



EUROPEAN CENTRAL BANK

Price Simulator Survey

ECB

DG Payments and Market Infrastructure

Frankfurt am Main, May 2009

Definition of “Price Simulator”

A price simulator is a device with which you can calculate different costs/fees of services at real time, by putting all the required data into an interactive platform.



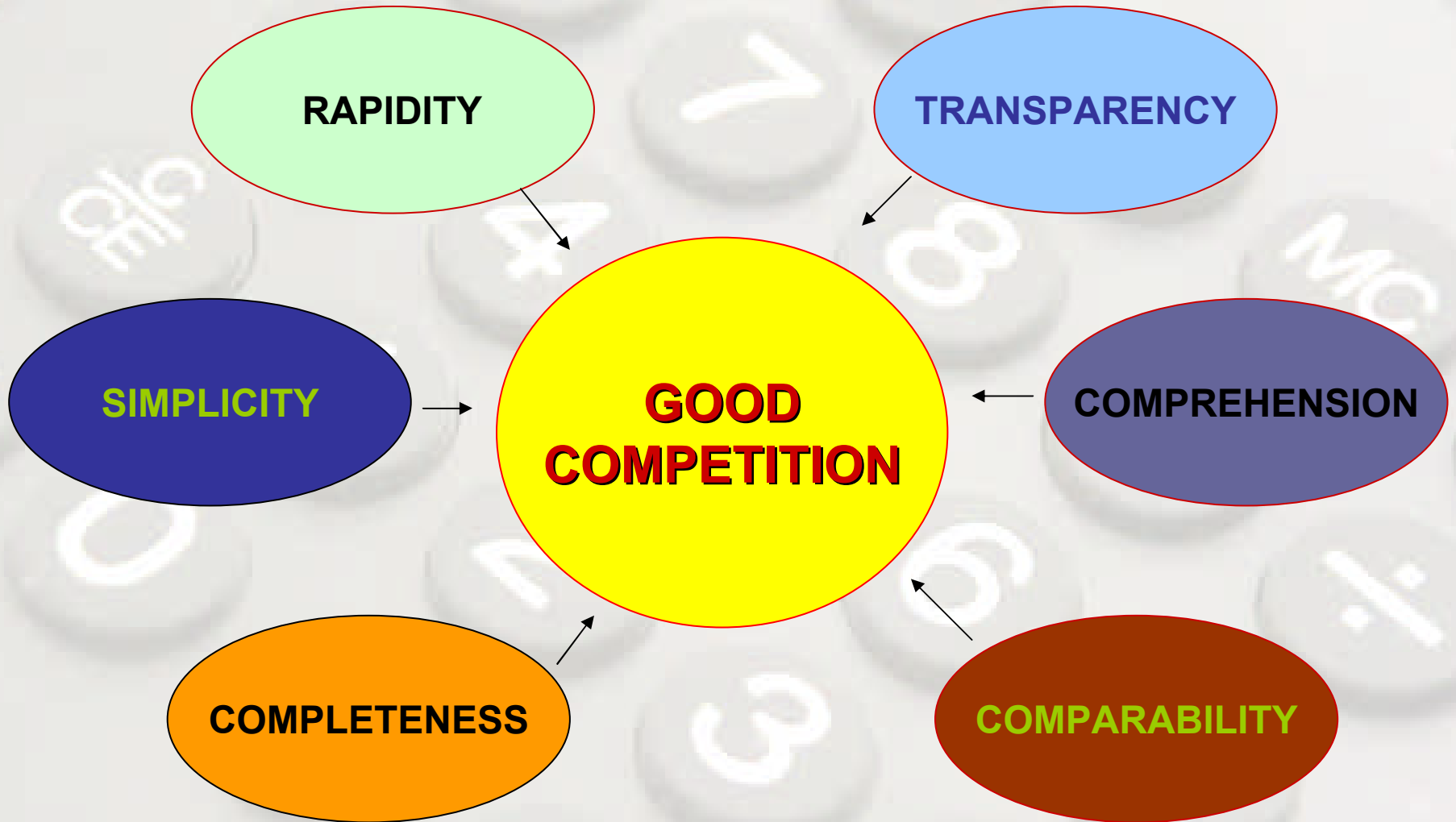
What is it for?

The survey aims to monitor the use of the Price Simulator, and suggest it as an efficient tool for improving the transparency of transactions.

NOTE:

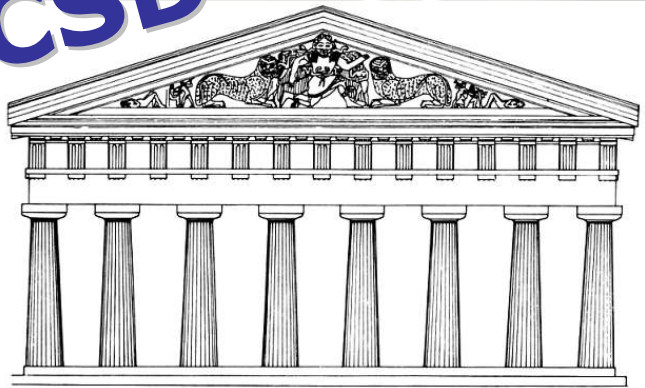
The Price Simulator IS NOT neither a requirement nor a suggestion under the provisions of the Code of Conduct on Clearing and Settlement.

Why use a price simulator?

