WORLD ECONOMIC FORUM

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Industry Agenda

Understanding the Commercial Real Estate Investment Ecosystem
An Early Warning System Case Study

Prepared by the Steering and Advisory Committees of the Shaping the Future of Real Estate - Asset Price Dynamics Initiative

March 2016

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Foreword

Real estate valuations have become fairly expensive in 2015 and the current real estate cycle might be approaching the end of its lifespan. In US commercial property markets, for example, the Federal Reserve's first interest rate increase in nine years may very well signal the end of the real estate cycle that has seen nearly unprecedented price growth, with values for commercial real estate having doubled since the financial crisis and prices today in some markets being more than 20% above their previous peak in 2007.

Despite increased macroeconomic risk in the world economy, some real estate buyers are taking on increased debt in their real estate investments to ensure reasonable returns. At the same time, overall risk appetite among global real estate investors has already noticeably declined over the past year as China's market weakness, geopolitical turmoil in the Middle East and decreasing commodity prices prompt them to adopt more cautious strategies.

Behavioural decision-making is key to understanding asset price dynamics, asset cycles and the macroeconomic links. The most destructive cycles were those in which asset price leverage and credits were intertwined, causing the greatest systemic effects. Asset pricing dynamics impact economies from the local to the global level. Policy-makers, industry leaders and academics are currently debating whether asset-pricing dynamics can, or should, be managed in the public interest. The Shaping the Future of Real Estate initiative delves into the mechanisms of asset pricing to learn how to detect when and why markets shift away from fundamentals and how the consequences can be mitigated.

Within its first year, the initiative developed a strong brand by engaging leading experts, central bankers and businesses from the real estate, investors and financial services industries. At the World Economic Forum Annual Meeting 2015, the Forum released its first two reports on asset price dynamics with recommendations and case studies. The recommendations included both short- and long-term strategies for managing asset dynamics and the case studies highlighted both common and unique factors associated with the misalignment of markets. In 2015, the initiative focused on select recommendations made in the first year.

In 2015, high-level multistakeholder discussions took place to further define asset ecosystems and describe how the consequences of asset bubbles can be limited through innovative solutions. This year's focus was to help market players make more informed decisions. One work stream (summarized in this report) focused on designing a prototype early warning system to flag markets that appear to be misaligned with fundamentals; a second work stream focused on institutionalizing the team's insights and learning through developing an educational curriculum. The report on the second work stream showcases the boom and bust of the London office market from 1970 to 1976 in a comprehensive case study.

This year's reports are the direct result of a collaborative process with leaders from government, civil society and the private sector, in particular the real estate and financial services industries, as well as investors. In this regard, we would like to thank and acknowledge the Forum's Partner companies that served on this initiative's Steering Committee: Acciona Real Estate, BlackRock, Cantor Real Estate, Emaar Economic City, Hillwood/Perot Group, JLL, McGraw Hill Financial, Newmark Grubb Knight Frank, Pine River Capital Management LP, RMZ Corp., Standard & Poor's Ratings Services, The Durst Organization, Two Harbors Investment and WS Atkins/Faithful+Gould.

We would like to specially acknowledge Colin Dyer, President and Chief Executive Officer of JLL, and Barry Gosin, Chief Executive Officer of Newmark Grubb Knight Frank, for their relentless interest and commitment to serve as the Champions of the initiative, as well as their teams for their exceptional support of this initiative.

Furthermore, we would like to thank the many experts, central bankers and those in academia who contributed to the report through their role on the initiative's advisory committee: Mahmoud Hesham El Burai, Yongheng Deng, Nuno Fernandes, Steven R. Grenadier, Erkki Liikanen, Colin Lizieri, Prakash Loungani, Kiyohiko G. Nishimura, Ewald Nowotny, Venkatesh Panchapagesan, Alessandro Rebucci, Nouriel Roubini, Simon Rubinsohn, Nicholas Scarles, Robert J. Shiller, Didier Sornette, Katja Taipalus, Stijn Van Nieuwerburgh, Susan Wachter and Ko Wang.

