SPACE RACE:
THE CONTRIBUTION OF PROPERTY MARKETS TO THE COMPETITIVENESS OF LONDON AND FRANKFURT

A REPORT BY

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1. INTRODUCTION

'The City of London is the world's leading international financial and business centre'
[Corporation of London, 1999]
'Our aim is to replace London as the most important business district in Europe.'
[City of Frankfurt, 1999]

Competition between Frankfurt and the City of London for European financial services business is intense. Both cities expend much effort and resource in marketing and extolling the benefits of locating business in their centres. Recent events highlighting this competition include the introduction of the Euro, rivalry between LIFFE and the German exchanges over the trading of Euro derivatives and the debate over withholding tax and its potential impact on the Eurobond and Eurocurrency markets. In recent years, both cities have emphasised the availability and quality of space in their respective markets as contributing to competitiveness.

This attention to property markets is comparatively new. The traditional view has been that property is a derived demand. As such, changes in employment drive demand for space and affect rent. Developers would then supply the market in response to those shifts in demand. The cyclical nature of property markets has, of course, long been acknowledged but was generally explained by lags between changes in demand and changes in supply caused by the length of the development process. This view has changed in recent years. Property markets are seen as playing a more significant role in market competitiveness. The quantity, quality and price of space alters firms' locational decisions and affects their efficiency. Property markets do not simply respond to shifts in occupational demand.

This report aims to assess the contribution of property markets to competitiveness in the City of London and Frankfurt. The primary focus is on the office markets of the two cities. However, we also consider the impact of other real estate sectors: the retail and leisure market and the housing market. These, as we will argue, have an important, but neglected, influence on competitiveness Property is placed in the context of wider economic and social factors: the depth and breadth of capital markets; the quality and quantity of labour markets; taxation, regulation and planning; culture, language and society; the environment and its contribution to quality of life.

Our findings are based on research, funded by Development Securities plc. We critically reviewed available literature on the two markets and on the evolution of global financial services. We collected secondary data on the real estate markets and the local economies from public and private sources. Primary research included a directed questionnaire survey of decision-makers in major firms and their advisors in London, Frankfurt and other major European cities, the establishment of an office ownership and occupation database for Frankfurt and interviews with real estate and financial services professionals in both markets. We also drew on other University of Reading research, notably the *Who Owns The City?* research project (Baum *et al.,* 1998), also funded by Development Securities plc.

The remainder of the report is structured as follows. First, we consider the position of international financial service centres in a changing and increasingly competitive global marketplace. Next, we consider the role of property in contributing to the competitiveness of urban markets, rejecting the conventional view that property markets passively respond to shifts in demand. Chapter four examines the strengths and weaknesses of Frankfurt and London as financial centres and considers threats from other markets. The fifth chapter focuses in the property markets in the two cities. We draw on our survey work and fieldwork in Frankfurt and parallel studies in London. The final chapter draws together the strands of research and makes conclusions.

2. INTERNATIONAL FINANCIAL SERVICES AND COMPETITION

2.1 Introduction: Financial Services: Growth and Innovation

In this Chapter, we consider trends in financial service markets and the competition between cities to capture market share. It is not intended to offer a comprehensive review of changing global capital markets nor to provide extensive statistics on international financial transactions. Rather, we identify significant trends in the sector; consider the impact of those trends on the location of activity and, hence, on demand for office space; and focus on the struggle to capture market share by firms and by cities. What factors enhance a city's competitive position, enabling it to grow relative to its rivals? Thus, the chapter is intended to provide a context for the more detailed discussion of the competition between Frankfurt and London in Chapter Four.

The defining trends in financial markets over the last twenty years have been the globalisation of markets in the wake of deregulation and liberalisation; growth of markets resulting from demand due to greater securitisation, privatisation policies, developments in emerging markets and the impact of communications and information technologies on the financial services industry. These trends, in turn, have led to innovation in products and services and to intense competition between financial centres – and firms within those centres - to capture cross-border trade.

Globalisation of markets can be linked both to political-economic change and to technology. The removal of barriers to trade and flows of capital in the 1980s and 1990s, deregulation of markets (notably, the liberalisation of regulation of the pensions and insurance industries) and privatisation of state business in developed economies were instrumental in creating integrated global capital markets. This process, led by the US and UK in the 1980s, is far from complete, even in mainland Europe. A further impetus for international activity has come from foreign direct investment in the south east Asian economies, in other newly industrialising countries and, more recently, in the emerging post-communist economies of eastern Europe. Rapid developments in information technology and communications technology have facilitated the process of global linkage, creating 24 hour trading across the world with electronic flows of capital.

These developments do not come without risks. Global trading allows rapid transmission of shocks. Problems in one market rapidly affect other markets through contagion. This emerged starkly with the collapse of stock markets around the world on "Black Monday" in October 1987. Since then, there have been a number of crises – the Mexican and Brazilian currency crises, Russian bond delinquency and, most recently, the currency and stock market difficulties in south east Asia. Even individual problems faced by firms can threaten the stability of the financial system – as the rescue operation of Long Term Capital Markets revealed. These wider impacts of problems in one part of the market – *systemic risk* – can be linked both to the close integration of markets and to the complex nature of new financial instruments and, in particular, the role of derivatives in magnifying shocks. These crises – and less newsworthy problems such as banking sector difficulties following property price falls around the world in the late 1980s and early 1990s – focus attention on risk management and the regulatory framework.

In analysing international financial services markets, it is important to distinguish between retail services – products and services provided directly for consumers, usually in a firm's domestic market – and wholesale, corporate services. The latter include headquarters functions of banks, international banking, corporate finance, issuance and underwriting, securities trading, derivatives and commodities trading, fund management, corporate insurance and transport brokerage. It is these wholesale services that have been most clearly integrated into a global financial system. In turn, they have created an international business and professional services industry (legal services, accounting, consultancy, information gathering and technological provision) to support the financial service activity.

Lombard Street Research, in examining financial service employment prospects, argue that it is the wholesale market that is most dynamic and likely to benefit from global trends. International production growth fuels demand for debt and equity finance, for ship and plane broking, for corporate insurance and for foreign exchange dealing. Deregulation, demutualisation and privatisation bring new capital to market and open new investment opportunities. Thus, they see foreign exchange, derivatives trading, corporate finance, fund management and international securities trading as the sectors most likely to benefit from future growth.

One important feature of the global market that should be highlighted is the pace of innovation. While it is possible to identify broad areas of the market and point to possible growth trajectories, the reality is that market segments fragment and reform as new products and services are created. With such innovation, the static concept of market share becomes elusive. Rather, it is the ability to react to new products and services that determines a firm's – or a city's – competitiveness.

The growth of the derivatives markets provides one example. With humble origins in forward commodity contracts, the last twenty years have witnessed a feverish development of vehicles: futures, financial futures, options, swaps, hybrids (e.g. swaptions) and exotics, hedge funds and many other products of financial engineering. These vehicles are applied in almost all areas of economic and business activity – not excluding property markets. While a derivative may be defined as "an instrument whose performance is determined by how another asset performs" (Chance, 1995), the sheer size of markets and trading, often dominating the underlying market, can mean that it is the derivative market that drives performance. Systemic problems and fallout resulting from trading failures (LTCM, Sumitomo, Barings, Orange County, Metallgesellscaft …) make the origins of derivatives – as a risk control mechanism – somewhat ironic. The important features for this report, though, are the explosive growth of the sub-sectors and the short product lives of individual instruments.

The general trend, then, appears to be for continued long-run growth in wholesale financial services (subject to cyclical downturns and market corrections). Increasingly, such services are integrated into a single global financial system. As a result, there are very strong competitive pressures. Some result from technological change, some from competition between firms, some from competition between cities and regions. We will examine each of these in turn.

2.2 Technology, Innovation and Location

Since the 1970s, the pace of innovation in communications and technology has been dramatic. It is now commonplace to exchange information with co-workers in other offices – perhaps in other continents by e-mail, or to retrieve information on the internet. It is possible for individuals to buy or sell shares at their own desk at home or in the office. Financial service firms in one country can trade on another country's stock, bond or derivatives markets with no need for a physical presence, creating a near seamless, 24 hour global market. For the transformation of information - including financial transaction information and financial capital as information - time and geography appear to have lost their importance. Rapid developments in information and communications technologies and the convergence of those two fields have transformed service activity.

For some commentators, the opportunities offered by electronic working and trading remove the importance of business location. O'Brien (1992) talks of "*the end of geography*". Similarly, Peet (1992) argues that, with electronic trading, there is no persuasive case for a central market place. These ideas have resurfaced with the rise of Internet trading firms and "day trading," particularly in US equities markets. If information can be obtained readily anywhere in the world, if trades can be made anywhere in the world, why pay for expensive CBD office accommodation? Evidence of decentralisation of financial activity away from traditional downtown areas – notably from Wall Street – seems to give credence to such a view.

Technological developments have also contributed to the adoption of new working practices such as hot desking, office hotelling, remote working and other, similar practices. Although, as the RICS-sponsored *Right Space, Right Price* research makes clear, the adoption of such practices is uneven and implementation is complex and time-consuming, evidence is mounting that they are embedded in firms' strategies and that they contribute to "office intensification" – the reduction of floorspace per worker. The same technologies have driven the growth of call centres which, as office factories, are typically located away from the traditional city centre, on the edge of town and, often, in regions or even countries distant from the headquarters buildings. The financial services sector was quick to adopt call centres as a delivery system. These trends, then, might seem to point to a reduction in the aggregate demand for space and a decline in the importance of a central city location.

The reality is rather different. While the technology means that work can be anywhere, it must be *somewhere.* The location, then, will depend upon other factors associated with efficiency and profitability. For high-level financial services, the essential inputs are human capital – skilled labour – and information. This implies not decentralisation but concentration. Successful activities, as Porter, Krugman and others have noticed, increasingly cluster together. Economies of scale, agglomeration economies, information economies, the presence of customers, clients and competitors pull activity to a small number of key locations.

In a review of financial centres, the *Economist* (1998) noted that

> '*centres that thrive will increasingly take business from rival centres … today's mainly national financial centres will be replaced by just a handful of international centres. Increasingly, the forces that produced financial centres are ignoring national boundaries, gathering up financial businesses in even greater concentration*'.

In similar vein, Deutschebank (1998) suggest, in a European context, that

> '*modern communications technology enables banks who are under increasing pressure from costs to concentrate their international trading activities possibly to a single financial centre in the European timezone*'.

For the purposes of this report, it is significant that they continue:

> '*Thanks to the large number of highly qualified personnel, the large volume of trading and use of English …* [as the common language] *in the world of finance, the choice should fall on London in many cases'*.

It is important here to distinguish between retail and wholesale activity and between high volume, low margin and low volume, high margin activities. Retail activity may be less likely to concentrate since it relies on customer knowledge, tastes, preferences and local marketing. It is also cost-sensitive and, hence, may be displaced from major centres. The majority of call centres are, of course, for retail financial services. High volume, commoditised, wholesale activities include settlement, clearing and certain forms of trading. The tasks may be relatively standardised, are less reliant on information exchange and innovation, and generate lower profits. As a result, there may be pressure for these activities to decentralise, to seek lower cost locations.

By contrast, high value added, low volume business - corporate finance, fund management, raising capital, mergers and acquisitions, for example – rely both on information (from customers, rivals, parallel business and suppliers) and on close client contact. This leads to greater concentration, a concentration further fuelled by the need to access skilled labour. For such activities, as Gehrig (1998) has observed, information from IT sources and from face-to-face contacts are complements, not substitutes. Lombard Street Research points to the relative increase in earnings in the City of London as evidence for this "upgrading" of activity. Just as manufacturing, printing, publishing and non-financial office activities were pushed away from the City in earlier phases, so retail finance and commoditised, high-volume activities are being pushed away. This change brings, in turn, a change in the nature of office requirements and shifts in the required space per worker that counterbalances the office intensification brought by new working practices.

2.3 Consolidation, Core Business and Diversity

Mergers and acquisitions are a striking feature of the new international financial system. From deregulation of markets in the mid-1980s (when, following “big bang” major banks acquired securities houses and merchant banking operations) through to the more recent trend for cross-national and cross-continental bank mergers and strategic alliances between national and international stock and derivatives exchanges, the finance industry appears to be subject to rapid concentration.

The process can be seen most clearly in the US as the previously fragmented state level system is transformed. Between 1988 and 1997, the number of US banks fell by 27% while the share of business held by the largest eight rose from 22% to 36%. The number of life insurance companies fell by a similar amount, the number of securities firms fell by 36% and the number of savings institutions fell by 62%. Over the same period, employment in these industries *increased.* Other, linked, sectors exhibit similar trends – international accountancy and management consultancy firms, international legal services and, more recently, real estate service providers have merged, formed alliances and consolidated.

What motivates this process of consolidation and concentration? Industrial economics and the business management literature has suggested that successful firms should concentrate on core activities and processes, break down vertical linkages, outsource supply, “de-layer”, “right size” and become leaner, smaller and more responsive. Why, then, is the financial service industry and its associated business services sector creating ever larger firms straddling activities and geographical boundaries?

One important driving factor is the need to obtain economies of scale by increasing the size of operation. Combining clients, funds under management, skilled staff and capital not only increases market share in particular sectors, it also allows the firm to create specialist teams to work in niche areas. By concentrating on larger deals, transaction costs, information gathering costs, management costs and monitoring costs can be minimised, increasing profit margins. Such concentration is facilitated by improvements in technology, which permits the relocation of branch and subsidiary offices. It is further encouraged by concerns about risk management and reporting lines (many of the well-reported firm failures, including that of Barings, were, at least in part, due to poor monitoring of business activities in branch locations).

Deregulation has also contributed to mergers, consolidation and concentration. With the erosion of national barriers to trading, investing and capital flows, the need for a formal presence in individual countries is reduced. Thus, within the European Union, it is sufficient to be established in one country to operate in all others (although the Investment Services Directorate is open to interpretation). Freed of national restrictions, banks and financial firms can move to the most advantageous locations.

In practice, concentration and consolidation are not polar opposites of concentration on core business and outsourcing. Typically, the merged firm will concentrate on high value, high margin activities and downsize or shed other operations. This creates opportunities for start up firms (often spun off the merged parent) to provide specialist, niche services or to serve a displaced client group.

Such firms are likely to locate as near to the parent firm as costs permit, to benefit both from prestige and from information linkages. This permits larger centres to offer a greater range of specialised services and to be more adept at innovation and adaptation to changing market environment.

Outsourcing of non-core services creates a demand for specialised business and professional services: lawyers, accountants, consultants, research and information services, providers of specialised technology, recruitment firms, courier services. Again, larger centres are favoured. The business and professional service firms can benefit from scale economies. Furthermore, the size of markets allows such firms to specialise and hence provide a tailored service for clients. Following Porter, then, it is the *diversity* of markets that provides agglomeration economies and drives further clustering. This, then, focuses attention on the competition between cities for market share.

2.4 Competition Between Cities and Regions

As in other sectors, financial service centres seek to attract firms to locate headquarters and branch offices in their cities and to capture a growing market share of international business in those cities. This competition for market share takes the form both of advocacy – extolling the virtues of a particular location for business – and active promotion through planning initiatives and legal/regulatory measures. For firms, these latter measures must be weighed alongside the immediate economic factors in making locational decisions. For the city and region, firms provide employment (both directly and through multiplier effects) and, possibly, help to retain capital. Market share, however, does not necessarily bring either employment or wealth. For example, for all the much publicised gains made by DTB over LIFFE in trading bund futures, it turns out that some 30% of trades were from terminals based in London. The proposed merger between the London stock exchange and the Deutsche Börse needs to be viewed in this light.

Surveys provide an indication of the types of variables that are important in determining the success of a city in attracting firms and capturing market. These include capital market size; the labour market and the mix of skills; the regulatory regime; taxation; land and labour costs; transport and accessibility; business culture and the quality of environment for senior staff. However, while some of these are historically contingent, others can be created or change over time. The list of factors does not explain why some cities are attractive to business and others are less so.

Krugman has suggested that the economic success of one region rather than another may, ignoring natural resource endowments, be simply a matter of chance. Once established, first mover advantages enable that city to capture economies of scale, drive down costs, export services and dominate later cities. To an extent, this can be seen in the City of London. The City has always been externally oriented, as Ingham has demonstrated. Nonetheless, the decline of the British empire might have been expected to lead to a decline in London's importance. However, the establishment of the Eurobond and Euromoney markets – themselves a response to the particular nature of US financial regulation – enabled a new growth impetus and provided a depth to the capital markets that did not rest on the UK domestic economy. The City is, thus, an exception.

Geography may also be seen as a matter of accident! While technology has eroded the importance of location, it still plays a role. Thus, time zone is an important factor, despite the growth of 24-hour working. If, as is often suggested, three global centres will dominate the international financial market (as is, to an extent, already the case), then there will be a major centre in the European time zone. Geo-political factors may also be important in developing new markets – within Europe, opening up the eastern economies might be an example. As important as geography is accessibility. The presence of one or more major airports is a key element in the attractiveness of a city, while high speed rail links are, at least in a European context, becoming an important factor. Intra-city accessibility, the existence of a transit system capable of drawing labour into a centre from a wide catchement area is also important.

