BANCO DE ESPAÑA

COREP TEMPLATES TO XBRL MAPPER

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INSTITUCIONES FINANCIERAS

Why develop a mapper with Excel VB?

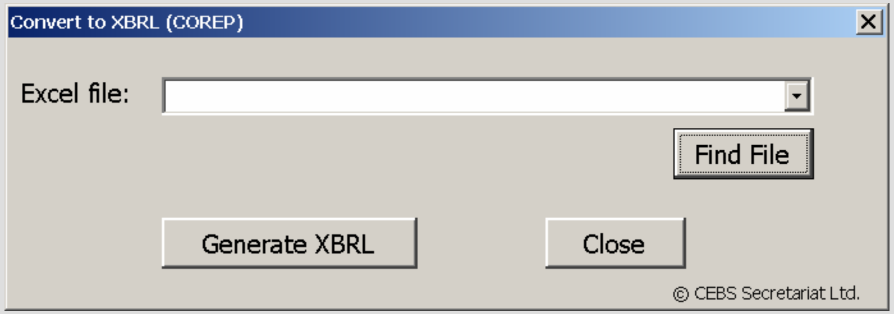
- **Concept**
  - It's a **low cost tool** which converts **COREP Templates written in Excel** into an **XBRL instance**
- **Benefits**
  - Easy to use
  - Efficient, reliable and useful for testing instances
  - Easy to understand its internal operation
  - Autonomous: the taxonomy is included in the Excel file
  - No Internet connection required
  - Open code
- **Construction:**
  - Developed in Excel Visual Basic for Applications

How to use (I)

1. Download converttoxbrl.xls from www.corep.info

How to use (II)

2. Open converttoxbrl.xls: if the file is opened directly from the Webpage, it will not work properly. It must be downloaded.

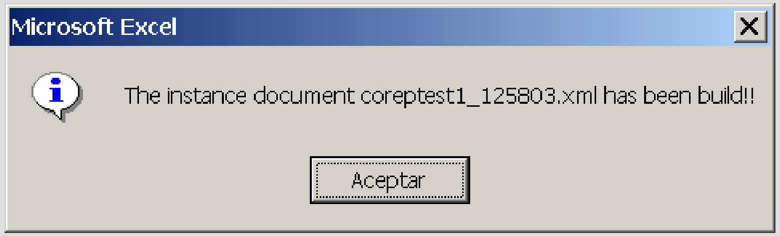


3. Open the corep file: the *Find file* button can be used to open the file with the COREP templates

4. Select the corep file: once opened, the file must be selected from the scroll-down box.

How to use (III)

5. Press Generate XBRL



6. The xbrl instance will be generated in the same folder as the corep file

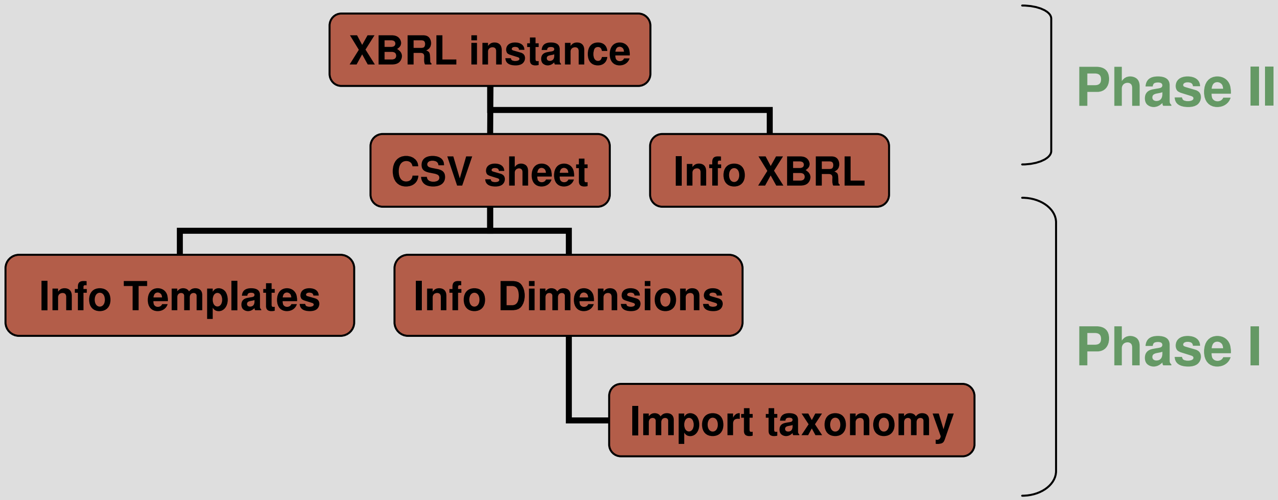
You can also see the results in the CSV sheet