The experience, perspective and guidance of all these people and organizations contributed substantially to a number of remarkable discussions during and following the World Economic Forum Annual Meeting 2015.

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Message from the Project Champion

History shows us that real estate is inherently cyclical, and for a long time the analysis and prediction of market cycles has been a critically important topic for real estate investors, developers and tenants. The 2007 financial shock and the ensuing global crisis has led to increased attention from regulators and central bankers at both national and international levels. While we certainly do not expect to avoid future downturns, we do believe that expert and in-depth analysis could help limit their financial and social costs.

With this in mind, the Steering and Advisory Committees of the Shaping the Future of Real Estate initiative have been working with the World Economic Forum on a programme aimed at providing a better understanding of the causes, consequences and policy options associated with cycles in real estate markets. As part of this programme, we have developed a suite of case studies which illustrate how past real estate market cycles have played out. Against the backdrop of a globalizing market, these case studies offer a unique picture of events across different markets, countries and time periods.

The key take-out from these case studies is that real estate cycles are complex and that every cycle is different. But there are common themes that carry important lessons for all real estate market participants, and for bankers and regulators.

The first case study summarizes the London office market boom and bust of the early 1970s. In many ways, this episode was the forerunner of many subsequent cycles. It brings together the challenge of analysing macroeconomic factors, banking sector regulations, planning policies and market responses in a world of uncertainty and external shocks; a world of challenges not unlike those we face today.

Colin Dyer

President and Chief Executive Officer, JLL, USA

Executive Summary

Why did the London office market bubble burst in 1974?

The boom arose from multiple causes

The concurrence of several factors – a strong business cycle, a lagging property development cycle further constrained by regulation, an accommodative credit cycle enhanced by banking liberalization and a misguided monetary policy – triggered a boom in the London commercial real estate market of the early 1970s.

The subsequent bust in 1974 was triggered by the sharp rise in oil prices that lifted the United Kingdom inflation rate and caused the Bank of England to immediately increase the Minimum Lending Rate and impose price and wage controls that limited rent increases. But these measures would not have been accompanied by the severe London office market crash had market conditions not been conducive to a property market collapse.