Other authors note the importance of diversity in maintaining economic advantage. This diversity is acknowledged in the urban growth literature – for example in the work of Jane Jacobs. Diversity serves to reduce risks as cyclical fluctuations differ across sectors and industries. Helsley and Strange show that in large diverse cities, capital is likely to be more productive. If a funded project fails, the next best use is more likely to be valuable when the density of possible uses is higher. Therefore, the bank can recover and reallocate more of its loan. This both drives down the cost of capital and makes it more likely that a bank will finance innovative and risky projects, increasing diversity still further. They describe this as *urban scope*.

Diversity also features as an important factor in Porter’s discussions of regional growth. Here, clustering of businesses - suppliers, clients, competitors in a range of industrial sectors - create information linkages that foster innovation and reduce production costs. Labour mobility enhances the information linkages. These information agglomeration economies encourage firms to locate in such centres and permit a higher proportion of firms to survive and profit in a competitive environment. Such information economies are vital in the financial services industry – and particular in high level international financial business activity.

Critical mass, then, is not simply a function of the size of the market, it is also a function of diversity – the presence of many firms in associated business sectors, the existence of specialist service providers serving those sectors and the presence of a large and varied pool of labour. In turn, skilled labour will be attracted to a centre because of its size and range of activities. This will be particularly important for skilled international financial service employees. The presence of many firms both provides the possibility of advancement and also risk diversification in that, in the event of loss of job, there will be many more locally available opportunities. The quality of life in and around the city (cultural amenities, housing, education, environment) will also be important in determining individual decisions – but, we suspect, not as important as some commentators have suggested. It is largely labour market factors and the structure of rewards that determine the decisions of globally mobile professionals.

A number of surveys have pointed to the importance of business culture in the success of a city. This generally implies an ability to respond to new business opportunities and adapt to changing economic conditions. This must be linked to the overall regulatory environment. In international financial service centres, most attention has been paid to direct regulation of financial markets (with liberal regulatory regimes favoured).

However, other regulatory issues are important – for example labour market regulation (which helps determine both cost structures and the ability of firms to adjust staffing to the changing business environment) and workplace regulation. In turn, differences in the taxation regime between cities may bestow locational advantage.

A final factor that reappears in the literature is that of language. With English as the *de facto* world business language, it may well be that this plays an important role in determining competitive advantage. Arguably, in a European context, German may be an essential language in the opening up of the eastern economies, and in the associated financial activity. Hau (1999) provides evidence of the importance of language in financial markets from an analysis of trading on the German stock exchange. He found that traders in non-German speaking cities made inferior trading profits when compared to local traders and those in other German-speaking cities. Language was a more important factor than distance. Emphasising the importance of information asymmetry, he also found that traders in cities that were close to the headquarters of firms made greater share trading profits than those remote from the HQs. This suggests that presence of headquarters buildings in a city will offer advantages to that city's financial services industry over and above the likely business linkages associated with corporate finance, placement and issuance.

The role that city governments can play in encouraging firms to locate and contributing to the growth of resident firms may be limited in comparison to the importance of the economic and business environment. One role is clearly advocacy – raising the profile of the city and ensuring that firms considering a move are aware of the potential benefits; and arguing for regulatory, resource allocation or taxation changes that benefit the city. Subject to competition laws, it may be possible to provide direct incentives through capital allowances and tax breaks. The most important contribution, however, may well be through land-use planning and the provision of basic infrastructure. Given the importance of accessibility, the establishment and maintenance of an efficient transportation system may be the most critical element.

In this section, we have not considered the role of real estate markets in contributing to competitive advantage. It is surprising that this topic has received little attention in the financial markets literature, given its importance. Office costs rank third after labour costs and IT and communications costs as a factor cost for financial service firms. We focus on the property-related issues of competitiveness in the next chapter.

2.5 Financial Services, Competition and the European Union

Much attention has focused on the impact of the Euro and the UK's non-involvement in the first wave of membership. Creation of a single currency zone (and the completion of the single European market prior to that) benefits cross-border activity through elimination of barriers and currency liability risk. This may boost corporate bond markets and encourage centralisation of financial firms to serve the whole market. London's position could, theoretically, be compromised by the UK's non-membership while Frankfurt's position is enhanced by the presence of the European Central Bank and, arguably, access to its decision making processes.

Against this, it is often noted that the presence of the Federal Reserve in Washington has not acted as a magnet for New York banks and financial services. Europe is not the USA, as markets and cultures are much less integrated. Nonetheless, Deutschebank notes that:

> *'although Great Britain is not among the founding members of a monetary union … we do not see any danger to London's dominant position in investment banking, foreign exchange, raw materials or derivatives.'*

There are other potential impacts of European Union membership that do merit mention in considering competitiveness of European financial centres. An important issue is harmonisation of taxation and regulation – directly, with respect to financial markets and products, and indirectly in relation to workplace, health and safety, environmental standards and other regulatory issues. The debate over withholding tax and its application to the Eurobond markets illustrates the importance of the issue and the way in which a competitive advantage may be eroded.

The introduction of the Euro might seem to reduce the need for foreign exchange trading (and currency-related derivatives). A strong Euro, as a reserve currency, may be traded actively across economic blocs. Euro-denominated corporate bond markets are likely to develop rapidly. However, there is no necessity for such activity to take place predominantly within the Euro zone – or even within Europe. There may be advantages in locating settlement business in the Euro zone. As noted above, settlement is a commoditised activity subject to strong cost competition and decentralisation forces.

The wider project to enlarge the market and integrate the eastern and southern economies of Europe will inevitably have implications for capital flows, foreign direct investment and, hence, capital markets. Whether this has an impact on the competitiveness of financial centres will depend on the nature of the enlargement and the degree of involvement of different member states. Any predictions at this stage can only be speculation.

2.6 Conclusions

The forces of globalisation and technological innovation have contradictory impacts on financial services markets. At one level, they break the ties of geography, affording the opportunity to work anywhere. As competitive pressures increase, so cost reduction becomes vital and pressures to seek out locations with lower labour costs, lower property costs and lower taxation increase. Yet, this pressure to decentralise activity must be set against a stronger trend – the concentration of more and more international financial business. This concentration of activity occurs both at the level of the firm (with the establishment of major multi-national multi-functional financial institutions) and also at the level of the city (as a small number of major financial centres capture a growing share of business).

This apparent contradiction can be resolved by distinguishing different forms of financial services. Retail financial services and commoditised wholesale activity (settlement, clearance, individual trading) are most subject to cost competition and, hence, to forces of decentralisation.

High added value wholesale services – corporate finance, fund management, financial engineering and risk management - rely heavily on information exchange, innovation and human capital. As a result, such activities are increasingly concentrated in major global financial centres to benefit from scale, scope and agglomeration economies. Such financial centres compete to attract firms and to gain market share.

In examining the features that favour location and growth in particular capital markets, it is clear that scale of markets plays a key role. The size and quality of the labour market, the depth of capital markets, the liquidity of markets are all highly important. Above all, though, it is the *diversity* of markets that is critical. Breadth and depth of markets permits specialisation and the development of specialist, niche, sub-sectors. Breadth and depth of markets allows the development of specialised business and professional services. Exchange of information and labour across markets and sectors creates innovation and allows development of new products and services in response to a changing business environment. As a result, it becomes very difficult for other centres to compete – to attract business and skilled labour – other than in niche areas.

National and local governments play an important role in establishing and maintaining competitive position. They set the regulatory and tax environment for business and establish labour market structures. They contribute to the physical infrastructure of cities through land-use planning and critically, maintain the transportation systems that determine inter-city accessibility and intra-city circulation. They also play an important advocacy role.

One factor missing in much of the discussion of financial service competitiveness is the property market. Firms may seek to locate near to competitors and clients, to maximise their access to skilled labour markets, to benefit from information economies and benign regulatory environments – but they need somewhere to locate. Thus, access to appropriate space at appropriate costs overlays the implementation of decision to locate or expand in a particular city. Hence, property markets affect competitiveness. This forms the subject matter of the next chapter.

3. PROPERTY AND COMPETITIVENESS

3.1 Introduction: Economic Growth and Property Markets

In this chapter, we consider the role that property markets play in the competitiveness of cities. We argue that, in contrast to the traditional neglect of the property dimension, the quality of office markets in cities and the ability of those markets to adjust to changing economic conditions has a significant effect on the competitiveness of those cities. We identify a framework for analysing the strengths and weaknesses of markets – one which we will apply to the office markets of Frankfurt and London later in the report.

Conventional discussions of urban growth and change have, typically, assigned a secondary, passive, role to property markets. Economic growth (or decline) in a region is seen to result from locational advantage, the resource endowment of the city or region and from human capital – the skills and flexibility of the labour force. Firms chose to locate, grow and prosper in locations that offer the best combination of factor inputs and costs. Cities and regions compete for firms and firms compete in a global marketplace.

In traditional models, the key factor in firms' decision making (and hence the growth of an area) was transportation cost – the cost of transporting factor inputs (raw materials and labour) to the production site and finished products to market. Within an urban region, firms (and households) traded off transport costs and space, with city centre sites having higher land prices and rents. As service industries have risen in importance and as information has become a key input and output of economic activity, research has tended to emphasise the importance of agglomeration economies and information spillover.

In such analyses, the significance of land and property markets tends to be ignored. Thus, in the standard models of urban economics, land values and property rents result simply from location and transport infrastructure; the issue of supply of space is not considered. Property is seen as a derived demand, with supply responding (albeit not seamlessly) to economic change. Similarly, in the new regional economic literature, networks of firms arise, compete and exchange information with no consideration of *where* they do business. When property markets are considered, it tends to be in a critical fashion, with land owners and developers seen as a constraint to economic adjustment.

This view of urban change, blind to property markets, is limiting. As D'Arcy and Keogh note, real estate market dynamics shape changes in economic and spatial structure. The technological and economic forces that determine the growth and decline of firms and industrial sectors are mediated through the existing built environment and the property market structures that are in place in particular cities and regions. The same economic forces may, thus, generate quite different outcomes in cities where the built form and real estate market institutions differ markedly. The important role of office markets in maintaining competitiveness has been acknowledged in both Frankfurt and the City of London only comparatively recently.

Urban economic activity generates a requirement for land and buildings that must, initially, be met from the existing stock, given the necessary time lag between a demand signal and supply of new space. The characteristics of the existing stock of space, then, will help determine how successfully changing patterns of demand can be accommodated. Stock characteristics include the aggregate quantity of space, the quality of that space, the mix of space suitable for a diversity of needs and the flexibility of the existing buildings. Access to that space depends on the structure of the market, which allocates space to different, competing, users and helps determine the price. That same structure will also determine how responsive the market is in the face of new demand: whether supply is encouraged or constrained. Thus, the property market will influence the ability of an urban economy to accommodate trends and pressures. This, in turn, will feed back into the economic development process. Those cities with more advanced, adaptive systems will gain competitive advantage, altering the path of economic development.

3.2 The Significance of the Existing Stock of Space

Examining, first, the existing stock of space, it is clear that the total amount of aggregate space must play an important role. The larger the stock, the more firms and workers that can be accommodated and, hence, the more scale economies and the benefits of agglomeration are likely to arise. The size of the existing stock will, naturally, arise from the historical development of the urban economy. Mere size, however, will be insufficient to maintain competitiveness.

Quality of stock is another critical dimension. For large, high order service firms, office space must be capable of supporting the business: accommodating the technology required for efficient operation, providing a satisfactory working environment for key staff and prestige in the eyes of clients and competitors. Equally important, the space needs to be flexible to permit reconfiguration and the implementation of new working practices. Thus, an ageing stock, subject to depreciation and functional obsolescence, is ill-suited to a competitive international financial services centre. A recent history of stock expansion, renewal and replacement will thus be important.

However, it needs to be stressed that this does not imply that a competitive international service centre will *only* have large, modern, high specification offices. As the previous chapter suggested, one key feature in global finance cities is diversity. This diversity needs to be mirrored in the office stock. Major banks and financial services firms may require modern, large floorplate office space; other major professional service firms may require modern space but with smaller plates to accommodate cellular offices. Niche product firms and suppliers need smaller amounts of space either in multi-occupied buildings or in smaller offices. Around these firms are a web of smaller suppliers, start-up businesses, outsourced services, information providers and branch offices of firms based elsewhere. These require a whole range of property solutions, from serviced offices and small bespoke dedicated space to space in secondary, class B or C offices. This is important in the framing of real estate policy. Building large prime office buildings to attract major firms to locate in a city is not, in itself, a sufficient solution if the built environment does not offer the range of space for all the necessary support services and suppliers that those firms require.

One example of the need for variety can be seen in the growth of the business centre and serviced office market (in North America often known as executive suites). Serviced offices offer a combination of space and service, with infrastructure set up costs met by the provider. This allows the business occupier to concentrate on core activities – at a price. Recent research into the growth of this sub-market reveals that serviced offices play an important role in providing high level market entry for external firms, quality space for start-up companies and niche players and expansion space (with no long-term commitment) for existing firms. At the prime end of the market, the vast majority of occupiers are financial services firms and information and communications technology firms. Thus, one might expect to find such provision in a competitive international financial centre alongside more traditional space.

3.3 Property Market Structures and Competitiveness

The institutional structure of a property market determines, in large measure, its ability to respond to changing occupational requirements. That structure depends on public and private sector actors and on the legal, regulatory and contractual framework within which the market operates. The market structure shapes the processes that channel investment into real estate, create new space and allocate space to firms. The sophistication of the market determines how freely information flows amongst participants, shaping attitudes to investment and occupation and influencing key locational decisions.

The planning system imposes an obvious constraint on the operation of the market. This may well have beneficial impacts – reconciling conflicting demands, dampening cyclical volatility and preventing gluts, co-ordinating land-use and transport infrastructure, preserving environmental quality and ensuring space for public good uses that might otherwise be outbid in a pure market system. Planning, by constraining excess development and preserving some measure of scarcity, may maintain property values and encourage continued investment (see below). However, restrictive planning regimes may hamper the market's adjustment to changing occupational requirements. For example, a strict conservation policy may prevent replacement of functionally obsolete space; a rigid zoning policy may hamper the provision of space at the fringes of existing office areas. Furthermore, the planning system can impose delays in the development process which lead to lags in responding to demand signals and, possibly, to greater market cyclicality. The most competitive cities, then, will have planning systems which, whilst reconciling land-use conflicts and private and public interests, respond flexibly to the changing economic environment without imposing bureaucratic constraints on the property market.

Public involvement in the market also includes workplace legislation (minimum space standards per worker, rights to light, health and safety standards), legal restrictions on the nature of lease contracts and on security of tenure, the system for recovery of debts and enforcement of obligations and the taxation system both local and national. Even with a move towards European harmonisation, these differ greatly between cities in different countries. The impact of strict security of tenure provisions on the development of a City market can be seen clearly in France and in Spain prior to the Boyer law changes. Differences in the cost and speed of recovering bad debts in European countries have been highlighted by the European mortgage federation.

Lease contracts also develop distinctive features in different markets, in response to both legal and political traditions and to professional structures. This is perhaps most obvious in a European context in relation to lease lengths with the UK traditional long institutional lease of 25 years contrasting with the typical French 3/6/9 pattern or the German 5/10 year lease. It is not the lease length *per se* that is important, but rather the rigidities imposed by a market system. Recent research by the University of Reading examined the way that new working practices and ways of organising business can be stifled by inflexible and inappropriate lease structures. This must be balanced against the landlord's requirement for security of income: without this, the necessary investment in the built environment may not be forthcoming.

3.4 Ownership, Investment and Finance

Thus, the planning, legal and taxation framework and the development of forms of lease contracts influence the investment potential of a city's office markets. Investors will be mindful of entry and transaction costs, security of income flow, taxation of rental income and capital gains (and building taxes where the incidence falls on landlord rather than tenant) as well as the potential for rental and capital value growth – the components of risk and return. The decision to invest directly in property – as landlord or as owner-occupier – contributes to the supply of new space and the upgrading of new space. Furthermore, since office buildings as financial assets represent a store of value, office investment helps to retain capital within a city. Similar considerations apply to banks and other financial institutions providing development finance and longer term funding for new office supply.

The office ownership structure can influence how integrated the real estate market is with other capital markets and how it adjusts to change. It has been suggested that traditional owners and landlords may be less able to tap into new sources of funding and be more resistant to change. A private owner with no debt and less pressure to generate returns may have less incentive to ensure that a site is in highest and best use (maximising its economic potential) than a publicly listed firm or financial institution subject to competition. It may well be that, as with the quality of stock, the ideal is a diverse ownership structure. Previous University of Reading research in "*Who Owns the City?*" highlighted the significance of foreign ownership in signalling commitment to a centre and locking in capital that might otherwise be vulnerable to capital flight in adverse market conditions.

Investors, occupiers and developers will also be mindful of the degree of transparency in the market: that is the flow of information between buyer and seller and the availability of transaction information, research, consultancy and professional services. The absence of a free flow of market data and information asymmetry[1] add uncertainty and cost, discouraging investment. Thus, the sophistication of the property market – 'market maturity' - is another important element in determining the role and significance of real estate in the competitiveness of cities and regions.

[1] Asymmetric information occurs when one party (typically the owner or manager of an asset) possesses more information about the asset than another (a shareholder or potential investor). Faced with asymmetric information, an investor will require higher returns.

Ultimately, all these factors lead to an economic and financial outcome. For tenant occupiers, the bottom line is total occupancy cost – the rent, taxes and service charges that they must pay to occupy office space in a particular market. These costs will be set against the benefits of locating in a particular market and the quality of space on offer. While property costs may be less significant than labour costs and information and communications technology, they are not insignificant. For owner-occupiers, the total cost of acquiring space, recurrent costs and ease of exit must be considered. For those investing in real estate equity or debt – lenders, developers, landlords – potential returns must be considered in the light of market risk.

