DEVELOPER

TABLE OF CONTENTS

D-3	INTRODUCTION
D-4	OFFICE MARKET CONTEXT: LONDON
D-12	BANKSIDE: POTENTIAL FOR COMMERCIAL DEVELOPMENT
D-14	LAND SECURITIES: PROPERTY & RISK
D-21	LAND SECURITIES: THE COMPANY
D-25	BANKSIDE 123: PROJECT OVERVIEW
D-29	BANKSIDE 123: FEASIBILITY STUDY
D-45	CONCLUSION

INTRODUCTION

This chapter aims to study the city making by studying the developer as a character and actor within the development process. The research is divided into several sections.

The first part studies the general office market in the context of London and the flows in which those processes operate consistent with contemporary city networks. From that broader view, Land Securities' history was studied; what influenced them, their activities through the sometimes volatile property cycle, and how they have learned from experience to mitigate risk. Further analysis is concentrated on Land Securities as a company; who they are, their company structure, their vision, and how they work to uphold their corporate strategy.

Bankside 123 forms a convenient case study for our study. Since the site itself is influenced by several factors that contributed to the success of the development financially. Bankside as a suitable City Fringe location for office development and regeneration is explored while the physical characteristics of the design in itself are discussed.

Finally, the business case for the development help to explain why the developer acted as they did, while proving the financial feasibility of the project.

In the end, Land Securities are a successful developer property owner and investment company. Through a thorough investigation of Bankside 123 with respect to Land Securities, valuable insight into an processes in city making have been revealed.

THE LONDON OFFICE MARKET: GEOGRAPHY

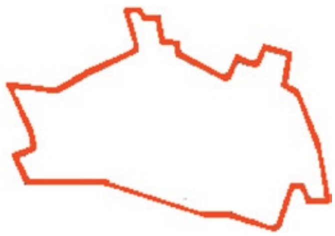
The London office market is unique, and like all cities, has evolved through the evolution of many systems of flows, an evolutionary process as complex as the urban agglomeration itself. Historical settlements such as the ancient Roman City and its highways, transport and trade routes, natural and human-made obstacles and situations of business activity have created the London of today.

For the purposes of classification, the central London area can be defined by three major geographical areas of commercial activity: the City, the West End, and Canary Wharf. In addition to these three basic districts, there are several areas defined as "fringe areas" - new office clusters that are being developed to provide additional employment and/or mixed use areas in regenerated parts of central London.

London from space. From left to right: The West End, The City, and Canary Wharf. Image sourced from Google maps www.maps.google.com.

THE CITY

The City of London is the traditional financial services capital, the heart of commerce for Britain and to a lesser extent, Europe. It comprises the greatest concentration of financial services in Europe, and as a neighbourhood, is centred both spatially and figuratively by the Bank of England. The Corporation of the City of London defines the area, and it is the pro-business policies and activities of the corporation that have maintained the city's position as a dominant locus of global economic control. The City is served by a high density of Underground lines and National Rail stations, mostly built in Victorian times. Lobby groups are encouraging the central government to move forward with CrossRail, a massive civil engineering scheme that will bring suburban trains through the centre of the City, instead of having them terminate at nearby peripheral stations for the City to maintain its edge over rivals in New York and Paris, and, to some degree, Canary Wharf.



GROSS OFFICE FLOOR AREA IN PIPELINE 2005 - 2009:

~ 2.7 million sq. m.

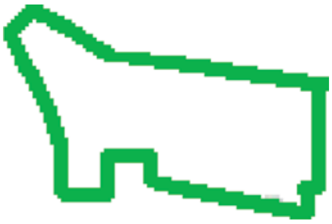
RENT FOR 'A' OFFICE SPACE:

~ 50 - 55 GBP / sq.. ft.

CANARY WHARF

“The geographical and ideological heart of the new docklands is Canary Wharf[1],” previously docks for goods from the Canary Islands and elsewhere, and now a North American-style premier office development championed by Olympia & York of Toronto in the late 1980s (See case study in Working Capital). A unique circumstance in politics, economy, real estate market climate, and a pro-development tax environment and planning regime promoted this massive speculative office development that was the downfall of highly leveraged Olympia & York. Completed buildings through the first phase in the early 1990s including landmark One Canada Square, the tallest building in Britain, were to a large degree vacant until the late 1990s. Today the cluster is home to many international banks and multinational firms, including the global headquarters for HSBC and Barclays, soon to be joined by Reuters and BP.(1) Much of London’s publishing industry has also moved there from their traditional locale on Fleet Street in the western area of the City of London to Canary Wharf in the last decade.

Canary Wharf was initially served by the several stations on the Docklands Light Railway (DLR) which ultimately proved inadequate. Today in addition to the DLR the area is also served by The Jubilee Line Extension of the London Underground, which opened in 1999. The Canary Wharf station is the largest on the underground network, and is expected to handle 40 000 persons per hour by 2015.



GROSS OFFICE FLOOR AREA IN PIPELINE 2005 - 2009:

~ 1.4 million sq. m.

RENT FOR ‘A’ OFFICE SPACE:

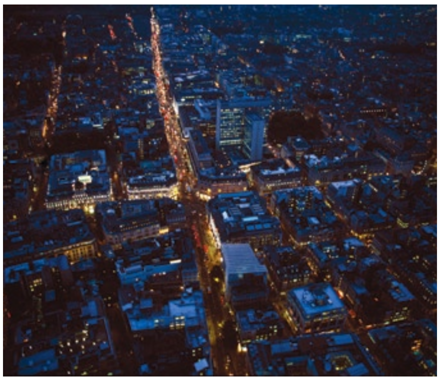
~ 40 - 45 GBP / sq. ft.

Previous page bottom; left to right: The City from the south west; The city with St. Paul’s Cathedral from Waterloo bridge at night.

Canary Wharf is a new development epitomizing the North American office cluster. Tall buildings with large, flexible floorplates cluster around Canada and Cabot Squares to create a dramatic skyline. At the bases, dock basins have been retained as natural water features to augment the pedestrian and retail space at ground level. Left to right: Canary Wharf dock basin as water feature; the skyline at dusk from the north; Cesar Pelli’s One Canada Square at 48 stories, the tallest building in the United Kingdom. (www.canarywharf.com)

THE WEST END

The 'West End' is the spatially largest of the three central business areas in London is comprised of such neighbourhoods as Mayfair, Soho, Covent Garden, St. James, and Westminster, among others. Most of it is within the boundaries of the City of Westminster, a borough of London with very strict historical preservation and planning practices. As a result, building heights are for the most part very restricted, and combined with right-to-light laws (refer to Statutory Regulations). Floor areas for most sites have already been maximized, and there are very few areas to build within what is historically known as 'The West End'. This area contains London's most exclusive neighbourhoods, and rents for all real estate types is very high. Offices are occupied by a diverse variety of users including finance, banking, insurance, media, communications, legal, advertising, and business services. The area is served by a number of London Underground Lines from all directions, and despite its spread out character compared to the City or Canary Wharf, is very well served by public transport. St. James, Green, Hyde, and Regent's Parks are all considered to be within the West End.



The West End contains many very successful retail-office mixed-use avenues. Left to Right: Oxford Street at night; New Bond Street; Piccadilly

Fringe Areas

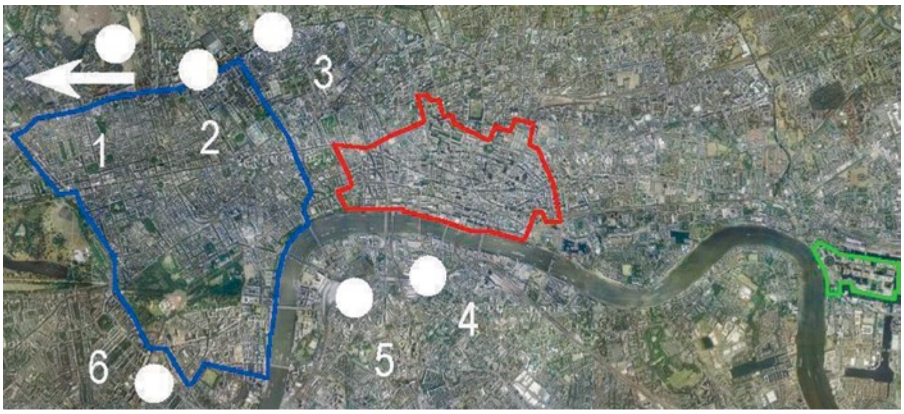
Due to space and expense constraints, several 'fringe areas' to be pursued for intensifying development have been identified by developers and the property industry in central London. All take advantage of transport links and neighbourhoods that, while less expensive, are still considered well within central London, easily accessible, and suitable for regeneration and office and/or mixed use development. Examples of these developing fringe clusters are Paddington, Euston Road, King's Cross, Bankside, Waterloo/Southbank, and Victoria.

GROSS OFFICE FLOOR AREA IN PIPELINE 2005 - 2009:

~ 0.6 million sq. m.

RENT FOR 'A' OFFICE SPACE:

~ 55 - 75 GBP / sq. ft.



Developing fringe office clusters developing in central London:

1. Paddington (off image to left)
2. Euston Road
3. King's Cross
4. Bankside
5. Waterloo/Southbank
6. Victoria

Image sourced from Google Maps, www. maps.google.com, and edited by author

Clockwise from top left: King's Cross, Paddington Basin, and Euston Road all contain mixed-use office developments as a part of intensive regeneration and the creation of secondary office clusters.

Key Point: As Central London grows, employment growth concentrates in both emerging and existing clusters. Fringe Area clusters play an important role in augmenting space provision in the traditional clusters through regeneration of inner neighbourhoods and utilization of transport infrastructure.

TRENDS IN THE LONDON OFFICE MARKET

Current Rents

Trends in the current property market are partly unique to London, however with increasingly mobile capital, differing global property markets tend to move generally together. Thus, data from other major cities is of great interest to investors in London and can provide some insight into future market activity and trends.

Future rents — Trends

As asking rents have declined for the first half of this decade, Land Securities is optimistic and expecting that the little new space online and positive economic trends in the last few years will contribute to a turn around in the office market. This reason for optimism was confirmed by a recent report by C.B. Richard Ellis in January of 2006 highlighting an upswing in first class office occupancy and rents in most major cities:

"For the first time this decade, asking rents for Class A office space increased simultaneously in 10 major global markets. London was among the strongest office markets in the world, with significant increases in asking rent and declining vacancies." -www.landsecurities.co.uk

Market	2005 Rent/sf	% Change from 2004	Vacancy Rate	Change from 2004
Hong Kong	$58.81	+45.0%	4.8%	-2.1 pt.
London	$141.72	+6.7%	7.0%	-2.4 pt.
Los Angeles	$29.76	+15.3%	13.1%	-1.5 pt.
Madrid	$36.59	+8.0%	9.0%	-0.3 pt.
New York	$44.85	+11.8%	7.0%	-1.0 pt.
Paris	$72.06	+2.1%	5.0%	-0.3 pt.
Sydney	$33.22	+3.3%	10.4%	-0.8 pt.
*Tokyo**	*$111.45*	*+19.8%*	*1.7%*	*-1.8 pt.*
Toronto	$25.44	+3.9%	6.3%	-2.1 pt.
Washington, D.C.	$45.47	+4.5%	6.4%	-0.4 pt.

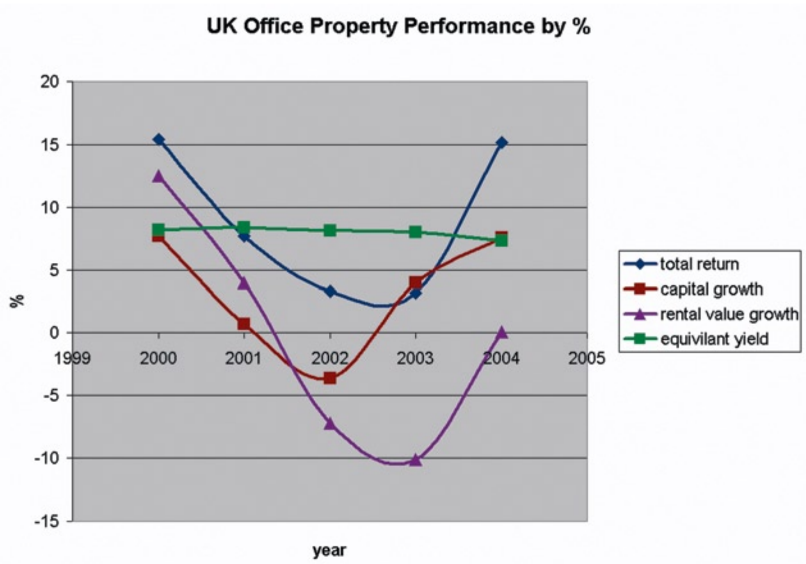
Rents for office space in Central London, 2nd quarter, 2005. Source: Frank Knight and Associates.

*Data to third quarter only. Source: CBRE Research.

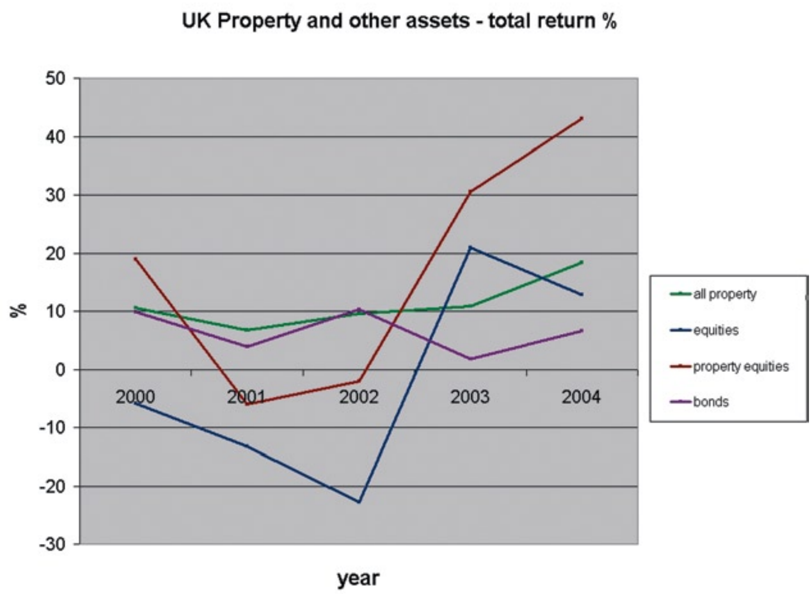
This is supported by statistics tracked and reported by DTZ consultants. In 2002 and 2003, there was a slight contraction in capital growth, followed by a slightly more severe contraction in rents. As a result, returns for the office sector as a whole were just north of zero in 2003. In 2004, rental growth, capital growth, and total returns improved noticably while yields hardened slightly. Several reports indicate 2005 was a modest year of improvement over 2005, and analysts are enthusiastic for a better 2006.