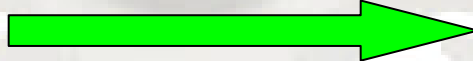


Price simulator diagram

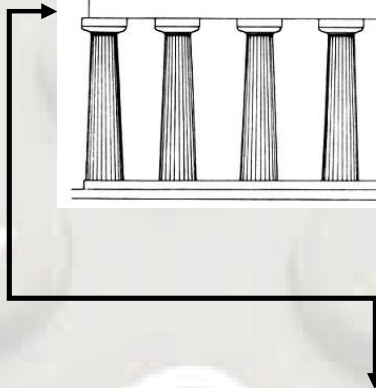
CSD



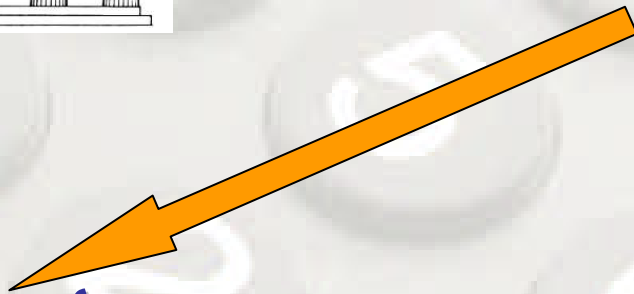
Services offered



User



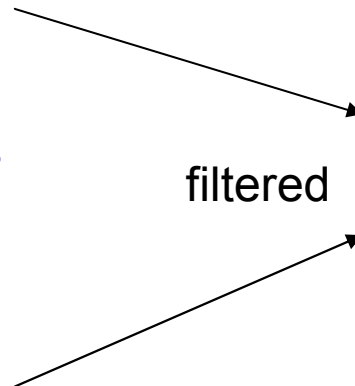
Price simulator



a) What the survey consisted of

1 – Listed CoC's Signatory members, referring to the following criteria:

- CSDs (ECSDA)
- Stock Exchanges (FESE)
- CCPs (EACH)



EU membership

EURO-zone +UK



b) What the survey consisted of

- 2 – Looked for the relevant information needed by going through Signatory Members' official websites
- 3 – Detected whether a Price simulator and a Fee Guide were provided or not
- 4 – Re-elaborated all information by comparing them under a specific benchmark (*most complete service*)

c) What the survey consisted of

5 –

Price Simulator section has been sub-classified into three parts

- Provided
- Interactive
- Friendly

PRICE SIMULATOR		
provided	interactive	friendly
//	//	//
✓	✓	✓
//	//	//
// 9	//	//
//	//	//
✓ 10	✓	✓
✓ 10	//	//
//	//	//
n/a	n/a	n/a
✓	✓	✓
// 6	//	//
//	//	//
✓ 1	✓ 1	//
✓ 1	✓ 1	//
✓ 7	✓	✓
//	//	//
//	//	//
//	//	//
//	//	//
//	//	//
//	//	//

example

d) What the survey consisted of

6 –

Fees Guide section has been sub-classified into two parts:

- Provided
- Static Example

FEES GUIDE	
provided	static example
✓	✓
✓	✓
// 9	//
✓	//
✓	✓
✓ 10	✓
✓	✓
n/a	n/a
✓	//
✓	//
✓	✓
✓	✓
// 2	✓
✓	//
✓	//
✓	✓
✓	//
✓	//
✓	//

example

...terminology

“Interactive”

means that a service is provided through a software that directly responds to user activity

(like a normal calculator)

PRICE SIMULATOR		
provided	interactive	friendly
//	//	//
✓	✓	✓
//	//	//
//9	//	//
//	//	//
✓10	✓	✓
✓10	//	//
//	//	//
n/a	n/a	n/a
✓	✓	✓
//6	//	//
//	//	//
✓1	✓1	//
✓1	✓1	//
✓7	✓	✓
//	//	//
//	//	//
//	//	//
//	//	//
//	//	//

example

...terminology

“Friendly”

is related to how easy and fast it is to get as much information as users require in terms of

- Quantity: (number of calculable costs and fees - “completeness”)
- Quality: (software used, free access)
- Rapidity: (in gathering information)
- Simplicity: (in using software or website)

PRICE SIMULATOR		
provided	interactive	friendly
//	//	//
✓	✓	✓
//	//	//
//9	//	//
//	//	//
✓10	✓	✓
✓10	//	//
//	//	//
n/a	n/a	n/a
✓	✓	✓
//6	//	//
//	//	//
✓1	✓1	//
✓1	✓1	//
✓7	✓	✓
//	//	//
//	//	//
//	//	//
//	//	//
//	//	//

example

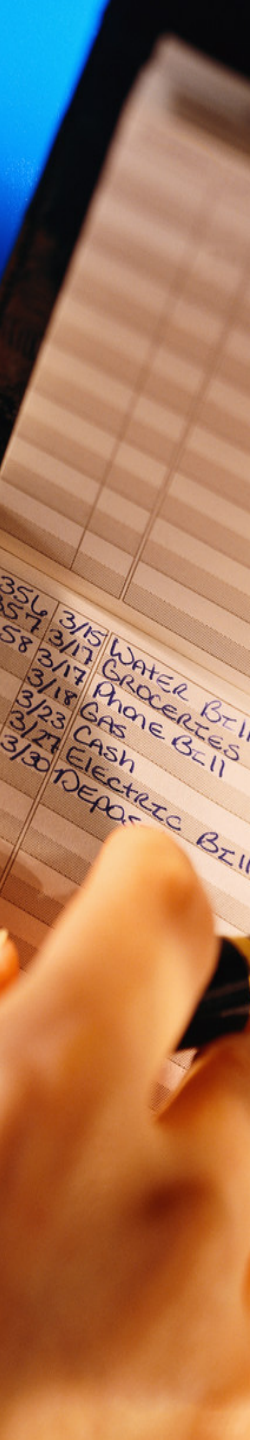
...terminology

“static example”

it is a calculation of a limited number of fees, with no interactive components.

