

Financial derivatives and employee stock option statistics in the UK flow of funds accounts matrices

Explanatory notes for the compilation of financial derivatives statistics in UK flow of funds accounts matrices: 2019, as part of the Economic Statistics Transformation Programme.

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Table of contents

1. [AF.71 – Financial derivatives](#)
2. [AF.72 – Employee stock options](#)

1 . AF.71 – Financial derivatives

Introduction

This note explains the sources and methods used in the compilation of the experimental from-whom-to-whom financial derivatives statistics. Table 1 shows the estimates for balance sheet assets by sector, together with the counterparty sector that holds the liability, for 2018. These data are consistent with the [UK Economic Accounts 2019 Q2 \(UKEA\)](#), on a [Blue Book 2019](#) basis, except where explicitly highlighted. The second part of this note describes the data sources for these estimates, as well as highlighting areas for review.

We will continue the programme of development and quality assurance of these newly released experimental from-whom-to-whom statistics and any improvements identified in the wider datasets will be integrated within the national accounts at the earliest opportunity.

We welcome feedback on the data sources and methods outlined in these notes. Any feedback on the statistics and accompanying explanatory notes can be sent to flowoffundsdevelopment@ons.gov.uk.

Table 1: Counterpart matrix showing financial derivatives in the UK flow of funds accounts: 2018

£bn		Liabilities:												Total
		S11001	S1100P	S12K	S12P	S124	S12Q	S1311	S1313	S14	S15	S2	S1N	
	Assets:	PC	PNFC	MFI	OFI	NMMF2	ICPF	CG	LG	HH	NPISH	RoW	Unknown	
S11001	PC	-	-	-	-	-	-	-	-	-	-	-	-	-
S1100P	PNFC	-	-1.1	22.5	23.5	-	-	1.1	-	-	-	-	-0.4	45.6
S12K	MFI	-	31.3	454.7	394.0	-	45.2	-	-	1.3	-	1,380.2	-	2,306.
S12P	OFI	-	25.3	390.8	93.5	-	28.9	0.2	-	0.0	-	697.8	-	1,236.
S124	NMMF ¹	-	-	-	-	-	-	-	-	-	-	-	32.2	32.2
S12Q	ICPF	-	-	44.8	28.1	-	-	-	-	-	-	-	-	72.9
S1311	CG	-	-	-4.2	0.1	-	-	-	-	-	-	0.0	0.4	-3.7
S1313	LG	-	-	-	-	-	-	-	-	-	-	-	-	-
S14	HH	-	-	0.9	0.0	-	-	-	-	-	-	-	-0.1	0.8
S15	NPISH	-	-	-	-	-	-	-	-	-0.2	0.2	-	0.1	0.1
S2	RoW	-	-	1,339.8	682.8	-	-	-	-	-	-	-	-	2,022.
S1N	Unknown	-	-	-	-	22.5	-	-	-	-	-	-	-	-
	Total	-	55.6	2,249.2	1,222.1	22.5	74.1	1.3	-	1.1	0.2	2,078.0	0.0	

Source: Flow of funds, Office for National Statistics, 2019

Notes

1. Non-money market funds (NMMF) are presented as a subset of other financial institutions (OFI). [Back to table](#)
2. Consistent with UK Economic Accounts 2019 Q2 (Apr to June). [Back to table](#)
3. PC is public corporations, PNFC is private non-financial corporations, MFI is monetary financial institutions, OFI is other financial institutions except MFIs and ICPFs, NMMF is non-money market funds, ICPF is insurance corporations and pension funds, CG is central government, LG is local government, HH is households, NPISH is non-profit institutions serving households, RoW is rest of the world, and – no value possible for this relationship. [Back to table](#)

Data sources by institutional sector

These estimates relate to the asset and liability positions on financial derivatives, including options, forwards and credit derivatives. All derivatives must go through a monetary financial institution (MFI) or a securities dealer; all assets and liabilities will therefore be counterpart to either the MFI, other financial institution (OFI) or rest of the world (RoW) sector.

All institutional sectors can hold financial derivatives. Estimates for derivatives with MFIs and OFIs are sourced from the Bank of England (BoE) survey of banks and building societies and the Office for National Statistics (ONS) survey of securities dealers, both of which include the total asset and liability positions and a split by counterpart outlined in more detail in this section. Reserves data are provided by the BoE for central government derivatives with the rest of the world.