3.6 Conclusion

The competitiveness of cities is undoubtedly influenced by the characteristics of their office markets. While a firm's decision to locate in a particular city may well be driven primarily by quality of labour markets, presence of customers and competitors and access to capital markets, the cost and quality of real estate will be a factor. More important, the characteristics of the office market must affect business efficiency – both for incoming firms and those already based in the city. In a global market with intense competition, these impacts may be critical.

In this chapter, we have examined the way in which property market structures and the quality of the existing stock affect the capacity of a market to adapt to changing economic environments. It is this flexibility and speed of response which is critical. As industrial sectors grow and decline and as the occupational requirements of firms change – in response to new technology, business reorganisation and new working practices, for example – the market must deliver appropriate space. Functionally obsolete space must be replaced and the stock be upgraded continuously.

We have identified three main factors that determine the adaptability of the office market in response to change: the characteristics of the existing built environment, the institutional structure of the private market and the nature of the public policy context. We summarise some of the sub-dimensions of these factors and provide examples in the following table. This provides a framework which can be used to assess the quality of markets in particular cities and the contribution of those markets to overall competitiveness.

Factor:	***Dimension:***	***Examples:***
Existing Stock	♦ Quantity	Aggregate stock of space;
	♦ Quality	Age; functionality; flexibility;
	♦ Diversity	Size; configuration; quality; costs.
Private Market Structure	♦ Ownership Pattern	Traditional / modern types; international character; integration to capital markets;
	♦ Occupational Pattern	Lease lengths and terms; tenure; access and barriers; flexibility of formats;
	♦ Market Maturity	Property rights; property services; integration with other markets;
	♦ Market Transparency	Information flows; asymmetry of information; transactions data; research services;
	♦ Investment Quality	Risk/return profile; income security; market liquidity; transparency;
	♦ Finance & Funding	Diversity in funding modes; diversity in provision; capital access and constraints; integration with capital markets;
Public Policy Context	♦ Planning Regime	Responsiveness; rigidity; speed of processing; costs; land-use co-ordination;
	♦ Workplace Rules	Health & safety; floorspace standards; natural light; facilities; environmental standards; enforcement;
	♦ Legal Structure	Property rights; lease terms; enforcement of obligations; security of income and tenure;
	♦ Tax Regime	Entry & transaction costs; income and capital taxes; local property taxes; VAT.

In this chapter, we have focussed on the office market as a contributor to competitiveness. Other real estate sectors should not be ignored, however. A major business centre needs hotel accommodation for business visitors, probably accompanied by conference facilities. Offices generate demand for industrial and quasi-industrial products (printing facilities, for example). For staff based in the city, there need to be restaurant, fast food and entertainment facilities and cultural resources. Staff need to be housed, while residential areas need schools, hospitals and shops. These require infrastructure. As with prime office space requiring a range of supporting business space, so an expansion of office space and office employment generates new requirements in the other sectors.

These must be an integral part of any office-led policy. A successful city will be one that can accommodate these expanding demands within the urban region.

These ideas can be used to examine the contribution of the office markets of Frankfurt and the City of London to the competitiveness of those two cities. This is the subject matter of Chapter Five. Before we do that, however, we must consider the overarching issue of competition between the two cities. Both seek to capture an increasing share of the global financial services market and, in particular, to capture the activity that takes place in the European time zone. This battle for status as the European financial capital forms the context for our analysis of the two office markets.

4. LONDON AND FRANKFURT AS FINANCIAL CENTRES

4.1 Why is Competition between London and Frankfurt an Issue?

Within the European time zone, the City of London has long held a dominant position as the major financial centre. However, it can be argued that London's peripheral position within the European Union (both geographically and politically) and technological developments have led to a battle for market share. The City of Frankfurt and the Corporation of London thus appear to be in direct competition to be regarded as the pre-eminent European financial centre. This has been thrown into focus by a property issue: the Frankfurt development plan, called 'Frankfurt 2000'.

> '*Frankfurt 2000 is our invitation to the world. As Frankfurt has gained momentum by the locating of the ECB we are prepared to take on the role of the Euro-city'* [Martin Wentz, Frankfurt planner, September 1999]

> *'Our aim is to replace London as the most important business district in Europe.'* [Martin Hunschaer Frankfurt planner March 1999]

The Frankfurt 2000 initiative can be seen as integral to the first serious threat in 30 years to the City of London's dominance of most of Europe's (and many of the world's) financial markets (see below). The re-location of the European Central Bank (ECB) has been the catalyst for change prompted by the opportunity to create a single market to rival the economic might of the US, underpinned by a single currency for Europe.

In February 1999, Frankfurt unveiled a ten year programme to increase office space by 2-4 million m^2, including a plan to develop 20 new skyscrapers. The bulk of development was to be adjacent to Frankfurt's trade fair (Messe) district. In addition, a massive entertainment district was planned for the city centre. The increase in the stock of modern quality office space would, it was hoped, attract international banks and finance houses seeking to locate near the ECB. This in turn, would create sufficient critical mass to erode London's advantages of agglomeration and depth of markets. This property-led strategy was given some credence by property market transactions. In the aftermath of the announcement of the ECB location in Frankfurt, take up in the three years to March 1999 was more than in the previous ten. This was mainly to satisfy demand form the financial services sector.

In some respects the City of London is confident of its ability and appears unruffled:

> '*It's quite different promoting an enormous international financial services centre, which has both international and domestic business, compared to promoting a domestic centre, however strong. London has many more financial sectors than Frankfurt'* [Judith Mayhew, Chair of the Corporation's policy and resources committee March 1999]

> *'Frankfurt is one of the most important financial services centres in Europe but does not approximate in any way to the city'* [Lord Mayor of London, Peter Levene, May1999]

This view is supported by some local Frankfurt players, with an acceptance that Frankfurt may be a continental European centre, but will not rival London.

> *'The city is now confident of its position as mainland Europe's head of financial services'* [Healey and Baker, Frankfurt, September 1999]

Nonetheless, the Corporation of London has responded to Frankfurt's plans by identifying sites for developing seven skyscrapers of its own. This relaxation of the City's tall building policy *'is aimed at countering Frankfurt's bid to become financial centre of Europe and also to compete with Canary Wharf'* (Estates Gazette, 13 March 1999). Provision for housing in the City of London will also increase from 8,000 today to around 11,000 within 3 years. Despite the apparent scale difference between the two city economies, and despite public pronouncements, the Frankfurt threat seems to be taken seriously. Part of the reason for this appears to be the opportunities being delivered to the smaller and, arguably, more nimble of the two cities.

Frankfurt's financial world is tight knit; the stock market, derivatives exchanges and clearing houses are all owned by a consortium of German banks; and Frankfurt can thus make tactical moves like its recent assault on the bund market with lightning speed. On the other hand, London has developed a tradition of innovation in financial markets and has a reputation for a more flexible regulatory environment.

4.2 The importance of the Euro

Britain's non-membership of the European single currency appears to place the City of London in a position of some disadvantage. LIFFE was the first Euro-related casualty of the new rivalry between London and Frankfurt, losing trading in the benchmark German government bond or bund contract to its chief rival the German/Swiss DTB-Eurex. As noted above, however, 30% of electronic bund trades were out of London and much ground has, subsequently, been regained.

Many feared that the same would happen to short term interest rate futures, one of the City of London's most profitable markets. After the launch of the Euro, trade in short term interest rate futures fell dramatically in London. LIFFE had been promoting its own home-grown form of the trade based on the Euro-LIBOR interest rate bench mark, but many Euroland investors wanted an alternative Euribor benchmark instead and "moved" to where they could get it – Frankfurt. LIFFE then reversed its policy, offering a voluntary conversion scheme to enable traders to switch into EURIBOR linked contracts. This meant LIFFE spectacularly won back business, and now has 86% of short term interest rate market, having replaced its outdated open out-cry trading system and installed an all -electronic system.

Within one week London's daily turnover in Euro-denominated EURIBOR short term interest rate futures was 3.5 times that of Frankfurt. This victory combined with the collapse of Eurex's proposed alliance with the Chicago Board of Trade relieved fears of the City's decline in the face of Euro related trading and the UK's non-participation in the single currency.

The July 1998 the London International Stock Exchange alliance with Deutsche Borse –subsequently enlarged to include several other European exchanges – secured for the ISE an entrée to two faster growing equity markets on the continent, but the impression from reports and commentaries remains that Frankfurt had more reason to be pleased with the agreement than London.

Since the launch of the single currency, 42% of London turnover has been in Euro denominated Euroland stock. The Corporation of London is now pushing the message that *'Britain may be out of the Euro but the City is in'*. However, a survey of 5,000 European company directors by Healey and Baker found that 54% of respondents expect Frankfurt to be the top financial centre in Europe in 5 years if Britain does not participate in the single currency (*Europroperty*, Nov. 1996). Even if the UK were to join, only 61% thought London's pre-eminence would be maintained.

4.3 Strategic, time zone and language location

Frankfurt is economically and strategically well placed in the heart of mainland Europe. Berlin and Paris links are efficient, and its motorway linkages are highly rated. The developing high speed rail network in Europe provide rapid access to most major cities. Although it has excellent air links (see below), London occupies a more peripheral position within Europe – particularly with the EU enlargement project and growing trade with the former soviet countries.

As noted in Chapter Two, the English language is clearly an advantage for London as a financial centre. Frankfurt is an increasingly international city, in which it is possible to observe a taxi driver listening to English language tapes while parked. Furthermore, German is proving an important language in the opening up of the eastern European economies.

Despite the growth of 24-hour trading, it is likely that there will continue to be a major financial centre in the European time zone. Within Europe, the time zone differential favours Frankfurt. Western continental Europeans lose a time zone hour in travelling to London, while UK travellers get back their travelling time when visiting western Germany.

4.4 The Economies Of London And Frankfurt: Some Stylised Facts

The previous sections outlined the implied threat of Frankfurt to London's position as the European financial capital. In this section, we provide a brief overview of the relative sizes of markets in London and Frankfurt and of their strengths and weaknesses. Any published statistics on size of labour markets and economy depend upon the areal definitions employed and the time period selected. The figures here, drawn from varied sources, are intended to give an overview of the scale of the two cities. We have included some comparative data on Paris as the third key financial service centre in the European time zone.

Figure 4.1 Population and Employment

	Greater London	City of London	Frankfurt unterMain	Frankfurt (City)	Paris Ile de France	Paris Centre
Population	7.01m		2.22m	620k	10.98m	2.17m
Employment	3.11m	302k	0.93m	560k	4.78m	1.61m
Financial Svcs.	286k	154k	138k	68k		183k
Business Svcs.	674k	110k	89k	43k		275k
FBS as % of Greater London	-	27.5%	23.6%	11.4%		47.7%
FBS as % of City of London	(363%)	-	86.0%	42.0%		173.5%

As can readily be seen, London dominates Frankfurt in most basic economic and labour market statistics. The population of the lower Main area around Frankfurt is less than one third the size of Greater London. Even including the whole of the Main region including, for example, Darmstadt, the population would not exceed 3.1 million – and then the comparison should, perhaps, be with the South East region and the London travel to work area. The City of Frankfurt itself, with a population of around 625,000, is about the same size as Glasgow, slightly larger than Sheffield, smaller than Leeds. The number employed in financial and business services in Greater London is four times that of the whole Frankfurt region and nine times that of the city of Frankfurt. Indeed, there are more employed in finance and business services in the Square Mile than there are in unterMain region.

Population and employment, even business and financial services employment are not, in themselves, sufficient to demonstrate position in the hierarchy of international financial centres. It is the size of markets, in relation to the total global market, that determines the economies of scale and agglomeration economies in a city-region. Once again, on most measures, London's financial markets dwarf those of Frankfurt. For example:

- *Major headquarters:* 118 of the 500 largest European companies have headquarters in London, compared to 61 in Paris and 9 in Frankfurt. Those nine are all in the top 100 in Europe, London having 16 and Paris 29 of the headquarters of the top 100 firms. 60% of the Fortune global 500 firms have head or branch offices in London. London has 537 foreign banks registered, while Frankfurt has 225.

- *Debt Markets:* London accounts for 20% of all global cross-border lending (some $1900bn), while German banks (not all based in Frankfurt) account for 9%. London's share increased over the 1990s. 60% of primary trades and 60% of the secondary market in international bonds takes place in London. The German government bond market is, however, larger than the UK market.

- *Equity Markets:* In 1999, the market capitalisation of the London Stock Exchange, at £1,819 billion was 2.04 times as large as the combined value of German stock exchanges (£892.2bn) and 2.12 times larger than Frankfurt alone (£860.5bn). Only the New York and NASDAQ exchanges are consistently larger than London (the position relative to Tokyo varies according to the yen/pound exchange rate). FIBV figures for 1998 suggest that the German exchanges are about 10% larger than the Paris market. The value of share transactions on the London stock exchange is over twice as large as Frankfurt's and nearly five times that of the Paris bourse, implying greater liquidity. London has the highest number of foreign stocks listed of any stock exchange (552 at end 1998, compared to 441 on NASDAQ and 392 on NYSE) and accounts for 65% of all turnover of such stocks, compared to the German stock exchange's 4%. The process of European stock exchange mergers and alliances may benefit Frankfurt in the medium term. FIBV statistics show that London's share of global equity market value (excluding Chicago, for which data are missing for the early period) remained relatively stable over the 1990s, rising from 8.8% in 1990 to 9.0% in 1998. The Deutsche Börse share rose from 3.7% to 4.2% over the same period, which does not suggest any major narrowing of the gap between markets. The mooted merger of the two markets (and possible link up with NASDAQ) clearly would change the dynamic greatly.

- *Fund Management:* London manages some $2,200bn institutional equity holdings, making it the most important fund management centre globally, ahead of New York ($2,000bn), Boston ($1,469bn) and Tokyo ($1,117bn). Frankfurt ranks 12th with $270bn, just ahead of Edinburgh ($239bn) and behind Zurich, Paris and Amsterdam in Europe.

- *Foreign Exchange:* the UK (and, hence, London) handled 32% of all global foreign exchange transactions (by value) in 1998, compared to 5% in Germany. The UK share increased over the 1990s. However, figures for the post-Euro period are not yet available. London's daily average trading – at around £386bn – is six to seven times larger than Frankfurt's.

- *Derivative Trading:* Frankfurt and London have similar levels of exchange trading of derivatives with a 10-11% share of the global market. However, London dominates over the counter trading, with a 36% share of the global market (measured by average turnover of contracts), nearly five times larger than Frankfurt's 7.3% share. In the first five months of 1999, the value of turnover on LIFFE was double that of Eurex (source: British Invisibles, 2000). Despite alliances and aggressive competition, the value of trading in futures on LIFFE still exceeded the combined DTB and Soffex (Zurich) turnover by some 44%.

- *Insurance Markets:* Germany's insurance market is ranked third in the world (after the US and Japan) with gross premiums of $152bn. The UK ranks fourth with $137bn, 6.5% of the global market. London's specialist transport insurance markets hold the leading position in global markets, with 22% of marine insurance and 27% of aviation insurance (German market share is 10% and 3% respectively). However, the UK's share of the market has been falling: in 1989, London controlled 37% of the aviation market and 31% of the shipping market.

- *Other Specialist Markets:* specialist markets in London include the International Petroleum Exchange, the London Metals Exchange and, complementing the marine and aviation insurance business, shipbroking through, *inter alia,* the Baltic Exchange and ship registration. London has a liquid and active bullion market: it was estimated that the daily clearance of gold and silver in spring 1999 had a value of some $9bn. While Frankfurt has no comparable markets, it has developed its securities and derivatives markets alongside the more traditional banking business and, in 1997, created the NeuerMarkt for technology stocks which has the potential to grow on the NASDAQ model. London's equivalent TechMARK market went live in November 1999 and was followed by relaxation of listing rules for high tech firms in January 2000.

The proposed merger of the London stock exchange, the Deutsche Börse and other exchanges once again raise questions concerning the precise definition of a financial centre. With the markets separate, firms wishing to raise capital have a clear choice: London or Frankfurt. The greater depth of the London market, then, is a key advantage. With a combined exchange, the decision is more complex since investment bankers and financial advisors have access to the whole market in either city. However, employment and income generation depend to a large extent upon where the arrangement takes place. London benefits from stronger networks amongst bankers, investors and fund managers; Frankfurt from closer proximity to mainland European industry and the expanding Eastern economies. Further, total business may increase from the greater capitalisation and liquidity of the combined exchange. NASDAQ's involvement adds a further complication. Within the US, the rise of NASDAQ has led to concerns about market fragmentation and competitive losses (Securities and Exchange Commission, 2000).

An international financial centre requires accessibility to facilitate face to face contacts. Both London and Frankfurt have major airports providing global interconnections. Rhine-Main is the second largest airport in Europe with a an annual passenger throughput of 39 million in 1996. First, though, is Heathrow, which catered for some 56 million passengers in the same year. Moreover, Gatwick, with 24 million passengers, was ranked sixth and there is additional capacity with London City airport, Stansted and Luton (these last two growing as business ports through the advent of cut-price airline competition). Paris's two main airports Charles de Gaulle and Orly were ranked third and fourth with combined passenger numbers of 59 million. Frankfurt's second airport, Hahn is small and some distance from the City. Frankfurt, however, benefits from its more central location in the European growth heartland with good motorway connections and, in particular, with the development of the high speed inter-city rail network. Even when the high speed link from the Channel tunnel is finally completed, London's peripheral position within Europe is a disadvantage.

