Best execution

The data provided by GSCS Information Services is based on its global equity transaction cost measurement universe. This universe incorporates representative transactions from more than 150 investment management companies, using more than 400 institutional brokers. The total number of transactions in the universe grows at a rate of around four million per annum across more than 50 countries.

UK leads the way in lower commissions

Average commissions remain under pressure but are holding at close to levels seen at the start of the year. Within the major European markets, the majority of business being done on a 'full-service' basis is still at around 20bps. Some modest amount of discounting as well as use of electronic trading tools brings down the average in most countries by two or three basis points. The only real exceptions are France, Italy and the UK where average commissions are down to around 13-14bps. It would appear in the UK that 15bps has become a more common level of commissions,

COUNTRY ANALYSIS – DEFINITIONS

Market impact
Market impact, expressed in basis points, is calculated based on a comparison between the execution price and the price of the security immediately before the trade was put in the market by the buy-side trading desk. This is commonly known as Release Time price.

Cost of delay
Cost of delay expressed in basis points represents the costs incurred as a result of delays between the decision to trade being made and the trade being put into the market.

Implementation shortfall
Implementation shortfall, expressed in basis points, reflects the difference of a paper portfolio versus the actual portfolio purchased. This is calculated based on a comparison between the execution price and the price prevailing at the time the decision to trade is made (or where this is not known, the open price on the trade date).

Opportunity cost
Opportunity cost represents the percentage of the market price movement across a three-day period (one day before trade date to one day after) that the execution 'captured'. A low or negative figure suggests that the timing of the execution was materially suboptimal. A high figure suggests that timing of trades was generally superior.

Average commission
Commission, expressed in basis points, reflects all trades (including program trades) that bear commission. However, it excludes any principal or zero commission trading activity.

% Zero commission
This shows the relatively low proportion of activity in most countries that is carried out by dealers acting as principal and not charging a commission to act as a broker on behalf of clients.

Broker execution Q3 2005

COUNTRY ANALYSIS

	Market impact (bps)	Cost of delay (bps)	IS* (bps)	Average agency commission	% Zero commission (%)
Europe – major					
Finland	16	53	69	18	1.2
France	13	19	32	13	9.1
Germany	14	31	45	16	5.1
Italy	15	36	51	14	3.1
Netherlands	10	23	33	15	7.2
Norway	25	15	40	18	1.5
Spain	17	11	28	17	6.9
Sweden	16	22	38	18	1.3
Switzerland	15	22	37	17	2.1
UK	14	10	24	13	1.9
North America					
Canada	13	32	45	11 (3.1 c/s)	0.9
US	12	19	31	11 (2.0 c/s)	5.0
Asia – major					
Australia	6	11	17	21	2.5
Hong Kong	47	-7	40	21	9.5
Japan	8	28	36	11	2.6
Korea	12	10	22	27	4.8
Singapore	18	22	40	30	9.8
Taiwan	25	6	31	24	4.5
Other – select					
Brazil	84	-37	47	30	40.8
Greece	2	12	14	24	20.6
Hungary	-6	4	-2	44	1.3
Ireland	26	6	32	15	1.2
Malaysia	26	4	30	32	9.5
Mexico	1	22	23	25	8.4
Poland	-12	23	11	45	0.1
Portugal	12	12	24	17	5.2
South Africa	2	27	29	22	5.2
Thailand	11	52	63	45	3.6

**IS = Implementation Shortfall*

especially for large local investment managers. The same may also be the case in the French market.