Interestingly enough, the property upswing seems to be led by the capital markets taking an interest in commercial property as an investment choice while equities posted negative returns early this decade, as shown in a comparison on UK property and other asset classes. All property showed a slight increase in 2003-2004, but property equities showed dramatice returns on the expectation of capital growth and and rents returning to upward ways. Such statistics would explain the buoyant outlook many analysts have for commercial real estate combined with low expectations for equities have hardened yields to below 6% in many cases.

TRENDS IN THE LONDON OFFICE MARKET



UK Office Property Performance by % indicates the poor year for office properties that was 2002-2003. Rental value growth was negative, capital appreciation was briefly contractive, and total returns barely were better than inflation. Source: DTZ research.

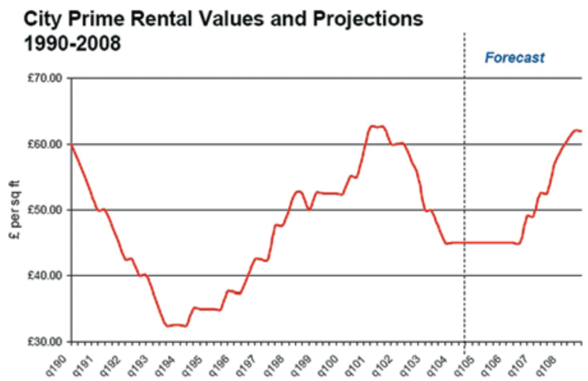


UK Office Property against other asset classes helps illustrate how poor performance in equities markets has sent investors to commercial property as an attractive asset class. The availability of financial products as explained in Working Capital has compounded to produce some spectacular returns for investors in commercial property. Data sourced from DPI.

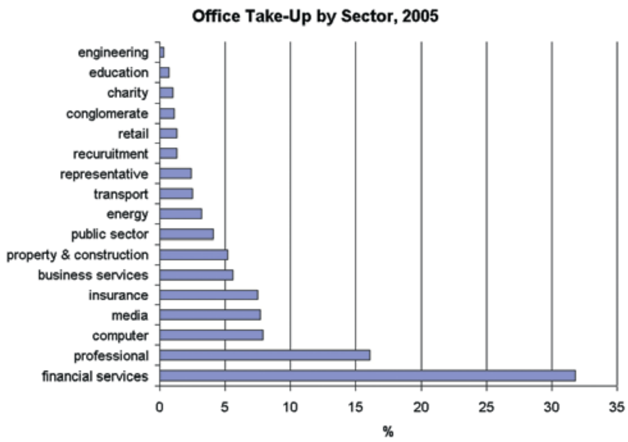
Many industry analysts are seeing an upswing in office construction too, as a response to slightly tighter vacancy rates, and finally upward pressure on rents is making the latest schemes for towers in the city legitimate. A reassuring fact is that space in the city is being demanded by its most traditional core industry: financial services and banking.

"In contrast to 2004, the 2005 outlook for developers has improved, particularly for mixed-use developments (modern high-quality office, retail, and residential space."[7]

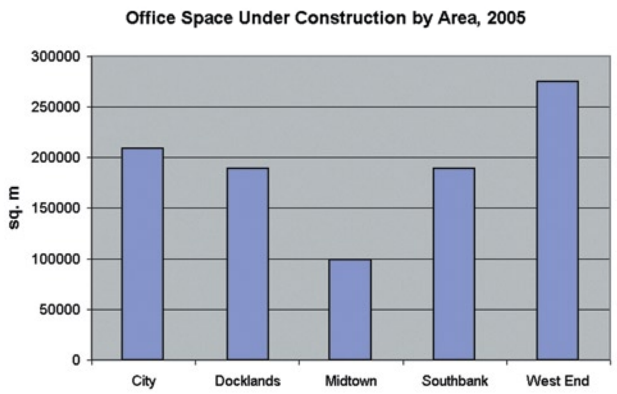
Rents in the city were expected to follow the long term trend and begin a recovery in late 2005/2006. Source: Frank Knight.



From "London Report: The Indispensible Office Property Who's Who." 7th Ed. November 2005. Touch Property: London.



From "London Report: The Indispensible Office Property Who's Who." 7th Ed. November 2005. Touch Property: London.



THE LONDON OFFICE MARKET: THE UK'S DOMINANT OFFICE CENTRE IN THE EUROPEAN MARKET

It is the recent trend towards property specific equities from many different types of investors away from under-performing general equities which has led the stock price of 'the big three' - Land Securities, British Land, and Hammerson into repeated +20% return years for investors.

It has also pushed yields to historically low level, some say to below 6%, which in turns, benifits those that own land - firms like Land Securities.

The recent buzz about REITs possibly making their way to the UK from Canada and the United States couldn't have hurt the hot commercial property market either.

There is no doubt london as an employment district acts within not only the united kingdom as a command centre and node of activity, but serves the same purpose within a european and global context as well. With the integration of the eu and the reduction in barriers to the flow of capital, labour, and trade, london more so than ever is competing in the integrated european market. How integrated and homogenous is the european commercial property market? As with any economy the size of europe, there will certainly be differences from region to region. How great are they? What are the barriers that maintain those differences?

All economic integration processes take time, and the european property market is no different. There are noticable regional economic differences, both structural and practical, which produce "substantial variations in the pricing of investment property."[2] "Among the many complications facing cross-border investors in europe is the lack of consistent data on property yields. Lease terms vary significantly across europe in terms of both the length of contract and the obligations on landlords and tenants."[3]

There are several factors which for the time being can be summarized as improved information through technology and awareness that is leading investors to increasingly look abroad to maximize returns in any industry. In the property market, it is trade liberalization and availble capital that is driving increased consistency and transparency in the property market from region to region.

"Among the many complications facing cross-border investors in Europe is the lack of consistent data on property yields."

The Investment Property Databank (IPD) in the UK "has created a new standardised set of net and gross income yield measures for all the European countries it covers."[4] This is one example of information services adapting to investor needs for more effective information that can be used for comparison purposes between markets. However, the propety market is inherintly slow to adjust. Property has traditionally been less liquid than other investment products, creating a lag that is compounded by the lag in renovation/construction developments. For example, despite the existance of the Eurozone for quite some time, "Germany still has very low yield levels which cannot be explained by economic prospects. One possible explanation is that property yields are still reflecting historic differentials in inflation and bond yeilds which existed before the creation of the Euro."[5] For the same reasons, Italy and Spain should also be noted as countries with low yields but not particulary good medium term economic outlooks.

Another distinct difference between markets is the variations in pricing and contractual practices. There are significant differences between countries in the EU with respect to pricing practices for utilities and maintence for commercial office buildings "In most of continental Europe operating costs on offices were equal to between 8 - 13% of gross income. Operating costs were hightes in the Nordic region at 17 - 19% of gross income and lowest in the UK and Ireland at 2% gross income."[6]

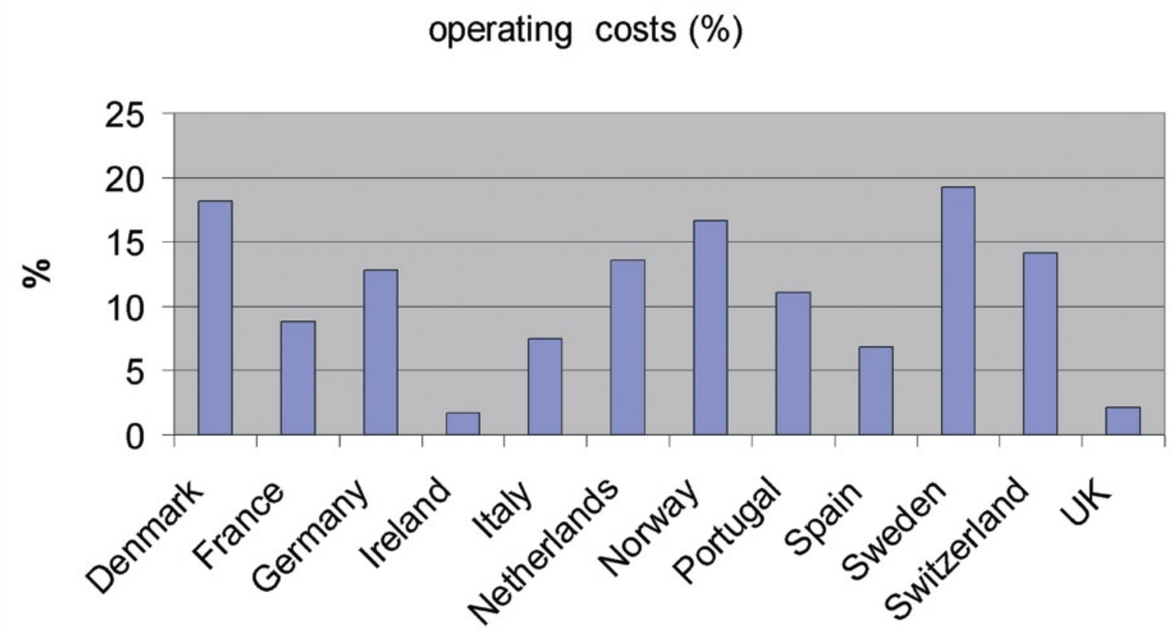
New York.

Toronto.

London City.

In the context of the uk market and bankside 123, questions about tenant and landlord consideration for building efficiency as a result of pricing practices are raised. Buildings in the nordic countries are generally more efficient and less energy consumptive; what impact are pricing practices for utilities and maintenance having on building design?

“The real estate market is inherently slow; compounded by construction lag times, there are differences and evolving changes between regulatory, finance, planning, and cultural systems...the property markets in Europe still have evidence of barriers to free capital flows for investment in property.”



Operating costs as a percentage of gross income vary widely between EU countries. Practices in the Nordic countries that insist landlords be responsible for certain maintenence and overhead costs explain the high operating costs there. Conversely, in the UK and Ireland, most operating costs are paid by tenants. Data sourced from IPD[2].

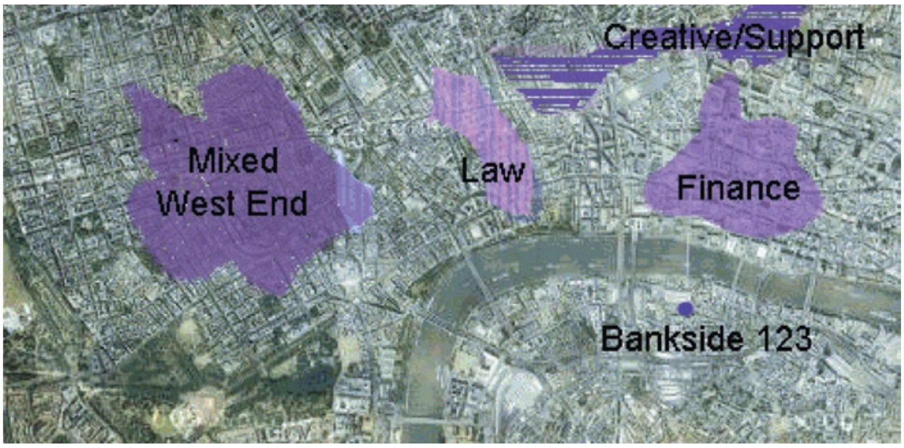
Net Income Yields on office property by country in the EU. Note that variations between countries are up to 2%, with little correlation to the generally accepted medium-term economic outlooks. Spain and Italy both have low net yields while their economic outlooks are generally accepted as mediocre.

Source: Investment Property Databank. “Consistent Yields for European Property.” 2005. www.ipdindex.co.uk. (accessed 15 February 2006).

BANKSIDE: POTENTIAL FOR COMMERCIAL DEVELOPMENT

LOCATION FACTORS IN OFFICE DEVELOPMENT
In seeking sites for commercial development, risks arise in terms of likely demand for space, in the ability to acquire land at the right price, and the ability to economically gain permission for commercial development from the local authority.

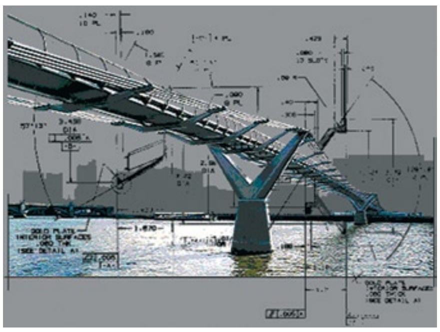
The greatest demand in the office sector is for the most centralized locations with the best transport connections[1]. In the financial industries, which can pay the highest prices, physical proximity- a maximum walking distance of 15 minutes- is crucial[2]. The financial services sector forms a tight cluster in the City of London, with supporting services seeking accommodation as close by as possible[3]. At the fringes of the City, quality of life for workers has an impact on staff retention, and on corporate credibility[3], so some neighbourhoods will be perceived as more desirable than others.



BANKSIDE: DEVELOPMENT OF THE URBAN CONTEXT
Bankside lies south of the River Thames, opposite St Paul's Cathedral. In the past, with few bridging points, the river formed a barrier. While the commercial and political centres of London developed on the north bank, for centuries, Bankside lay outside the City of London. It's role was as a place of entertainment, with few prestigious permanent buildings. After the English Civil War, the theatres were destroyed, and new uses grew up, again none tending to create a lasting architecture and urban grain comparable to the northern bank. In the 19th century, the south bank's less prestigious urban structure was sacrificed to provide access for commuter railway lines to the north of the river. Around the viaducts were homes for 90,000 people, industrial buildings and wharves.[4] During the Second World War the area suffered bomb damage, and as with elsewhere in London, sites were cleared, and purchased at low prices by the emerging modern property developers5.

SITE ACQUISITION
The site of Bankside 123 was partly purchased by Land Securities in the 1950s, and the remainder of the site is held on a 150 year lease from the Corporation of London. Securing the site has not been an issue.

RISK OF PLANNING OPPOSITION
On top of war losses, a significant amount of housing was demolished when the South Bank was chosen as the site for the 1951 Festival of Britain, literally clearing the way for businesses to move into the area[5]. (website of Coin Street Community Builders) Shell International opened its headquarters at Waterloo in the early 1960s and many others have crossed the river since. By the early 1970s, the residential population of the area had fallen to just 4,000. Much of the remaining residential property was in the private rented sector, or available for sale, leaving the stock liable to gentrification[6]. While a large and unified residential community could provide substantial opposition to commercial developments, a small population, gentrified particularly in the last 25 years has created a population less likely to strongly oppose commercial redevelopments. Coupled with a sympathetic planning



From top to bottom: Tate Modern; Borough Market; Jubilee Line Extension; Millenium Bridge

regime (See 'Policy') the risk of a costly or difficult planning process was small, though the developer could expect section 106 obligations to be imposed[7].