A study by CEBR for the London Development Partnership (1999) attempted to combine various measures of competitiveness (salary and operating costs, productivity, property costs and the benefits of scale and scope opportunities) to produce an index of competitiveness. Such an exercise is fraught with methodological difficulties. Nonetheless, the index showed London to be more competitive than other major financial centres for "City" type activity:

Figure 4.2 Overall Competitiveness Index (London = 100)

City	Index	Rank
London	100.0	#1
New York	117.2	#2
Tokyo	143.4	#3
Paris	154.9	#4
Frankfurt	162.5	#5

Source: London Development Partnership (1999), page 20.

In summary, London dominates Frankfurt by virtue both of the scale of its markets and the breadth and diversity of those markets. This should not be a cause for complacency on London's part. With technology and global competition, market share can easily be lost in particular sectors and niches. However, Frankfurt could capture markets, grow rapidly relative to London, benefit from the consolidation of mainland European financial services – and still not offer the depth and breadth of markets found in the City of London and in city-type activity in the rest of central London. As Deutschebank (1998, p41) state, "we expect that Frankfurt am Main will be able to maintain its position as European finance centre number two *behind London"* [emphasis added]. The Economist (1998), similarly concludes that although London has, in some areas, lost its leadership, "*on the other hand, London has most of the ingredients essential for success".*

4.5 Survey Data on the Cities as Business Locations.

A Harris research centre survey carried out for Healey and Baker compared London, Frankfurt and Paris. It concluded that the advantages of London include the quality of the communication and travel network (although this is challenged by many) and a low level of costs reflected in more a favourable tax climate than Paris or Frankfurt.

Paris was penalised relative to the other two centres for low accessibility and high staffing costs. Its quality of lifestyle was considered superior to London but this criterion was considered to be least important. The regulatory framework governing transactions was seen to be an important factor in measuring the competitiveness of a financial centre: the World Competitiveness Yearbook 1998 (University of Lausanne) suggests that Frankfurt's financial centre has achieved the most satisfactory legal and regulatory balance for investor needs, ahead of London and Paris on level pegging. The overall taxation of non-residents is close to neutral in each of the three centres[2].

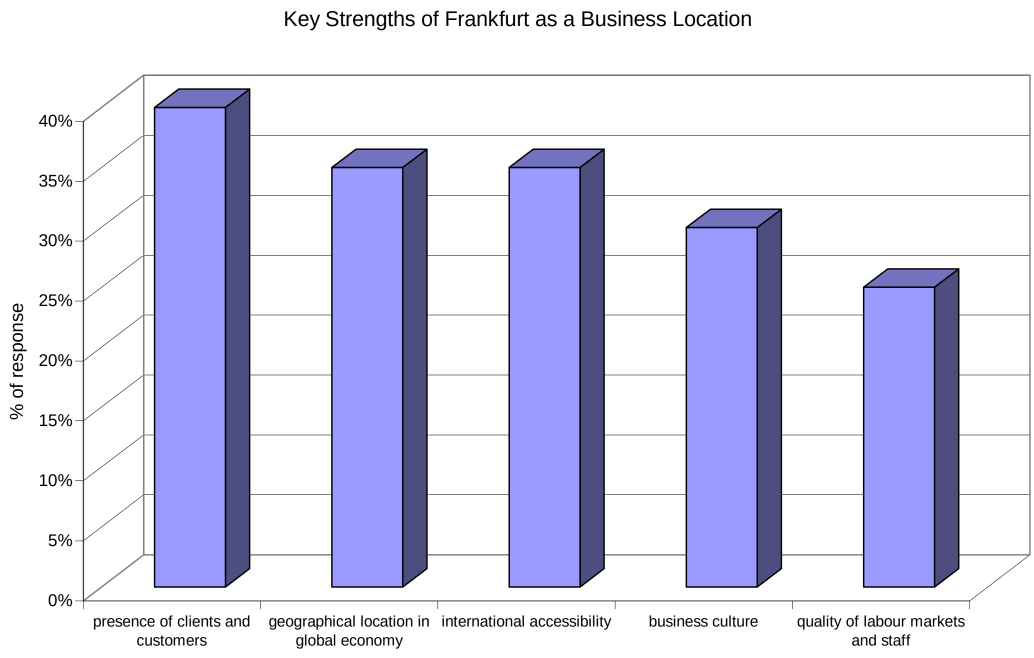
In The University of Reading survey of market participants, respondents were asked to rate the business environment in the two cities. The figures below set out the views of the participants. London's key attributes, mentioned by over half the respondents, are business culture and the presence of customers and clients, with quality of labour markets and staff mentioned by nearly half those replying. These are features of the urban agglomeration economies that were noted as the key to competitiveness in the information economy.

[2] (source: Management and Finance Techniques no 106,13, April 1999).

Presence of customers and clients featured for Frankfurt, too, but was mentioned by only a third of respondents as a major strength. Geographic location and international accessibility were the next most cited responses, with location of institutions (e.g. the ECB) and currency zone also mentioned by a number of respondents. Quality of labour markets was cited by less than a quarter of respondents, with a similar low proportion mentioning business culture. It seems, then, that Frankfurt's key strength lies in its location in the European heartland, with easy access to the emerging eastern economies. However, London's scale, diversity and urban information economies, allied to a favourable business environment, will be hard to overcome.

Figure 4.3 London's Business Strengths

Figure 4.4 Frankfurt's Business Strengths



4.6 Conclusions

Frankfurt has a number of attributes that enable it to compete with London. It is, however, hard to deny that London has overwhelming natural advantages:

- *a huge pool of skilled labour: more people work in the city than live in all of Frankfurt;*
- *breadth and depth in financial and capital markets and the existence of specialist markets and business services;*
- *lighter regulation and lower corporate and personal taxes;*
- *a stronger IT infrastructure;*
- *internationally mobile workers (financiers) drawn to London's more cosmopolitan environment.*

It has been suggested by the Corporation of London that these factors outweigh the Euro. With borderless electronic trading, staff can be in London and trade on the Frankfurt stock exchange. The decision about where to locate the trading room is potentially as much about lifestyle as other issues.

The Centre for the Study of Financial Innovation suggests that the dangers to London's dominance are connected with poor management of British financial institutions and the failure of Government to maintain a low-tax environment that has encouraged financial enterprise. London's recent problems - the scandal at Lloyds, the foreign take-over of almost every British owned merchant bank, the transfer to Frankfurt of German bond futures market and poor managerial performance of the London Stock Exchange are not to do with EMU but result from complacency and poor management.

Each city authority has a well-developed marketing plan. London is selling itself using the following qualities:

- large pool of skilled labour
- better IT infrastructure
- English language
- lower corporation and personal taxes
- better culture entertainment and restaurants
- large stock, foreign exchange and other capital markets

At the same time, Frankfurt is promoting itself based on strengths that include[3]:

- use of single currency
- location of ECB
- rapidly growing equity and capital markets
- Europe's largest economy
- cheaper property prices
- better transport and public services

[3] (source: The Observer 21 March 1999)

Yet the action being taken to increase the chances of success for each city primarily concerns commercial property. Frankfurt 2000 is a commercial property development plan designed to create sufficient space for critical mass in financial and support services to be established in the city. The Corporation of London's strategy seems similarly property focused, concentrating on the facilitation of the development of large floorplate office space to rival, initially, Canary Wharf, and, later, European competitors, from which group Frankfurt has clearly emerged as the most important. How real is this threat? To what extent are the property issues significant? We address these questions in Chapter Five.

5. THE PROPERTY MARKETS OF LONDON & FRANKFURT

5.1 Introduction: Property Markets and Competitiveness in London and Frankfurt

In this chapter, we consider the relative strengths of the office markets of London and Frankfurt and assess their contribution to competitiveness. We begin by considering the size, quality and costs of business space in the two markets and discuss Frankfurt's ambitious plans to expand supply. Next, developing work from the *Who Owns The City* project, we examine ownership and occupation patterns based on databases for the two cities. The strengths and weaknesses of the two markets are examined using evidence from the survey of market participants. Finally, we consider other property market sectors in terms both of their contribution to competitiveness and of the new requirements that an expansion of office space triggers.

5.2 Supply, Availability and Costs in the Two Markets

Any analysis of the supply of space and the cost of that space confronts major data issues. These include the areal definitions to be applied, definitions of business space, floor area (internal or external, including or excluding common services), vacancy (all empty space or only space available for sale or rent; how to deal with under-occupation), occupancy cost (rent and service charges, all cost including taxation?); the rent variable itself (headline rent or effective rent accounting for incentives?) and many others. As a result, any comparison of two markets must be fraught – particularly when those two markets are in different countries with different market structures and cultures. This section is intended to provide a brief overview to the scale of the market in the two cities.

Estimates of the total stock of space in Frankfurt vary, depending on the precise definition of the city's boundaries adopted. Most estimates suggest that the city total is around 8.8-9million m^2. This figure includes not only the core banking, trade fair and west end areas but also more peripheral developments and Niederrad, south of the river. It does, however, exclude the satellite areas such as Eschborn and Kaiserlei which are outside the city limits. This would add perhaps 1.5million m^2. Deutschebank suggest that the total office space in the wider region (defined as unterMain) is about 15million m^2. This makes Frankfurt only the fourth largest office market in Germany, behind Berlin, München and Hamburg.

From these figures, it is clear that Frankfurt's office market is small compared to that of London. Within the traditional boundaries of the City of London, the total office stock is around 7million m^2. Agents' estimates of the core and fringe City market suggest a figure of 9.25-10million m^2. Thus the City of London office market alone is larger than the whole of the Frankfurt market before any account is taken of the Docklands, Holborn or West End markets. Adding those markets in gives an estimate of 21million m^2 for the central London market – 2.4 times as large as the whole Frankfurt market. Beyond the central London area, estimation becomes more problematic. The Greater London market may contain 27-29million m^2, which implies that Frankfurt's market is only a third of the size of London's.

The Greater London figure, restricted to the City and the 32 boroughs, excludes office developments around the M25 and into the Thames Valley which, realistically, form part of the London market (for example, the Thames Valley corridor houses key IT software and hardware providers and the data processing, clearing, retail sales and back office financial service functions of City banks and institutions). No reliable estimates exist for this wider total: however, combining data from disparate sources provides a minimum office floorspace estimate in the area of be 35million m^2. Were secondary and tertiary quality space fully accounted for, the figure would be far larger.

Frankfurt is also substantially smaller than Paris. The Ile de France region contains around 40m^2, Paris (Départment 75) around 15million m^2. Office space in the Golden Triangle, at c.5million m^2, is less than the City of London total, however. These scale differences are important in the context of Frankfurt's ambitious development plans. Even if the full expansion of the city's offices is achieved, Frankfurt's total space – at around 13.5million m^2 – will still be less than half the London total, without allowing for any increment in the London figure, and still smaller than Paris. Were London's stock to remain static, Frankfurt's space would have to increase at 6% per annum for twenty years before equality was achieved. Even in the late 1980s development boom in the City of London, growth rates were little more than 3% per annum.

Agents' estimates of the vacancy rate in Frankfurt vary. At the end of 1998, most suggested a figure of around 6-7%, down from its peak in the mid-1990s. However, the vacancy rate fell over 1999 to around 5% in the third quarter. This is around the same figure as that reported for the City of London at the same date, slightly higher than the West End and Mid Town figures. However, in Frankfurt, the total amount of vacant space is around 550,000 m^2 while the central London total is 935,000.

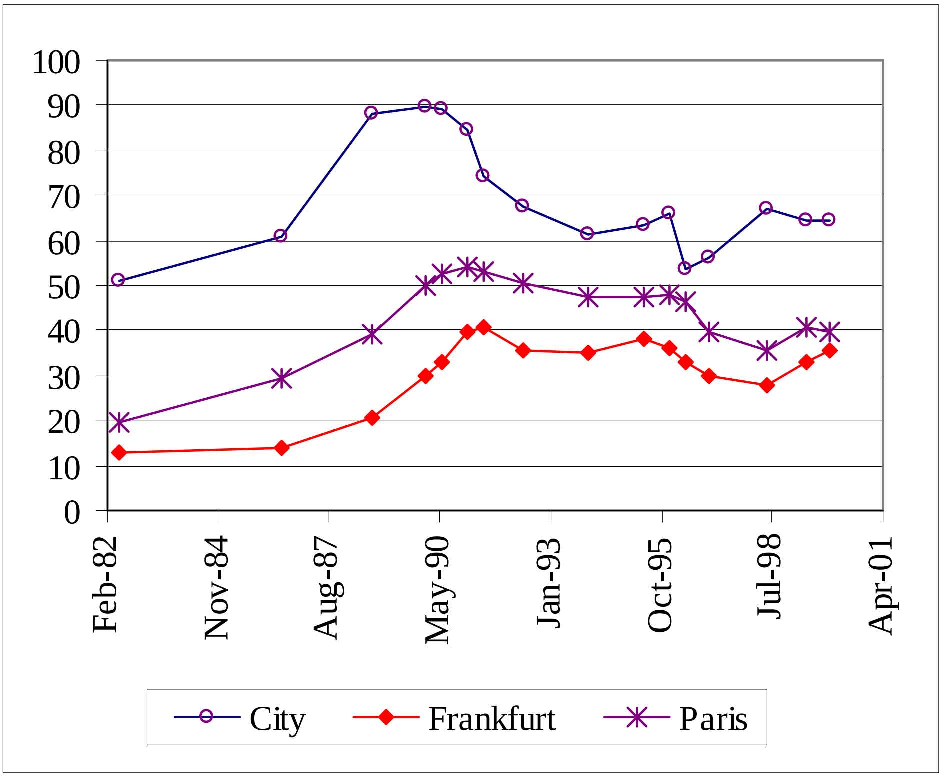
These differences become more stark when consideration is taken of the quality of space. Much of the available space in Frankfurt is older space in need of renovation and, as we were told by an agent "*nobody wants old space; it cannot be let*". Excluding this Class C space reduces the available, quality, space to around 315,000 m^2. For central London, even with fairly strict definitions, there was some 658,609 m^2 of class A and class B space on the market. Müller suggest that, of space on the market, only 17% is new, with a further 13% classified as modern. Thus, 70% is standard space or in need of renovation. Frankfurt's office stock includes a substantial proportion of space built in the 1970s that has been subject to functional obsolescence and depreciation and may already need redevelopment or substantial refurbishment.

In both markets, there are supply shortages. In London there is a reported shortage of large modern units, despite recent increases in supply (most of the new space in and around the City is bespoke or pre-let rather than speculative). This may be solved by the second phase of Canary Wharf, further expansion in Docklands and the Paddington Basin scheme. In Frankfurt, large buildings are in very short supply – and large, here, means lettings of >2,000 m^2. It has been suggested that there are only four properties in Frankfurt that offer the opportunity of lettings >10,000 m^2 and none of these are located in the centre. Planning and labour regulations (particularly the right to natural light) have, to date, precluded the development of large floorplate buildings, in part explaining the number of high rise skyscrapers in the city.

Assessing occupation costs in the two markets is problematic as lease terms vary, as do definitions of floor area, the split of responsibilities between landlord and tenant and the package of tenant incentives on offer. Time series comparisons are hampered by exchange rate movements. As a benchmark, Richard Ellis St Quintin provide estimates of prime occupancy costs in both markets. In Winter 1999, these show Frankfurt at £383psm, the City at £694psm and the West End at £840psm. This implies that Frankfurt's occupancy costs are around 55% of the City's. This total occupancy cost includes local property taxes – which are substantially higher in London. In both markets, rents are well below their previous peaks in nominal as well as in real terms.

The figure below plots total occupancy costs for Frankfurt, London and Paris. While London remains well above the other two markets, there is tentative evidence of a convergence of costs. Across the 1980s, London occupation costs were four times those of Frankfurt. This differential has halved with London costs now less than double. This appears to be part of a more general trend of cost convergence in financial centre markets. Across the 1980s and 1990s, after accounting for cyclical movements, costs grow fastest in those markets with a low starting rent while the variation between occupancy costs are narrowing[4]. Costs, of course, reflect the level and nature of demand as well as the amount of space available. Convergence implies both mobility of firms and an upgrading of demand in the "low start" cities.

Figure 5.1 Total Occupancy Costs, 1982-2000



Source: Richard Ellis St Quintin.

[4] Formally, these are known as beta-convergence and sigma-convergence.

This brief review has highlighted the difference in scale between the two markets. The vastly greater size of the central London market means that it offers a greater range of space, in terms of size, quality and specification. This is important in maintaining competitiveness, since diversity of firms requires diversity of business space. Major financial service firms may require modern, large floorplate offices. The requirements of their suppliers - of business and professional services, IT solutions, office services – may differ markedly. Creation of new quality space only contributes to diversity in as far as it frees up older space allowing firms to filter through the system.

