Global equity turnover: market comparisons

Favourable economic conditions, deregulation and technological innovation contributed to rapid growth in the turnover of most equity markets during the 1980s. Equity trading also became more mobile, moving both from one exchange to another in response to turnover costs and liquidity, and in some cases off-exchange altogether. The internationalisation of equity trading has been facilitated by the liberalisation of capital movements and the growing importance of sophisticated institutional investors, who can invest and trade cross-border with ease.

This article[1] reviews trends in the turnover of the major equity markets over the last two years. It compares turnover in London with that in other major centres, for both domestic and foreign equities. The article also analyses the turnover of different nationalities of equities in London in relation to turnover on their home exchanges, to cast light on changes in the relative attractiveness of the major exchanges.

Methodology

Secondary market equity turnover can be divided into trading of domestic equities (ie shares issued by companies incorporated in the country of the exchange) and trading of foreign equities (ie shares issued by companies incorporated in a country other than that of the exchange on which they are traded). The value of turnover, rather than the number of shares traded, is used as the basis of comparison because in different markets the 'typical' value of shares differs greatly. Value figures also facilitate intermarket comparisons of the amount of commission-generating business in the market. Furthermore, since liquidity can be defined as the ability to convert an asset into cash, turnover as measured by value is indicative of the liquidities of the different markets.

The turnover data were put on to a consistent basis by adjusting for the fact that some exchanges, such as the London Stock Exchange, count both the sale and the purchase, while others count only the sale. Then they were converted into sterling using average exchange rates for the period in question.

Nevertheless, intermarket comparisons of turnover data are still beset by a number of statistical difficulties. Most important is that the data cover only reported on-exchange trading. This is a significant limitation; a recent survey by the Federation of Stock Exchanges in the EC indicated that as much as 43% of total EC turnover in equities may be unrecorded or traded off-exchange. Underrecording is particularly likely in the case of foreign equity trading; most exchanges do not require reporting of transactions of unlisted foreign equities. In contrast, the London Stock Exchange requires its members to report all trades of foreign equities, whether they are listed on the Exchange or not.

Other difficulties include the treatment of intramarket turnover in market-making systems, and the fact that in many countries accurate reporting systems have only been set up relatively recently. Furthermore, changes in exchange rates make time series comparisons of turnover problematic. An additional problem is that turnover statistics from markets composed of networks of exchanges (eg Germany) are increased to an unknown degree by arbitrage trading and double counting between the exchanges.

Equity turnover in London and other centres

Total turnover on the exchanges listed in Table A fell by 26% between 1989 and 1990, as markets responded to the slowdown in growth of the Anglo-Saxon economies and to the Gulf crisis. (The decline in equity turnover was particularly marked in Japan; the sterling value of turnover on the Tokyo and Osaka exchanges was only a little more than half its 1989 level.) There were significant quarterly differences during 1990, with the first quarter data being boosted by a surge in German equity turnover in anticipation of unification following the opening of the Berlin Wall. However, turnover fell away sharply over the rest of the year, particularly after Iraq invaded Kuwait in August. Trading volumes recovered substantially in the first quarter of 1991 after the start of Allied military action against Iraq, with the result that, overall, turnover in the first quarter was only 3% lower (at an annual rate) than the 1990 average.

In 1990 London was the third largest equity market, with turnover totalling £305 billion (sales only), an average of well over £1 billion per day. Turnover in the first quarter of 1991 was about 7% higher than this, and London increased its market share to 13% of turnover on the major exchanges, up from 12% in 1990, and 8% in 1989. Turnover on the

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Table A
Equity turnover on major exchanges
£ billions (sales only)