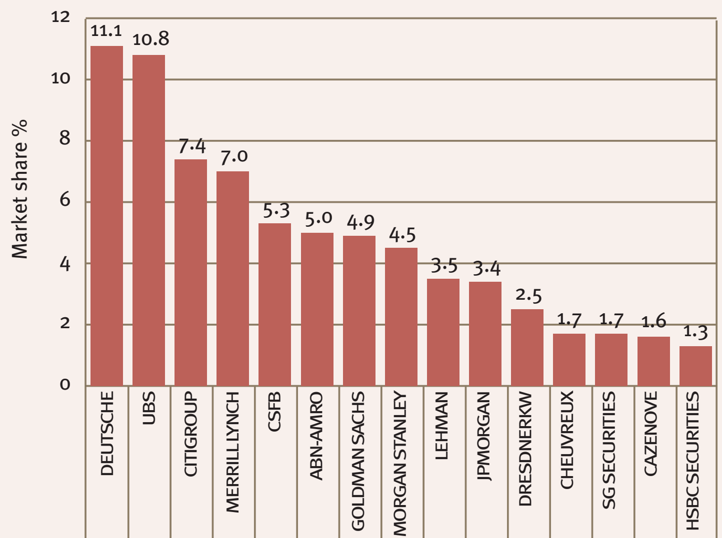
The most interesting aspect is not so much what will happen to total commissions but how managers and brokers will agree to break down the existing levels between execution commissions and research commissions as they are obliged to do from 1 January 2006 if they are managing UK pension fund assets. A 50/50 split or in some cases 7bps for execution appears to be the most 'popular' basis at present. Obviously, lower execution commissions are negotiable for situations where full sales trading support is not required (e.g. with algorithms or DMA). Even so it will be interesting to see how managers justify paying almost twice the level of basic 'execution only' commissions for executions with full service brokers. The reaction of pension fund executives when they get to see exactly how much of their money is being spent on research is also likely to lead to an interesting dialogue, not to say encouragement to managers to do more business on an execution only basis.

Q3 2005 Broker execution

Global brokers: **US firms compete for market share**

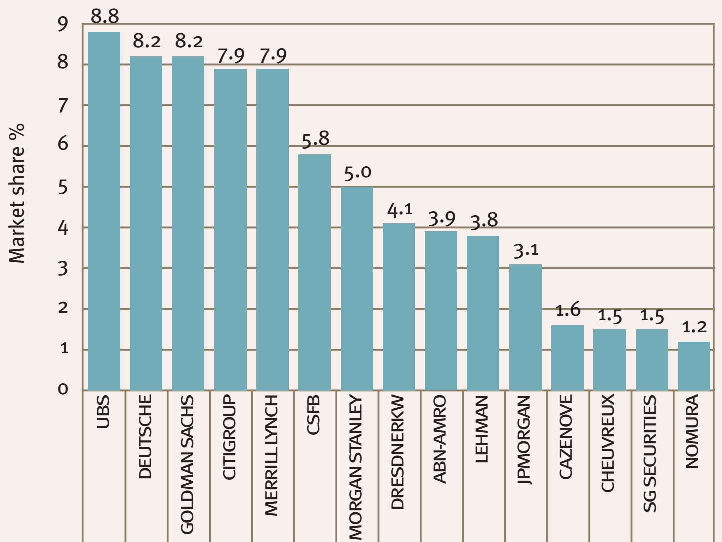
The leading brokers, whether measured by commission or total value traded remained generally consistent with previous periods. Globally, UBS and Deutsche ranked top in both value traded and share of commissions. Both of these European institutions seem do be winning, while the major US firms are not performing as well on the global stage. Most notably in the latest period Goldman Sachs dropped from third to seventh place in terms of commissions and dropped one place to third in terms of value traded. All the US firms appear to be competing to maintain market share in terms of value traded by cutting commissions, not so much directly in terms of full service support but more through getting clients to make greater use of cheaper trading channels such as program trading, algorithmic trading and DMA.

Q3 2005 LEADING BROKERS – TOP 15 RANKED BY COMMISSION



Rank Q3 2005	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rank Q2 2005	2	1	4	5	6	8	3	7	10	9	11	13	12	14	–