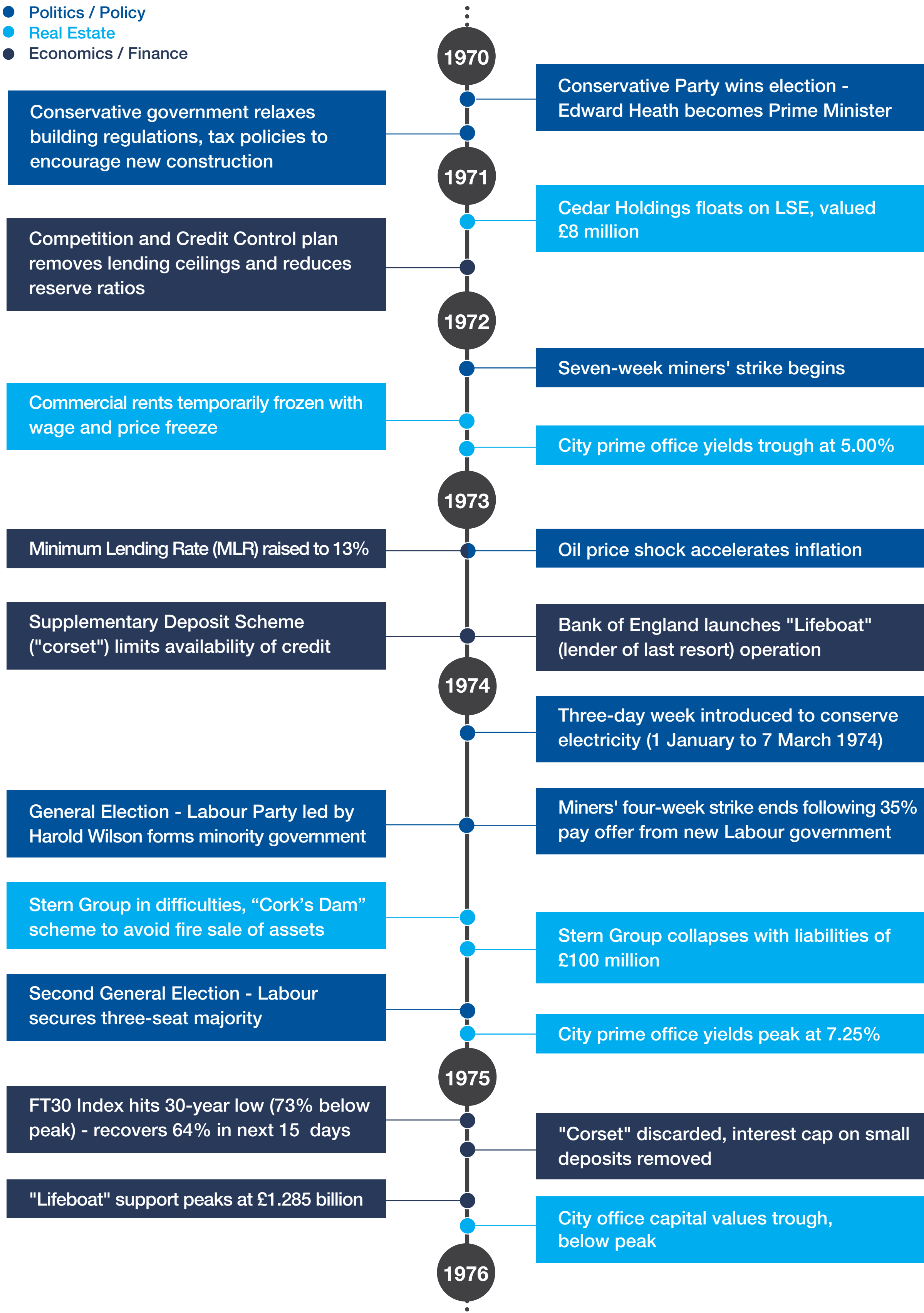
Lax financial discipline led to a financial crisis

Due to overlending to the property market and excessive gearing, the property market crash and ensuing loan defaults created a significant banking crisis. The Bank of England sponsored a rescue package dubbed “the lifeboat operation”, wherein the major clearing banks, along with large insurance and pension companies, participated in providing funding to the troubled secondary banks that were overexposed to the ailing property market.

The London market experience highlights common features of real estate cycles

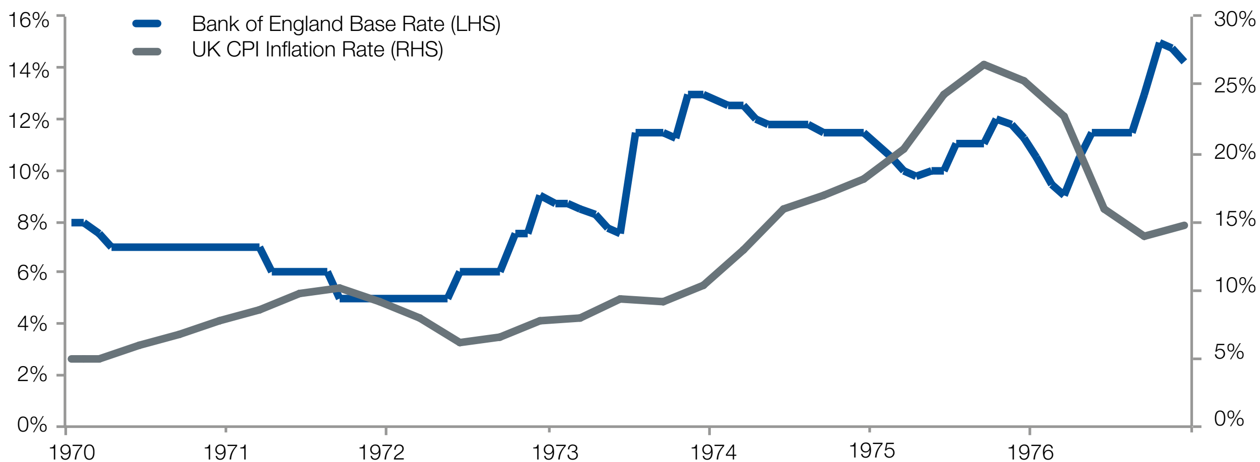
Some believe that the 1974 real estate bust and associated banking crisis were exceptional, resulting from poor public policy decisions and flaws in banking regulation. However, subsequent boom-bust cycles and crises have revealed several common factors. Recurrent building cycles, when coinciding with expansionary credit cycles, can result in a feedback loop of asset inflation, overgearing and overlending to the property sector. The real estate market thus becomes prone to an abrupt end-of-cycle bust if the cost or availability of credit is reversed too swiftly. Indeed, the property market’s interconnectivity with the financial sector poses a systemic risk to the overall economy, if capital values should drop suddenly and extensively.