Exchange	1989 Domestic	Foreign	Total	(%)(b)	1990 Domestic	Foreign	Total	(%)(b)	1991 Q1(a) Domestic	Foreign	Total	(%)(b)
ISE(c)	197.7	84.6	282.3	(8)	157.1	147.8	304.9	(12)	185.3	143.1	328.4	(13)
Federation of German Exchanges	217.3	11.1	228.4	(7)	286.6	6.7	293.3	(11)	222.8	5.1	227.9	(9)
of which, Frankfurt	*101.8*	*6.0*	*107.8*	*(3)*	*172.8*	*4.3*	*177.1*	*(7)*	*150.1*	*4.7*	*154.8*	*(6)*
Paris	68.7	2.9	71.6	(2)	64.9	2.5	67.4	(3)	59.4	2.1	61.5	(2)
NYSE	..	..	956.8	(28)	..	..	748.5	(29)	..	..	814.8	(33)
NASDAQ	248.6	14.2	262.8	(8)	243.2	15.9	259.1	(10)	319.5	12.3	331.8	(13)
Tokyo	1,436.8	12.1	1,448.9	(42)	730.3	7.3	738.2	(29)	610.8	3.6	614.3	(25)
Osaka	185.0	—	185.0	(5)	140.4	—	140.4	(6)	117.5	—	117.5	(5)

.. not available.

(a) At an annual rate.

(b) Percentages in brackets indicate the exchanges' turnover (domestic and foreign) as a proportion of all exchanges' turnover. The Swiss markets are also quite large but accurate figures are difficult to obtain. However, the ISE estimated that in 1990 Q3 the Zurich Stock Exchange had a total equity turnover of about £210 billion (at an annual rate)—about ¾ the size of the ISE.

(c) There is a break in the foreign equity and therefore also in the total equity series for the ISE between 1989 and 1990 due to changed reporting rules.

Federation of German Stock Exchanges (especially Frankfurt) also jumped markedly in 1990, actually surpassing that on the London Stock Exchange in the beginning of the year as a result of unification euphoria. Frankfurt more than doubled its market share to 7% in 1990. NASDAQ expanded its market share as well. Of course, to some extent, these increases are accounted for by the collapse of the Japanese equity markets during this period.

While Germany's turnover has fallen back somewhat this year, NASDAQ has continued its steady growth, registering a 28% increase over the 1990 average in the first quarter. Indeed, turnover on NASDAQ was virtually equal to that on the London Stock Exchange. This partly reflects the 11% appreciation of the US dollar against sterling in the first quarter of 1991. While the New York Stock Exchange (NYSE) also posted increased turnover in the first quarter of this year, some 7% (in sterling) above the 1990 average, the figures strongly suggest that it may be losing market share to NASDAQ.

Falling equity prices and a reduction in the number of shares being traded caused the Tokyo Stock Exchange, in the third quarter of 1990, to fall behind the NYSE as the largest equity market in the world. This position has continued to the end of the first quarter of 1991 despite the increase in the Nikkei index from 23,849 at the end of 1990 to 26,292 at the end of March 1991 and a substantial increase in turnover.

The foreign equity market in London

Trading of stocks outside their country of origin has grown dramatically over the last decade. This is due in part to the deregulation of capital flows and advances in information technology which have enabled easier cross-border trading. The growing sophistication of investors and institutionalisation of investment has encouraged international diversification of portfolios.

Investors may prefer to trade stocks outside their country of origin for a variety of reasons. Liquidity may be better than on the domestic market or regulation may be lighter. In particular, onerous trade publication requirements can encourage business, particularly large deals, to move to another exchange, or off-exchange entirely. Again, high transactions costs on the home exchange (eg turnover taxes, commissions or settlement costs) may also drive trading elsewhere.