How it works (I)

The internal operation is divided into two phases:

I) The generation of the CSV sheet with all data required

II) The generation of the XBRL instance from the CSV sheet



How it works (II)

Information about the Corep Templates in the Templates sheet

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
1	Template		Area	Horizontal / Vertical	Range	Fixed/ Variable	Primary dimension		Dimension 1			Dimension 2			Dimension 3			
2	Name	prefix					prefix	from	Type	prefix/name	from	Type	prefix/name	from	Type	prefix/name	from	Ty
3	MKR SA TDI	t-mt	1	H	F9:M10	F	p-mt	1	Int	d-ri	1	gcd	Currency	E3				
4	MKR SA TDI	t-mt	2	H	F11:M54	F	p-mt	1	Int	d-ri	6	gcd	Currency	E3				
5	MKR SA TDI	t-mt	3	H	F55:M58	F	p-mt	1	Int	d-ri	52	gcd	Currency	E3				
6	MKR SA TDI	t-mt	4	H	O9:O10	F	p-mt	9	Int	d-ri	1	gcd	Currency	E3				
7	MKR SA TDI	t-mt	5	H	O11:O54	F	p-mt	9	Int	d-ri	6	gcd	Currency	E3				
8	MKR SA TDI	t-mt	6	H	O55:O58	F	p-mt	9	Int	d-ri	52	gcd	Currency	E3				
9	MKR SA EQU	t-me	1	H	F9:K12	F	p-me	1	Int	d-ri	1	typed	NationalMark	E3				
10	MKR SA EQU	t-me	2	H	F13:K13	F	p-me	1	Int	d-ri	41	typed	NationalMark	E3				
11	MKR SA EQU	t-me	3	H	F14:K19	F	p-me	1	Int	d-ri	50	typed	NationalMark	E3				
12	MKR SA EQU	t-me	4	H	M9:M12	F	p-me	7	Int	d-ri	1	typed	NationalMark	E3				
13	MKR SA EQU	t-me	5	H	M13:M13	F	p-me	7	Int	d-ri	41	typed	NationalMark	E3				
14	MKR SA EQU	t-me	6	H	M14:M19	F	p-me	7	Int	d-ri	50	typed	NationalMark	E3				
15	MKR SA FX	t-mf	1	H	F10:R33	F	p-mf	1	Int	d-rc	1							
16	MKR SA COM	t-mc	1	H	G10:M43	F	p-mc	1	Int	d-pc	1	typed	CommodityD	E3				
17	MKR SA COM	t-mc	2	H	O10:O43	F	p-mc	8	Int	d-pc	1	typed	CommodityD	E3				
18	MKR-IM	t-mi	1	H	D7:D7	F	p-mi	7	Int	d-pm	1							
19	MKR-IM	t-mi	2	H	D8:D18	F	p-mi	7	Int	d-pm	2							
20	MKR-IM	t-mi	3	H	E7:J7	F	p-mi	1	Int	d-pm	1							
21	MKR-IM	t-mi	4	H	E8:J18	F	p-mi	1	Int	d-pm	2							
22	MKR-IM Details	t-md	1	H	B8:G8	F			typed	BasicInformationDimension								
23	MKR-IM Details	t-md	2	H	C16:J16	V	p-md	1	typed	DayDimension								

How it works (III)

Information about the Corep Templates in Templates sheet: Areas

MKR SA EQU			MARKET RISK: STANDARDISED APPROACH FOR POSITION RISK IN EQUITIES					
National market:	Prueba							

	POSITIONS						RISK CAPITAL CHARGE (%)	CAPITAL REQUIREMENTS
	ALL POSITIONS		REDUCTION EFFECT FOR UNDERWRITING POSITIONS	NET POSITIONS		NET POSITIONS SUBJECT TO CAPITAL CHARGE		
	LONG	SHORT		LONG	SHORT			
	(1)	(2)	(3)	(4)	(5)	(6)		(7)
EQUITIES IN TRADING BOOK								Link to CA template
1 General risk							8,00	
1.1 Exchange traded stock-index futures broadly diversified subject to particular approach				I				IV
1.2 Other equities than exchange traded stock-index futures broadly diversified								
2 Specific risk				II				V
2.1 High quality, liquid and diversified portfolios subject to lower capital requirements				500,00			2,00	
2.2 Other equities than high quality, liquid and diversified portfolios							4,00	
3 Particular approach for position risk in CIUs				III				
4 Margin-based approach for exchange-traded futures and options								VI
5 Margin-based approach for OTC futures and options								
6 Other non-delta risks for options								