FEES GUIDE	
provided	static example
✓	✓
✓	✓
✓	✓
// 9	//
✓	//
✓	✓
✓ 10	✓
✓	✓
n/a	n/a
✓	//
✓	//
✓	✓
✓	✓
// 2	✓
✓	//
✓	//
✓	✓
✓	//
✓	//
✓	//

example



Outcomes (CSD members)

1/3

A	ECSDA signatories		PRICE SIMULATOR			FEES GUIDE	
	eu members	country	provided	interactive	friendly	provided	static example
1	cleastream banking	germany	✓	✓	✓	✓	✓ 6
2	cdcp	slovakia	//	//	//	✓	✓
3	central securities depository SA	greece	//	//	//	✓	//
4	cleastream International SA	DE+ Lux	✓ 4	✓	✓	✓	✓ 6
5	cyprus stock exchange	cyprus	✓ 1	✓	// 3	✓ 2	✓
6	estonian csd	estonia	//	//	//	✓	✓
7	euroclear bank SA	ICSD	//	//	//	✓	✓
8	euroclear belgium	belgium	✓ 6	✓	✓	✓ 5	//
9	euroclear france	france	✓ 6	✓	✓	✓	//
10	euroclear netherland	netherland	✓ 6	✓	✓	✓	//
11	euroclear UK & Ireland	united kingdom	//	//	//	✓	✓
12	finnish central securities depository APK	finland	//	//	//	✓	✓
13	iberclear	spain	//	//	//	✓	✓
14	interbolsa	portugal	//	//	//	✓	✓
15	kdd	slovenia	//	//	//	✓	// 7
16	kdpw	poland	//	//	//	✓	✓
17	keler	hungary	//	//	//	✓	✓ 6
18	latvian central depository	latvia	//	//	//	✓	✓
19	lcypd	lithuania	//	//	//	✓	✓
20	montetitoli spa	italy	✓	✓	✓	✓	✓
21	oekb	austria	✓	//	// 3	✓	✓
22	scp	czech republic	✓ 1	✓	// 3	✓	//
23	Univyc	czech republic	✓ 1	✓	// 3	✓	//
24	vp securities service	denmark	//	//	//	✓	✓
25	vpc ab	sweden	//	//	//	✓	✓

Outcomes (Stock Exchange members)

2/3

B	FESE signatories		Stock Exchanges				
	eu members	country					
1	athens exchange	greece	//	//	//	✓	✓
2	borsa italiana	italy	✓ 4	✓	✓	✓	✓
3	borsas y mercado espanol (BME)	spain	//	//	//	✓	✓
4	bratislava stock exchange	slovakia	//	//	//	✓	//
5	budapest stock exchange	hungary	//	//	//	✓	✓
6	cyprus stock exchange	cyprus	✓ 1	✓	// 3	✓ 2	✓
7	deutsche Börse	germany	✓ 4	✓	✓	✓	✓ 6
8	Euronext	BE + FR + NL + PT	//	//	//	✓	✓
9	Irish stock exchange	ireland	//	//	//	✓	//
10	Ljubljana stock exchange	slovenia	//	//	//	✓	✓
11	london stock exchange	united kingdom	//	//	//	✓	✓
12	luxembourg stock exchange	luxembourg	//	//	//	✓	//
13	malta stock exchange	malta	//	//	//	✓	//
14	OMX nordic exchange	SE + FI + NO	//	//	//	✓ 4	✓ 4
15	Virt-X	switzerland	//	//	//	✓	✓
16	warsaw stock exchange	poland	//	//	//	✓	✓
17	wiener borse AG	austria	//	//	//	✓	✓

Outcomes (CCP members)

3/3

C	EACH signatories	CCP					
	eu members	country					
1	CC&G (cassa di compensazione e garanzia spa)	italy	✓ 4	✓	✓	✓	✓
2	eurex clearing AG	DE + CH	✓ 4	✓	✓	✓	✓ 6
3	LCH clearnet Ltd + SA	BE + FR + NL + PT + UK	✓ 1	✓	// 3	✓	//
4	CCP Austria	Austria	✓ 4	//	// 3	✓ 4	✓
5	keler	hungary	//	//	//	✓	//
6	OMX nordic exchange	SE + FI + NO	//	//	//	✓ 4	✓ 4
7	kdpw	poland	//	//	//	✓	✓

Outcomes (EU membership)

1/2

		country	PRICE SIMULATOR			FEES GUIDE	
			provided	interactive	friendly	provided	static example
eu members							
Athens exchange	FESE	greece	//	//	//	✓	✓
Borsa italiana	FESE	italy	✓	✓	✓	✓	✓
Borsas y mercado espanol (BME)	FESE	spain	//	//	//	✓	✓
Bratislava stock exchange	FESE	slovakia	//	//	//	✓	//
Budapest stock exchange	FESE	hungary	//	//	//	✓	✓
CC&G (cassa di compensazione e garanzia spa)	EACH	italy	✓ 4	✓	✓	✓	✓
CCP Austria	EACH	Austria	✓ 4	//	//3	✓ 4	✓
CDCP	ECSDA	slovakia	//	//	//	✓	✓
Central securities depository SA	ECSDA	greece	//	//	//	✓	//
Clestream banking	ECSDA	germany	✓	✓	✓	✓	✓ 6
Clestream International SA	ECSDA	DE + Lux	✓ 4	✓	✓	✓	✓ 6
Cyprus stock exchange	ECSDA	cyprus	✓ 1	✓	//3	✓ 2	✓
Cyprus stock exchange	FESE	cyprus	✓ 1	✓	//3	✓ 2	✓
Deutsche Börse	FESE	germany	✓ 4	✓	✓	✓	✓ 6
Estonian csd	ECSDA	estonia	//	//	//	✓	✓
Eurex clearing AG	EACH	DE + CH	✓ 4	✓	✓	✓	✓ 6
Euroclear bank SA	ECSDA	ICSD	//	//	//	✓	✓
Euroclear belgium	ECSDA	belgium	✓ 6	✓	✓	✓ 5	//
Euroclear france	ECSDA	france	✓ 6	✓	✓	✓	//
Euroclear netherland	ECSDA	netherland	✓ 6	✓	✓	✓	//
Euroclear UK & Ireland	ECSDA	united kingdom	//	//	//	✓	✓
Euronext	FESE	BE + FR+ NL + PT	//	//	//	✓	✓
Finnish central securities depository APK	ECSDA	finland	//	//	//	✓	✓
Iberclear	ECSDA	spain	//	//	//	✓	✓
Interbolsa	ECSDA	portugal	//	//	//	✓	✓
Irish stoch exchange	FESE	ireland	//	//	//	✓	//