One final factor needs to be considered: the structure of the market and the quality of services. We quote a major German bank's view: "*British commercial property provides some conditions of business that make it especially attractive for an investor … analysis of the property market has a long tradition … and provides a high level of transparency … characterised by low entry and exit costs for investors in comparison to Germany and France".* This mature institutional structure not only reduces entry costs for investors, but also reduces tenant costs – particularly by reducing search costs. For investors, the depth of research and availability of performance data contribute to market liquidity. This has encouraged both domestic and international investors into the market, providing both the City's international character and a flow of capital that has enabled the upgrading of the stock of space. Whether Frankfurt can achieve comparable transparency and liquidity remains to be seen.

5.3 The Frankfurt Plan and the City's Response

In February 1999, Frankfurt unveiled a ten year programme (the Frankfurt2000 or the High Rise Framework Plan) to increase office space by up to 4.5million m^2 with some 2million m^2 (21.5m sq. ft.) resulting from the development of up to twenty new skyscraper buildings in two zones, adjacent to the trade fair district and the station. The plan is intended both to counter quality stock shortages and to act as a property-led competition policy. Implicit in the plan is the idea that a supply-led approach will encourage firms to locate in the centre, with consequent multiplier effects for the local economy. This is similar in conception to UK urban regeneration schemes, including those in the Docklands, but pitched at international financial services.

It should be noted that the impetus for much of the growth comes from the proposed redevelopment of the main station, which has yet to reach full approval. Furthermore, the scheme requires private developers, who must assess the financial viability of the schemes (and, hence, judge the likelihood of Frankfurt capturing a larger share of international financial business from London due to the ECB, the Euro zone and direct competition in banking and securities activity). The skyscraper plan in part reflects the characteristic skyline, and in part results from the German labour and health and safety laws relating to natural light. This makes 'groundscrapers', large floorplate buildings, impossible under the current planning regime.

Associated projects include upgrading of public spaces (squares etc.); upgrading the river Main area; re-orienting development back towards the river Main (for example, residential development on south bank at Saxenhausen); the re-organisation of rail transport and tracks including new underground rail station (Frankfurt 21 plan); and the development of new neighbourhoods between existing residential areas.

In response, the City Corporation moved to relax the City's policy restricting tall building, earmarking potential sites in the unitary development plan. The move was a response not only to the implied threat from Frankfurt but also to the expansion of space in Canary Wharf, Docklands and elsewhere. While the City Corporation has publicly stressed that it sees expansion of City-type employment anywhere in central London as beneficial in maintaining London's position as the principal European financial centre, there is clearly a desire to retain business in or near the Square Mile. Given the importance of information linkages for high added value financial services, this may be a sensible, pragmatic response.

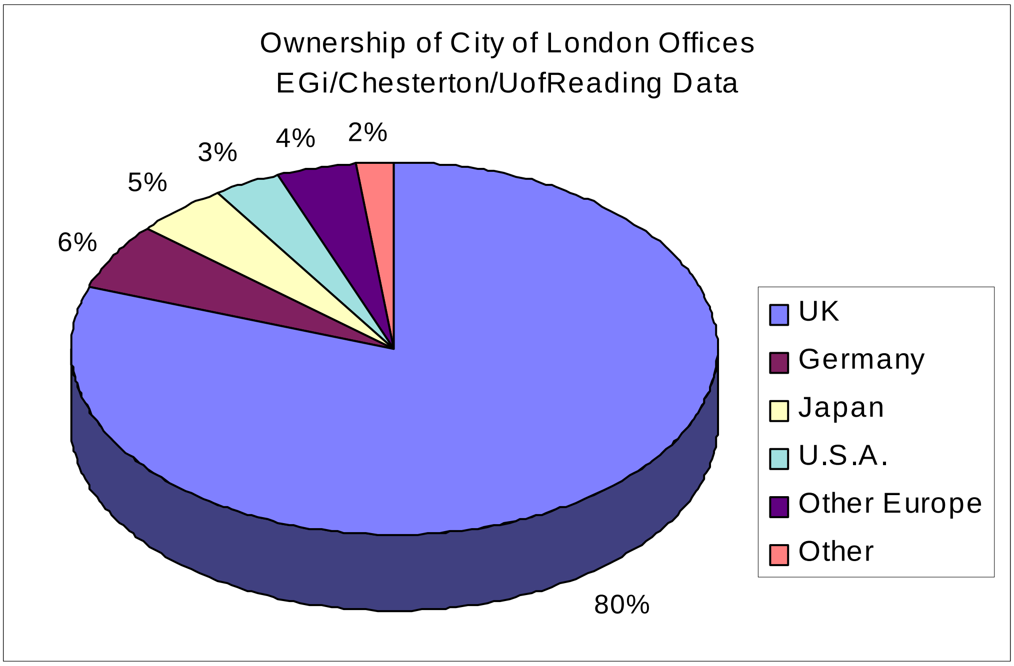
5.4 Occupation and Ownership in Frankfurt and London

In this section, we compare office ownership and occupation patterns in the City of London with those of Frankfurt. The City of London data are drawn from the *Who Owns The City* research conducted by the University of Reading and funded by Development Securities plc. Information on Frankfurt has been collected specifically for this project. We draw comparison with the City of London due to Frankfurt's ambition to become Europe's principal financial centre. Nonetheless, the entire central London office market provides a property resource for firms operating in, or moving to, London.

5.4.1 The City of London Market

Offices in the City are owned by firms from thirty-three countries. In the core City, UK organisations own just over 80% of all space. Only Germany, Japan and the United States have significant holdings in the City centre. Nonetheless, overseas ownership in the core accounts for some 975,000 square metres (10.5m square feet) of net lettable space. For the City fringe, the area immediately outside the square mile centred on the Bank of England, the figures are broadly similar, with around 14% of office space being in overseas ownership. The increase in the proportion held by the Rest of Western Europe results largely from Swedish holdings. Combining the two samples produces total overseas ownership of around 19%. Applying this to the City Corporation's estimated office stock produces a figure of 1.3m square metres (14.38m square feet) of office space in overseas ownership.

Figure 5.2 International Ownership of City of London Offices

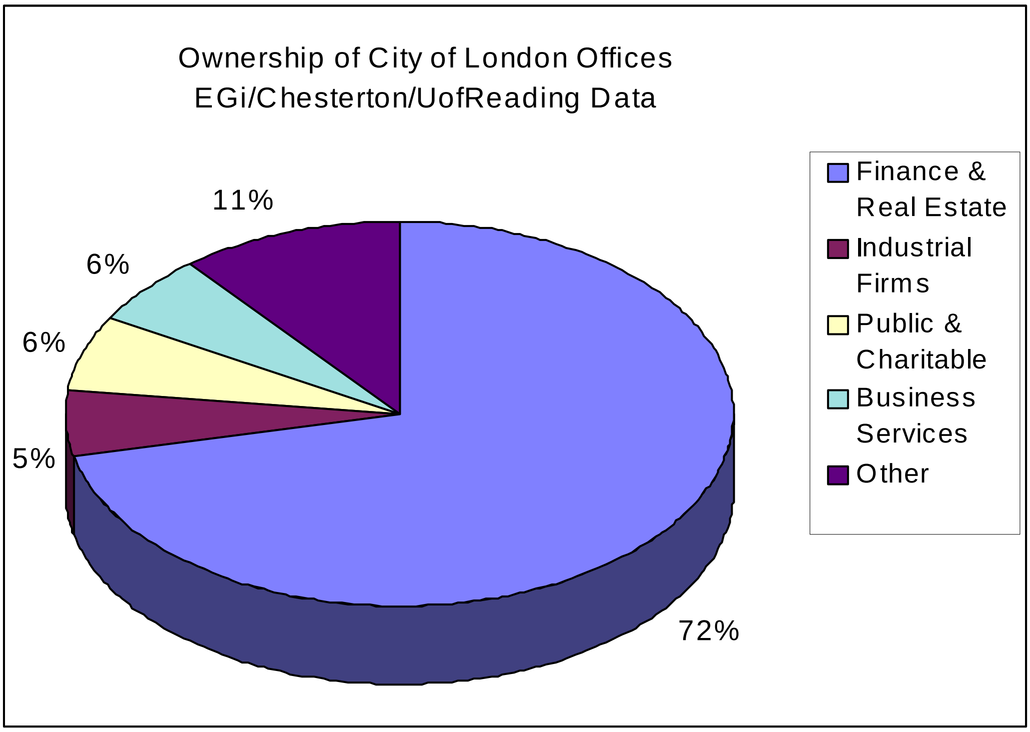


As *Who Owns The City* showed, around 27% of the core stock is owner-occupied. Owner-occupation levels are, however, much higher for overseas-owned offices at 49%. Owner-occupation levels vary by country of origin. As a result of the greater extent of owned operational property, 32% of the owner-occupied stock is owned overseas. As a corollary, UK firms own 86% of tenanted investment space. Only German (and, to a lesser extent, Japanese) investors held substantial amounts of tenanted property. A proportion of the owner-occupied space will, of course, be sub-let.

As expected, ownership of City of London offices is dominated by *FIRE* (finance, insurance and real estate) industries. For Core City offices, these sectors own 80% of the total office space. In part, ownership is related to the function of the City as an international financial services centre. Over half the owner-occupied space is owned by financial services companies including banks. However, ownership in the investment (tenanted) sector is also heavily concentrated, 81% of space being held by *FIRE* companies.

The overseas owners are equally dominated by FIRE sectors. Of overseas owners in the City Core, nearly 97% were finance, insurance or real estate companies. Foreign banks, merchant banks and brokers owned 58% of overseas core offices; a further 23% were owned by insurance companies or institutional fund managers (including pension funds) while 16% of the foreign owned space in the core was held by specialist property development and investment companies.

Figure 5.3 Ownership by Type of Firm



35.4% of City Core office space is occupied by overseas firms. Around half these overseas occupiers are in offices owned by UK companies. Owner-occupation, as noted above, accounts for a considerable proportion of the remaining space. Only 3.3% of overseas businesses occupy office space that is owned by a foreign firm from a different country or region. This may suggest that the City property market is not yet completely 'international' in nature.

Figure 5.4 International Occupation of City Offices

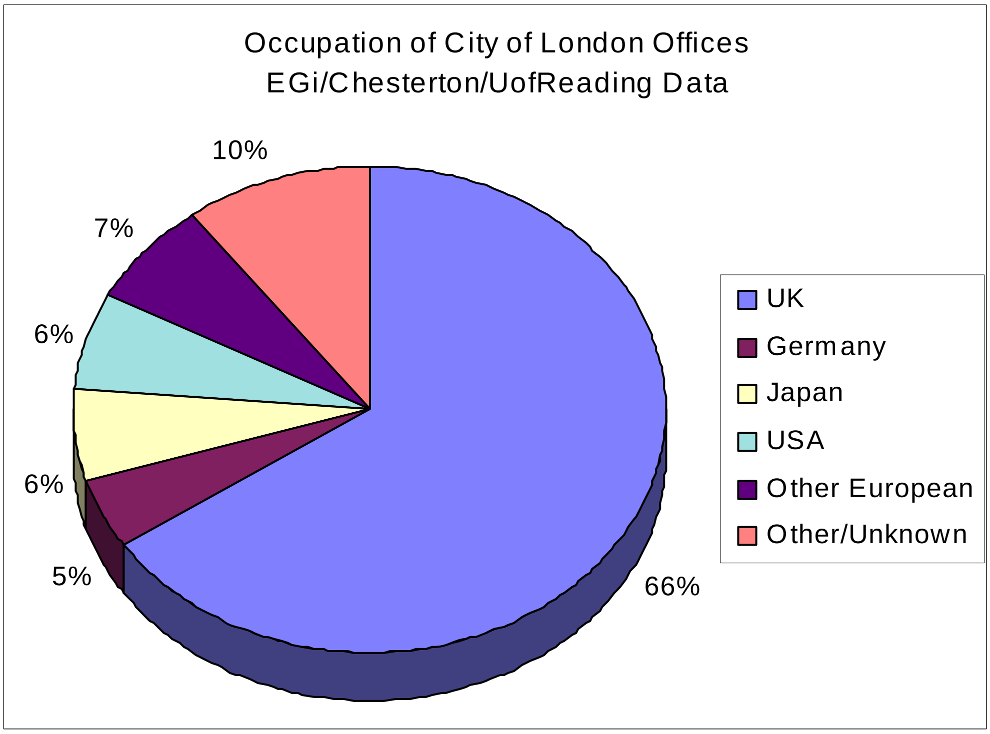
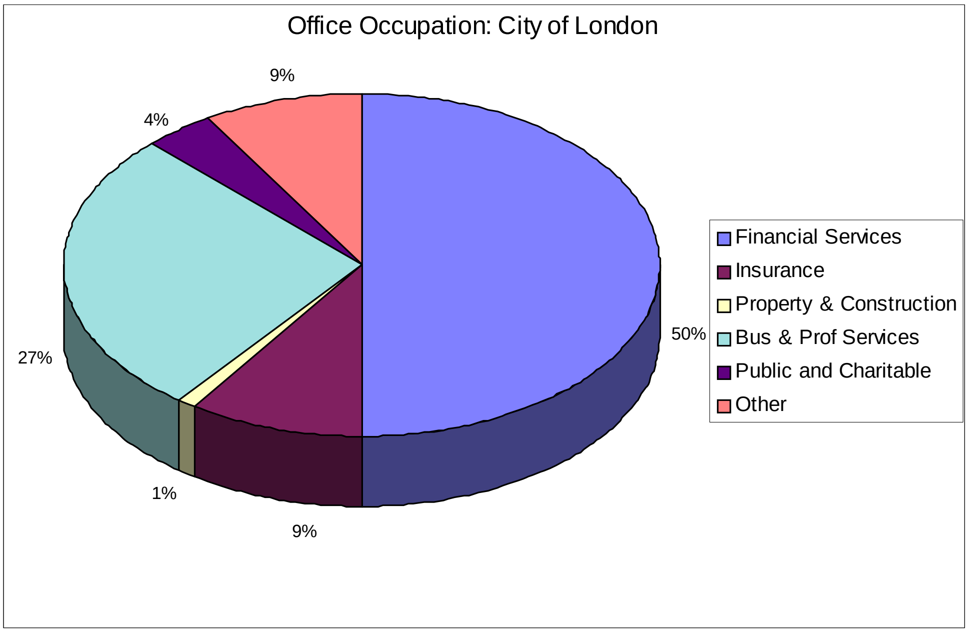


Figure 5.5 Occupation by Type of Firm, City of London



One feature of the City of London market that may be a cause for concern is the growing linkage of ownership and occupation. Over half the office space in the City of London core is simultaneously owned and occupied by finance, insurance and real estate firms. Adding in business and professional services (on the grounds that they are, in general, supplying services to financial services firms) increases the proportion to nearly 75%. Functional specialisation in major financial service centres such as London has led to closer linkages between property investment, occupational and development markets. The occupiers in the City are, primarily, financial services firms. These same type of firms own the properties and provide funding and finance on the supply side. This creates potential risk when financial services markets go into recession, since problems in the occupational market (falling real rents, rising vacancies) lead to poor performance in the investment and development markets. Thus the links between the property and financial services markets may serve to deepen recession. The West End and Mid Town markets, with greater diversity of occupation, may cushion this effect for central London as a whole.

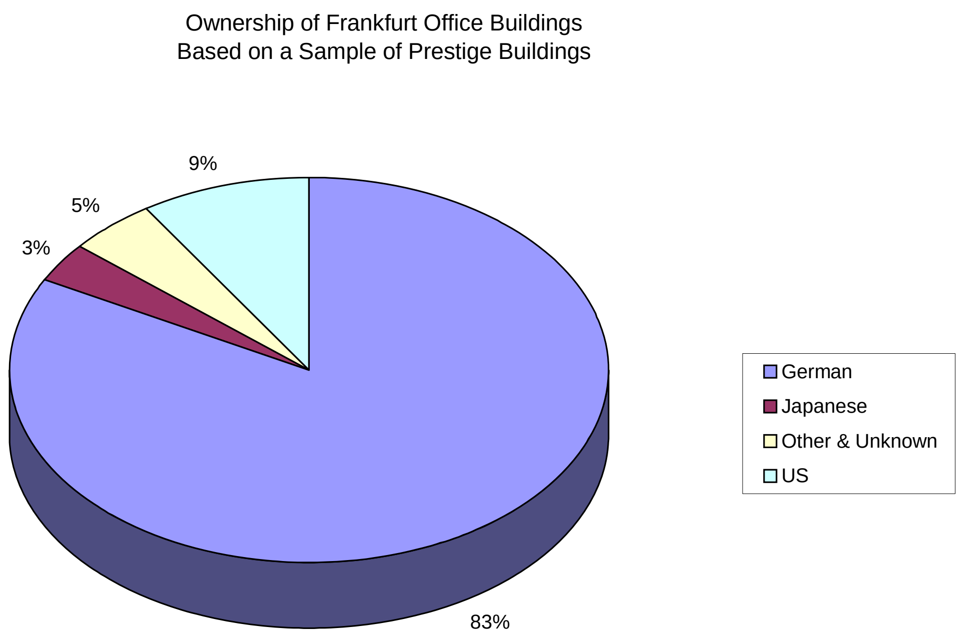
Analysis of ownership and occupation patterns, then, in the City of London office market has shown both the importance of overseas investment and the dominance of both occupation and ownership by the finance, insurance and property sectors. Functional specialisation in the City of London can be seen as both a strength and a weakness. The interlinkage of ownership, financing and occupation may lead to an intensification of the recessionary phase of the property cycle. However, the depth and breadth of the international financial services markets create agglomeration economies[5] which strengthen the City's competitive position as the European financial capital and thus help to sustain both occupational and investment demand for office space. How does Frankfurt compare?