POTENTIAL DEMAND: EXISTING TRENDS

The Royal Festival Hall, a legacy of the Festival, was later joined by the National Theatre, the National Film Theatre, London Weekend Television, IPC Media, IBM and many others, turning the South Bank close to Waterloo into Europe's largest centre for the arts and media. The services industries, publishing and media are therefore an established sector in locations from Waterloo to Blackfriars bridges just west of Bankside 123. In the 1980's, the City's financial services sector, seeking centrally located space in a severely limited geographical area, first spread south of the river, with developments such as London Bridge City at London Bridge, immediately to the east of Bankside 123. London Bridge has become culturally accepted not as a fringe location, but functionally as part of the City of London.

QUALITY OF LIFE

Despite the changing commercial landscape to east and west, Bankside still languished, lying between bridges and dominated by the redundant and empty Bankside Power Station, however the last decade has seen significant change. In 1994 the Tate Gallery acquired an option on the site and in May 2000, Tate Modern opened, giving Bankside a globally admired landmark, now the most visited attraction in Britain. The Globe Theatre, Borough Market and a range of other attractions have made Bankside a destination not only for tourists but for Londoners, a place of quality and character.

CONNECTIVITY

While Tate Modern changed perceptions of the area and its offer, transport connections were simultaneously enhanced. In December 1993, work started on the £3.5 billion project to extend the Jubilee line, London's most modern underground line. The extension ran from Green Park in the West End to Stratford. The extension was finally joined to the existing line on 20 November 1999, coinciding with the opening of Southwark station. The line's fast connection to London Bridge, and Waterloo Stations and to Canary Wharf via Southwark Underground Station makes Bankside highly accessible to workers in suburbs east and west, and to the City's 'extension' at Canary Wharf- another key factor influencing location for the finance industry and allied service sector[2]. Added to the increased accessibility of reliable underground services, a walking link to the City was created in the form of the Millenium Bridge, which originally opened in 2000, then reopened following engineering modifications in 2002.

CONCLUSION

Since 2002, Bankside 123 has been within the critical 15 minute walk to the City of London, and in easy walking distance of 4 major rail terminals, 9 underground stations serving 6 lines, including the important Jubilee line, and has close proximity to Piers to River Taxi/Bus. It is a 'destination' with cultural and social facilities, and offered no risk in terms of planning or site acquisition. Not only Land Securities see the value of Bankside as a newly connected commercial location.The case for is supported by the property press, and by the significant number of square metres of office space now on site or in the pipeline.

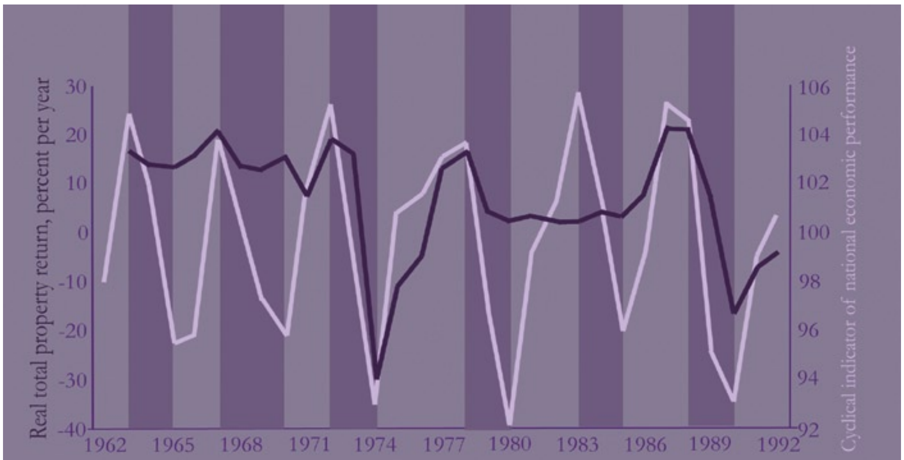
1. Harvey, 'Urban Land Economics', Macmillan Press 2000
2. Sassen, 'Cities In a World Economy' 1998
3. Loughborough University 'Financial Services Clustering and Its Significance for London' Corporation of London 2003
4. www.tate.org.uk/modern/february 2006
5. Barras 'The Development Cycle in the City of London', Centre for Envbironmental Studies, 1979
6. Counter Information Service 'The Crisis of London', Counter Information Service 1979
7. London Borough of Southwark, Unitary Development Plan 1995

LAND SECURITIES: PROPERTY AND RISK

PREDICTING PROPERTY CYCLES
Property returns will always be subject to fluctuating cycles, to ‘booms’ and ‘busts’ of varying intensity. This is due to the time lag in delivery of development. In a perfect economic model, prices or supplies fluctuate around a trend, converging toward their eventual equilibrium point in the market. When lags exist, production and prices do not converge to a stable equilibrium. They oscillate from below to above equilibrium, and may even move further away. This is a classic economic model, described by Cobb- Webb Theory.[1] There is a minimum of two years between a demand arising for a new building, and the delivery of that building, time needed while designs are developed, planning permissions secured and buildings constructed. Because of the delay in response, actions taken today may not have the intended outcome.

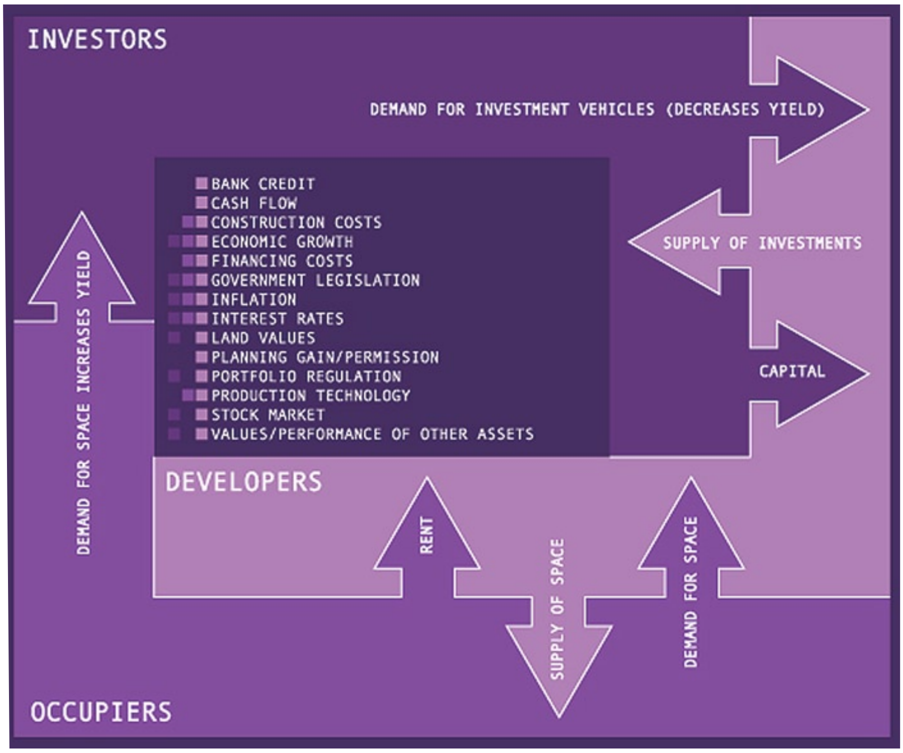
The most profitable development occurs at the beginning of an upturn of the cycle, the least profitable when the boom appears to be at its peak. The ability to predict movements in the property cycle would allow developers to maximise profits, and minimise risk. Understandably there is much interest in the property cycle. Looking at trends over time and trying to identify patterns or periodicity might provide a means of predicting future events. Unfortunately, the information required to assess if property cycles do have a regular periodicity has been available only for the last fifty years, which is too short a time period to be statistically valid. (1) Even leaving conclusive statistical information aside, no clear pattern is emerging, as demonstrated by the disparity between analysts describing the length of property cycles, from four to fifteen years. There are also no clear patterns in underlying causes. Each part of the cycle in the last fifty years has had its own particularities and complexities.

If property followed the general economy into recession it would be possible to moderate behaviour to avoid extremes of ‘boom’ and ‘bust’. However, turning points in property cycles, up and down, coincide with turning points in the leading indicators of general economic trends, as illustrated, meaning property is only as predictable as the general economy. Developers, who aim to make profit, are therefore able only to respond to current trends and current circumstances, in the knowledge that changes in economy, policy, technology etc may make their assumptions incorrect.



The Property Cycle overlaid on Economic Cycle. (McGregor et al 1994)
Property downturns coincide with economic downturns. & cannot be predicted.

Land Securities aim is to make their investment product seem reliable and predictable in a marketplace subject to risk, and they are very successful. This section investigates how Land Securities strategies offer reassurance to would be investors, wishing to invest in a market which has shown good returns, but has also been subject to spectacular failures.



DYNAMICS OF POST WAR SPECULATIVE DEVELOPMENT

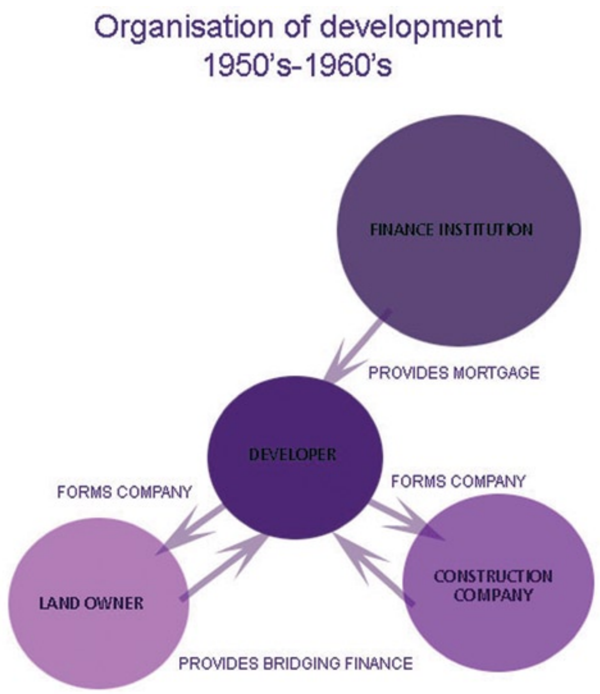
Since the decline in manufacturing from late 19th to pre war 20th Century, the most profitable land use in London has been office based, driving the growth of development in the office sector. The profitability of property development and property ownership at any time is a product of its attractiveness as an investment versus alternate investment choices, demand for space from occupiers; and the feasibility of building. Aspects of investment are discussed in Chapter 1 .

The development process involves four types of capital deployed by four different agents: Commercial capital (the property company), financial capital (the funding institution), landed capital (the landowner), and industrial capital (the construction company) These different agents compete for a share of the development profits, and in order to maximise share of profit have formed partnerships in various ways to control the development process.[2]

Typically a property company organises the scheme, the owners of the site sell it or lease it for development, the local authority grants permission, a bank provides short term 'bridging' finance to fund construction, financial institutions guarantee long term finance post completion, a construction company builds the building, and it is let to an occupier or occupiers on completion. The property company take development profit, the landowners get ground rent or purchase price, institutions receive interest on their loan capital, and construction companies obtain a profit. After completion the developer and or financial institution usually retain the property as an investment, receiving rental income from the occupier.[2]

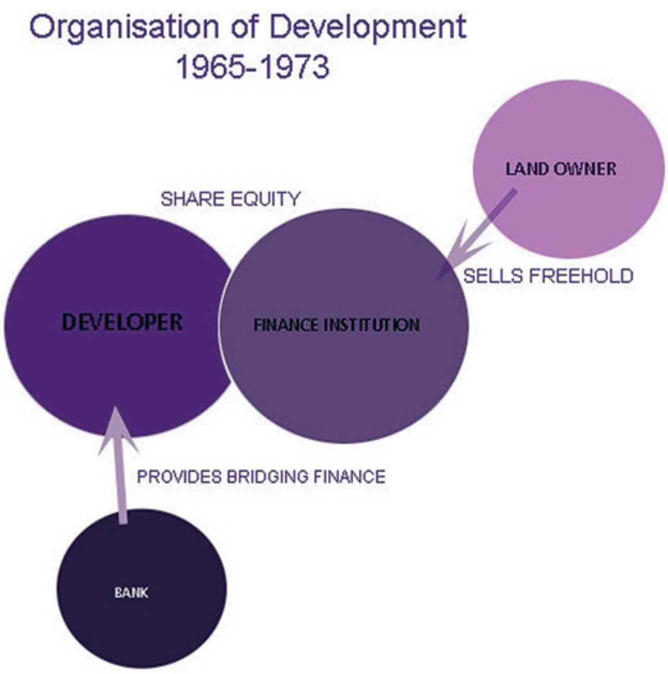
Since the Second World War, demand has been generated by investors and by occupiers, and supplied by various combinations of participants in development. This section seeks to explore the interaction of developer, investor, and occupier, primarily from the developers' perspective. It will explore the changing organization of speculative development in the post war period, the circumstances surrounding peaks and troughs in the cycle, and those who gained or suffered as a consequence. The subsequent section will look at the ways in which Land Securities appear to have adapted to the risks exposed by the two major post war property crises, and their current strategies that ddress exposure to risk, while still being flexible in terms of strategies for development.

REBUILDING 1950-64
Harold Samuel, acquired the 'shell' company, Land Securities in 1944. The company had decided by 1947 to specialise in commercial property, acquiring offices and retail properties, and starting to acquiring other property companies by 1951 . Land Securities first became developers in 1955, with the acquisition of Ravenseft Properties, a retail development between of occupier demand from investment demand. Designed to control oversupply, including Office Development permits. The policy successfully ended the first boom. It has been argued that these controls helped to stabilise the office development market.[2] Land Securities continued to focus on acquisitions and takeovers, as did other major players, and the property sector rapidly concentrated into few larger companies.



Investment Fuelled 'Boom' 1968 -1973
The demand for property investment rather than occupier demand fuelled the second boom, now requiring the redevelopment of existing sites. In the rental sector, newest stock commands highest rents, at a disproportionate level to older secondary stock, providing a major financial incentive to build new on the site of existing secondary supplies. Acquiring freeholds on suitable sites was increasingly costly, further favouring large companies. Finance companies by now supplanted landowners or construction companies as main partners to developers. shared equity in properties with Prudential & Legal & General. The institutions had the capital base necessary to initiate major burst of speculative development,

and to acquire at least part freeholds of their sites. In 1968 Britain's biggest property deal at that time, Land Securities took over City Centre Properties. In 1969 a further take over City Of London Real Property provided further valuable freeholds in the City, ensuring the company would dominate office development in London in second boom. Between 1964 and 1974 there was a reduction of 40 per cent in the number of quoted property companies due to similar takeovers and acquisitions. The assets of property companies were becoming more valuable because of the effect of the shortage of investment properties3 In 1970 a new Conservative Government again relaxed planning regulations, and with the aim of stimulating economic growth, released new money into the economy. By March 1972, property shares had risen over five times from their value five years before. With more money in the economy, banks were seeking property to fund. Bank lending increased from £71m to £1332m between 1970 and 1973, mostly in property.[4] Loans were made at rates where interest payments exceeded rentals, on the basis of increasing capital values, and on expectations of upward rent increases on increasingly short rent review periods.