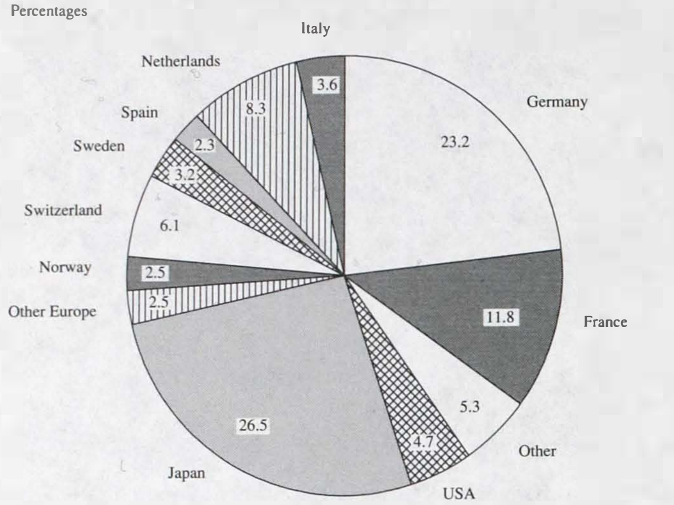
Accurate data on foreign equity trading in London only became available in February 1990 with the full introduction of SEQUAL, the London Stock Exchange's trade reporting and confirmation system for stocks quoted on SEAQ International (the Exchange's screen-based professional market for trading foreign equities). Comparison of 1989 data with that for 1990 or the first quarter of 1991 can therefore only be approximate. Exchange members are now required to report all foreign equity trades in London, whether the equities are quoted on SEAQ I or not. Overall, about 50% of trading of non-UK stocks in London is done via SEAQ I. The proportion does, however, vary considerably for each national category of stock with, for example, the percentage being considerably higher for Japanese stocks and lower for German stocks.

The data on foreign equity turnover that have become available since early 1990 seem to confirm London's position as the biggest foreign equity market in the world. Table A shows that foreign equity trading has become an increasingly important part of turnover on the London Stock Exchange, accounting for just under half the total turnover in 1990. At nearly £150 billion (sales only) in 1990, foreign equity turnover on the London Stock Exchange is many times greater than that on the Exchange's main European counterparts, Frankfurt and Paris. Figures for the next biggest foreign equity market, the NYSE, are not generally available but in the first quarter of 1990 it was estimated that foreign equity turnover on the NYSE was only 25% that on the London Stock Exchange. The apparent dominance of London as a foreign equity exchange is, however, partially accounted for by differences in reporting rules.

The chart analyses the turnover of foreign equities in London by nationality of stock. The largest group is Japanese, accounting for just over a quarter of London's foreign equity turnover in 1990. German shares are also heavily traded in London, typically accounting for around 23% of foreign equity turnover on the Exchange. Other

Composition of foreign equity turnover in London: 1990

Percentages



Total foreign equity turnover in 1990 was £148 billion

European shares contribute most of the remainder. American shares are not heavily traded on the London Stock Exchange; they represented only about 5% of the total foreign equity value. This is primarily the result of the time zone factors; trading on SEAQ I begins before the American markets open, when dealers are reportedly less willing to trade. In contrast, SEAQ I trading in Japanese stocks naturally follows on from the Tokyo close.

Table B shows the turnover of foreign stocks by London Stock Exchange members as a percentage of home country domestic turnover. On this basis, the London Stock Exchange has been especially successful in attracting trading of European equities—notably Swedish and Dutch shares—where the home exchanges have high turnover costs and low liquidity. In 1990, turnover on London's foreign equity market relative to the home exchange(s) averaged 54% for Swedish shares and 51% for Dutch shares. The percentages for other European equities were 26% for French shares, around 20% for Italian and Spanish shares, 29% for permanently traded Swiss shares, and 12% for German shares. For individual stocks, particularly those

Table B
Turnover of foreign equities by ISE members in London
As percentages of turnover of domestic equities on 'home' country exchange(s)