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How it works (IV)

Information about the dimensions: automatically imported into Dim and ExtDim sheets

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	p-mt		p-me		p-mf		p-mc		p-mi		p-md		d-ri	d-rc	d-pc
2													EquitiesTradingBookDimension	PositionsNonReportingCurrenciesDimension	TotalPositionsInC mmoditiesDimensi n
3	AllPositionsLong	EUR	AllPositionsLong	EUR	AllPositionsLong	EUR	AllPositionsLong	EUR	PreviousDayVaR	EUR	VaRT10	String	Total	TotalPositionsNonReportingCurrencie	TotalPositionsInC mmodities
4	AllPositionsShort	EUR	AllPositionsShort	EUR	AllPositionsShort	EUR	AllPositionsShort	EUR	SpecificRiskSurcharge	EUR	VaRT1	EUR	GeneralRisk	CurrenciesSecondStageEMU	MaturityLadderAp roach
5	RedutionEffectUnderwritingPositions	EUR	ReductionEffectUnderwritingPositions	EUR	HedgingPositionsCapitalRatioLong	EUR	MemorandumItemsLong	EUR	IncrementalDefaultRiskSurcharge	EUR	SpecificRiskSurcharge	EUR	ExchangeTradedStockIndexFuturesBroadlyDiversifiedSubjectParticularApproac	CurrenciesSubjectIntergovernmentalAgreements	MaturityLadderAp roachMaturiyZone essEqual1Year
6	NetPositionsLong	EUR	NetPositionsLong	EUR	HedgingPositionsCapitalRatioShort	EUR	MemorandumItemsShort	EUR	CapitalRequirements	EUR	IncrementalDefaultRiskSurcharge	EUR	OtherEquitiesThanExchangeTradedStockIndexFuturesBroadlyDiversified	CurrenciesCloselyCorrelated	MaturityLadderAp roachMaturityZon YearBetween0Anc Month
7	NetPositionsShort	EUR	NetPositionsShort	EUR	NetPositionsLong	EUR	NetPositionsLong	EUR	NumberOfOvershootingsDuringPrevious250WorkingDays	EUR	InternalVaR	EUR	GeneralRiskMaturityBasedApproach	AllOtherCurrenciesIncCIUsTratedDifferentCurrencies	MaturityLadderAp roachMaturityZon YearBetween1And Months
8	LongNetPositions	EUR	NetPositionsSubjectCapitalCharge	EUR	NetPositionsShort	EUR	NetPositionsShort	EUR	MultiplicationFactor	Pure	InternalVaRLimit	EUR	Zone1GeneralRiskMaturityBased	Gold	MaturityLadderAp roachMaturityZon YearBetween3Anc Months
9	ShortNetPositions	EUR	CapitalRequirements	EUR	PositionsSubjectCapitalChargeLong	EUR	PositionsSubjectToCapitalCharge	EUR	MultiplicationFactorXAveragePrevious60WorkingDaysVaR	EUR	Hypothetical	EUR	Zone1Between0And1Month	OtherNonDeltaRisksCurrencyOptions	MaturityLadderAp roachMaturityZon YearBetween6Anc 2Months
10	NetPositionsSubjectCapitalCharge	EUR			PositionsSubjectCapitalChargeShort	EUR	CapitalRequirements	EUR			Actual	EUR	Zone1Between1And3Months	MemorandumItemsCurrencyPositions	MaturityLadderAp roachMaturityZon Between1and3Yea
11	CapitalRequirements	EUR			PositionsSubjectCapitalChargeMatched	EUR							Zone1Between3And6Months	Euro	MaturityLadderAp roachMaturityZon Between1And3Ye sBetween1And2Y
12					RiskCapitalChargeLong	EUR							Zone1Between6And12Months	ERM2Currencies	MaturityLadderAp roachMaturityZon Between1And3Ye sBetween2And3Y
13					RiskCapitalChargeShort	EUR							Zone2GeneralRiskMaturityBased	DKK	MaturityLadderAp roachMaturiyZone reaterThan3Years
14					RiskCapitalChargeMatched	EUR							Zone2Between1And2Years	EEK	MaturityLadderAp roachMatchedLon AndShortPosition WithinMaturityBa
15					CapitalRequirements	EUR							Zone2Between2And3Years	LTL	MaturityLadderAp roachMatchedPos onsBetweenTwoM turityBands
16													Zone2Between3And4Years	SIT	MaturityLadderAp roachResidualUnm tchedPositions
17													Zone3GeneralRiskMaturityBased	GBP	ExtendedMaturity dderApproach
18													Zone3Between4And5Years	SEK	ExtendedMaturity dderApproachMa rityZoneLessEqual Year
													Zone3Between5And7Years	CHF	ExtendedMaturity dderApproachMa