[5] Gordon & McCann (2000) discuss different forms of agglomeration economy and spatial clustering in London. They identify a strong financial service cluster in the City benefiting from shared intelligence, potential interaction and competition. No other industrial group exhibits similar clustering benefits.

5.4.2 The Frankfurt Market

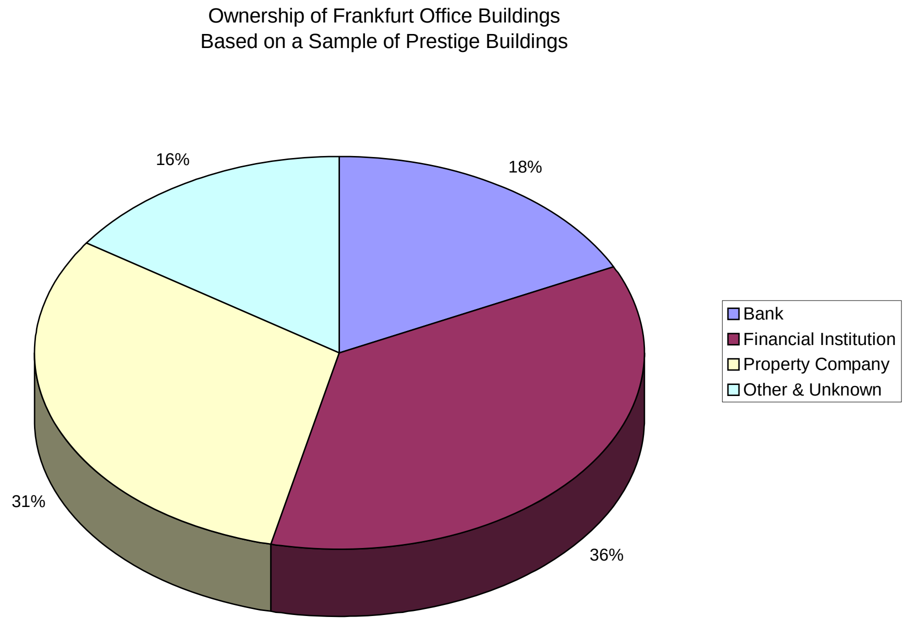
Comparable data for Frankfurt are much harder to obtain (an interesting fact in itself, perhaps indicative of lack of market transparency?). The results presented below are derived from a database of prestige office buildings assembled specifically for the research. The database covers thirty of the largest buildings in central Frankfurt. The floorspace in those buildings amounts to around 10% of the total floorspace in the city as a whole but a far higher proportion of the prime central market. Given the nature of the database, it may tend to overstate international ownership and occupation when compared to the more comprehensive City of London data. Fuller details of the database and data collection methods may be found in Appendix 2.

Figure 5.6 International Ownership, Frankfurt



From the database, around 17% of space is owned by non-German firms, a lower international ownership than found in the City of London. Some of this ownership is via joint-venture schemes or by German firms with international parent firms. Furthermore, the non-German ownership is probably overstated, as the sample concentrated on large, prestige buildings in the central area, excluding smaller, and secondary properties. Thus, from discussions with market participants, agents and occupiers, it is felt that the level of foreign ownership in the overall Frankfurt office market is much lower than these figures would imply. As might be expected, a very high proportion of space is owned by banks, institutional investors and property companies. The other/unknown category includes business services firms, trade and marketing firms and firms whose business has not yet been clarified. These figures suggest that ownership is even more concentrated in the FIRE sectors than the City of London. In the wider Frankfurt market, we would expect to see more owner-occupied non-financial corporate headquarters buildings.

Figure 5.7 Frankfurt: Ownership by Firm Type



Sixty seven percent of the space on the Frankfurt database is occupied by banks, with the remainder being in professional and financial services (or in finance-related trade and marketing). The figures include 4% of space allocated to hotels or restaurants: a number of the schemes in the database are mixed use, although predominantly in office usage. Once again, these figures are similar to those found in the City of London (although comparable figures for the central London market reveal a much more diverse pattern). 73% of occupiers where we were able to identify the nationality were German firms – a slightly lower proportion to the City of London where around a third of office space is occupied by non-UK firms. However, the presence of the European Central Bank and associated organisations to some extent distorts the results. In general, the occupation of Frankfurt offices seems less cosmopolitan in nature.

These figures suggest that Frankfurt is somewhat less international in character than the City of London. If figures were available for the whole market, rather than for the larger prime space in the centre, then foreign ownership would be well below 10%. By industrial sector the ownership and occupational structure in Frankfurt is very similar to that of the City of London. Consideration of the Central London market rather than the core City would have shown greater diversity, particularly in occupation. The concerns about lack of diversification and the linkage of occupation and ownership expressed for the City of London apply equally to Frankfurt. Despite its larger industrial base, the Frankfurt office market is inextricably linked to national and international financial markets and, hence, is vulnerable to any downturn.

Figure 5.8 Frankfurt: Occupation by Type of Firm

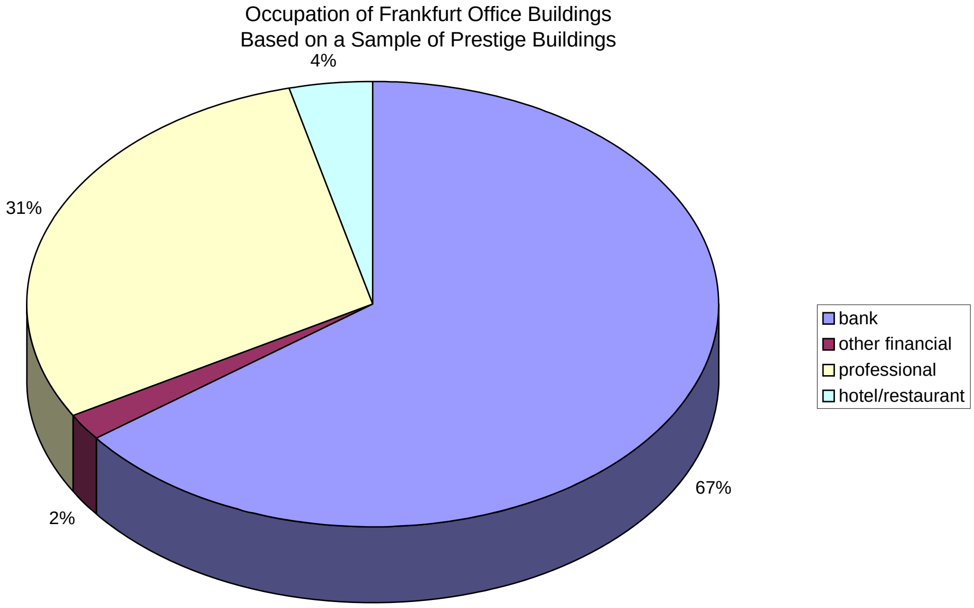
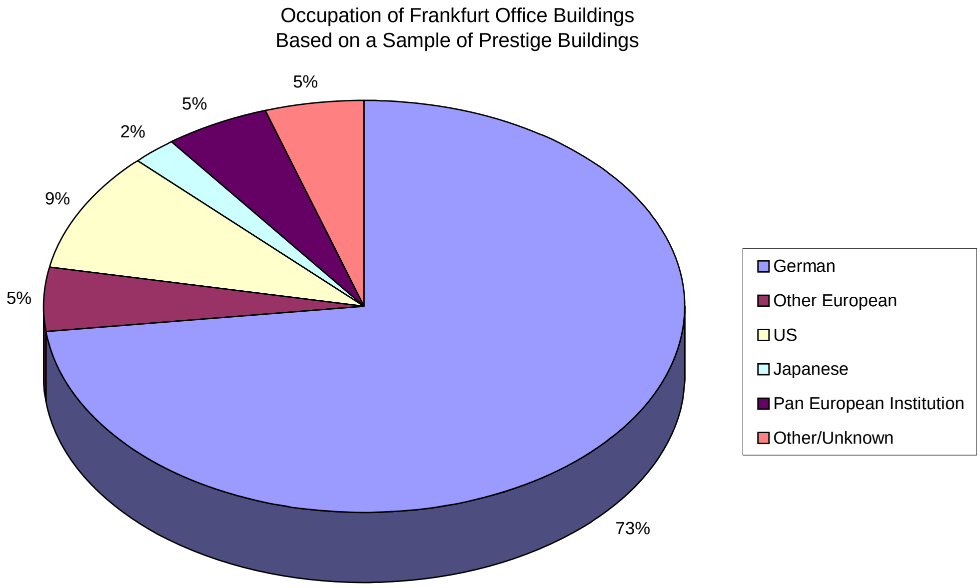


Figure 5.9 Frankfurt: Nationality of Occupation



5.5 The Strengths and Weaknesses of the Two Office Markets

As part of the survey of market participants in London and Frankfurt, we collected views on the strengths and constraints of the two markets (fuller details of the survey procedures can be found in Appendix 2). The results reported here identify the most frequently cited strengths and weaknesses (as a proportion of all respondents commenting on the specific market). The response rate for London was higher than for Frankfurt. However, over half the sample commented on the Frankfurt market.

For the City of London, key strengths identified by those surveyed related in large measure to space availability. Over 40% cited the availability of quality modern floorspace, with a similar proportion identifying general availability of space. The quality of real estate brokerage and agency services was mentioned by more than a third of respondents. Other factors were cited less often, although 18% of those surveyed cited the quality of telecommunications as a strength of the London market.

Figure 5.9 London Office Market Strengths

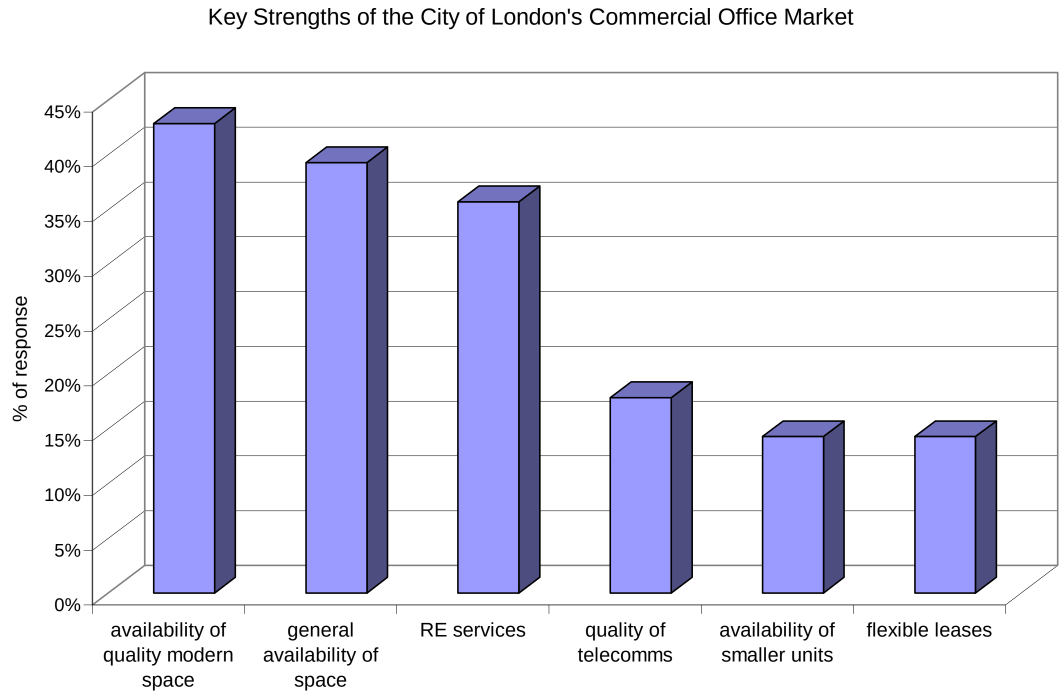
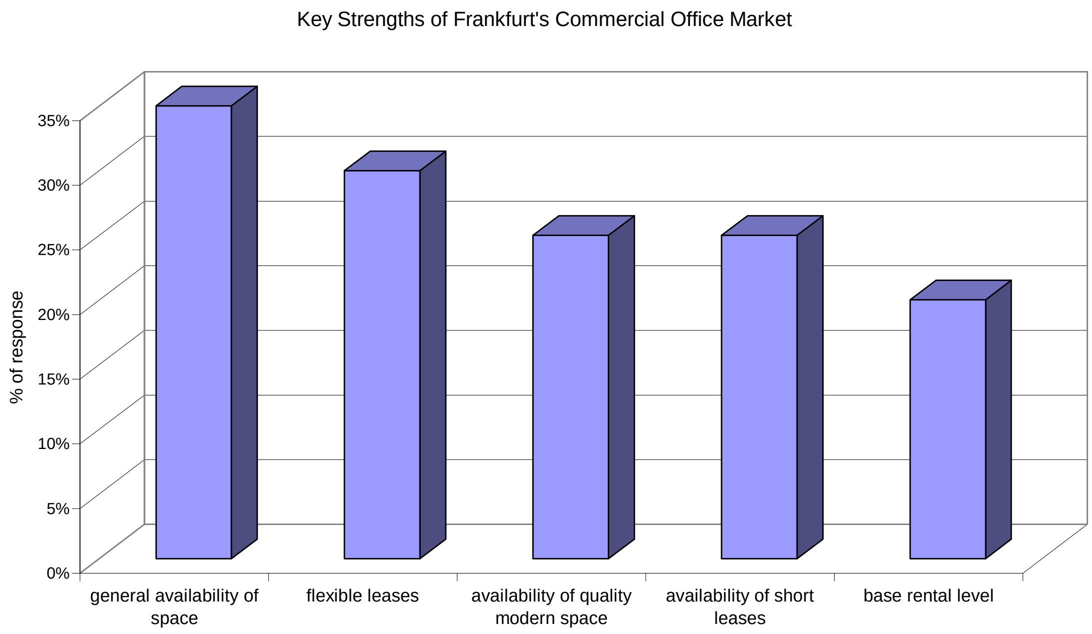
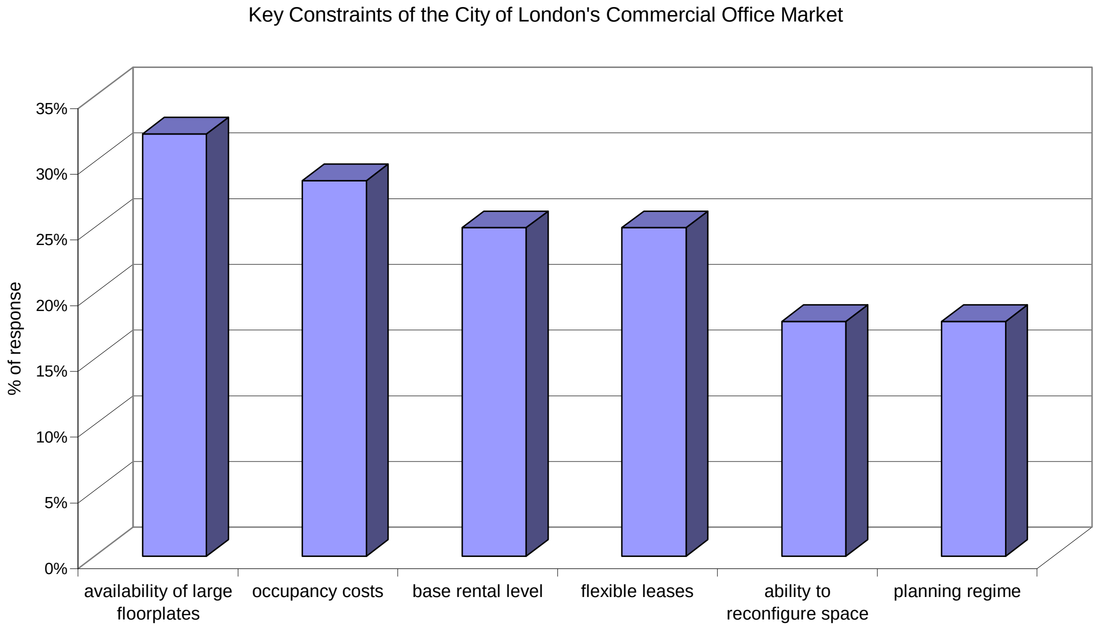


Figure 5.10 Frankfurt Office Market Strengths



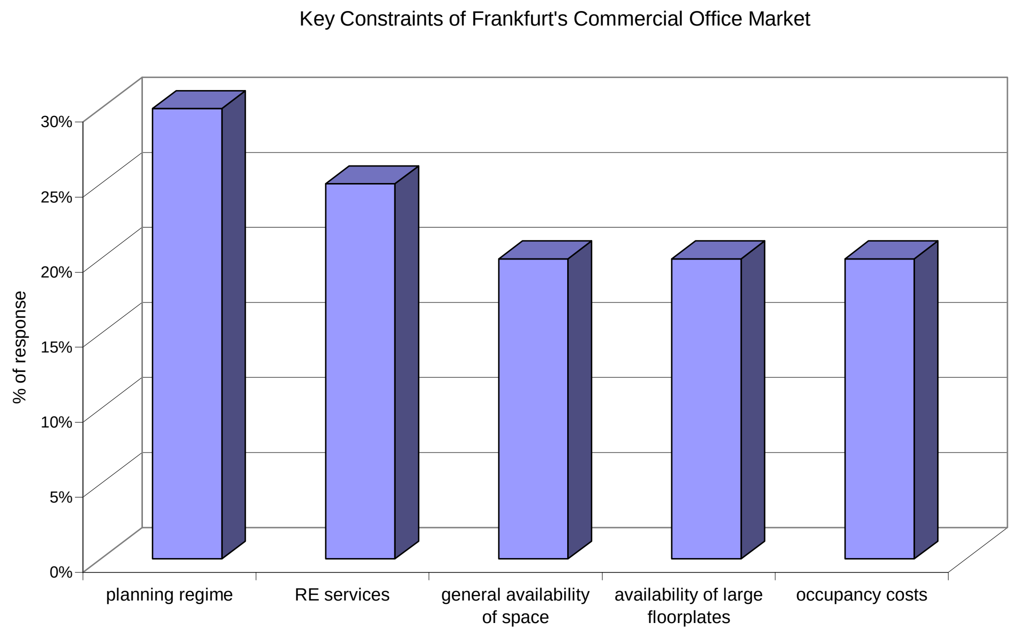
For Frankfurt, general availability of space again figured as a key strength: however, it was mentioned by just 35% of the Frankfurt respondents. Equally important factors concerned tenure and the lease contract: the availability of short leases and flexible leases featured highly. Factors mentioned by a small number of those interviewed included base rents and the availability of quality space.