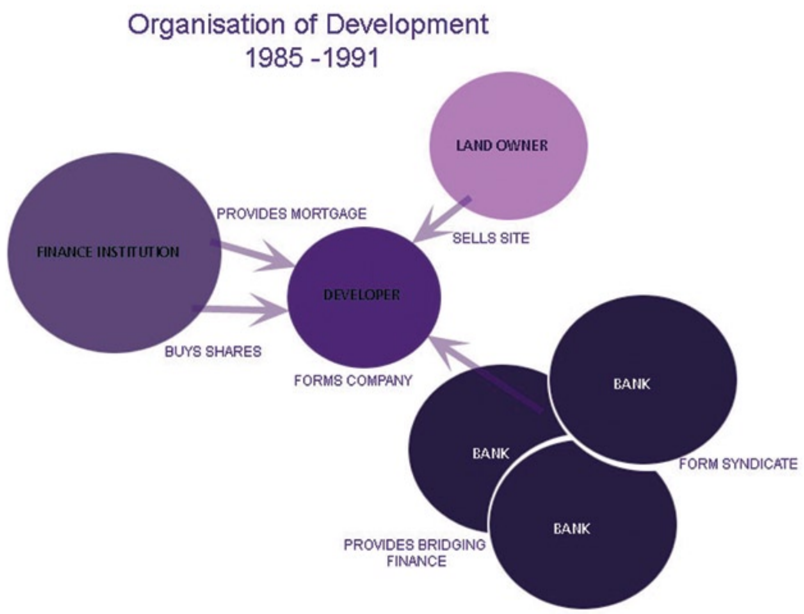
THE FIRST MAJOR 'BUST' 1974-75

To counter growing inflation,interest rates were raised to 'penal levels' [3], and the government introduced a commercial rent freeze. Developers borrowed further against the assumed increase in value of their properties to meet the income shortfall between rental and interest payments. The oil crisis of 1973 and loss of confidence in Sterling led to a national recession. Occupier demand for property fell, the market was over supplied, and property values tumbled. As investors began to withdraw their funds from banks, the banks attempted to call in their loans from property companies, against assets which had not held their predicted values. Property companies that survived, including Land Securities, were forced to sell off assets at low prices to repay loans. Many large developers and property companies, and merchant banks could not recover their funds. The banks were rescued, to avoid a loss of integrity in the banking system as a whole, by the four largest clearing banks and the Bank of England, hoping to see out the crisis.[4] When the Labour Government then renewed commercial rent freezes in 1974, the property market completely collapsed.

In 1974 Land Securities was the largest property company in the world with assets worth over over £1,000 million. The following years saw Land Securities selling some £200m worth of properties to meet the commitments of a much reduced redevelopment programme. The company also took out a five year £80m loan. [5]

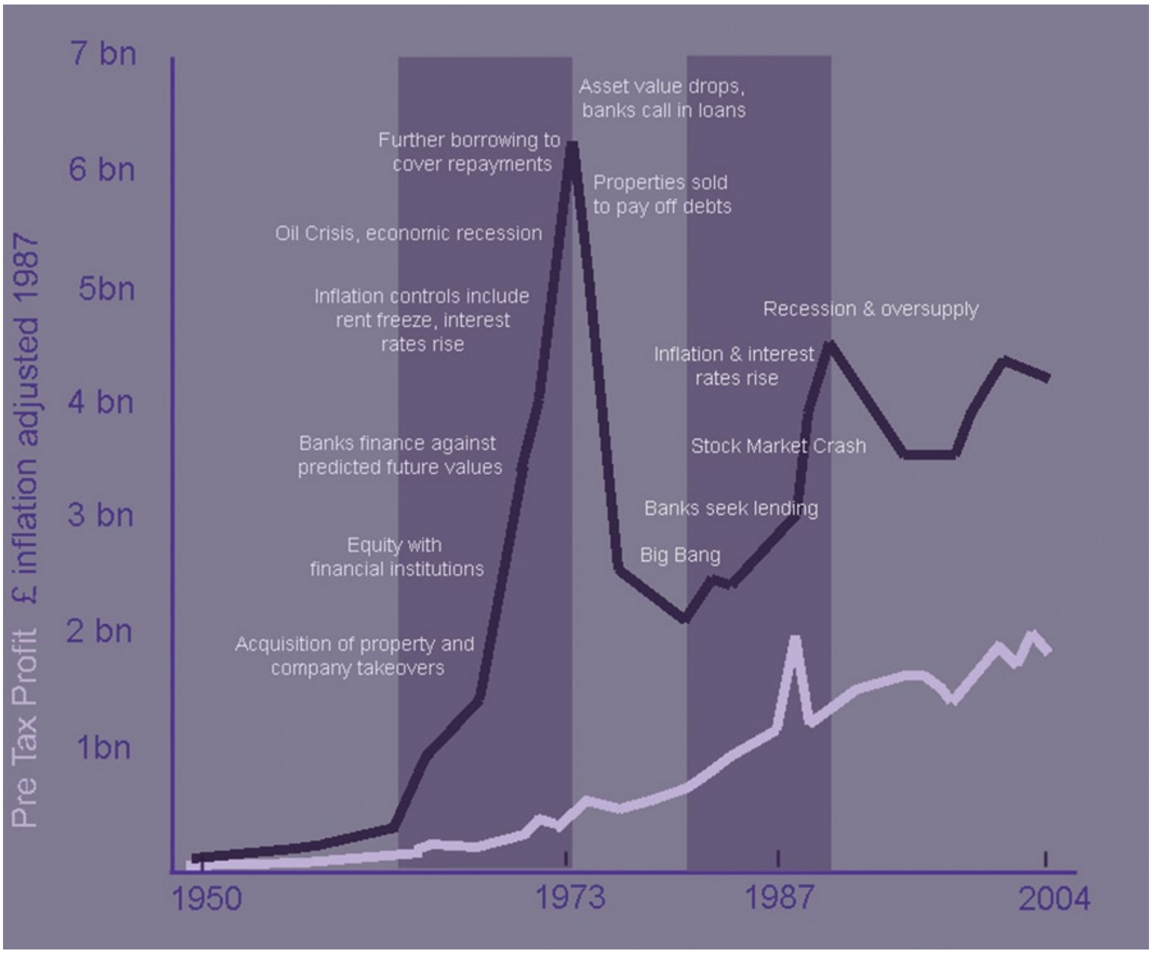
THE THIRD BUILDING BOOM 1986-89

By 1977 the property industry had been reestablished, thanks partly to pressure put on the Government by the banks to 'unfreeze' commercial rents. Investment returns were lower than previously, and other markets appeared more attractive to the financial institutions, who began to seek alternate locations for their investments. In 1980, around 20 per cent of insurance companies' and 10 per cent of pension funds' investment was in property. By the mid-1980s they had reduced their share to a third of this amount 3. Increased demand for office space was anticipated, due to technological changes, and as a result of the deregulation of the Stock Exchange. The 'Big Bang', took place in October 1986, but had been set in motion three years previously. Planning restrictions were eased. The globalisation of financial activities in the City of London with deregulation produced huge levels of liquidity, provided by the banks, and by the end of the 1980s bank lending had reached an all-time record from £7bn to £38.9bn. Property provided a hedge for capital. A debt financed development boom, funded by the banks, had begun. Schemes were much larger and more complex than previously. Property developers were able to secure loans against individual developments with no liability for repayment to the parent company, putting most risk with the banks. The Banks moderated their risk by not funding schemes alone but by creating syndicates, and developing other forms of complex financing.



1989-1991:THE SECOND 'BUST',

The 1987 stock market crash sparked an economic crisis. Once again inflation rose, interest rates rose, investors wanted to divert money away from property, and demand for space, lower than anticipated, dropped further. By the beginning of the 1990s, rental growth had tailed off and the market was collapsing. There were no buyers for the completed developments. By 1991, one third of office space created in Docklands was empty.



CURRENT CONDITIONS

Institutions and banks are reluctant to invest heavily in speculative development, as they have been since the 1991 bust. Properties performance has been good against other investment markets, and has drawn capital through private investors, though recently institutions are once again beginning to invest. The shortage of institutional capital may have been instrumental in the increasingly innovative types of development finance, such as joint ventures, and securitization. As the varying organizational diagrams of parties engaged in speculative development shows, there is a desire to build, and when, as the credit squeeze of the fifties shows, finance from traditional sources is unavailable, innovative solutions are found.

LAND SECURITIES AND RISK

Before 1974 Land Securities appears to have been very assertive, not only buying property, but making take over bids, and acquiring companies, for which they were debt financed. The property crash in 1974 impacted Land Securities heavily, requiring sale of assets and a major loan, which supports the supposition that the company, like others in this period, was highly geared. Now, Land Securities are geared at around 40%, a very modest figure. In Japan, developers, are typically geared at around 200%. Prior to the 1974 Crash, Land Securities reports many company takeovers, driving competitors from the marketplace. Post 1974 , the only company acquisition recorded in their published company information is Trillium acquired in 2000. Detailed information has been difficult to obtain, however, it appears that the crash of 1974 had a profound effect on the companies strategy. Land Securities chief investors are pension companies, who are risk averse. The strategy adopted t has been highly successful,

and while assets have not shown growth since the 1970s, pre tax profits and share values have continued to grow year on year.

The losses to property companies in 1973 and 1989 can be attributed to

- Loan repayments exceeding rental incomes
- Loss of investment to more rewarding markets
- Insufficient occupier demand

The companies current strategies to address these risks are

LOAN DEFAULT RISK
- low gearing across company,
- self finance on some developments (Bankside 123)

LOSS OF INVESTMENT TO OTHER MARKETS
- large land/ property portfolio holding with long term value guaranteed,
- UK property only, therefore known commodity, known political processes
- conservative image to suit pension funds etc seeking long term returns
- diversification in tried & tested areas (property management services),
- increasingly complex/innovative investment offer to spread risk & attract investment

DEMAND RISK
- appeal to mass market with flexibility in occupation, as determined by Agents

– conservative and reactive group who can recommend only what the market has wanted before- not cutting edge or 'risky'

CONCLUSION
The property market is subject to risk, because of the delay between demand and supply. Demand is generated by investors and by occupiers. Return for investors is reliant on demand from occupiers, as high rentals provide high yields, but investment demand does not always coincide with occupier demand. Both demands are influenced by external forces, such as technological changes and national economic cycles in the case of occupiers, or excess capital, inflation and alternate market performance in the case of investors. Developers are motivated by profit, which is achieved through supplying demand from occupiers and investors, however investors provide capital for development and long term finance, and therefore have more control over speculative development than occupiers. Occupiers interests and needs are represented in the process by agents, who advise on the basis of analysing the markets response to available property, an inherently conservative process.

1 . McGregor et al 'Understanding the Property Cycle' Royal Institute of Chartered Surveyors 1994
2. Barras 'The Development Cycle In the City of London' Centre for Environmental Studies 1979
3. Isaac,'Property Finanace' Palgrave MacMillan 2003
4. Harvey 'Urban Land Economics' MacMillan Press 2000
5. www.landsecurities.co.uk/February 2006

LAND SECURITIES:THE COMPANY

source: Capital Commitment / Land Securities

picture of Sainsburys - an example of Land Securities retail properties

30 Gresham Street, EC2, Courtesy of Land Securities annual report 2005

BACKGROUND:
Land Securities is a public listed company and indexed in the FTSE 100. It is the largest Uk property development and investment company, employing over 1.900 professionals , owning and managing over seven million m2 of retail and commercial property.
Its early roots go back to 1944 when its founder Harold Sammuel purchased Land Securities Investment Trust Limited. Ever since the company has witnessed major restructuring in its businesses and has transformed into one of the largest property owners across Europe and a leading reputable company in the UK.
In 1947, the company concentrated on commercial property in and around the West End of London , this was accompanied by the disposal of their residential holdings in the UK.During that year the value of the group's portfolio reached £1 billion. Although they have been affected by the booms and busts of the market they have managed successfully to maintain a high value portfolio indicated in the value of their total assets which reaches £10 billion today.
In 1982 the name of the company was changed from The Land Securities Investment Fund to Land Securities PLC. During that period their portfolio valued at £ 1.48 billion.
For further information about the history of Land Securites refer to Property and risk.
source : www.landsecurities.co.uk

ORGANIZATIONAL STRUCTURE:
Land Securities is divided into three different business units, each unit meeting the particular requirements of its customer group. These units are:

PORTFOLIO MANAGEMENT:
This part of the company manages the portfolio of the group in order to achieve maximum returns for its shareholders. This is done by renting properties, thus this unit plays the role of a landlord on behalf of the group. Properties include retail and central London portfolios.

DEVELOPMENT:
This business unit manages the development of new sites and buildings or the re-development of existing buildings. It primarily focuses on urban community development and these are long term developments which include their holdings in Kent Thameside, Eastern Park, Stansted , Essex and Coldhams, Cambridge. Such developments may include residential, leisure, retail and community facilities.

LAND SECURITIES TRILLIUM:
This part of the company owns and manages buildings on behalf of customers who occupy them, these include properties that Land Securities own and others which are only managed by them. It offers a full range of support services including providing reception staff and maintenance staff. Land Securities Trillium manages over 7,400 properties for clients covering over eight million square metres. Their clients are diverse, including BBC, Barclays, and Norwich Union.
Each of these three business units is overseen by the Land Securities Group. The Group agrees the overall strategy of the business and develops the company's business plan. It agrees the funding requirements of each separate unit, approves individual projects and determines the Human Resources, Information Systems and communican.
(source : www.thetimes100.co.uk/case-study)

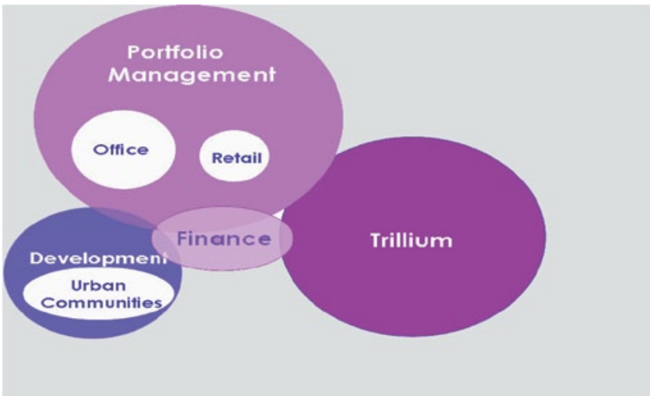
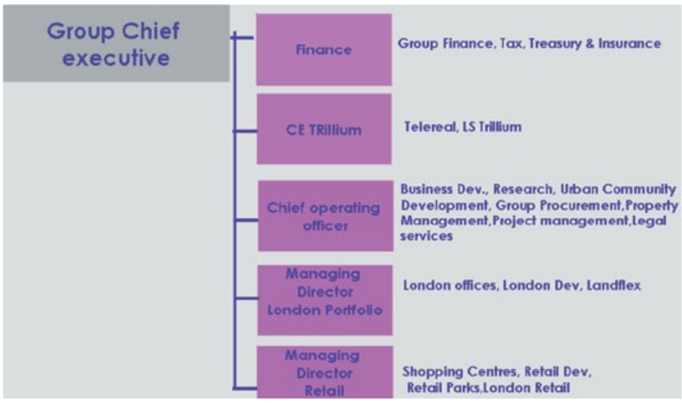


Diagram showing the three business unit, (development, Management portfolio and Trillium) and their relationships to one another.



