fijación del tipo inicial (g).....	0004		0079
Más de 1 año y hasta 5 años de fijación del tipo inicial.....	0005		0080
Más de 5 años y hasta 10 años de fijación del tipo inicial.....	0006		0081
Más de 10 años de fijación del tipo inicial.....	0007		0082
Crédito al consumo (f).....			
Tipo flexible y hasta 1 año de fijación del tipo inicial (g).....	0009		0084
Más de 1 año y hasta 5 años de fijación del tipo inicial.....	0010		0085
Más de 5 años de fijación del tipo inicial.....	0011		0086
Crédito para otros fines (f).....			

Coordinate Values

ZAxis coordinate values:
Currency of instrument : Euro
Location of the activity of the reporting entity : Spain
Residence [Counterparty] : Economic and Monetary Union [EMU]

Row coordinate values:
Amount type : New business
Assets : Loans other than revolving loans, overdrafts, convenience and extended credit [instalment credit]
Counterparty [Sectors] : Households and non profit institutions serving households [NPISHs]
Initial fixation rate : Floating rate and ≤ 1 year
Loan type by purpose : House purchase
Original maturity : All

Column coordinate values:
Base financial meaning (nature) : Narrowly defined effective rate or annualised agreed rate [NDER or AAR - Weighted average]

Cell code : 4



THANK YOU FOR YOUR ATTENTION

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