Figure 5.11 London Office Market Constraints



In London the main constraints and weaknesses related to lack of specific types of property (most importantly, large floorplate office space and flexible leases) and costs (both base rent and total occupancy cost mentioned by over a quarter of those surveyed). In Frankfurt, respondents were more likely to identify constraints and weaknesses than strengths. Key problems identified included the planning regime; general availability; the lack of modern offices and buildings with large floorplates; and the quality of real estate services. 15% of those interviewed cited taxation as a market constraint.

Figure 5.11 Frankfurt Office Market Constraints



Overall, the survey results, confirmed by comments made by participants, point to a marked difference between the two cities. For the City of London, the overall strength is the size and diversity of the market, providing a pool of available space. Access to that space is facilitated by strong real estate services. The major constraint to the operation of the market is seen to be inflexibility in lease contracts. Despite erosion of the dominance of the 25 year institutional lease, the scarcity of short leases or flexible forms of occupation is seen as a problem. Finally, occupancy costs were seen as a problem by a minority of those responding although, as noted above, London rents in real terms are still well below their late 1980s peak and there is some evidence of convergence between the two markets.

In Frankfurt, by contrast, short and flexible leases are seen as a strength. However, it is availability of space – and specifically the availability of modern space and large floorplate buildings - that are seen as a constraint. Frankfurt's planned office expansion may help the general supply of modern space. However, the planning and regulatory regime – identified as a key weakness – hampers the market's ability to respond to changing demands. The skyscraper plan, in part driven by health and safety in the workplace regulation, will do little to resolve the lack of large floorplate buildings.

Overleaf, we set out some of the detailed comments made by the survey respondents. They confirm the general findings of this chapter on property markets and the previous chapter on financial markets and competition. For most of those surveyed, London's international character, size, diversity of services and availability of space place it in a dominating position. The physical constraints of the City and the pressure on the public transport network seem to be the major weaknesses, which Frankfurt could exploit. However, Frankfurt is seen as being parochial and inflexible, hampering its ability to exploit these advantages.

ADDITIONAL COMMENTS FROM THE SURVEY PARTICIPANTS

As regards occupancy costs, whilst London's unit cost is higher, the productivity per unit is also substantially higher. Therefore rent is not the key measure but rather efficiency and productivity. Roughly, each Frankfurt employee occupies twice the space of a London worker.

In Frankfurt, people are less relaxed ; less mixing - more formal business culture, less open

In London, public transport congestion with an improved local economy will become a major issue in the short term.

In addition to clients/customers and appropriate qualified staff availability, the key reason for a London location is being within our geographic 'cluster' facilitating better overall marketing environment

Political pressures/environmental issues also impact - for instance in Frankfurt no space can be further than 15m from daylight. This makes for an inefficient layout

Other issues include language (a London strength), accessibility (a London strength) and access to specialist skills set (a London strength) …

We have to be in central London and central Frankfurt to service our clients. However constraints and costs in both cities mean that we are locating on the outskirts where this is good value for money.

The other property factors highlights why London will remain the key financial centre of Europe's financial zone. It is the larger centre and can offer the cultural facilities which Frankfurt can never match due to its size. There will always be this disparity.

Strength of London - availability and range of businesses and business services, international environment. Major issues: costs, housing and transport. Not being part of the Euro zone is a weaknesses. By contrast, Frankfurt’s strength is being at the heart of the EU.

London - business culture - banking tradition, language, dominant UK law in business, world city London with Great attraction the [underline] trade place in European time zone. Frankfurt - a small city - German language lacks international flavour, good environment.

The missing variable here is transport structure. London is at breaking point. Frankfurt is a small town with none of the same challenges.

The two cities are not comparable. London is an internationally established centre with multi-national culture, entertainment and tradition. Frankfurt is a financial 'village' - has a non-existent cultural/socio-economic tradition.

London is more international. Frankfurt important for local or Euro - but not international - business. London's regulatory environment is much freer. London has quality telecommunications networks.

There’s a serendipity effect - London has it, Frankfurt does not. Frankfurt - too restrictive environment.

City of London. 1. Developers desperate to develop every square foot regardless of viability of end product. 2. Physical infrastructure/environment/historic narrow streets leads to sub-optimal development shapes. 3. Transport (road in particular) remains a problem.

The development industry has now woken up to the fact that floors with large floorplates are a major requirement for most equity dealing etc. companies.

Public transport is a critical issue in London particularly anticipating future control on private car use.

London is a huge financial services facility, with a skilled workforce, global big hitters locate here - history and culture language presence of good housing and international schools excellent IT. The constraints are an over-stretched public transport system, costs.

5.6 Other Sectors and the Impact of an Office Expansion

Frankfurt's ambitious plans for expanding its prime office space raise a number of questions. Some relate to the office market itself. As we note above, the tendency of firms to concentrate on their core skills and capabilities – particularly following consolidations, mergers and acquisitions – creates a demand for specialist business and professional services. All of these services require space. How much *additional* support space will have to be built for the tax, accountancy, legal, business and property services supporting the financial sector? Will there be an appropriate mix of space for all these services in terms of size, quality and cost? The size of the central London office market provides that diversity, but even here there are pressures. It was recently reported that there were active requirements for 47,000 m^2 of space in the City fringes for telecomm companies alone. Another office demand in an international market is for serviced offices or business space. The e-suite international database lists 59 central London business centres, with a further 49 in Greater London and 31 in the Thames Valley. For Frankfurt, just ten are listed although some smaller/local German operators may not be recorded on the e-suite register.

Another property demand induced by growth in the office sector is for hotel accommodation. Frankfurt's occupancy levels are comparatively low (reported at around 45-50%), perhaps reflecting the lack of cultural attractions. However, the total number of bed spaces is estimated to be between 17,000 and 22,000, around 4,000 - 5,000 of which are high quality. Paris, accommodating some 12 million visitors, has perhaps 75,000 bed spaces with occupancy levels around 65%. London has nearly 114,000 bed spaces – seven times as many as Frankfurt. Occupancy levels are far higher, as much as 80%. If Frankfurt is to compete with London for financial employment, then it will require a considerable expansion in its hotel offer – and it will need to demonstrate to major chains that hotel development is viable, given the current low levels of usage.

An expansion of financial services employment in Frankfurt raises other questions. Where will the workers come from? Where will they live? How will the infrastructure accommodate these workers? An expansion of the workforce requires housing, schools, hospitals and other health care facilities, retail outlets, entertainment and cultural facilities and other associated developments. These, in turn, generate infrastructure requirements such as utilities and transportation. While the increase in regional income and taxation helps fund or subsidise some of these developments, they require planning and land-use management.

Frankfurt's population declined in the 1960-1985 period, primarily because there was not enough space for housing and the city invested in workspace. Concerns have been expressed about the consequence on the population displaced to peripheral locations (many of them low income migrant workers) and the pressures on services in those peripheral towns. Now there will be no permissions for conversion of residences to offices as the city attempts to attract city dwellers. This, coupled with required space per employee, increasing at 0.7% per annum, means the city needs large amounts of new office space. Housing costs in Frankfurt are high and additional demand will add to inflationary pressures.

The situation in London is similarly problematic. The very high density of population in London and the South East[6], allied to restrictions on development, has resulted in very high house prices and rents. While this may be less of a problem for senior finance and business services staff, it presents difficulties for support staff. The quality and cost of housing in the region is identified as a major problem.

Of still greater concern is the state of the public transport network in London. Lack of capital investment in the infrastructure has resulted in a system that, in peak hours, is at near full capacity. This must be a major constraint on growth in the City and is a recurrent theme in discussions of London's problems. Clearly, in a metropolis as large as Greater London, an internal transport solution must involve public mass transit. While the population of Frankfurt is tiny compared to London, there are 500,000 daily commuters into Frankfurt, 66% by car, and 1.2m people in the city every day. Any substantial increase would put pressure on existing delivery systems.

5.7 Conclusions

As the supply figures make clear, the Frankfurt office market is small by comparison to that of central London, ranking only fourth in Germany. The City of London office market is far larger than the core banking and financial district market in Frankfurt. As a result, London offers a far greater range of space in terms of size, age, configuration and quality. This makes it far more likely that a firm will be able to find an appropriate building and provides space for the vital ancillary support services and niche firms that are vital to the operation of a major financial centre. Both markets suffer from specific shortages of quality large buildings and both have ambitious plans to expand their prime office space.

In general, the central London market is more transparent than the Frankfurt market with good data, a tradition of research and analysis, and better developed real estate services. This reduces entry and search costs for both tenants and owners. It has contributed to the liquidity of the prime office market and encouraged inward investment – not least of German open ended funds. This flow of capital assists in the development of new space and the upgrading of existing stock. Frankfurt has yet to achieve such transparency and liquidity.

Both markets exhibit some inflexibility. In London, inflexible leases are an area of concern, with the long, onerous institutional lease still dominating the letting market. This lease form sits uneasily with the mobility and dynamism of international financial services. In Frankfurt, inflexibility comes from the planning system and from labour laws which inhibit the design of space suited to major banks and financial institutions.

Expansion of the prime office market triggers new requirements in other property sectors and for upgrading of infrastructure. Pressure points in London include the transport system and housing costs. Currently, there are less pressures in Frankfurt (although social problems exist in surrounding towns). However, if Frankfurt2000 were implemented, the impact on the surrounding area and the need for non-office development would be considerable.

[6] Greater London has a density of 4,400 persons/km ^{2} compared to Frankfurt's 2,610 p/ km ^{2}. The comparative regional densities are 660 p/ km ^{2} and 580 p/ km ^{2}. However, Central Paris has a density of 20,700 p/ km ^{2} .

6. CONCLUSIONS

This report has examined the competition between cities to capture a greater share of the international financial services market. We have attempted to provide an overall framework for understanding the trends and competitive pressures in financial markets. The main trends seem to be globalisation of activity, liberalisation and deregulation, securitisation, product innovation and the impact of information and communications technologies.

The impact of those trends has been to create intense competition between firms to win business. This has led to consolidation in the various financial markets, demonstrated by the waves of mergers and acquisitions. The impact of innovation in information and communications technology has been to remove many of the locational constraints that existed. Ironically, this has led to greater concentration of activity as firms seek to locate where maximum economic advantage lies. Since the key inputs and outputs of the sector are skilled labour and information, this leads to large urban centres. As a result, the network of international financial centres has acquired more and more of the international business.

Cities compete to encourage major firms to base their operations and to win a greater share of the market. Office markets contribute to that competitiveness both as the base for operations and as a store of value and investment in the city. A city unable to provide adequate quality business space for the major financial firms - and for their web of support services – is unlikely to be able to compete in such an environment. A city with inflexible planning policies, with an inefficient property market structure or with entry and exit barriers will be unable to react to changes in the business environment.

The City of London has developed as one of the major global financial centres and is the most important financial centre in the European time zone. Frankfurt seems intent on contesting that role. It seeks to capitalise on its geo-political location, on the presence of the European Central Bank and its centrality to developments in the European union to erode London's position. Already there have been struggles over financial product markets. As a key element in this struggle, Frankfurt is attempting a property-led strategy to encourage businesses to relocate there. In the report we have attempted to assess the relative strengths of both the financial markets and the property markets in the two cities and to see how the trends in financial markets, translated through the offices markets, affect their competitive position.

These issues are summarised below in two pairs of SWOT tables. The first pair examines the strengths, weaknesses, opportunities and threats in the financial markets of the two cities[7], while the second pair repeats the analysis for the office markets. We then identify some main themes and draw general conclusions.

[7] For a similar exercise on financial and business competitiveness in London, see London Development Partnership (1999).

Figure 6.1 The City of London Financial Markets

Strengths:	***Weaknesses:***
◦ Breadth and depth of capital markets; ◦ Labour markets and skills; ◦ Language and business culture; ◦ Cosmopolitan character; ◦ Regulatory framework; ◦ Climate of innovation; ◦ Information & agglomeration economies; ◦ Diversity and variety.	◦ Relatively small domestic economic base; ◦ Outside the Euro zone; ◦ Crumbling infrastructure; ◦ High occupancy & business costs; ◦ Cost of living and housing costs; ◦ The main target for competition.
Opportunities:	***Threats:***
◦ Increase share of high value added and innovative work, increasing productivity; ◦ Information & communications technology permits geographical concentration; ◦ Mergers, acquisitions and consolidation increase market share. ◦ Growth in international business and foreign direct investment increases City business.	◦ E-commerce and electronic trading reduce benefits of agglomeration; ◦ Loss of specialist markets and niches to competition; ◦ Harmonisation of EU regulations and taxes erode advantages (e.g. withholding tax in bond markets); ◦ Transport infrastructure unable to cope with growth; ◦ Dispersion of office markets reduces information network advantages; ◦ Lack of diversity in City employment creates cyclical slumps and volatility.

Figure 6.2 The Frankfurt Financial Markets

Strengths:	**Weaknesses:**
° Strong domestic economic base; ° Growing capital markets; ° Geo-political location; ° Links to emerging eastern economies; ° Presence of ECB, heart of Euroland; ° Integrated transport network; ° Quality of environment in hinterland.	° Restricted local labour market; ° Lack of cosmopolitan environment and reputation; ° Difficulty in recruiting high level international workforce; ° Competition from other German cities and länder; ° Inflexible planning, employment, health and safety laws.
Opportunities:	**Threats:**
° Capture growing market share in securities, derivatives and dealing in Euro; ° Capture large share of EU cross-border lending activity, particularly post-enlargement; ° Achieve critical mass in markets and erode London's lead; ° Property-led plan attracts business to city.	° e-commerce and e-trading erode business and reduce advantages of location; ° Rise of Berlin undermines competitive strategy and shifts focus within Germany; ° Growth creates housing, social and infrastructure problems; ° Growing specialisation in banking and finance creates risk of volatility and cyclicality; ° M&A and consolidation lead to concentration in existing world cities (e.g. BASF move to London).

Figure 6.3 The Central London Property Market

Strengths: ◦ Scale, diversity and quality of business space; ◦ Transparency and service; ◦ Low entry & exit costs; ◦ Relatively flexible and responsive planning regime; ◦ International occupancy and ownership fix mobile capital; ◦ Liquidity in investment and debt markets encourages capital flow.	***Weaknesses:*** ◦ High occupancy costs in global context; ◦ Inflexibility of leases and forms of occupation; ◦ Shortages in specific quality/size bands; ◦ Density and lack of land; ◦ Fragmentation and existing historic form create awkward sites and foundation problems.
Opportunities: ◦ Increased upgrading of stock retains and grows high value financial services sector; ◦ Growing international business activity and consolidation increases demand for high quality space; ◦ Development of large office satellites around City retains commoditised business and reveals City pressures; ◦ Rental convergence erodes cost disadvantages and enhances benefits of location; ◦ Planning flexibility allows reaction to changing market environment.	***Threats:*** ◦ Risk of speculative boom-bust cycle and capital flight; ◦ Congestion, costs and growth of satellite clusters leads to decentralisation; ◦ Aggregate demand falls due to more intensive use of offices and e-trading; ◦ Rental pressures and local taxes drive out cost sensitive business; ◦ Financial market turmoil has systemic effects on property markets.

Figure 6.4 The City of Frankfurt Property Market

Strengths:	***Weaknesses:***
◦ Existence of quality new space; ◦ Occupancy costs low for an international financial centre; ◦ Flexibility of lease and occupational formats; ◦ Room to expand; ◦ Property-led competition strategy.	◦ Lack of large buildings, particularly large floorplate buildings; ◦ Lack of diversity of product on market; ◦ High proportion of poor quality stock in need of renovation; ◦ Rigid planning and labour laws stifle innovation; ◦ High entry costs, lack of transparency and liquidity.
Opportunities:	***Threats:***
◦ Frankfurt2000 generates marked expansion in quality new space; ◦ Exploit high cost structures and expansion constraints in other centres; ◦ Demand fuelled by expansion of ECB and Euro activities; ◦ Older space can be upgraded if demand pressures,	◦ Depreciation and obsolescence in stock reduces quality of offer; ◦ Erosion of cost advantages through convergence and growth in demand; ◦ Lack of liquidity hinders achievement of high rise framework plan; ◦ Fragile and volatile demand presents risk of sharp cyclical downturn; ◦ As London, growing functional specialisation creates systemic risk.