How it works (V)

CSV sheet

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	1	125803	C1	t-mc	p-mc	MemorandumItemsLong	200	EUR	d-pc	TotalPositionsInCommoditiesDimen	MaturityLadderApproachMaturityZone1YearBe	typed	CommodityDimens
2	1	125803	C2	t-mc	p-mc	NetPositionsShort	300	EUR	d-pc	TotalPositionsInCommoditiesDimen	MaturityLadderApproachMaturityZoneBetween	typed	CommodityDimens
3	1	125803	C3	t-me	p-me	NetPositionsLong	500	EUR	d-ri	EquitiesTradingBookDimension	HighQualityLiquidDiversifiedPortfoliosSubjec	typed	NationalMarketDim
4	1	125803	C4	t-mf	p-mf	RiskCapitalChargeLong	8	EUR	d-rc	PositionsNonReportingCurrenciesD	AllOtherCurrenciesIncCIUsTratedDifferentCurrencies		
5	1	125803	C4	t-mf	p-mf	RiskCapitalChargeShort	8	EUR	d-rc	PositionsNonReportingCurrenciesD	AllOtherCurrenciesIncCIUsTratedDifferentCurrencies		
6	1	125803	C5	t-mf	p-mf	RiskCapitalChargeMatched	4	EUR	d-rc	PositionsNonReportingCurrenciesD	CurrenciesCloselyCorrelated		
7	1	125803	C6	t-mf	p-mf	RiskCapitalChargeMatched	1,6	EUR	d-rc	PositionsNonReportingCurrenciesD	CurrenciesSecondStageEMU		
8	1	125803	C7	t-mf	p-mf	AllPositionsShort	100	EUR	d-rc	PositionsNonReportingCurrenciesD	CurrenciesSubjectIntergovernmentalAgreements		
9	1	125803	C8	t-mf	p-mf	PositionsSubjectCapitalChargeShort	800	EUR	d-rc	PositionsNonReportingCurrenciesD	Gold		
10	1	125803	C8	t-mf	p-mf	RiskCapitalChargeLong	8	EUR	d-rc	PositionsNonReportingCurrenciesD	Gold		

How it works (VI)

XBRL parameters: XBRL sheet

	A	B	C	D	E
1	Namespaces				
2	<?xml version="1.0" encoding="UTF-8"?>				
3	<xbrli:xbrl				
4	xmlns:xdt="http://www.xbrl.org/2005/xdt"				
5	xmlns:xdi="http://www.xbrl.org/2005/xdi"				
6	xmlns:iso4217="http://www.xbrl.org/2003/iso4217"				
7	xmlns:xbrli="http://www.xbrl.org/2003/instance"				
8	xmlns:xbrll="http://www.xbrl.org/2003/linkbase"				
9	xmlns:xlink="http://www.w3.org/1999/xlink"				
10	xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"				

20	Units
21	<xbrli:unit id="EUR">
22	<xbrli:measure>iso4217:EUR</xbrli:measure>
23	</xbrli:unit>
24	<xbrli:unit id="NonPositive">
25	<xbrli:measure>iso4217:EUR</xbrli:measure>
26	</xbrli:unit>
27	<xbrli:unit id="NonNegative">
28	<xbrli:measure>iso4217:EUR</xbrli:measure>
29	</xbrli:unit>
30	<xbrli:unit id="Percentage">
31	<xbrli:measure>xbrli:pure</xbrli:measure>
32	</xbrli:unit>
33	<xbrli:unit id="Double">
34	<xbrli:measure>iso4217:EUR</xbrli:measure>
35	</xbrli:unit>
36	<xbrli:unit id="Decimal">
37	<xbrli:measure>iso4217:EUR</xbrli:measure>
38	</xbrli:unit>
39	<xbrli:unit id="Boolean">
40	<xbrli:measure>iso4217:EUR</xbrli:measure>
41	</xbrli:unit>
42	<xbrli:unit id="Integer">
43	<xbrli:measure>iso4217:EUR</xbrli:measure>
44	</xbrli:unit>

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THANK YOU FOR YOUR ATTENTION

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