London Office Market Cycle Timeline (1970-1976)



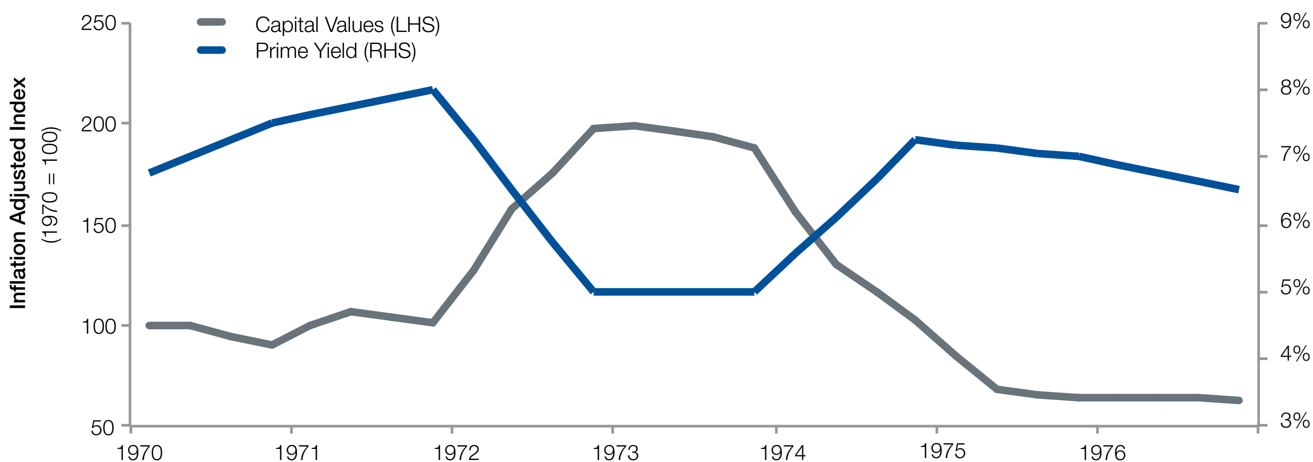
Economic and Real Estate Backdrop (1970-1976)

UK Inflation and Bank of England Base Rates (1970-1976)



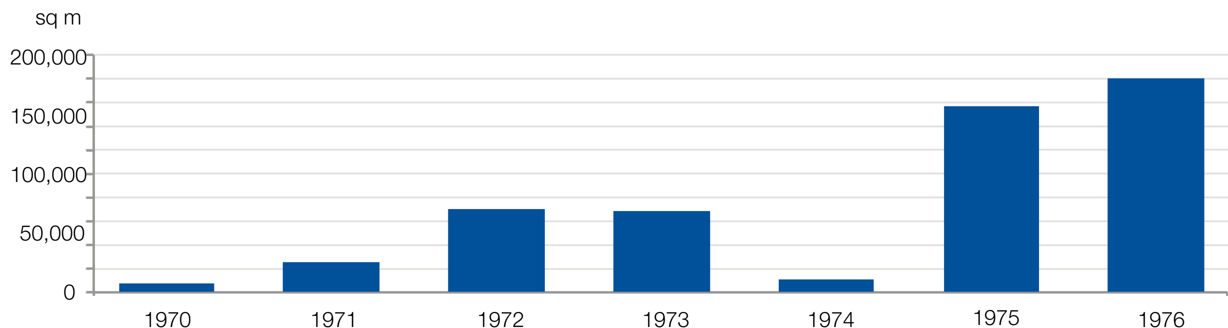
Source: Bank of England, Office for National Statistics