Corporate Structure of Land Securities, showing the main business units.
Source: www.landsecurities.co.uk. tructure and people

STRATEGY, IMAGE AND VISION

" Innovation, Excellence, Respect, Integrity, Customer Service", are the key words used by Land Securities to describe their strategy. They market themselves as a company that builds mutual respect with their clients and the people they deal with including their employees. These words have been confirmed by Jonathan Turk from Land Securities who has confirmed that they have good relationship with the local authorities and they also work closely with communities. According to him they have integrity as they are always committed to what they promise, and brand and quality best describes what they deliver.
Following on their good social image which they work on maintaining, they have an active contribution on a community level. This is accomplished by the generous grants they donate as part of their commitment to communities. This is reflected in their funding of "SELF", (South East London Community Foundation) a charitable company as part of their Capital Commitment Fund. Grants usually go to community groups such as residents associations and community centres. Between 2003 and 2005 the Fund has provided grants to a range of community projects, Southwark has had its share. As stated in a press release in July 2005 , Land Securities have pledged 50.000 to Southwark the community, benefiting diverse projects primarily educational ones for children, dance theatres, summer camps, sports teams and youth clubs. (source:www.selcf.org.uk/ls.html).
Their focus on communities is illustrated in the development of Bankside 123, According to Tim McCahill, an architect from Allies & Morrison Bankside 123 forms a good link to "Big London." What makes it so important? For Tim, "it's the combination of business space with a new focus for local people. With much-needed shops and public spaces, Bankside 123 is about the community – not just tourists, workers or visitors." Refer to (Civic image and Public space).
According to Land Securities, their vision is: "to be recognized as the UK's leading property company. The achievement will be measured by returns generated for shareholders, new business wins, customer retention and satisfaction levels,employee satisfaction and third party recognition of our achievements". Their success indicators will be discussed in the following section. (source: Land Securities annual report-2005)

"We have a long tradition of working closely with the communities that neighbour our property holdings. Through our relationship with SELF we believe that we will be able to direct better these activities to areas of the greatest need and benefit from SELF's experience in London".Mike Hussey, Managing Director,London Portfolio.
Source: www.selcf.org.uk/ls.html

School trip to Southwark Cathedral

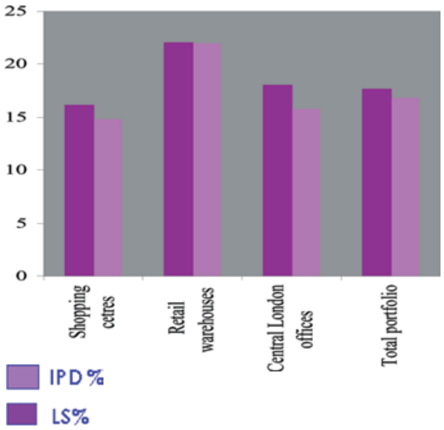
SUCCESSFUL COMPANY

There are several key indicators that illustrate how Land Securities are a successful company, meeting their goals in maximising returns and creating value for thier shareholders.

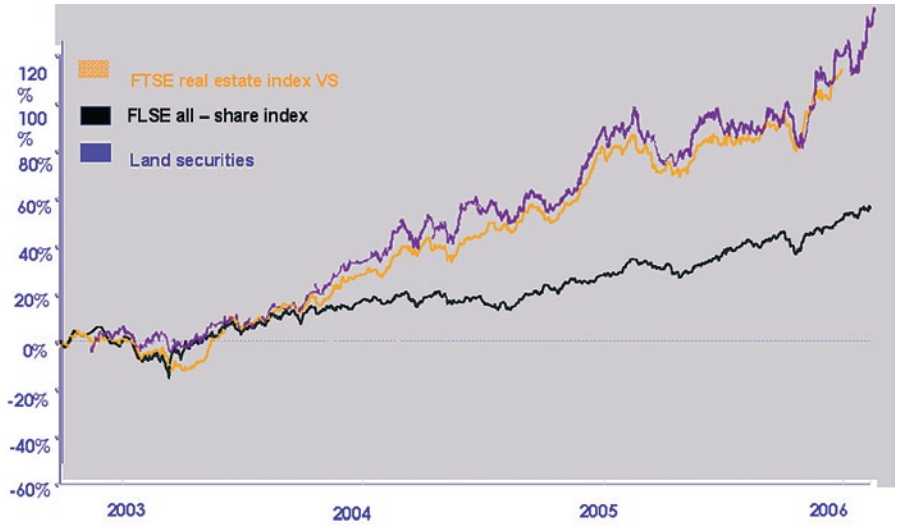
One indicator is the value of their combined investment portfolio in the Uk which was £9.4 billion in 2005. (The London portfolio business is responsible for Central London retail and office properties) .This value has seen a 10% increase from 2001 to 2005 which is relatively a good indicator . Their good performance is also illustrated in

Graph 1 which shows that their total property returns have exceeded the IPD (Investment Property Databank) , in particular the central london offices Exceed IPD sector returns by more than 1% per annum.

The rising value of their share price which is also higher than the growth of the FTSE as illustrated in graph 2 is also an indicator of their good performance. Graph 3 compares Land Securities to other developers and shows that they are one of the top three companies in the UK.

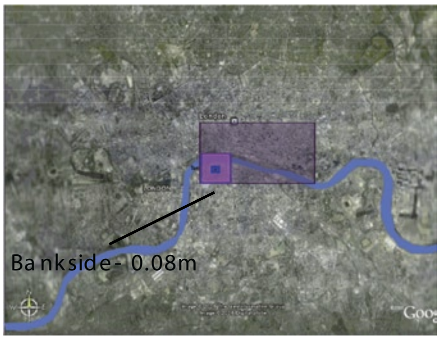


Graph -1 / Land Securities returns outperform IPD
Data taken from LandSecurities nnual report-2005

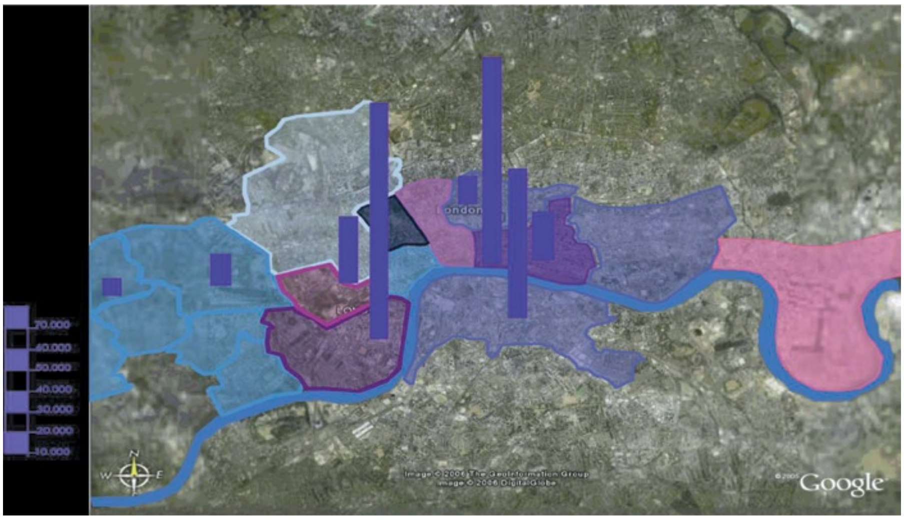


Graph -2 / Land Securities outperform FTSE
Source: www.developmentsecurities.com

Graph -3 / Land Securities compared to other developers
Source: www.developmentsecurities.com



Graph -5 / image illustrates land Securities total assets in m2 highlighting bankside 123.
Uk assets 7M m2,London property1Mm2, London office .7m2, in development .3Mm2and bankside .08Mm2



Graph -4/ Land Securities' office space in square meters in London

Furthermore, graph 4 indicates Land Securities' total area of London office holdings and developments by location. As illustrated in the graph, the highest area of office space is concentrated in Victoria , followed by the core of the City . Bankside 123 comes within the highest zones in the city fringe. Although Land Securities owned the land for bankside 1 as discussed in the Project Overview, they have made further aquisitions within the past few years. As reported in their press release in 2005 , they have made further aquisitions to their holdings.

Image showing the model for the development by courtesy of Land Securities

In April 2005 it has been announced that Land Securities have purchased the property on 42 Southwark Bridge Road. This aquisition further consolidates Land Securities' holdings in Southwark where they are also developing Bankside 123. Mike Hussey managing Director at Land Securities, commented, " The Bankside area has a real head of steam in its transformation to a commercial and cultural hub for London and the aquisition of 42 Southwark Street provides an apportunity to generate a good income return from a medium term redevelopment prospect". In addition it has also been announced that LandSecurities have exchanged contracts for the purchase of the Red Lion Court and Park Street in SE1 .

In conclusion Land Securities are a successful investment company with a good social image which they maintain through their contribution to the community, delivering what they promise by outsourcing work to reputable consultancy firms in the Uk. Bankside 123 is one example that confirms this strategy. As discussed earlier, brand and quality distinguishes them, as can also be seen in the scale of the model they made done for the development which cost £250.000 as Jonathan Turk , from Land Securities confirmed.This amount of money is nearly the cost of a flat in central London. Their work with top consultants also facilitates planning procedures for them and makes it easier and faster to get planning permissions for their developments. The first chapter discusses how land securities are a conservative company that does not take risks as they have learned from their past experience. Bankside 123 was not a risk for them as the project was also self funded. Being conservative in the market enables them to maintain their reputation with their shareholders as a safe place to invest. Being a successful company whose development pipeline constitutes 10% of their asset they aim at renewing their investment , they believe that they have no competition in the market due to the scale of their developments as in Bankside 123. Refer to Bankside 123:project overview.

BANKSIDE 123 - PROJECT OVERVIEW

1. Aerial photo of St. Christopher House, Google -Earth
2. Map of site

SITE DESCRIPTION
The site, owned by the developer is of 2.2 hectares which was first granted office use in 1949 and was occupied by the Ministry of Defence (the building itself called St. Christopher's House). A large complex of blocks of varying heights, the tallest section being 14 storeys including plant had a linear, impermeable, layout of two staggered slab elevations to Southwark Street facing south and Sumner Street facing north. The building, one of Europe's largest at the time of construction in 1959, comprised 81,684 sq. m. of office floorspace, and contained three retail units. Though not a designated conservation area, the site and surroundings have immense townscape value, much of which drawn from its historic street pattern which was eroded by the assembly and subsequent development of this site in the 1950's. At that point, half of Zoar Street which connected Sumner Street east-west to Great Guildford Street and provided both physical and visual permeability was removed. In addition, half of Canvey Street which connected Sumner Street north-south to Southwark Street, and provided physical connection was removed from the public realm together with a smaller mews style cul-de-sac inside one of the blocks. Other cul-de-sacs and back street passageways had been removed between 1916 and 1950 and all architecture of any historic interest dissappeared. The eastern part of the site lies within the background to the strategic view of St. Paul's from Alexandra Palace in north London. Established strategic policies, issued by the Secretary of State, afford some protection to the strategic viewing cone from developments deemed harmful in its backdrop. As such, the maximum height for the new building in this part of the site is 50 metres AOD (above ordinance data: i.e. mean sea level). Very little is known about the archaeology and past landscape of this area but the on-site recording and post-excavation work on the samples (taken between April and August 2004 during an excavation undertaken on behalf of Land Securities plc.), can tell us what sort of landscape feature it would have been at different times in the past, which is of real value for understanding the landscape setting of the archaeology associated with the eyots (islands of higher ground) to the east and west.

DEMOLITION OF ST. CHRISTOPHER HOUSE
A few factors contributed to the decision to demolish St. Christopher House rather than refurbishing it. The first being the poor physical condition of the building. Secondly, the Ministry of Defence (MOD) was moving to a new secure, modern and efficient working accommodation in central London, close to Downing Street. This created opportunities for reducing the number of London buildings used by MOD and save accommodation costs. In addition, MOD had identified that improvements were necessary to the accommodation and working environment available in its principal office building in Whitehall known as Main Building. It therefore decided to redevelop Main Building and move its other offices to it. Thirdly, Land Securities believed that the lay out of the existing building did not meet the standards of modern office space requirements and brought forward a new proposal for the site. During the demolition over 90% of the debris was recycled (see Environment chapter).

THE PROPOSAL
In october 2001, an application was made by Land Securities Plc to a design by Allies and Morrison. St Christopher's House would be demolished and replaced with three new buildings with a new ground floor layout and urban design. Canvey Street, half of which was removed in 1950, is replaced and mostly pedestrianised so that it connects Sumner Street with Southwark Street north to south. Another north-south connection is provided by a new space between Buildings Two and Three linking Zoar Street (to the back of Tate Modern) with Southwark Street. The layout includes laid out spaces between each of the new buildings and also at the apex of the corner with Great Guildford Street and Southwark Street where the plan form of Building Three is arranged to reveal the elevation of the adjacent building forming a triangular ''Piazzetta'1 with an ancillary retailing unit/kiosk providing activity.
There would be 26 retail units in all together with a large leisure/health club use. One of the retail units would be a metro supermarket. All are at ground and basement l.





A view of Bankside 1,2 Images by courtesy of Allies and Morisson

THE DESIGN

The proposal (as described in the planning decision to approve the plan) reinstates the features of townscape which had been lost, provides visual and physical connection, and includes vistas and new public spaces. The buildings address the street with easily recognisable entrances and a transparent ground and mezzanine level. The new open space at the junction of Southwark Street and Great Guidford Street is also a major benefit.
In architectural terms, the proposal concures with CABE's guidelines. CABE's comments (see statutory structures and policy chapter) regarding the impact of the buildings on Southwark Street are fair criticism as the buildings are somewhat bulky. The council believes that the overall improvements to the urban design and visual appearance of the site and surroundings would outweigh this consideration. The orientation of the floorplates in the three buildings, which results in an inflected building line facing Southwark Street, is intended to reduce the visual appearance of bulk and create rhythm in long views, and does so with some success.

In terms of long views of the building from the Thames and other main streets, Land Securities environmental statement (see more on this in the Environment chapter) demonstrates that although the building would be visible from many close local views, it would not be unduly dominant or intrusive. The most critical, though not strategic protected views, are from the Thames along oblique angles from the water and adjacent northern embankments and also from the elevated platform of the new Millennium footbridge.