Outcomes (EU membership)

2/2

KDD	ECSDA	slovenia	//	//	//	✓	//7
KDPW	ECSDA	poland	//	//	//	✓	✓
KDPW	EACH	poland	//	//	//	✓	✓
Keler	ECSDA	hungary	//	//	//	✓	//
Keler	EACH	hungary	//	//	//	✓	//
Latvian central depository	ECSDA	latvia	//	//	//	✓	✓
LCH clearnet limited	EACH	BE + FR+ NL + UK + PT	✓ 1	✓	// 3	✓	//
LCVPD	ECSDA	lithuania	//	//	//	✓	✓
Ljubljana stock exchange	FESE	slovenia	//	//	//	✓	✓
London stock exchange	FESE	united kingdom	//	//	//	✓	✓
Luxembourg stock exchange	FESE	luxembourg	//	//	//	✓	//
Malta stock exchange	FESE	malta	//	//	//	✓	//
Montetitoli spa	ECSDA	italy	✓	✓	✓	✓	✓
OEKB	ECSDA	austria	✓	//	// 3	✓	✓
OMX nordic exchange	FESE	SE + FI + NO	//	//	//	✓ 4	✓ 4
OMX nordic exchange	EACH	SE + FI + NO	//	//	//	✓ 4	✓ 4
SCP	ECSDA	czech republic	✓ 1	✓	// 3	✓	//
Univyc	ECSDA	czech republic	✓ 1	✓	// 3	✓	//
Virt-X	FESE	switzerland	//	//	//	✓	✓
Vp securities service	ECSDA	denmark	//	//	//	✓	✓
VPC AB	ECSDA	sweden	//	//	//	✓	✓
Warsaw stock exchange	FESE	poland	//	//	//	✓	✓
Wiener borse AG	FESE	austria	//	//	//	✓	✓

Outcomes (EURO-zone + UK)

1/2

EUROZONE + UK		country	PRICE SIMULATOR			FEES GUIDE	
			provided	interactive	friendly	provided	static example
Athens exchange	FESE	greece	//	//	//	✓	✓
Borsa italiana	FESE	italy	✓ 4	✓	✓	✓	✓
Borsas y mercado espanol (BME)	FESE	spain	//	//	//	✓	✓
Bratislava stock exchange	FESE	slovakia	//	//	//	✓	//
CC&G (cassa di compensazione e garanzia spa)	EACH	italy	✓ 4	✓	✓	✓	✓
CCP Austria	EACH	Austria	✓ 4	//	//	✓ 4	✓
CDCP	ECSDA	slovakia	//	//	//	✓	✓
Central securities depository SA	ECSDA	greece	//	//	//	✓	//
Cleastream banking	ECSDA	germany	✓	✓	✓	✓	✓ 6
Cleastream International SA	ECSDA	DE + Lux	✓ 4	✓	✓	✓	✓ 6
Cyprus stock exchange	ECSDA	cyprus	✓ 1	✓	//3	✓ 2	✓
Cyprus stock exchange	FESE	cyprus	✓ 1	✓	//3	✓ 2	✓
Deutsche Börse	FESE	germany	✓ 4	✓	✓	✓	✓ 6
Eurex clearing AG	EACH	DE + CH	//	//	//	✓	✓ 6
Euroclear bank SA	ECSDA	ICSD	//	//	//	✓	✓
Euroclear belgium	ECSDA	belgium	✓ 6	✓	✓	✓ 5	//
Euroclear france	ECSDA	france	✓ 6	✓	✓	✓	//
Euroclear netherland	ECSDA	netherland	✓ 6	✓	✓	✓	//
Euroclear UK & Ireland	ECSDA	united kingdom	//	//	//	✓	✓
Euronext	FESE	BE+FR+NL+PT	//	//	//	✓	✓

Outcomes (EURO-zone + UK)

2/2

Finnish central securities depository APK	ECSDA	finland	//	//	//	✓	✓
Iberclear	ECSDA	spain	//	//	//	✓	✓
Interbolsa	ECSDA	portugal	//	//	//	✓	✓
Irish stoch exchange	FESE	ireland	//	//	//	✓	//
KDD	ECSDA	slovenia	//	//	//	✓	//7
LCH clearnet limited	EACH	BE+FR+NL+UK+PT	✓ 1	✓	// 3	✓	//
Ljubljana stock exchange	FESE	slovenia	//	//	//	✓	✓
London stock exchange	FESE	united kingdom	//	//	//	✓	✓
Luxembourg stock exchange	FESE	luxembourg	//	//	//	✓	//
Malta stock exchange	FESE	malta	//	//	//	✓	//
Montetitoli spa	ECSDA	italy	✓	✓	✓	✓	✓
OEKB	ECSDA	austria	✓	//	// 3	✓	✓
OMX nordic exchange	FESE	SE+FI+NO	//	//	//	✓ 4	✓ 4
OMX nordic exchange	EACH	SE+FI+NO	//	//	//	✓ 4	✓ 4
Wiener borse AG	FESE	austria	//	//	//	✓	✓

notes

- 1) Service partially provided, as it has been set up for limited fee-calculation examples only.

- 2) Service provided in Greek. The English version is not available due to a website malfunctioning.