London City Prime Yields and Real Capital Values (1970-1976)



Source: JLL, 2015

London City Development - Completions (1970-1976)



Source: Barras, R. (1979) "The Development Cycle in the City of London", Research Series 36, CES, London.

Background, Causes and Triggers

Metropolitan London is the largest office market in the world (in capital value terms) and the dominant commercial real estate market in the UK economy. The United Kingdom real estate market in general, and the London office market in particular, experienced a boom in the early 1970s and a pronounced bust in 1974.

London's growth as a commercial and financial centre leads to strong demand for office space

Growth gained momentum in the late 1950s, coupled with the accelerating trend of national companies to relocate their headquarters to the capital. Building regulations and fiscal policies, instituted by the 1964-1970 Labour government, aimed to discourage new developments in London and stifled the supply of new office buildings. Moreover, regional incentives prompted developers to relocate projects to the suburbs. However, despite incentives, major financial and business service firms were unwilling to relocate to peripheral regions and cities. The resulting supply-demand imbalance caused City office capital values to increase substantially – 110% in real terms between March 1968 and the market peak in June 1973, while West End real capital values rose by 58% over the same period.

Relaxed building regulations and tax reforms trigger development boom

The incoming Conservative administration under Prime Minister Edward Heath (1970-1974) relaxed building regulations and reformed tax policies to encourage new construction and mitigate London's supply shortage. In September 1971 the Competition and Credit Control plan removed lending ceilings and reduced reserve ratios for banking organizations. Moreover, to combat the sluggish growth of the UK economy and high national unemployment, the new administration instituted an expansionary economic policy. Taxes were cut, the Bank Rate (MLR) was reduced from 7.5% in 1970 to 5.0% in 1971, and the money supply increased (M3 rose by 73% from 1971 to 1973). The easy credit policy stimulated bank lending that flowed disproportionally to the property sector, increasing from £343 million in 1970 to £2.83 billion in 1973. Deregulation of the financial sector (instituted by the Labour administration in 1964) had facilitated the growth of secondary (or "fringe") banks that were lightly regulated and monitored. These finance houses typically relied on short term, and therefore less stable, funding sources than well-established clearing banks. Competition for market share led to an erosion of lending criteria and downward pressure on lending rates.

As a result of abundant debt capital, London commercial property prices spiked rapidly, and development boomed. Despite rising inflation, property investment returns increased in real terms from an annual average of 1.55% (1965-1967) to 14.2% (1971-1973).

Seven Factors that Contributed to the 1974 Office Market Crash

1. Strong business cycle

Financial deregulation in the United Kingdom was followed by an expansion of international banking and financial services. This resulted in a rise in occupier demand for office space and increased floor space per worker. At the same time, public sector demand for office space in Central London increased. The temporary shortage of space resulted in rising rents and capital values. Therefore, financial deregulation increased the demand for office space in London, while at the same time facilitating the financing of additional construction leading to increased supply.

2. Property development cycle

The London office construction boom was highly speculative due to a lack of pre-committed tenancies. While occupier demand increased steadily and rents rose by 90% between 1970 and mid-1973 (compared with a 30% rise in consumer prices) the supply of new space took several years before reaching completion.

3. Price distortions due to regulation

From 1964 onwards the Labour administration enacted legislation limiting new office development (Control of Office & Development Act of 1965) and imposed taxation (Land Commission Act of 1967) on property development gains, thereby disincentivizing new construction. The corporation tax (1965) favoured direct ownership of property assets. Together, these regulatory changes stimulated investor demand while constraining supply, hence exerting more upward pressure on values. These policies were later reversed by the Conservative administration of Edward Heath from 1970 to alleviate the supply shortage. However, by then, easy credit was providing further stimulus for consumer and asset price inflation.