* N:\Planning Decisions - Web pages\Meeting date 8 March 2002\st_christopher's_house_report.rtf

Final ground level plan submitted with proposal,
Allies and Morisson

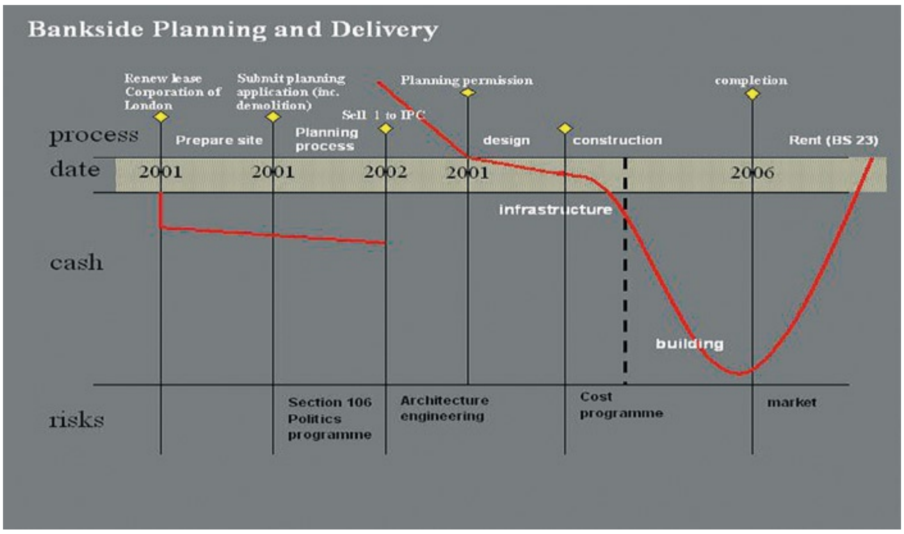
The roofline of St. Christopher's house was not visible from the north side of the river but the proposed Building One will be. Its elevated bulk is mostly obscured and shielded by the Herzog De Meuron's glass sarcophagus on top of the Tate Modern but in oblique views, where the development plane facing the Thames is lower, between five and eight of the floorplates would be visible. Though visible from the Thames, it would not however be harmful or intrusive in the skyline.
The interior layout of the buildings: These specifications are made before appointing the architects. The layout caters to the wide-cross section of the office market, supplying a wide office plate, necessary to accommodate open-space work facilities.

To conclude, the office-led development of Bankside, is the right development at the right place and in the right time. As Land Securities owned the site, there was no need to purchase the site or to secure outside funding. The "forward looking neighbourhood" of Bankside makes this development a focal point of a dynamic district. The removal of the existing over bulky St Christopher's House and its replacement by the current proposal will hopefully add to the regeneration of the Bankside area of North Southwark and contribute to London's world city status.

THE BUILDING PROCESS

The preparation of site started in 2001, when Land Securites who owned most of the site (Bankside 1) renewed the lease of the rest of the site from the corporation of London. By June 2002 planning permission was granted and the demolition of St. Christopher House began. In May of 2004 Land Securities did a forward sale of Building 1 IPC for the use of Time Warner's London based magazine and book publishing operations. Land Securities intends to lease back the retail and leisure elements of the building. IPC has an option to buy back this element once it has been let by Land Securities.
Bovis Lend Lease had been contracted by Land Securities to build the property which will be handed over to IPC Media for fit-out in Spring 2006.
Completely funded by it's own resources, the sale to IPC covers the cost of building 1. According to the contract with IPC. Land Securities is required to landscape the sites of buildings 2 and 3, though it has been decided to continue with the construction of these buildings- delivery date March 2008.

Time line showing the construction process of Bankside 123 in relation to the cashflow.

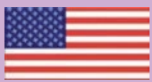


Floor areas (sq m)

		Bankside 1	Bankside 2	Bankside 3
Floor		Sq m	Sq m	Sq m
12	Offices	605.2		
11	Offices	1,975.1		
10	Offices	2,975.1		
9	Offices	3,739.7	723.9	875.4
8	Offices	3,739.7	1,693.8	1,559.3
7	Offices	3,739.7	1,693.8	1,544.3
6	Offices	3,739.7	1,747.8	2,438.6
5	Offices	3,739.7	1,747.8	2,438.6
4	Offices	3,739.7	1,747.8	2,438.6
3	Offices	4,035.1	1,747.8	2,438.6
2	Offices	3,998.7	1,747.8	2,652.9
1	Offices	3,238.1	1,708.4	2,580.5
Sub total	**Offices**	38,435.1	14,557.0	18,967.4
	Entrance hall	698.5	394.5	164.8
	Conference/Storage	3,941.0	770.1	860.0
	Retail	2,211.5	826.0	2,347.1
	Health Club	749.7	-	-
Total		46,035.8	16,547.6	22,339.3

The name of building 1 " The Blue Fin Building" - selected following a staff competition which attracted more than 300 entries - refers to the 2,000 blue aluminium fins that cover the building's facade. The fins, manufactured in Poland, have a metallic finish that changes the building's appearance when viewed from different angles. Specifically placed to reflect the sun at different parts of the day, the fins will provide constant shade inside the building (see Environmental chapter). IPC claims that The Blue Fin Building will provide an "architectural statement" to match Tate Modern.

A topping out ceremony was held in September 2005. "I believe we've chosen a name that not only describes the building's unique appearance, but one that will also be memorable to everyone, from visitors to taxi drivers," says chief executive Sylvia Auton. "The building has many amazing and distinctive design features - the blue fins are without doubt the most eye-catching, and make it instantly recognisable." Allies and Morrison architect Tim Makower adds: "The shadows and reflections created by the fins change shape and direction as the sun moves around the building, marking the time of day in a dynamic way, like a sundial." The building has a central atrium more spacious than IPC's current headquarters.

ALTERNATE TERMINOLOGY	
PRO FORMA	
DEVELOPMENT APPRAISAL	

DEVELOPMENT METHODOLOGY

- -SITE ACQUISITION
- -SITE PREPARATION
- -HARD COSTS
- -CONSTRUCTION
- -SOFT COSTS
- -PROFESSIONAL
- -FEES AND PLANNING CHARGES
- -REVENUE

FEASIBILITY STUDY

Goal: Determine the profitablity of a proposed development

The Feasibility Study is a theoretical investigation by a developer to determine if a development is economically feasible. Note the alternate terminology used in Britain and the United States. 'Development Appraisal' is used in the United Kingdom, whereas 'pro forma' is the common American term. Two definitions for pro forma as listed on investopedia.com are as follows: "A Latin term meaning "for the sake of form." In the investing world, it describes a method of calculating financial results in order to emphasize either current or projected figures." Therefore, a pro forma not only estimates the merits of a business proposition, but generally follows a consistent format. The other definition says that a pro forma is a a "description of financial statements that have one or more assumptions or hypothetical conditions built into the data."

The feasibility study is the initial step of testing the viability of a project, and is updated and cross-checked as a development proposal moves forward. There are many examples of developments that made it through several stages of planning but never were completed because as market and regulatory conditions evolved, the viablility of projects is invariably changed.

To understand the pro forma, the development process must be clear to the reader. Although development projects differ, they all have the similar steps and they often can happen in different order or pose different levels of difficulty.

DEVELOPMENT APPRAISAL											
PREPARATORY STATISTICS											
Office Letting	**Bankside 1**			**Bankside 2**			**Bankside 3**			**Bankside 23**	
	OFFICE			OFFICE			OFFICE				
	square feet leased:	495596	sq. ft.	square feet lea:	178116	sq. ft.	square feet lea	204164	sq. ft.	382280	sq. ft.
	rent (year 1)	32	£	rent (year 1)	32	£	rent (year 1)	32	£	32	£
	annual growth	3%		annual growth	3%		annual growth	3%		3%	
	RETAIL			RETAIL			RETAIL				
	square feet leased:	23804	sq. ft.	square feet lea:	8891	sq. ft.	square feet lea	25264	sq. ft.	34155	sq. ft.
	rent (year 1)	50	£	rent (year 1)	120	£	rent (year 1)	120	£	50	£
	annual growth	3%		annual growth	4%		annual growth	4%		3%	
Site Demolition		3500000									
Site Acquisition		0									
Hard Costs - Creation Costs											
HARD COSTS	(£/sq. m)										
office construction cost	1700	158	£/sq. ft.								
retail construction cost	1700	158	£/sq. ft.								
car park construction cost	14000	14000	£/space								
	(£/space)	40	spaces								
TOTAL BUILDING COSTS											
office		94337932			33904824			38863125		72767949	
retail		4531151			1692424			4809065		6501489	
car park		560000			0			0			
TOTAL		99429082			35597248			43672191		79269438	
landscaping, extras (+ x %) x=	15%	114343445			35597248			43672191		79269438	
SOFT COSTS											
Soft Costs - Creation Costs											
professional fees	10%	9942908			3559725			4367219		7926944	
Total Creation Cost		124286353			39156972			48039410		87196382	
Bankside 123								211482735			
TOTAL CREATION COST											
Miscelaneous assumptions											
BUILDING RUNNING COSTS											
expenses:	2	£/sq. m.	=	21.56	£/sq. ft.	(Nick Baker, U of Cambridge)					
annual expense growth:	4%										
BUILDING EFFICIENCY											
assumed vacancy rate	office	10%									
	retail	10%									
building floor space efficiency		83%									

The initial work for the pro forma - setting up the creation costs and rental templates for future time sequenced spreadsheet work.

DEVELOPMENT APPRAISAL									
Office Letting	**Bankside 1**			**Bankside 2**			**Bankside 3**		
	OFFICE			OFFICE			OFFICE		
	square feet leased:	495596	sq. ft.	square feet lea	178116	sq. ft.	square feet lea	204164	sq. ft.
	rent (year 1)	32	£ / sq. ft.	rent (year 1)	32	£ / sq. ft.	rent (year 1)	32	£ / sq. ft.
	annual growth	3%		annual growth	3%		annual growth	3%	
	RETAIL			RETAIL			RETAIL		
	square feet leased:	23804	sq. ft.	square feet lea	8891	sq. ft.	square feet lea	25264	sq. ft.
	rent (year 1)	50	£ / sq. ft.	rent (year 1)	50	£ / sq. ft.	rent (year 1)	50	£ / sq. ft.
	annual growth	3%		annual growth	4%		annual growth	4%	

NOTE: the purple blocks visible in the spreadsheet images indicate data that can be adjusted to test for changing market trends and check profitability.

SITE ACQUISITION COST

At Bankside 123, the site had been owned by Land Securities since the 1950s. Although any piece of property has an inherent carry cost that is at least the opportunitiy cost of potential returns on the capital imbedded in the site invested elsewhere, it was assumed for the purposes of the feasibility study that since Bankside is an up and coming area, the capital appreciation of the site over time makes makes the site in under-developed form (as it was with St. Christopher's House), an attractive investment from a capital appreciation perspective. Thus, the potential for higher returns iin other investments relative to the land at Bankside 123 is low, and for the purposes for the feasibility study, the cost of the site is assumed to be roughly zero.

PREPARATORY STATISTICS

The preparatory statistics are the most basic and fundemenatal statistical assumptions about the development project. It is these details that form the core assumptions made by the developer, and should have seemed plausable before through quick mental calculations prior to the project reaching the spreadsheet for analysis. The amount of lettable office space is one of the most important considerations. The worth of property is often, and almost always in large urban centres, determined not by what is currently on the site but what is possible to exist on the site. As such, the allowable density on a site and the resultant area of lettable space greatly determines the worth of the land. In the case of Bankside 123, the square footage was roughly determined early in the development process by three building envelopes that would please the developer, the local borough, users, and residents of the area. In a retrospective pro forma, the possibilities for additional profit can be investigated as if the buildings were to be built larger than actually constructed. Bankside 1, for example, at only 11 stories for half of a million square feet has generous floor plate sizes of over 40,000 square feet. It is considered a medium to somewhat large building in the London market office market.

Another very important consideration is the predicted rental value of the space to be offered to market. From reasearch of London office market data, it is quite clear that as Bankside 123 is directly behind the Tate, is within a 15 minute walk of the City via the Millienium Bridge, and is close to Waterloo and and London Bridge stations, +the Bankside locale is well accepted as 'City Fringe'. As shown on earlier graphs, rents in these areas are between 30 and 35£ per square foot. For the pro forma, £32 per square foot was seen as a reasonable caluculation, and annual rent growth of approximately 3% was seen as a conservative factor to use for the time series calculations.

Quite the opposite from office rentals in an up-and-coming fringe area in central London, the regenerative aspects of the neighbourhood make it very difficult to predict what retail rents will be reasonable. As shown previously, retail rents in London vary widely on a micro scale, so much so that a quiet street around the corner from one of teh Capital's major thoroughfares may command rents of less than a third that of nearby high streets. How much pedestrian traffic will the new public realm provide? Will workers be inclined to use the retail shops at ground level? There are several reasons for a positive retail outlook at Bankside 123. First, Land Securities has secured one of the best tenants possible in Marks & Spencers


Bankside 123 is located in the rapidly regenerating area of Southbank; the popular Tate Modern, millenium bridge, Jubilee Line, and booming Borough Market all suggest that modest price increases in rent are likely a conservative if not pessimistic outlook.

Land Securities' reputation and size have allowed it to build relationships with blue-chip retail tenants; an enviable position for creating new high-quality retail areas.

Southwark Street is the area's main east-west thoroughfare, and the and Millenium Bridge should draw pedestrian traffic through the north-south passages leading through the site. As middling high streets in London generally command retail rents of over £100 for prime street-fronting shop windows, and the retail units in Bankside 123 are fairly shallow to maximize usable frontage, average rents of £50 per sq. ft. should be considered quite reasonable. As the retail outlook in London is not as optimistic as at the beginning of 2005, while keeping in mind the growing nature of the immediate neighbourhood in Bankside, retail rental rates were assumed to grow at 3% per year.

Differing costs for various types of office construction in the London market. Note the particularly relevant numbers as highlighted. Source: Spon's Architects and Builder's price book 2006. Edited by Davis Langdon. 131st edition. Taylor and Francis. Milton Park 2006.

	£ per sq. m (excl. VAT)
Civic Offices	
Non air conditioned	1 130 to 1 430
Fully air conditioned	1 430 to 1 680
Probation/Registrar Offices	830 to 1 180
Offices for letting	
Low rise, air conditioned, high quality speculative	1 150 to 1 450
Medium rise, air conditioned, high quality speculative, 8-20 storeys	1 400 to 1 900
Medium rise, air conditioned, city fringe, deep plan speculative office towers	1 700 to 2 000
Offices for owner occupation	
Low rise, air conditioned	1 150 to 1 450
Medium rise, air conditioned	1 700 to 2 000
High rise, air conditioned	1 900 to 2 400
Offices, prestige	
High rise, air conditioned, iconic speculative towers	1 900 to 2 400
..	
..	
..	
Large trading floors in medium rise offices	2 650 to 3 160
Basic fit out; London City and West End carpets, partitions, good quality decortations	325 to 450

The buildings at Bankside 123 fit well within the categories highlighted above, and so an 1800 £/sq.m cost of the building for office space of was used.