- 3) Despite the price simulator being provided, it seems to not be friendly as it does not meet at least one of the qualitative and/or quantitative “friendly” criteria, such as “rapidity” and/or “completeness”.

- 4) It does not provide such service directly. It can be found through other linked websites.

- 5) Service provided in French and Dutch only.

- 6) Service provided by updating the website after the survey’s launch.

- 7) The linked pdf file has not been found.

✓ = positive
// = negative

conclusions

- EU membership

TOTAL **Price Simulator**

<i>EU-members</i>	49
<i>not provided</i>	32
<i>provided</i>	17
<i>interactive</i>	15
<i>friendly</i>	10

Fees Guide

<i>EU-members</i>	49
<i>not provided</i>	0
<i>provided</i>	49
<i>static example</i>	35

- Euro-zone + UK

TOTAL **Price Simulator**

<i>EU-ZONE memb.</i>	35
<i>Not provided</i>	21
<i>provided</i>	14
<i>interactive</i>	12
<i>friendly</i>	9

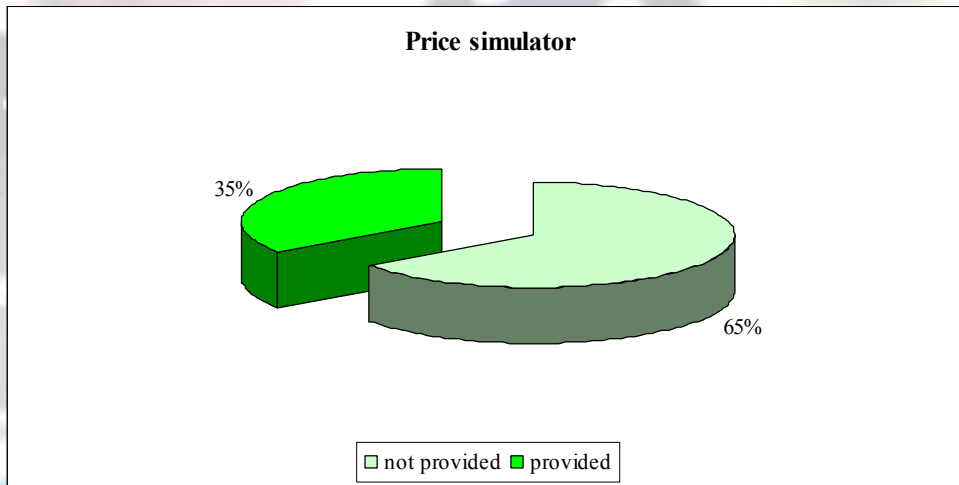
Fees Guide

<i>EU-ZONE memb.</i>	35
<i>Not provided</i>	0
<i>provided</i>	35
<i>static example</i>	25

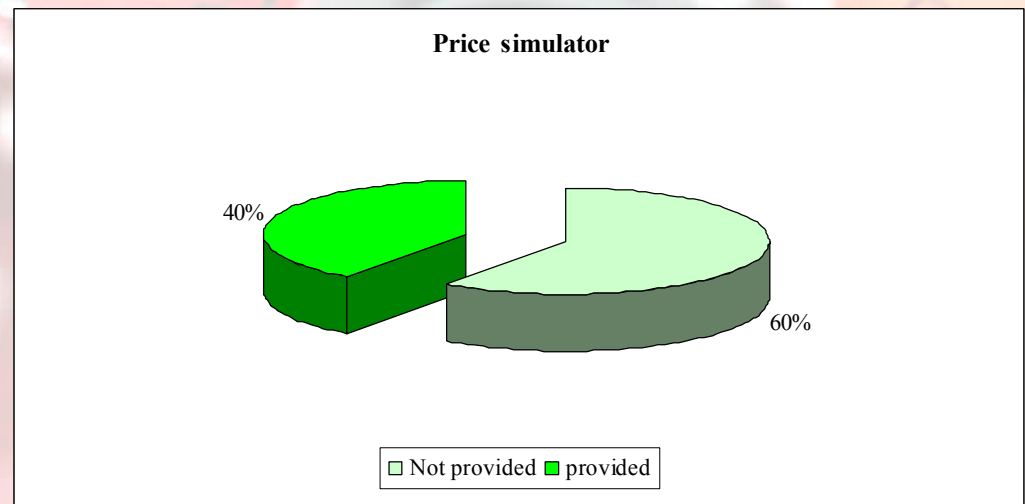
SUMMARY (price simulator)