4. Lending boom and gearing ratio increases

The expansionary economic policy of the Heath government from 1971 led to low interest rates and a rapidly increasing money supply. The result was a credit growth boom. Since property values were rapidly increasing, banks concentrated their lending to this sector. Gearing ratios, often based on inflated values, increased beyond traditionally safe levels (up to 100%). Developer borrowers were servicing their debt with additional loans solely in anticipation of capital appreciation. The office market boom, and subsequent bust, might be seen as collateral damage from the policies adopted to stimulate the broader UK economy.

5. Financial liberalization

Sections 123 and 127 of the Companies Act of 1967 had spawned a category of secondary (fringe) banks without explicit regulatory oversight. These financial institutions relied on the ever-growing money markets as a source of (largely short-term) funding. The Bank of England's laissez-faire stance towards the loosely regulated secondary banks failed to monitor and to limit their over-concentration of lending to the commercial construction market. The 1971 Competition and Credit Control plan also advanced banking sector deregulation by removing lending ceilings and reducing the reserve ratio, thereby releasing credit for lending. Deregulation resulted in increased competition among banks for market share, which led to the erosion of underwriting standards and increased risk-taking through highly leveraged loans priced at margins that did not adequately reflect the riskiness of the exposures.

6. The economic shock

The unanticipated shock of the 1973 oil crisis further accelerated the UK inflation rate. Annual inflation rose from 7.1% (1971) to an all-time record of 24.2% (1975), prompting the Bank of England to precipitously raise its minimum lending rate (MLR) from 7.5% in June 1973 to 13.0% in November 1973. Those property developments that were financed by short-term bridge loans (that were susceptible to rate rises) faced liquidity problems and many were unable to meet their debt-service obligations. Simultaneously, property values stalled because of price controls that limited rent increases and a reinstated development tax that curbed profits.

7. Belated strategies to limit the economic and financial fallout

The sudden shocks arising from these simultaneous pressures led to defaults and began a potentially self-reinforcing cycle of capitulation in the property market that resulted in the Bank of England's "Lifeboat" operation. The Bank of England, with the cooperation of UK clearing banks, established a liquidity fund of £2-3 billion to support the banking system in December 1973. Institutional investors (financial, pension and insurance companies, who were often creditors to property companies) were encouraged to take over their collateral, rather than force a distressed asset sale that would further depress values across all other similar assets. Institutional investors thus became increasingly involved in direct ownership of commercial real estate. In a further attempt to limit the "fire sale" of distressed assets, a moratorium of creditors established "Cork's Dam" to manage the assets of the failed Stern Group of companies. Also in December 1973 the Bank of England introduced the Supplementary Deposit Scheme (the "corset") that continued until February 1975 and intermittently thereafter.