HARD COSTS

For early pro forma purposes hard costs are reasonably standard once the developer knows his target market; what type of building that will built and at what level of quality. Instances where costs are not reasonably standardized are unique, institutional buildings, where geography, climate, or design neccesitate unique materials and/or methods of construction, or periods of econmic fluctuation where materials or labour may suddenly become in short supply. Spon's Architect's and Builder's price book for 2006 listed that medium rise, air conditioned and highly speculative office towers would cost between 1400 and 2000 £ per sq. m. As a result, 1700 £ per square metre was the unit cost used. Conveniently, Spon's also listed the cost for high quality indoor shopping malls at £1,700 per sq. m., which is a built form that will closely resemble the shops on the retail floor of Bankside 123.
Bankside 123 has minimal underground parking, however 40 spaces at £14,000 per space as reported in the same publication is simple, so it was also included. In the hard costs.

It should be noted that building floor plate efficiencies are an important consideration. Land Securities reported their space figures in terms of net lettable area, however, they also included the efficiency floorspace efficiency rating which was 83%. Thus, all costs calculations asumed that the effective built and maintainied floor aras would be the lettable area divided by the floor efficiency in percent.

Soft Costs - Creation Costs									
professional fees	10%	9942908			3559725			4367219	

Soft Costs calculated as a part of creation costs. The 10% is the variable number to be adjusted for changing professional fees due to market conditions, while the three subsequent values are 10% of the construction cost applied to each of Bankside 1, 2, and 3, respectively.

SOFT COSTS
Soft costs for the initial pro forma were quick, and under the advice of several people familiar with property development,22 10% of the construction costs were added to include for things like laywer fees, advertising, planning consultants, architects, and engineers. As shown below, the 10% was variable, and the next three numbers are the values for 10% of total construction costs for each of Bankside 1, 2, and 3.

Total Creation Cost		124286353			39156972			48039410	
Bankside 123								211482735	

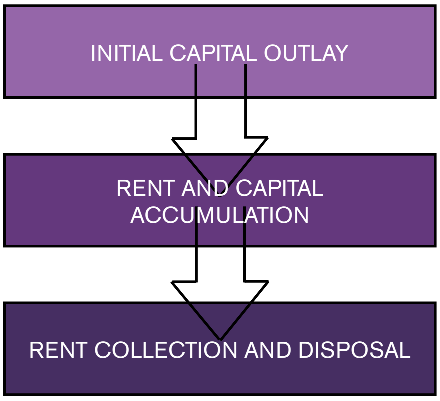
Exploded fragment from Excel worksheet showing total creation cost minus financing for Bankside 1, 2, and 3, respectively. The figure at the bottom right corner is the sum of the three buildings.

CAPITAL CREATION COST
The total creation cost uses the gross floor area (net floor area adjusted for floor area efficiency), and sums all the hard and soft costs. The above exploded fragment from Excel worksheet showing total creation cost minus financing for Bankside 1, 2, and 3, respectively. The figure at the bottom right corner is the sum of the three buildings; it closely resembles the total approximate constructed cost of approximately £220 million suggested by representatives from Allies and Morrison, the architects for the project, and Land Securities, the developer.

BUILDING EFFICIENCY
The last set of figures to be identified are a set fall under the broad category of 'building efficiency'. These figures were an attempt at building operating costs, assumed vacancies for both office and retail space, and where the figure for floor plate efficiency is sourced from with the spreadsheet. The operating costs of the building were sourced from a presentation by Professor Nick Baker of the University of Cambridge. Typical fully air conditioned buildings in the United Kingdom cost between £15 and £35 per sq. m., per year, and the value is converted to sq. ft. since the rest of the spreadsheet is worked through in sq. ft.

Miscelaneous assumptions							
BUILDING RUNNING COSTS							
expenses:	2	£/sq. m.	=	21.56	£/sq. ft.	(Nick Baker, U of Cambridge)	
annual expense growth:	4%						
assumed vacancy rate	office	10%					
	retail	10%					
building floor space efficiency		83%					

The miscelaneous assumptions for building efficiency. The effect of changing these potentially highly variable figures is examined later in the chapter.



The three phases through the pro forma time sequence. Initial capital outlay coincides with construction and creation; rent and capital appreciation occur through the middle; the last year final rent is collected and property disposed of.

CREATING AN IRR FORECAST THROUGH TIME TO DISCOVER THE VALUE IN A PROPERTY DEVELOPMENT

Once the known and estimated variables have been decided on, they can be combined with financing to calculate yearly revenue streams that can be used to calculate the discounted return on investment over a number of years, which is known as the internal rate of return (IRR). The internal rate of return is related to the net present value (NPV) of the investment, given an investor or developer's mill rate. If the investment's future discounted cash flows satisfy the developer's mill rate, then the NPV will be positive and assuming all variables hold true, the project will be make a successful investment.

There are three important segments in the time series worksheet. At the beginning of the project, there are large cash outlays to be made for the construction of the building and revenues have not started and/or become regular. The middle segment is when the developer holds the property as an asset, while it (hopefully) gains book value as capital appreciation occurs over time. For the purposes of the proforma, the last segment is the final year, and the develper not only collects the usual income from rent, but is assumed to sell the property and hopefully earn the capital appreciation they were expecting from the outset. After the last year, the developer has sold the property and over a period of time has a accumulated a series of cashflows that can be used to calculate the IRR.

	year -->	2004	2005	2006	2007	2008
Projected Cash Flow	**year -->**	**0**	**1**	**2**	**3**	**4**
	Building					
Cash flow from Operations						
- from retail	Bankside 1			1,071,180	1,103,315	1,136,415
	Bankside 23				1,536,975	1,583,084
- from office	Bankside 1			14,273,165	14,701,360	15,142,401
	Bankside 23				11,009,664	11,339,954
construction costs	Bankside 1	-30,000,000	-97,786,353			
	Bankside 23		-27,000,000	-60,196,382		
gross revenue		-30,000,000	-124,786,353	-44,852,037	28,351,314	29,201,854
cash position / equity in		30,000,000	-156,436,353	-209,892,390	-194,336,723	-177,957,888
expenses (running costs)						
cost of money (5.5%)	5.5%	-1,650,000	-8,603,999	-11,544,081	-10,688,520	-9,787,684
building running costs	Bankside 1			1,251,566	1,301,629	1,353,694
	Bankside 23				832,870	866,185
cash flow from operations		-31,650,000	-133,390,352	-57,647,685	15,528,295	17,194,291
tax on cash flow @ x % x =	30%	0	0	0	4,658,489	5,158,287
net cash flow		-31,650,000	-133,390,352	-57,647,685	10,869,807	12,036,004
cash position / equity in		-31,650,000	-165,040,352	-222,688,037	-207,159,742	-189,965,451
assumed cap. rate		5.5%	5.5%	5.3%	5.6%	6.0%
building(s) book value	Bankside 1			289,515,940	282,226,342	271,313,590
	Bankside 23				224,047,125	215,383,970
	Bankside 123				506,273,467	486,697,559
BUILDING SALE						
capital gains @ x % x =	40%					
CASH POSITION AT YEAR END		-31,650,000	-133,390,352	-57,647,685	10,869,807	12,036,004
total cash position		-31,650,000	-165,040,352	-222,688,037	-211,818,231	-199,782,227

INITIAL CAPITAL OUTLAY

2009	2010	2011	2012	2013	2014	2015	2016	
5	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
1,170,507	1,205,623	1,241,791	1,279,045	1,317,416	1,356,939	1,397,647	1,439,576	
1,630,577	1,679,494	1,729,879	1,781,775	1,835,229	1,890,285	1,946,994	2,005,404	
15,596,673	16,064,573	16,546,510	17,042,905	17,554,192	18,080,818	18,623,243	19,181,940	
11,680,153	12,030,557	12,391,474	12,763,218	13,146,115	13,540,498	13,946,713	14,365,114	
30,077,909	30,980,246	31,909,654	32,866,943	33,852,952	34,868,540	35,914,597	36,992,034	
-159,887,542	-140,009,784	-118,201,690	-94,332,901	-68,265,203	-39,852,071	-8,938,193	24,641,032	
-8,793,815	-7,700,538	-6,501,093	-5,188,310	-3,754,586	-2,191,864	-491,601	1,355,257	
1,407,842	1,464,156	1,522,722	1,583,631	1,646,976	1,712,855	1,781,369	1,852,624	
900,832	936,865	974,340	1,013,314	1,053,846	1,096,000	1,139,840	1,185,434	
18,975,420	20,878,687	22,911,499	25,081,690	27,397,544	29,867,821	32,501,787	35,309,234	
5,692,626	6,263,606	6,873,450	7,524,507	8,219,263	8,960,346	9,750,536	10,592,770	
13,282,794	14,615,081	16,038,049	17,557,183	19,178,280	20,907,475	22,751,251	24,716,464	
-170,990,031	-150,111,343	-127,199,844	-102,118,155	-74,720,611	-44,852,790	-12,351,003	22,958,231	
6.3%	6.7%	7.0%	6.7%	6.5%	6.5%	6.5%	6.5%	
266,145,712	257,764,108	254,118,587	273,461,942	290,332,441	299,042,414	308,013,686	317,254,097	
211,281,418	204,627,630	201,733,610	217,089,452	230,482,202	237,396,668	244,518,568	251,854,125	
477,427,130	462,391,738	455,852,198	490,551,395	520,814,643	536,439,082	552,532,254	569,108,222	
							569,108,222	
							-25,133,902	
							543,974,320	**IRR**
13,282,794	14,615,081	16,038,049	17,557,183	19,178,280	20,907,475	22,751,251	568,690,783	12.84%
-186,499,433	-171,884,352	-155,846,302	-138,289,119	-119,110,839	-98,203,364	-75,452,113	493,238,670	

RENT AND CAPITAL APPRECIATION

RENT COLLECTION AND DISPOSAL

			2004	2005	2006	2007	2008
Projected Cash Flow			**0**	**1**	**2**	**3**	**4**
	Building						
Cash flow from Operations							
- from retail	Bankside 1				0	0	0
	Bankside 23					1,536,975	1,583,084
- from office	Bankside 1				0	0	0
	Bankside 23					11,009,664	11,339,954
construction costs	Bankside 1		-30,000,000	-94,286,353			
	Bankside 23			-27,000,000	-60,196,382		
gross revenue			-30,000,000	-121,286,353	-60,196,382	12,546,639	12,923,038
cash position / equity in			30,000,000	-152,936,353	-221,544,234	7,565,905	20,072,198
expenses							
cost of money (5.5%)		5.5%	-1,650,000	-8,411,499	-12,184,933	416,125	1,103,971
building running costs	Bankside 1				1,251,566	0	0
	Bankside 23					832,870	866,185
cash flow from operations			-31,650,000	-129,697,852	-73,632,881	12,129,894	13,160,824
tax on cash flow @ x % x =		30%	0	0	0	3,638,968	3,948,247
net cash flow			-31,650,000	-129,697,852	-73,632,881	8,490,926	9,212,577
cash position / equity in			-31,650,000	-161,347,852	-4,980,734	7,149,160	20,309,984
assumed cap. rate			5.5%	5.5%	5.3%	5.6%	6.0%
building(s) book value	Bankside 1				289,515,940	282,226,342	271,313,590
	Bankside 23					224,047,125	215,383,970
						224,047,125	215,383,970
BUILDING SALE					230,000,000		
capital gains @ x % x =		40%			0		
					230,000,000		
CASH POSITION AT YEAR END			-31,650,000	-129,697,852	156,367,119	8,490,926	9,212,577
total cash position			-31,650,000	-161,347,852	-4,980,734	3,510,192	12,722,769

INITIAL CAPITAL OUTLAY

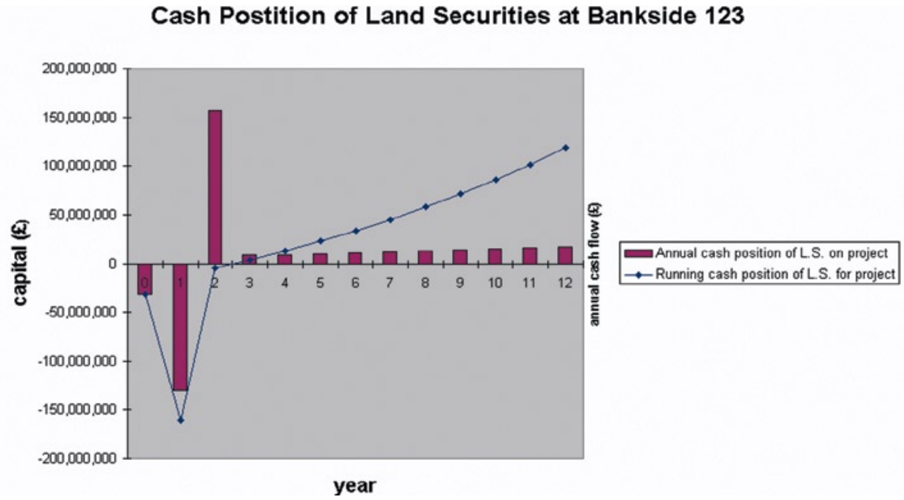
2009	2010	2011	2012	2013	2014	2015	2016	
5	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
0	0	0	0	0	0	0	0	
1,630,577	1,679,494	1,729,879	1,781,775	1,835,229	1,890,285	1,946,994	2,005,404	
0	0	0	0	0	0	0	0	
11,680,153	12,030,557	12,391,474	12,763,218	13,146,115	13,540,498	13,946,713	14,365,114	
13,310,729	13,710,051	14,121,353	14,544,993	14,981,343	15,430,783	15,893,707	16,370,518	
33,620,714	48,279,072	64,118,908	81,216,101	99,651,016	119,508,759	140,879,448	163,858,496	
1,849,139	2,655,349	3,526,540	4,466,886	5,480,806	6,572,982	7,748,370	9,012,217	
0	0	0	0	0	0	0	0	
900,832	936,865	974,340	1,013,314	1,053,846	1,096,000	1,139,840	1,185,434	
14,259,036	15,428,535	16,673,553	17,998,565	19,408,303	20,907,765	22,502,236	24,197,302	
4,277,711	4,628,560	5,002,066	5,399,570	5,822,491	6,272,330	6,750,671	7,259,191	
9,981,325	10,799,974	11,671,487	12,598,996	13,585,812	14,635,436	15,751,566	16,938,111	
34,569,021	49,997,556	66,671,108	84,669,673	104,077,976	124,985,741	147,487,978	171,685,279	
6.3%	6.7%	7.0%	6.7%	6.5%	6.5%	6.5%	6.5%	
266,145,712	257,764,108	254,118,587	273,461,942	290,332,441	299,042,414	308,013,686	317,254,097	
211,281,418	204,627,630	201,733,610	217,089,452	230,482,202	237,396,668	244,518,568	251,854,125	
211,281,418	204,627,630	201,733,610	217,089,452	230,482,202	237,396,668	244,518,568	251,854,125	
							0	
							0	IRR
9,981,325	10,799,974	11,671,487	12,598,996	13,585,812	14,635,436	15,751,566	16,938,111	20.39%
22,704,095	33,504,069	45,175,556	57,774,551	71,360,363	85,995,799	101,747,364	118,685,475	