charts

EU MEMBERSHIP



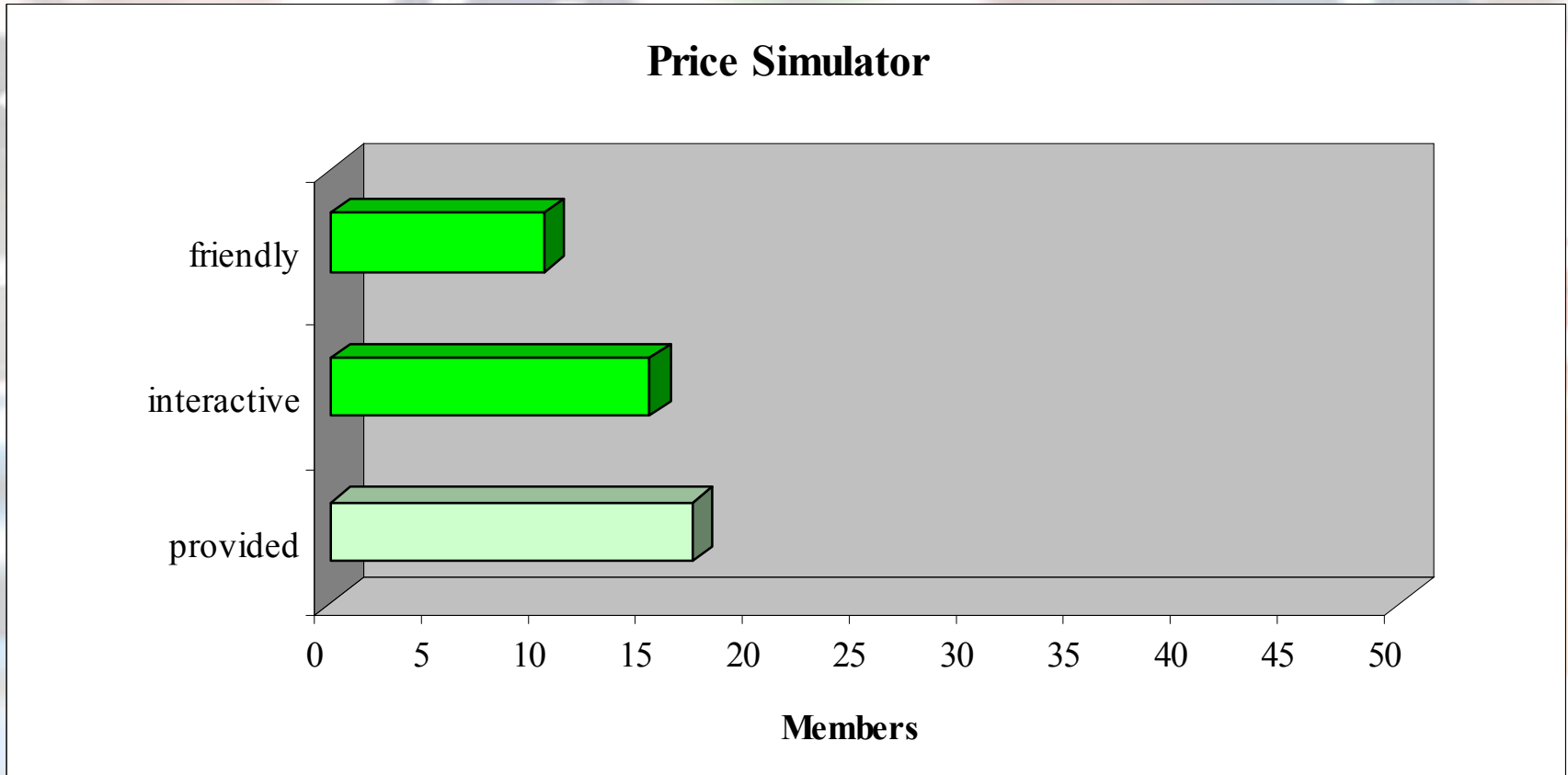
EUROZONE + UK



SUMMARY (price simulator)

charts

EU MEMBERSHIP

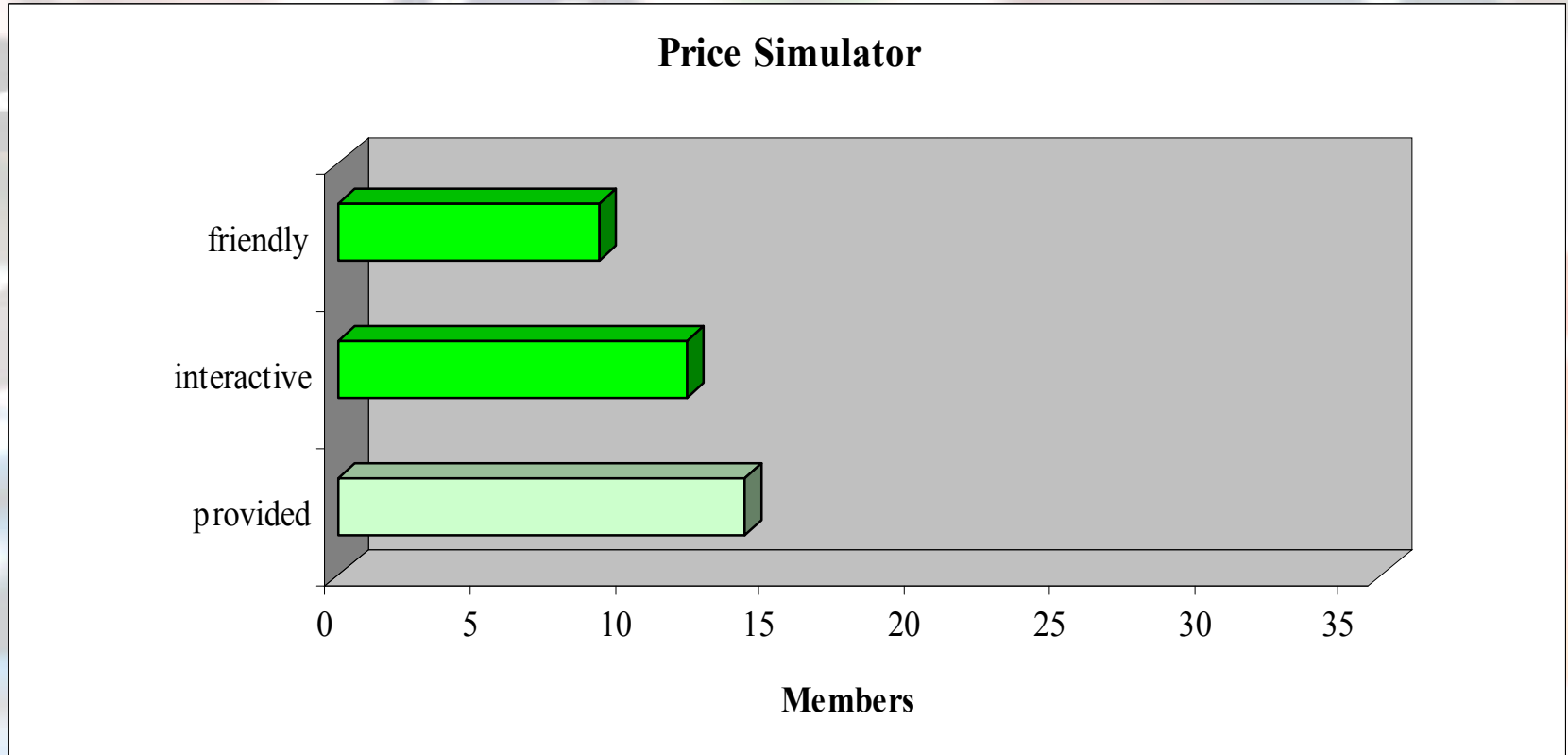


Price simulator provided by 17 members out of 49

SUMMARY (price simulator)