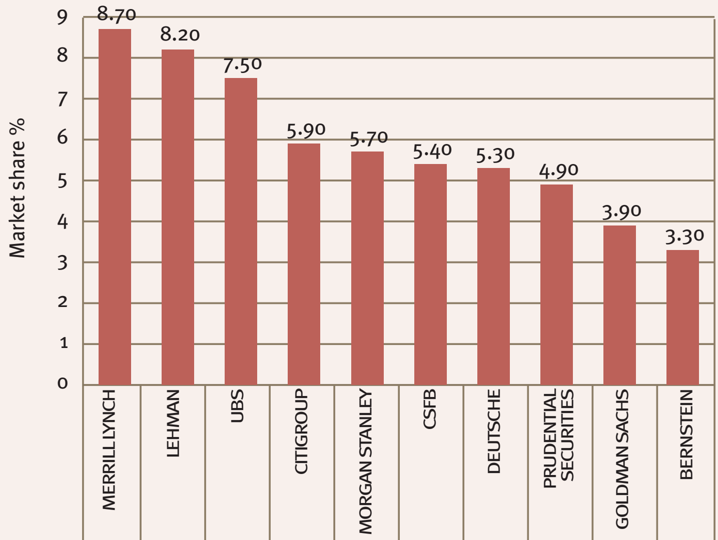
Q3 2005 LEADING BROKERS – TOP 15 RANKED BY VALUE TRADED



Rank Q3 2005	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rank Q2 2005	1	3	2	4	6	7	5	12	11	8	10	13	9	14	–

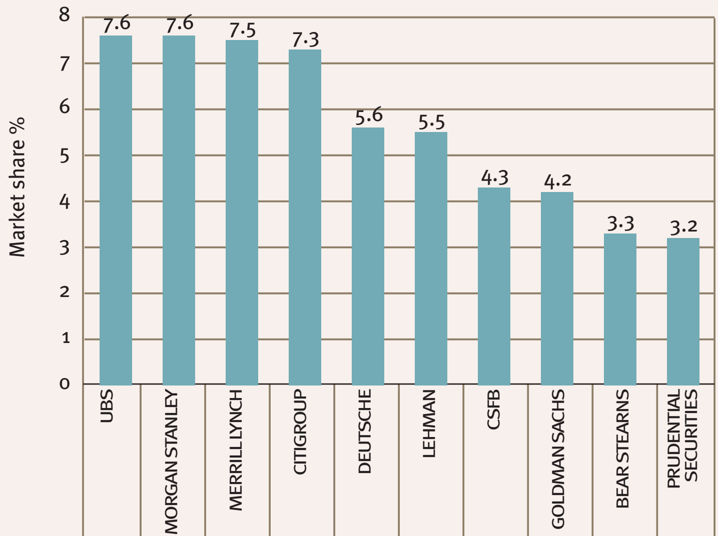
Broker execution Q3 2005

Q3 2005 LEADING US BROKERS – TOP 10 RANKED BY COMMISSION



	MERRILL LYNCH	LEHMAN	UBS	CITIGROUP	MORGAN STANLEY	CSFB	DEUTSCHE	PRUDENTIAL SECURITIES	GOLDMAN SACHS	BERNSTEIN
Rank Q3 2005	1	2	3	4	5	6	7	8	9	10
Rank Q2 2005	3	6	2	1	4	5	7	12	8	11

Q3 2005 LEADING US BROKERS – TOP 10 RANKED BY VALUE TRADED



	UBS	MORGAN STANLEY	MERRILL LYNCH	CITIGROUP	DEUTSCHE	LEHMAN	CSFB	GOLDMAN SACHS	BEAR STEARNS	PRUDENTIAL SECURITIES
Rank Q3 2005	1	2	3	4	5	6	7	8	9	10
Rank Q2 2005	2	1	5	3	4	6	8	7	10	13

US brokers: **Merrill Lynch moves into pole position**

In the US the position is somewhat different. Here Merrill Lynch comes out top in terms of commissions, up from third place and while Deutsche and UBS again performed well in this market it is they who are operating at lower commissions. Surprisingly, Goldman Sachs' position in the US has remained weak and they appear to be suffering from a dramatic erosion of market share and business in spite of having commission levels below the average.

BROKER RANKINGS – DEFINITIONS

Market share 'by value traded' is calculated based on the level of trading completed across all global equity markets. The share 'by commission' reflects the combination of both the value traded and the average commission rates charged. It is reasonable to assume that where market share by commission exceeds market share by value, above-average levels of commission are generally being charged.

Q3 2005 Broker execution

TGS proves the value of good research

Managers and brokers will argue that the level of commissions being paid is not relevant if the quality of research is high. It follows that some – not least local Scandinavian brokers – will be delighted to discuss developments in TGS, a Norwegian stock that was being bought by almost everyone in Q3 2005. The key question is whether you bought it before or after the middle of August. That is when the price went up by more than 75% in the course of a few days. Before and after this period it had been flat, but for those getting good advice and acting on it in a timely manner the gains were impressive. Brokers may be less keen to discuss United Micro in Taiwan. This was another stock where buyers outnumbered sellers by an impressive margin (six to one overall) during Q3. Unfortunately, the results were somewhat less impressive with the price starting the period at 23 and ending it at 21.3. It is probably as well that brokers are not yet on a formal 'payment by results' system.