RENT AND CAPITAL APPRECIATION

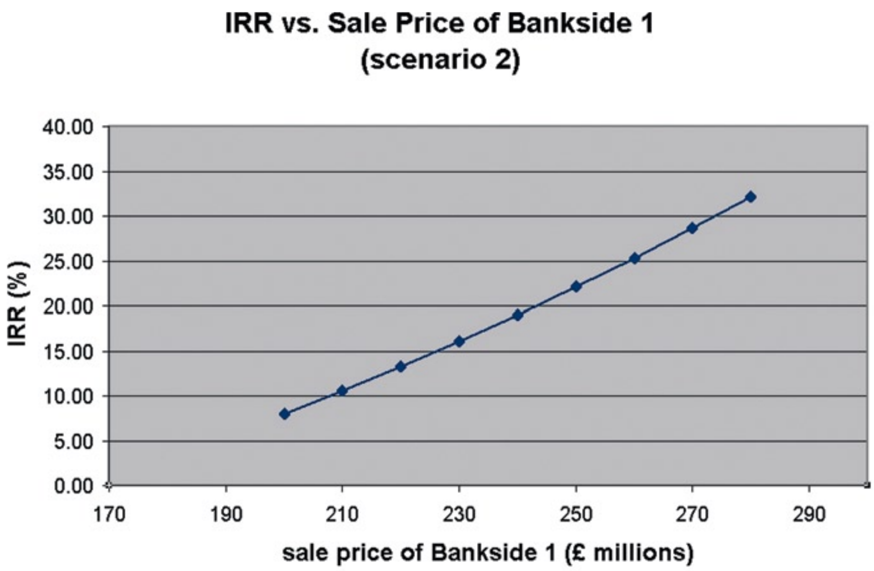
RENT AND DISPOSAL

UNDERSTANDING THE TIME SERIES SPREADSHEET: SCENARIO 1

The spreadsheet for scenario one plays out the Bankside story as if Land Securites had not sold Bankside 1 to IPC, and owned it as an asset until theoretical year 12. The three stages of 'initial capital outlay', 'rent and capital appreciation', and 'rent collection and [property] disposal' are shown above within the shaded regions. Note how rental income, building expenses, and taxes all increase year by year according to the revenue and cost growth predictions. The most important number is the IRR at the very bottom left corner of the opposite page. This indicates the value of the time series of revenues that is the second line from the bottom. All purple shaded boxes have variables that can be played with that will effect income, costs, and ultimately the IRR at the end of the year 12. The actual year corresponds approximately to the building year, both are indicated along the top in a horizontal fashion. Another thing to notice is that Bankside 1 started a year earlier than Bankside 2 and 3, which for the purposes of the pro forma are considered one building and designated Bankside 23. As yields and capitlization rates in the London office market are



The Cash Position of Land Securities is shown for 'scenario 2'. Notice the large outlay of capital to fund building in year 0, particularly year 1, and then a single large income for year 2 after the sale of Bankside 1. The running cash position of Land Securities shows the cumulative total, and indicates that the early sale of Bankside 1 immediately brings their capital position on the Bankside project back to a neutral position. In one sense, for two years of labour, capital, and some risk, they get Bankside 2 and 3 for free - and from year 3 on begin earning straight profit.



very low, the shaded purple row along the bottom has individually set yields to calculated the book value of the buildings. Yields tighten through 2006, and then ease slightly before tightening slightly for the Olympics. It is merely a guess; the reasoning was based on the simple fact that many are predicting the London office market to tighten even more, at which point capitalization rates will be at an extremely low point by historical standards, and will have to ease slightly to more historically typical levels.

SPREADSHEET SCENARIO 2

Scenario 2 shows the pro forma for a scenario that more closely resembles the true Bankside situation. At the end of year 2, just after Bankside 1 is completed, Land Securities sells the building. Note the change in the IRR in the very bottom right hand corner; it has gone up by 7.5%; that alone is an IRR that a conservative investor would be content with! The selling price for Land Securities was taken to be a £ 230 million; a very good deal for IPC considering the 'book value' as calculated from current capitalization rates. Based on very current capitalization rates that can be as low as 5.5%, and rents of £ 32 / sq. ft., the book value of Bankside 1 approaches £ 290 million. The conclusion is that selling Bankside 1 was very likely an excellent deal for both Land Securities and IPC. IPC aquired a headquarters building for well below market value in a promising neighbourhood, and Land Securities comes away with an inflated IRR for the project, and freed up capital that was other wise tied up in the capital costs of constructing the entire Bankside development.

USING THE PRO FORMA TEST MARKET AND EFFECTS ON PROFITABILITY

On the Scenario 1 where it is assumed that Bankside 1, 2, and 3 are all held for 12 years and then sold as shown in the first time series spreadsheet, trials were run to see the effect of running costs on profitability as though energy prices climbed very quickly in the near future.

CHANGES IN ENERGY PRICES

"Selling Bankside 1 was very likely an excellent deal for both Land Securities and IPC. IPC aquired a headquarters building for well below market value in a regenerating city fringe neighbourhood, and Land Securities comes away with an improved IRR for the project while freeing up capital."

Using scenario 1, if energy prices climbed such that building running costs rose by 20 % every year (doubling time of just 3.8 years), so that by the end of the 12 year cylce running costs were 3 timess as great as they had at the beginning, instead of a modest annual increase of 4%, the effect on the IRR would be a reduction of just -0.5%

RUNNING COST	RUNNING COST
£2 / M2 / YEAR	£2 / M2 / YEAR
RUNNING COST INFLATION	RUNNING COST INFLATION
4% / YEAR	20% / YEAR
IRR 14.84%	IRR: 14.34%

DEVELOPER TYPOLOGIES

The property industry is a complex network of key and supporting actors (see Organisational Structures and Working Capital). Developers coordinate the many players to produce an occupiable product by navigating economic and government systems with the goal of profit; by producing space that can be occupied at a market price above what it costs to bring to market.

There are many types of developers; different developers outsource differing types and amounts of required professional services to produce occupiable property. The foundation of the for-profit sector of the property development industry is simple: investors are looking for a maximum return on investment with a minimum of risk.

Commercial property development is like any other investment class; investors are looking for maximum return on investment with a minimum of risk.

All companies can be characterized by several features; size, willingness to take on risk, occupier use of property, and sources of capital.

Size is an important feature; combined with a credit history and willingness to leverage capital (inversely analogous to risk aversion), it is an important limiting factor regarding the size of the project the developer will undertake.

Risk aversion will strongly direct the type, location, and size of projects the developer will likely undertake. Since developers are pools of money invested from many possible sources, the characteristics of projects undertaken will mirror the wishes of the investors. For example, venture capitalists and other small credit organizations will likely be willing to take on much more risk than institutional investors such as pension funds.

Property type(s) engaged with will be greatly influenced by the developer's knowledge and expertise specific to geographic and property type-specific markets. For example, speculative office is a very different market from speculative industrial, and in turn, both are very different from residential. Each property type caters to very different users, and planning and market climates are also unique. As development is a highly specific and local industry, neighbourhood, market, and planning system knowledge is critical to success. Developers are therefore almost always highly specific to a local or regional market, and will specialize in one use: office, industrial, or residential. Residential is particularly unique as building homes for people to live in inherently introduces unique market situations. Office and industrial is to a large degree a consumption for business and industry; there is less intrinsic value in often generic office or industrial space. The exceptional land use is retail; as the planning industry has insisted on mixed use developements, it generally is fit into both residential and office schemes by either developer type specific to those development types.

The last characteristic is the degree to which development occupies a development firm's capital and labour resources. As property is an investment class, and an alternative to equities, bonds, and collectables, for that matter, many companies have property as a small percentage of their held assets as a method of diversification to minimize risk or take advantage of market opportunities. Many companies although involved with the development process would not consider themselves developers since most of their activities are in other activities (see Working Capital)

The developer of Bankside 123 is Land Securities PLC; below are highlighted several similar companies to place characterize Land Securities and the office product that is Bankside 123 within the industry.

CATEGORIZABLE
DEVELOPER TRAITS
- SIZE
- RISK AVERSION
- PROPERTY TYPE(S)
- DEVELOPMENT ACTIVITY IN PROPORTION TO SIZE

BRITISH LAND PLC

City of London office developments in the British Land Pipeline: 201 Bishopsgate and the Broadgate Tower, the Leadenhall Building, Ludgate West, The Willis Building. From British Land website.

British Land is considered to be one of the ‘big three’, along with Hammerson and Land Securities in the London office market. It’s size in the London office market is despite the fact that a majority of it’s portfolio is invested outside central London, with much of it’s interests lying in suburban shopping complexes such as regional shopping centres, superstores, and retail warehouses. They believe the prospects for out of town retail are good, with shopping trends of Britons mimicking those in North America of a desire for large shopping spaces and easy parking.

It’s flagship office property in the City of London is the Broadgate Estate. Similarly, its other office buildings follow the strategy of investing in high quality buildings in the best locations to capitalize on the expectation that London will remain at the top of the global city hierarchy.

It’s strategy is to continue to invest in out of town retail, high quality offices in central London, and to participate in joint ventures to increase market reach and develop relationships with large tenants.

factfile:

name:	the british land company plc
headquarters:	regent’s park, London, nw1
website:	www.britishland.com
Portfolio value:	£ 14.6 billion £ 12.1 wholly owned £ 2.5 billion in partnerhips
portfolio snapshot:	57% retail - 73% non high street 37% office - 94% in london
office development:	2% or £ 292 million
retail development:	1% or £ 146 million

BLACKFRIARS INVESTMENT LTD.

Blackfriars Investments Limited is a Real Estate Asset management company with activities in the United Kingdom, and the United States. Drawing capital from a variety of sources, they invest in high quality office and residential projects. They are not exclusively property interested; they invest in a multitude of investments with one goal: to maximize return.

factfile:

name:	Blackfriars Investment Limited
headquarters:	32 lawn road, London, nw3
website:	www.blackfriars-uk.com
portfolio value:	$ 20 billion US
portfolio snapshot:	high end office and residential, among many other investments

HAMMERSON PLC

Hammerson PLC is the smallest of the “big three” in property development in London, behind Land Securities and British Land. It operates in France and Germany as well as the UK, and owns and operates 15 shopping centres and 11 retail parks.

factfile:

name:	hammersono plc
headquarters:	32 lawn road, London, nw3
website:	www.blackfriars-uk.com
portfolio value:	£ 4.9 billion
portfolio snapshot:	57% retail - 73% non high street 37% office - 94% in london
office development:	2% or £ 292 million
retail development:	1% or £ 146 million

CANARY WHARF GROUP PLC

The Canary Wharf development in London’s docklands was the downfall of Olympia & York, the development company controlled by the Reichman family of Toronto in the early 1990s. Paul Reichman led a consortium of investors to buy the Canary Wharf Estate for £3 billion in 1995, and ever since the group has managed and further developed the site. The group is controlled by Songbird Estates of Morgan Stanley, who gained control for £3.04 billion in 2004.20

The site currently has 14 million square feet of grade A office space 95% leased, and HSBC, Barclays, BP, and Reuters all call the development their global headquarters.

Canary Wharf Group although small to medium by large London developer standards is significant because of the impact the Canary Wharf cluster has had on the City of London and the spatial landscape of the global finance industry in London.

factfile:

name:	canary wharf group plc
headquarters:	one canada square, canary wharf London, e14
website:	www.canarywharf.com
office space:	14.1 million square feet
portfolio value:	£ 4.8 billion
revenue, 2004:	£295 million
office pipeline:	5 million square feet

CANARY WHARF
GROUP PLC

The Canary Wharf Development, clockwise from left: Canary Wharf today, Canary Wharf in 1997, proposed Churchill Place development at east end of site, Jubilee Underground station.

LAND SECURITIES PLC

Land Securities is the largest commercial office developer and investor in central London and the rest of the United Kingdom. See beginning of chapter for more information.

factfile:

name:	land securities plc
headquarters:	8 strand, london, wc1
website:	www.landsecurities.co.uk
portfolio value:	£ 11.5 billion £ 5.3 billion retail, uk £ 4 billion in central london
development pipeline:	£ 500 million
retail development:	1% or £ 146 million

CONCLUSIONS

- Land Securities is primarily a property investment company, developing in order to renew and safeguard their investments.
- Land Securities was fortunate to have owned the free hold of St. Christopher's house which happened to be next to the Tate modern, the millennium bridge and the Jubilee line improvements.
- 2005- 2006 is a good time for office development in a city fringe location, in particular Bankside.
- "Innovation, Excellence, Respect, Integrity, customer Service," are key words used by Land Securities to describe their strategy and they work to uphold to these qualities
- Land Securities are risk averse, appealing to risk averse investors.
- Property Development is cyclical, due to lag time in delivery, equally property cycles are unpredicted, so developers cannot predict the market and are only able to react to current conditions and trends, and these are influenced by several factors; external factors, policy, investment, occupiers, supply and demand.
- Land Securities are highly influenced by agents who fill them by what is the demand in the market for good office space, and this is prior to working with consultancy firms. The end result is a product of that market.
- Hiring reputable consultants makes it easier for them to get planning permissions for their developments. Equally they have good relationships with the local authorities.
- Building running costs are is a relatively small expense in owning and profiting from real estate.
- There is a strong industry confidence in the future of London as a successful property investment market.
- Land Securities was aggressive pre-1947 which is quite opposite to their conservative nature today.

BIBLIOGRAPHY

Barras: ‘The Development Cycle In the City of London’ Centre for Environmental Studies 1979
CBRE Research
Counter Information Service: ‘The Crisis of London’ Counter Information Service 1979
Harvey: ‘Urban Land Economics’ MacMillan Press 2000
Isaac: ‘Property Finanace’ Palgrave MacMillan 2003
Land Securities: ‘Annual Report 2005’
Loughborough University: ‘Financial Services Clustering and Its Significance for London’ Corporation of London 2003
McGregor et al: ‘Understanding the Property Cycle’ Royal Institute of Chartered Surveyors 1994
Sassen: ‘Cities In a World Economy’ 1998
Spon: ‘Architects and Builder’s price book 2006’ Edited by Davis Langdon. 131st edition. Taylor and Francis. Milton Park 2006.

WEBSITES

www.canarywharf.com
www.ipdindex.co.uk
www.landsecurities.co.uk
www.landsecurities.co.uk
www.maps.google.com
www.selcf.org.uk/ls.html
www.tate.org.uk/modern
www.thetimes100.co.uk/case-study