charts

EURO-ZONE + UK



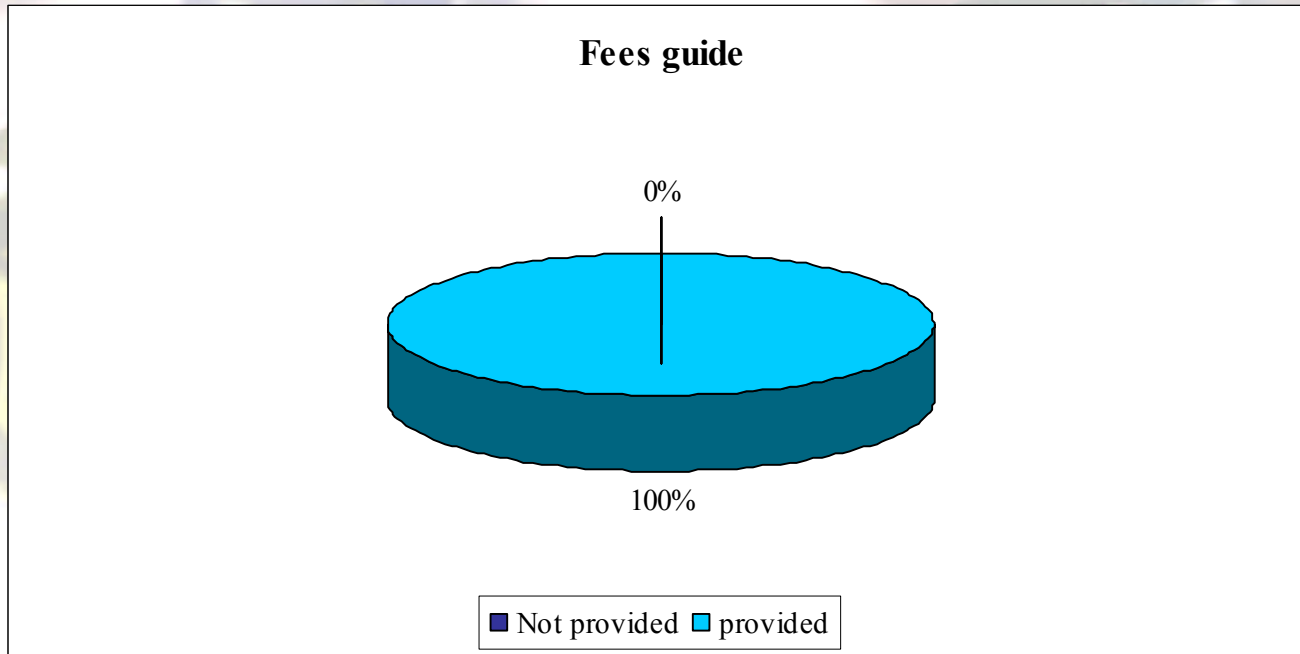
Price simulator provided by 14 members out of 35

SUMMARY

(Fees Guide)