LEADING STOCKS

	Market impact (bps)	Cost of delay (bps)	IS* (bps)	Buy/sell (%)	Leading brokers
US					
Exxon	-9	17	8	44.7/55.3	MLynch/UBS/BankAmerica
GE	7	-3	4	40.7/59.3	Bear Stearns/Bernstein/MLynch
OTP GDR	27	83	109	82.1/17.9	Deutsche/Citigroup/MLynch
Canada					
Encana	5	46	52	82.3/17.7	RBC/MLynch/CSFB
CNR	-7	1	-6	49.7/50.3	RBC/UBS/CSFB
Alcan	63	94	158	88.1/11.9	UBS/RBC/Goldman
Finland					
Nokia	21	148	169	45.3/54.7	Bear Stearns/Enskilda/Cheuvreux
Neste Oil	1	-24	-23	42.1/57.9	Cheuvreux/Carnegie/MLynch
Fortum	35	-3	32	50.1/49.9	MStanley/Cheuvreux/UBS
France					
Total	17	26	43	42.1/57.9	UBS/Cheuvreux/ABN AMRO
France Telecom	10	21	31	43.2/56.8	UBS/Deutsche/Cheuvreux
Pernod Ricard	20	18	39	48.0/52.0	Mlynch/JPMorgan/Exane
Germany					
EON	7	8	15	56.3/43.7	UBS/DresdnerKW/JPMorgan
Allianz	18	24	42	69.2/30.8	Deutsche/UBS/Lehman
Daimler Chrysler	21	42	63	76.9/23.1	Deutsche/CSFB/UBS
Italy					
ENI Spa	12	7	19	67.3/33.7	UBS/Intermonte/Intermobiliare
ENEL	7	15	22	50.8/49.2	MLynch/MDB/Intermobiliare
Unicredito	2	58	61	71.4/28.6	MLynch/CSFB/UBS
Netherlands					
Royal Dutch	-5	2	-4	64.4/35.6	ABN AMRO/Citigroup/CSFB
ING	11	24	34	54.1/45.9	Fox-Pitt/CSFB/ABN AMRO
Royal Dutch - A	9	58	67	39.9/60.1	CSFB/MLynch/UBS
Norway					
Statoil	8	39	47	64.3/35.7	Carnegie/Lehman/MLynch
Telenor	9	7	16	53.2/46.8	ABN AMRO/Citigroup/ABG
TGS	137	2	138	93.7/6.3	Enskilda/Carnegie/ABG
Spain					
Telefonica	1	9	10	58.2/41.8	UBS/CSFB/JPMorgan
BBVA	6	32	38	66.8/33.2	Fidentiis/Goldman/Citigroup
Repsol	12	-4	7	51.5/48.5	UBS/MStanley/Citigroup