Drawing from these tables and the research presented above, we can identify a number of principal themes and issues that emerge in considering competitiveness. These themes cut across the boundaries between the financial/employment markets and the office markets. We examine each in turn.

1. Scale of Activity

The scale of London's capital and labour markets is vast compared to Frankfurt. The growth that would be required to overcome London's lead would be unprecedented. This does not mean that Frankfurt (and other centres) cannot capture market share from London or even come to dominate certain specialised markets. However, even with the benefits of the ECB and the threat to London of a United Kingdom outside the Euro system it is hard to envisage London's replacement as the European financial capital in the immediate future.

This scale issue applies equally to the office markets in the two cities. Frankfurt's stock of space is far smaller than that of central London and the disparity is greater still if one examines regional markets or restricts analysis to the core financial areas. The ambitious plans to expand the supply of space in Frankfurt by extensive development of high rise offices would certainly assist in redressing the imbalance but this is conditional both upon those plans being realised and on London's stock of space remaining static over the period of the plan.

2. Diversity

As important as scale of activity is diversity. It is diversity that permits innovation and information transfer in markets. Scale encourages diversity by allowing greater specialisation which, in turn, drives down costs. London's capital markets are not simply *deeper* than Frankfurt's, they are broader. There is a greater range of specialised activities and trading places. In the same way, the business services, professional services, information technology and office support is more varied, allowing financial firms to obtain tailored services and products. Diversity, then, is the bedrock of the information economies, the agglomeration economies that provide the benefits of locating in a financial service centre.

Once again, this is echoed in the property market. The size of the central London market creates diversity in that available space will contain a greater mixture of buildings – by size, by age, by quality, by configuration, by cost – than the more restricted stock mix in Frankfurt. This means that a potential occupier is better able to match its requirements to the space on offer, hence maximising efficiency. Expansion of the stock in Frankfurt will improve availability in the prime, quality market. This *may* increase diversity if firms vacate older space. However, if the new space attracts new occupants (the implicit logic of the strategy), it will *exacerbate* the situation, as the suppliers of services for the incoming firms seek space.

3. Flexibility

To remain competitive, firms and markets in cities must innovate. This requires flexibility. The City of London has, it is frequently asserted, a tradition of innovation which is – or has been – facilitated by a liberal, flexible regulatory regime.

Frankfurt's reputation is more conservative and rigid. Labour laws are often cited as an example. The apparent contradiction between the desire – expressed in the high rise framework plan – to attract major financial firms to the city and the labour laws that hamper the development of large floorplate buildings remains unresolved. European Union harmonisation may reduce some of the City of London's regulatory and tax advantages.

The planning process, too, is seen as rigid and slow moving in Frankfurt (some complain of this, too, in London, but less frequently or vehemently). One clear advantage of Frankfurt, however, is the flexibility of the lease contract which provides short-term exit strategies and reasonable security of tenure. By contrast, the rigidity of the lengthy institutional lease, which still dominates despite erosion of lease length in the 1990s, acts as a market constraint.

4. Infrastructure

The clustering of firms and skilled workers in financial centres, embodied in its office markets, requires a physical infrastructure to ensure movement of people. The larger the centre, the more important the public transit system becomes. This is London's Achilles' heel. Under-investment in the train and subway network has left a system close to (or even beyond) capacity, incapable with accommodating substantial growth. Any expansion of London's office market to accommodate employment growth *must* be accompanied by a commitment to upgrade public transport. Frankfurt has less problems in this regard and an integrated transport plan. However, the substantial increase in space envisaged in Frankfurt2000 will lead to pressures on the existing infrastructure and require considerable capital investment to avoid overloading existing capacity.

5. Transparency

For markets to function adequately, there must be a good flow of information, limited entry barriers and restrictions to trading. Most financial markets are characterised by such transparency. The same cannot be held for commercial real estate markets. The private nature of transactions and the unique nature of the product create imbalances in the flow of information and exacerbate information asymmetry. Real estate services can help to reduce the impact of these asymmetries. In this regard, most commentators argue that London has an advantage over Frankfurt – confirmed in our empirical research. Central London is the most researched office market in Europe, possibly in the world, providing performance data and cost data for potential occupiers and investors. The institutional structure of the market serves to match landlords and tenants, investors and sellers, lenders and borrowers in an efficient manner, despite some misgivings about valuation methodologies. This, in turn, contributes to the highly liquid prime market and helps integrate the property market with the other capital markets ensuring a supply of capital for the sector.

6. Diversification

As we noted in *Who Owns the City,* financial centres, to compete in global markets, must become ever more specialised. In the core of those centres, then, the business space is owned, occupied and financed by the same industry – a monoculture which is vulnerable to cyclical downturns in international markets. The impact of such downturns on the office market then feeds back into the financial sector (declining asset values, falling rental income streams, bad debts) creating systemic risk. This is a threat in both Frankfurt and, in particular, the City of London. Some diversification occurs when one considers the whole of the central London market. However, the evidence of the last cycle suggests that the performance of the City market drives that of the West End and not *vice versa.*

7. Complacency

Almost all our findings point to the continued dominance of City of London as the European financial centre, with the central London office market serving to enhance rather than constrain competitiveness. There are threats – to the regulatory structure, from technology changing the way work is carried out, from erosion of market share, above all from the inadequacies of the public transport system. None of these seem sufficient to overcome the critical mass of the markets, the diversity of markets, services, labour and business space, the cosmopolitan appeal of London when compared to Frankfurt. Yet this is not pre-ordained. Venice, Genoa, Amsterdam, Antwerp were all cities that lost their dominant market position. In history, most falls from a dominant position follow a loss of empire or economic strength. London is the exception, surviving the loss of empire and the relative weakness of the domestic economy to thrive as the key international financial centre in the European time zone.

It will take an unprecedented combination of mismanagement and misfortune for London to lose its position to Frankfurt, no matter how enormous efforts are made by the latter. It is likely that each will continue to strengthen, with no change to the existing hierarchy, to the benefit of Europe in its own global battle for market share. Nonetheless, if Frankfurt does not currently seem to be a serious threat, it may become one in the future.

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APPENDIX 1: CLASSIFYING FINANCIAL SERVICE CLUSTERS

In a study for the City of Toronto (providing background information on a proposed mergers of the four largest Canadian banks to create two financial institutions capable of competing in world markets), the hierarchy of financial markets was discussed and a classification discovered. This provides a useful framework for understanding processes of competition and concentration. This appendix summarises that study's conclusions.

The study identifies three types of financial services clusters:

Global Clusters are international trading centres where many global firms are headquartered. New York, London and Tokyo are all global cluster, each located in a different time zone allowing for a world-wide trading around the clock.

Secondary International Clusters are substantial clusters serving regional markets in most businesses and perhaps global leaders in one or two sectors. Cited examples include Chicago, in view of its commodities and derivatives trading, Boston, because of the presence of large mutual funds and Toronto due to the strength of its banking sector and regional stock market.

Local Clusters serve local markets; in large countries possibly only serving regional markets with little national and minimal international activity. North American examples would include Los Angeles and Montreal.

The report stresses that the position of clusters in the hierarchy is not static and that a cluster's position can improve or weaken. Los Angeles, it is suggested has moved from a secondary international to a local centre as San Francisco has strengthened its position. The impact of major two acquisitions (Bank of America's takeover of Security Pacific and Wells Fargo's acquisition of First Interstate) and consequent consolidation of HQ operations in San Francisco provides an example of the process of change. Los Angeles lost some 45,000 jobs in financial services in the 1990s.

Five "support mechanisms" are identified as providing the foundation for growth and stability:

® *Structural anchors:* the presence of exchanges and a concentration of financial service headquarters;
® *Accessibility and infrastructure:* telecommunications, roads and airports, quality of life, excellent higher education institutions;
® *Public policy environment:* a supportive regulatory environment, efficient regulatory bodies, policies that enhance competitive position;
® *Non-financial business environment:* strength of the local economy and national currency;
® *Cost of doing business:* taxes, wages, real estate costs.

Failure to capitalise on strengths or to develop and maintain these mechanisms can lead to a weakening of competitive position. The report suggests that "*financial centres like Frankfurt have declined because many of their growth foundations were weak and unnurtured.*"

APPENDIX TWO: FIELDWORK AND SURVEYS

The Survey of Market Participants

A postal questionnaire survey was undertaken to examine the relative strengths of property markets in Frankfurt and the City of London and the contribution they make to economic competitiveness. The main focus of the survey was on the financial business sector and those companies who provide associated professional and business services. The survey sought to identify the factors which are thought to be important when considering each city as a business location and to assess which of those are judged to be strengths and weaknesses. Additionally the survey sought to identify the property market features which are judged to be either strengths or constraints in each location.

A sample of financial and associated professional and business companies, with a presence in both or either location was drawn up. Each company was contacted by telephone to identify the individual with responsibility for deciding or advising on corporate location issues.

Having established a provisional list of recipients, each individual was contacted in writing to confirm that they were the correct person to receive a questionnaire and that they would be willing to assist with the research. In light of responses to this letter, the list of recipients was amended and the survey was then distributed. The recipients were contacted by telephone to confirm receipt of the survey. Two weeks after the survey was distributed, non-respondents were contacted by telephone and asked if they would be able to return the survey. If they were unable to do so they were asked to identify an alternative person within their organisation. This person was then contacted and asked to assist. Respondents in German companies were contacted by German-speakers and asked if they required a German translation of the questionnaire. None asked for such a service.

The table below shows respondents to the survey by type of business conducted:

Type of business	% of response
Bank	29%
Real estate adviser	29%
Real estate development/investment	9%
Asset/fund management	14%
Other financial	6%
Other	14%

Businesses with their headquarters located in London accounted for fifty four percent of the responses. Eleven percent of respondents have their company headquarters in Frankfurt . Seventeen percent of respondents were businesses with their headquarters located elsewhere in Europe, and the remaining seventeen per cent were businesses with headquarters located in the United States. Sixty nine percent of respondents have a presence in both the City of London and Frankfurt. The remaining thirty one percent have a presence only in the City of London.

The questionnaire requested comment on the City of London and Frankfurt. However, where respondents were familiar with only one market, they were asked to confine their responses to that market. Eighty percent of respondents commented on the City of London and fifty seven percent of respondents commented on Frankfurt. A copy of the questionnaire is shown below. Note that, to avoid any biases, the position of "Frankfurt" and "London" headings were reversed for half the survey forms.

The Frankfurt Office Database

A database containing ownership and occupation information was constructed using a sample of high quality office buildings located in Frankfurt. The sample concentrated on high quality office buildings as these are an integral part of Frankfurt's bid to strengthen its role as an international financial centre. Within the city, prestige office buildings are of a high-rise construction, predominantly because of day-lighting regulations which have traditionally prevented the development of buildings with a large floorplate.

The initial selection criteria for inclusion was based upon age and height, with the thirty tallest and most modern office buildings in the city being selected. The suitability of this selection was discussed with commercial property agents in the city, and the sample was amended in light of their advice. The location of each of the buildings was also considered. The sample needed to reflect the significant impact that the financial market has on the commercial office market within the city, however, it was important to ensure that the sample did not exclude ownership and occupation by other types of businesses. Accordingly, the sample was structured to ensure that it included buildings which are located in a number of the city's different office districts.

The final completed sample comprises twenty-two buildings. The sample is considered to be representative of the range of prestige office stock in the city as a whole, in terms of size, location, ownership and occupation. The floorspace of these buildings is approximately 980,000 square metres, which equates to approximately eleven per cent of the city's office stock as a whole. For each property data was collected on size(floorspace in square metres, number of floors, and height), age, and details of ownership and occupiers.

Ownership
The details of the owners of the sample of properties were gathered from a number of sources. These included visiting the offices, consultation with commercial property agents, on-line sources, and where necessary, consultation with occupiers of the buildings.

Occupation database
The initial identification of occupiers was established by writing to the reception staff in each building, and asking them to provide details of the occupiers or pass on the request for information to those responsible for managing the building. For those properties where this approach failed to provide the required information, each building was visited and details of the occupiers were noted. Each occupier was then contacted in writing and asked to provide details of their nationality, type of business conducted and the amount of space occupied. Where necessary occupiers who

failed to respond were contacted by telephone and asked to provide the information, or details of the company who manages the property. Where the information required was unavailable to the research team, the space occupied by each company was apportioned equally, or, if known according to how many floors of the building were occupied by each company.

ANNEX: THE SURVEY FORM

THE FRANKFURT AND CITY OF LONDON PROPERTY MARKETS RELATIVE STRENGTHS AND CONTRIBUTION TO COMPETITIVENESS

This survey examines the role that property markets play in economic competitiveness. The main focus is on financial and associated professional and business services in the City of London and in Frankfurt. We are interested in your views on the office markets in those two cities. Do the property markets affect the competitive position of each city? Are the location decisions (and advice) of firms such as yours influenced by the office markets in the two cities? The survey here is short and directed. However, we would welcome your more detailed comments on the London and Frankfurt markets.

Your survey responses are strictly confidential. Individual views will not be disclosed to any third party, including the sponsoring client. If you have any questions about the survey please contact Professor Colin Lizieri (+44 (0)118 931 6339) Nick Williams or Melanie Oughton (+44 (0)118 931 6657.

Please fax the completed form (marked for the attention of Nick Williams) on +44 (0)118 931 8172

Thank you in advance for your assistance.

1. About your organisation:

(a) what is your principal business?

(b) where is your headquarters located?
City:
Country:

(d) do you have an operation in or near the City of London?

Yes: Head Office
Yes: Regional/Continental Office
Yes: Branch Office or Administrative Only
Yes: Other (please specify)
No, No Presence in Market

(e) if *Yes*, when was the office established?

(f) do you have an office in or near Frankfurt?

Yes: Head Office
Yes: Regional/Continental Office
Yes: Branch Office or Administrative Only
Yes: Other (please specify)
No, No Presence in Market

(g) If *Yes*, when was the office established?

(h) Please provide the locations of your other main operational offices.

2. The City of London and Frankfurt as Business Locations:

(a) In considering the following market factors, please indicate which are strengths and which are weaknesses of Frankfurt and the City of London respectively. If you are only familiar with one market, please confine your responses to that market.

Factor:		… Frankfurt …			… London …	
		Strength	Weakness		Strength	Weakness
Presence of Clients and Customers						
Tax Incentives and Subsidies						
Quality of Labour Markets and Staff						
Presence of Competitors						
Regulatory Environment						
Business Culture						
Language and Culture						
House Prices						
Location of Government / European Institutions						
Supply/availability of Prime Quality Office Space						
Overall Occupancy Costs						
Local Currency / Currency Zone						
Geographical Location in Global Economy						
Quality of Telecommunications						
Labour Costs (Salaries, Bonuses, Benefits)						
Time Zone of the City						
Quality of the Urban Environment						
International Accessibility by Air and/or Train						
Local Government / Planning Regime						
Other (please specify)						
Other (please specify)						

(b) which *three* of the factors shown above are the most important overall in determining your decision to locate in a particular city market?

(1)
(2)
(3)

(c) which *three* of the factors shown above are key strengths of Frankfurt and of the City of London?

Frankfurt:	London:
(1) (2) (3)	(1) (2) (3)

Please add any comments that you consider appropriate:

3. The Commercial Office Markets of Frankfurt and the City of London

In this section, we wish to explore the relative quality of the office markets in Frankfurt and the City of London.

(a) for each factor identified, we would like to know whether the factor is a market strength or, alternatively, if it is a constraint to the operation of business in that market (it may be neither). As before, if you are only familiar with one market, please confine your responses to that market.

Factor:		- Frankfurt -			- London -	
		Strength	Constraint		Strength	Constraint
General availability of office space						
Availability of large floorplate buildings						
Availability of smaller units of space						
Availability of quality modern space						
Typical floor to ceiling heights						
Quality of building services / IT / telecom						
Ability to reconfigure space						
Real estate planning regime / environment						
Base rental level for property						
Service charges and other occupancy costs						
Local and state property taxes						
Cost of maintenance & refurbishment						
Availability of long term leases						
Availability of short term leases						
Flexible leasing arrangements						
Real estate brokerage and agency services						
Specialist property legal services						
Good quality research and consultancy						

(b) considering each market in turn, what three of the factors cited above are most important office market *constraints* to the operation of business?

Frankfurt:	City of London:
(1) (2) (3)	(1) (2) (3)

(c) which three of the factors cited above are the most important office market *strengths* of each city?

Frankfurt:	City of London:
(1) (2) (3)	(1) (2) (3)

(d) Please add any comments you consider appropriate:

4. Other Property Factors

While the quality of office space and services will be the major way in which real estate affects business efficiency, other property factors may have an influence. As for Question 3, please specify which of the following factors act as a constraint on business operation or are a strength of the respective City of London and Frankfurt markets.

		- London -			- Frankfurt -	
Factor:		Strength	Constraint		Strength	Constraint
International grade hotels						
Dining & entertainment facilities						
Other leisure facilities						
Availability of / access to quality housing						
Cost of housing (prices / rents) in area						
Public facilities (hospitals, schools)						
Other (please specify)						
Other (please specify)						

5. General Views

Please add any comments on the relative strengths and weaknesses of the property markets of Frankfurt and the City of London. Please assess their contribution to economic competitiveness and the future development of the two cities.

Many thanks for your assistance.

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