Derivatives with monetary financial institutions (MFIs)

These estimates are sourced from the BoE survey of banks and building societies, which includes gross asset and liability positions for all derivatives with MFIs. The counterpart split available covers public corporations, private non-financial corporations, other financial institutions, central government, local government, households, non-profit institutions serving households and the rest of the world.

Other financial institutions, and insurance corporations and pension funds is estimated based on the proportional split evident in the deposits data for these institutions. The actual split has been collected by BoE from Quarter 1 (Jan to Mar) 2015 and will be reviewed for implementation in the future.

Central government is a net position sourced from government accounts; this is included within central government assets and can therefore sometimes be negative if gross liabilities are greater than gross assets. Data on gross positions are available from BoE and will be reviewed for implementation in the future.

Derivatives with other financial institutions (OFIs)

These estimates are sourced from the ONS survey of securities dealers, which includes gross asset and liability positions for all derivatives with securities dealers. The counterpart split available covers public corporations, private non-financial corporations, other financial institutions, insurance corporations and pension funds, central government, local government, households, non-profit institutions serving households and the rest of the world.

All derivatives with public corporations and private non-financial corporations are assumed to be counterpart to private non-financial corporations, and therefore no estimate is provided for derivatives with public corporations.

All derivatives with central government and local government will be counterpart to central government, and therefore no estimate is provided for derivatives with local government.

Derivatives with the rest of the world (RoW)

Estimates relating to monetary financial institution and other financial institution derivatives with rest of the world, as outlined previously, are sourced from BoE and ONS surveys.

Derivatives held as international reserves by the central government are based on reserves data provided by the BoE.

Other institutional sectors likely have derivative positions with the RoW but no estimates are currently made for these; this will be reviewed as part of the wider continuous improvement work.

2 . AF.72 – Employee stock options

Introduction

This note explains the sources and methods used in the compilation of the experimental from-whom-to-whom financial derivatives statistics. Table 1 shows the estimates for balance sheet assets by sector, together with the counterparty sector that holds the liability, for 2018. These data are consistent with the [UK Economic Accounts 2019 Q2 \(UKEA\)](#), on a [Blue Book 2019](#) basis, except where explicitly highlighted. The second part of this note describes the data sources for these estimates, as well as highlighting areas for review.

We will continue the programme of development and quality assurance of these newly released experimental from-whom-to-whom statistics and any improvements identified in the wider datasets will be integrated within the national accounts at the earliest opportunity.

We welcome feedback on the data sources and methods outlined in these notes. Any feedback on the statistics and accompanying explanatory notes can be sent to flowoffundsdevelopment@ons.gov.uk.

Table 2: Counterpart matrix showing employee stock options in the UK flow of funds accounts: 2018

	£bn	Liabilities:												Total
		S11001	S1100P	S12K	S12P	S124	S12Q	S1311	S1313	S14	S15	S2	S1N	
	Assets:	PC	PNFC	MFI	OFI	NMMF ¹	ICPF	CG	LG	HH	NPISH	RoW	Unknown	
S11001	PC	-	-	-	-	-	-	-	-	-	-	-	-	-
S1100P	PNFC	-	-	-	-	-	-	-	-	-	-	-	-	-
S12K	MFI	-	-	-	-	-	-	-	-	-	-	-	-	-
S12P	OFI	-	-	-	-	-	-	-	-	-	-	-	-	-
S124	NMMF ¹	-	-	-	-	-	-	-	-	-	-	-	-	-
S12Q	ICPF	-	-	-	-	-	-	-	-	-	-	-	-	-
S1311	CG	-	-	-	-	-	-	-	-	-	-	-	-	-
S1313	LG	-	-	-	-	-	-	-	-	-	-	-	-	-
S14	HH	-	5.4	0.2	0.2	-	0.0	-	-	-	-	0.0	-	5.9
S15	NPISH	-	-	-	-	-	-	-	-	-	-	-	-	-
S2	RoW	-	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
S1N	Unknown	-	-	-	-	0.0	-	-	-	-	-	-	-	-
	Total	-	5.4	0.2	0.2	0.0	0.0	-	-	-	-	0.0	-	

Source: Flow of funds, Office for National Statistics, 2019

Notes

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Data sources by institutional sector

These estimates relate to the asset and liability positions on employee stock options. All employee stock options are held by the household sector, or employees classed as non-residents (and therefore, rest of the world sector).

Employee stock options are currently assumed to be a fixed value of 0.25% of compensation of employees. Sources for employee stock options are the ONS Financial Services Survey (FSS) and ONS Financial Assets and Liabilities Survey (FALS). BoE will collect information in form PL, but the data are expected to be negligible.