**IS = Implementation Shortfall*

Broker execution Q3 2005

LEADING STOCKS

	Market impact (bps)	Cost of delay (bps)	IS* (bps)	Buy/sell (%)	Leading brokers
Sweden					
Ericsson	10	50	59	57.0/43.0	Enskilda/Carnegie/Cheuvreux
Nordea	4	14	17	41.6/58.4	Cheuvreux/Carnegie/Deutsche
SEB	22	-4	18	18.8/81.2	JPMorgan/Goldman/Citigroup
Switzerland					
Roche	11	26	37	62.2/37.8	MLynch/Pictet/CSFB
UBS	4	14	17	40.7/59.3	Lehman/Deutsche/UBS
Nestle	3	26	29	53.3/46.7	CSFB/Deutsche/UBS
UK					
BP	15	25	40	71.9/28.1	UBS/Citigroup/Lehman
Vodafone	9	11	20	33.7/66.3	Goldman/MLynch/UBS
RBS	13	36	50	20.3/79.7	MStanley/Lehman/Goldman
Australia					
BHP	0	0	0	54.3/45.7	CSFB/Macquarie/UBS
ANZ	-5	7	2	33.1/66.9	CSFB/Macquarie/JPMorgan
QBE Insurance	9	0	9	63.6/36.4	Deutsche/Citigroup/Macquarie
Hong Kong					
CNOOC	49	28	78	85.1/14.9	Citigroup/CLSA/CSFB
Petrochina	72	19	91	38.2/61.8	Goldman/Citigroup/UBS
China Netcom	97	-89	8	38.3/61.7	Citigroup/Deutsche/UBS
Japan					
Mitsubishi Tokyo	9	6	16	76.6/23.4	MStanley/BoTM/Nomura
NTT	-15	60	45	66.1/33.9	Nomura/Deutsche/MLynch
Mizuho	17	40	57	55.3/44.7	MLynch/CLSA/JPMorgan
Singapore					
UOB	-2	13	11	28.1/71.9	GKGoh/CLSA/MLynch
DBS	40	16	56	74.4/25.6	JPMorgan/CSFB/GKGoh
City Developments	43	0	43	33.8/66.2	Nomura/CSFB/GKGoh
South Korea					
Samsung	13	5	18	62.6/37.4	Citigroup/CSFB/MStanley
Hyundai	21	19	40	52.1/47.9	ABN AMRO/MStanley/UBS
LG Electronics	-3	48	45	63.6/36.4	Citigroup/JPMorgan/UBS
Taiwan					
Taiwan Semi	1	-4	-3	32.9/67.1	Citigroup/MStanley/UBS
Hon Hai Precision	-21	14	-7	70.8/29.2	MStanley/CLSA/UBS
United Micro	64	8	71	84.7/15.3	CSFB/UBS/MLynch

**IS = Implementation Shortfall*

LEADING STOCKS – DEFINITIONS

For each of 10 European major markets plus the US, the three most widely traded securities during the last quarter are identified. The 'Buy/Sell (%)' indicates the value of buys and sells as a percentage of the total value traded. It indicates the extent to which institutional investors as a whole were adding to their position during the period. The table identifies the three brokers that handled the highest proportion of trading activity in stock.

Q3 2005 Broker execution

Accentuating the positive

Movement in markets continued to result in fewer trades being completed with negative momentum than previously. However, despite the improving trading scenario, it remains the case that traders are more often than not confronted with the reality that portfolio managers want to buy stocks that are going up and sell them into a falling market.

Unfavourable momentum trades accounted for 42.3% this quarter against 45.1% three months ago, and 48.2% before that. In this period the proportion of 'very unfavourable' trades was stable at 7.1% of the total. However, the 'quite unfavourable' and 'somewhat unfavourable' categories did see modest declines. This certainly makes life easier for traders.

There was an increase in the 'very favourable' category (from 3.3% to 4.4%), but very unfavourable trades still outnumber very favourable ones by a factor of 1.61 times. On balance therefore trading was easier overall, but still the environment remained negative from the trading perspective. Traders will no doubt be glad that the trend is moving to one that is easier for them to do well in. However, they don't want it all to become too straightforward, otherwise who would need them?

MOMENTUM TABLE

ALL	*Q3*	*Q2*	*Q1*
Very unfavourable	7.1	7.1	10.5
Quite unfavourable	10.5	11.4	12.0
Somewhat unfavourable	25.9	26.6	25.7
Neutral	23.8	23.8	21.7
Somewhat favourable	21.0	21.0	17.9
Quite favourable	7.4	6.8	7.4
Very favourable	4.4	3.3	4.8

"Traders will no doubt be glad that the trend is moving to one that is easier for them to do well in. However, they don't want it all to become too straightforward, otherwise who would need them?"

MOMENTUM TABLE DEFINITION

To compile the 'Momentum table' GSCS considered price changes in each security being traded on the date the trade was completed and compared closing and opening prices. To the extent that the difference was less than + or – 0.33%, the market was considered neutral in terms of its impact on trading. A movement of between 0.33 and 1.33% was considered somewhat favourable (if the manager was buying a stock whose price fell by an amount in that range) or somewhat unfavourable (if the manager was buying a stock whose price rose). A daily movement in the range of 1.33% to 2.33% was considered quite favourable or unfavourable, while if the movement was greater than 2.33% then the momentum was considered as very favourable or unfavourable.

The chart shows the results in terms of the value of trades falling into each category. It shows the position across all trades across Q1 and Q2 2005.