charts

EU MEMBERSHIP – EROZONE + UK

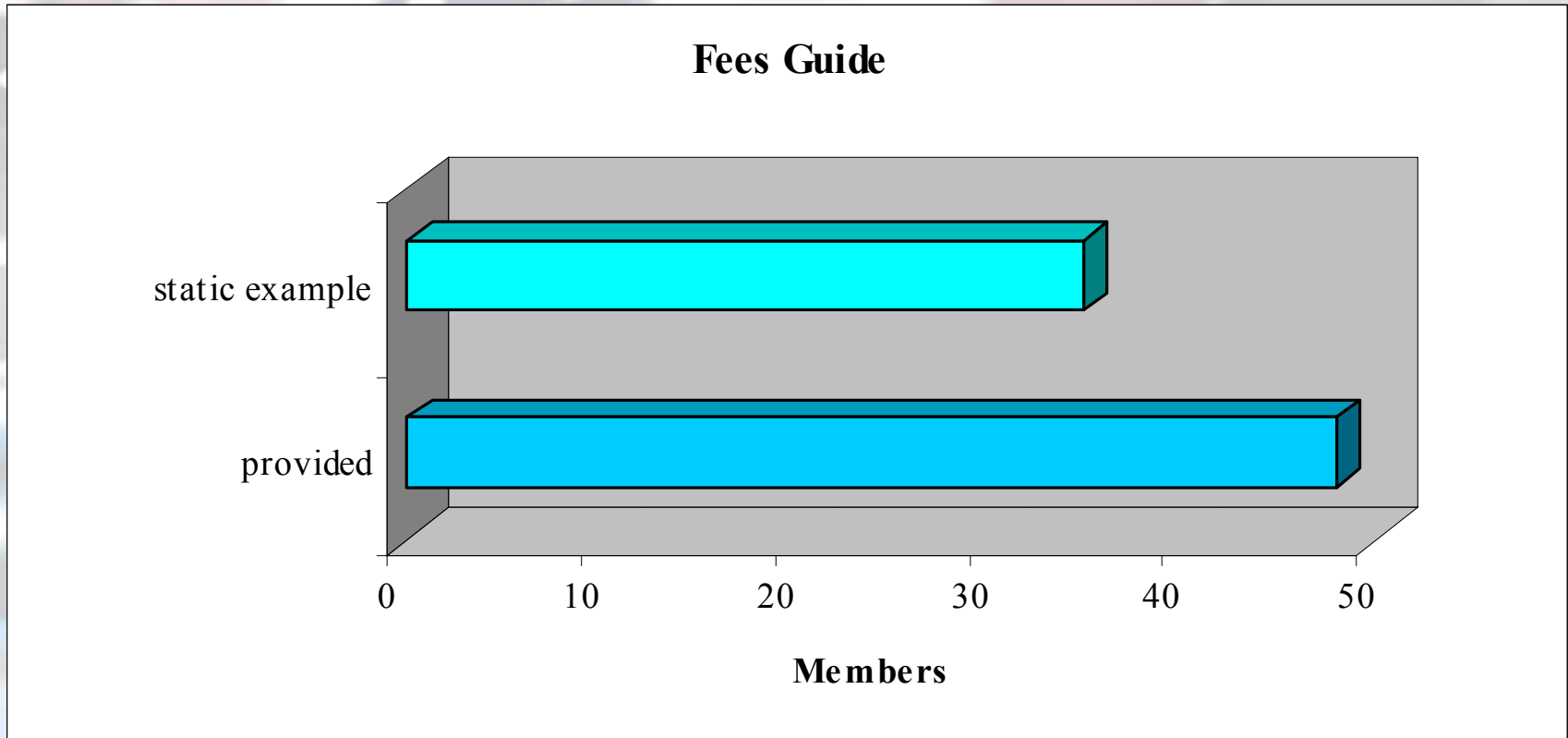


SUMMARY

(Fees Guide)

charts

EU MEMBERSHIP



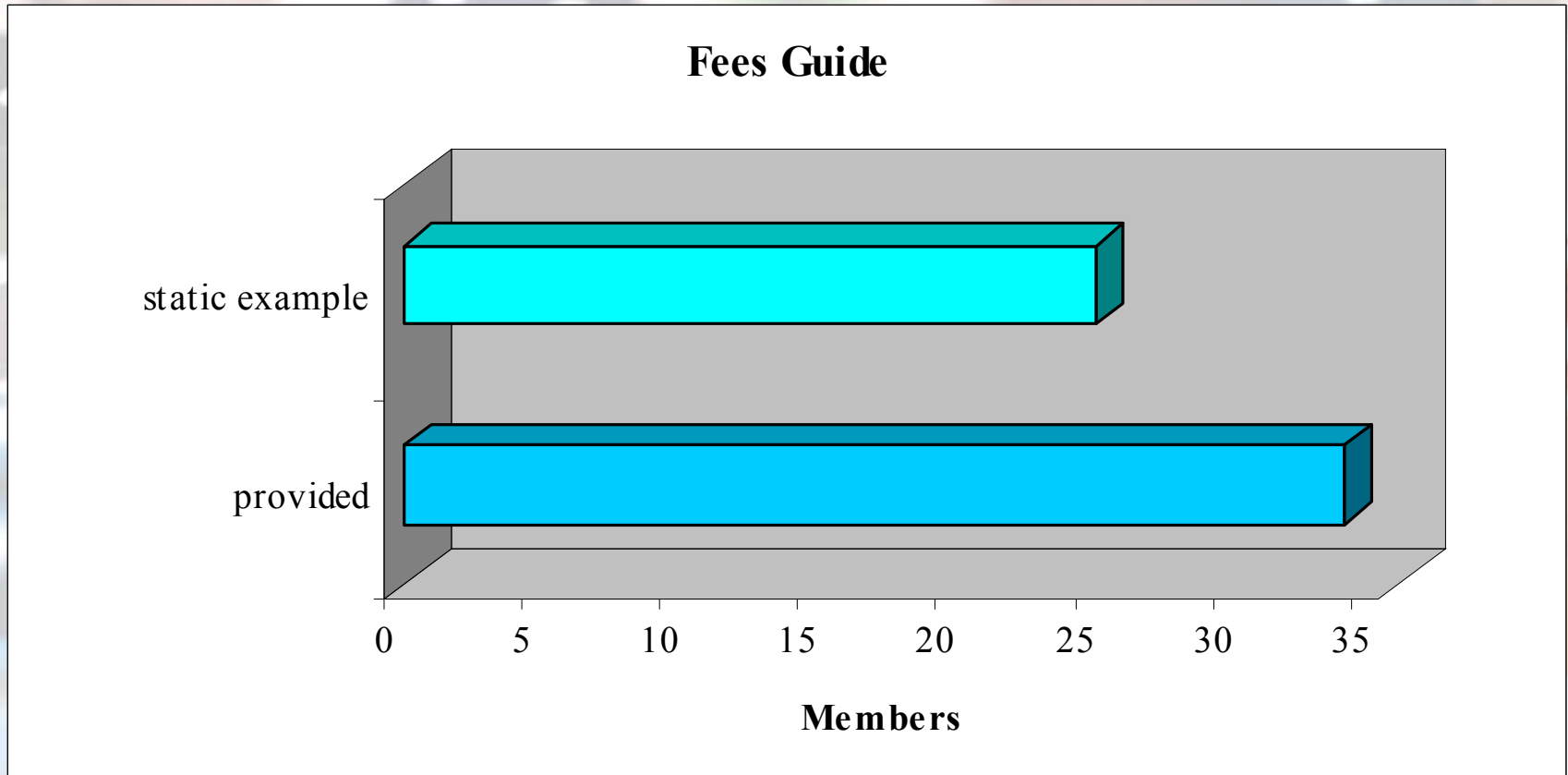
Static example provided by 35 members out of 49

SUMMARY

(Fees Guide)

charts

EURO-ZONE + UK



Static example provided by 25 members out of 35



EUROPEAN CENTRAL BANK

Thank you...