Nationality of equity(a)		1990 Q1(b)	1990 Q2	1990 Q3	1990 Q4	1991 Q1
German	(22)	12.5	12.2	11.3	12.8	10.3
French	(43)	26.9	26.8	25.3	26.3	29.5
Dutch	(35)	38.3	49.8	63.0	54.2	52.9
Swiss	(14)	..	29.2	25.5	33.5	35.5
Italian	(14)	23.1	18.1	19.1	27.1	24.7
Spanish	(7)	14.3	15.9	25.5	18.4	18.4
Swedish	(21)	39.5	64.9	62.4	50.0	45.0
American	(187)(c)	0.6	0.7	0.7	0.7	1.2
Japanese	(114)(d)	4.8	4.0	4.1	5.2	5.8
Total foreign equity turnover in London (£ billions)		**46.1**	**39.4**	**34.9**	**26.6**	**35.8**

(a) Figures in brackets indicate the number of companies quoted on SEAQ I and/or listed on the London Stock Exchange at end-1990.

(b) Reliable data for international equity turnover in London became available in February 1990. 1990 Q1 data are extrapolated from February and March.

(c) As a percentage of turnover on the NYSE and NASDAQ.

(d) As a percentage of turnover on the Tokyo and Osaka Exchanges.

quoted on SEAQ I, trading in London often greatly exceeds trading on the home exchange.

In the last two or three years a number of exchanges have introduced new trading structures and systems, at least partly in response to the success of London. So far, the data suggest that the London Stock Exchange has not lost substantial amounts of foreign equity trading to the home exchanges. For example, the Netherlands abolished fixed commissions and equity turnover taxes at the beginning of July 1990, but, subsequently, London's market share actually grew. Similarly, Germany abolished its turnover taxes at the beginning of 1991 but the data so far indicate only a small-scale repatriation of business. The increase in London's share of trading of Italian stocks over the last two quarters may well be due to strikes by Italian floor traders in response to the rushed imposition of a capital gains tax on share dealings in Italy. The Paris Bourse introduced a new rolling settlement system, Relit, in November 1990. The figures show, however, that London has actually gained some market share in French stocks after the system was introduced. Other competitive reforms, such as the integration of the French provincial exchanges onto the CAC system and the abolition of fixed commissions in Switzerland at the beginning of 1991, do not appear, at this early stage, to have had any appreciable effect. A decision on whether or not to abolish the Swiss stamp duty, from which deals in London escape, will be taken in a referendum this summer. More generally, the Swiss are aiming to create a unified electronic securities market over the next couple of years. The effect of this on London's considerable Swiss business is as yet unclear.

On the other hand, the Swedish Bourse introduced an electronic trading system, the SAX, in June 1990, and this appears to have led to a repatriation of some trading volume, despite some teething problems. Nonetheless, the high Swedish turnover taxes and commissions seem likely to keep a large proportion of business in London for some time.

On balance the reforms introduced on other exchanges have not, as yet, made much impact on London's position, suggesting that once trading has moved, strong positive reasons are needed for it to move back. It is important to remember, however, that efficiency-improving reforms also increase the size of the total turnover cake, rather than just merely redistribute each exchange's share.

Overall, London has been successful in attracting trading of foreign, particularly European, equities because of its historically open capital market and its low costs compared with other exchanges. Another significant factor in London's success has been SEAQ I, along with its light regulatory regime, low commissions and spreads, and trade publication arrangements. These allow market makers to take sizable positions in particular stocks without driving the market against themselves. London now accounts for over two thirds of reported trading of equities outside their country of origin.

Conclusion

London has succeeded in capturing a significant share of the growth in activity in world equity markets in the 1980s, particularly of secondary market trading of foreign equities. Both components of trading costs (ie transactions costs such as taxes and commissions, and costs of illiquidity) are low in London. Moreover, institutional traders seem to find that the London Stock Exchange's market structure, where market makers take positions to intermediate between buyers and sellers, provides superior liquidity for large wholesale trades. In the current liberal capital environment trading will tend to move to where market conditions are favourable. Future trends in London's market share will be an important test of the City's practitioner-guided approach to the provision of market facilities.