Four Lessons from the London 1974 Cycle

1. **Public policies that have the effect of stimulating the commercial real estate market should consider the lag between signals of user demand (a function of the business cycle) and new supply (a function of the development cycle).** Legislation to promote new development only reaches maturity several years later, and in a potentially different economic climate. The Labour Party's prohibitive building policies, subsequently reversed by the Conservatives, distorted the natural cycle of development. Indeed, the shifts in policy were, themselves, a shock to the system that exacerbated the natural market cycle.
2. **Financial deregulation may lead to a race to the bottom for market share, resulting in a mispricing of risk.** Without adequate regulatory oversight, a concentration of risk can develop through overlending to a single sector and gearing above prudent levels. The Heath administration's reaction to the over-buoyant property sector was too late and with insufficient force. While commercial rents were temporarily frozen in 1972, and the 1973 White Paper proposed a development tax on property profits, these measures were not adopted in the subsequent budget. A recurring theme in credit-induced boom-busts is that new lending channels appear, often outside the conventional regulated banking system. In the case of the London office market cycle, the banking-real estate crisis nexus emerged in the secondary banking market, with lending outside the formal regulated sector. The Bank of England had little visibility or control over the secondary banks' lending practices, but these financial institutions still had links into the overall financial architecture, with systemic effects.
3. **The effects of monetary policy on all important economic sectors should be considered.** Most central banks have a dual mandate of ensuring price stability and promoting full employment. However, an expansionary monetary policy does not necessarily achieve these objectives and may even adversely disturb equilibrium asset prices. In this case, as in many similar events, a period of low interest rates encouraged over-leveraging and reliance on short-term financing, so that a subsequent rapid interest rate increase resulted in liquidity problems and defaults. The unprecedented jump in the Bank of England's MLR from 7.5% to 13% within five months shocked the credit markets, and led to defaults by overextended property developers reliant on revolving short-term loans.
4. **The commercial real estate market is inherently linked to other important sectors of the economy – construction, business services, private and public sector tenants and, most importantly, banking.** Each sector, with its distinct cycle, is susceptible to exogenous shocks that can spread contagion to other sectors via the real estate market (the common channel). Prudential supervision and regulation of the property market should be continuous and countercyclical, rather than discrete and pro-cyclical. Data and monitoring of debt markets – volume, tenor, pricing and expiry profiles – is essential if central bankers and regulators are not to be blind-sided when external shocks occur.

Interview with Colin Lizieri and Robin Goodchild

We invited Colin Lizieri, Grosvenor Professor of Real Estate Finance, University of Cambridge, and Robin Goodchild, International Director, Global Research and Strategy, LaSalle Investment Management, to share their insights and thoughts on the London office crash of 1974 and what we can learn from this event.

You can watch the interviews in full on our London case study and access them through the Forum project website at http://www.weforum.org/projects/shaping-future-real-estate-asset-pricing-dynamics

Below we present selected comments from these video interviews.

– **RG:** *There were significant policy failings at that time… There was a huge difference between the Conservative and Labour parties then in terms of policies, so when you had a change of government, you had big changes in policy.*

– **CL:** *There are [lots of] common features of the 1974 crash which were found in other cycles: government policy with unintended consequences, excess lending to real estate, and sudden policy reversals which led to a downward spiral of asset values.*

– **RG:** *[In my view], it really pointed out the problem with lending: the basic problem [being] if a lender wants to build up their business – increase their market share – they do it by dropping their lending standards so they're taking more risks. So ultimately, [things] are likely to go wrong, which of course is what we saw in 2007, but there was strong evidence of it in '73 and '74.*

– **CL:** *Economic expansion bought more demand for space… but supply had been curtailed by the action of previous governments. As a result, London office rents escalated rapidly and, with the low interest rates, that created capital value rises. Investors flooded into the market and, with the relaxation of planning restrictions, this led to a supply boom. But the new supply came on in a very different economic environment.*

– **CL:** *Economic conditions deteriorated domestically and internationally in the second half of 1973… Interest rates grew sharply, initially to deal with currency depreciation but also to curb monetary expansion and inflation. This caused a liquidity crisis for the secondary banks that had borrowed short at low interest rates and then experienced extreme difficulty refinancing in the high-interest-rate environment. Property prices peaked at the end of 1973, and then began to tumble in the first quarter of 1974.*

– **CL:** *As in 2008, other financial institutions, banks, and institutional investors were dragged into the crisis as their exposure both to property debt and to the secondary banks caused difficulties for them.*

– **RG:** *The policy side was complicated and the oil shock, which was a genuine black swan event, tipped the global economy into recession, and the UK economy along with it. It was the first time in post-war real estate that you saw what happens with too much leverage and too much development.*

– **RG:** *What did we learn? Well that's rather more debatable because of course we've done it twice since. So I have to say we didn't learn as much as we should.*

– **RG:** *I don't see us having another crash in this decade because people's memory is too strong; everyone remembers very well what happened in the global financial crisis, and so we're not going to get the over-exuberance which usually produces a bust.*

– **RG:** *The real question for me is how long that memory lasts. And the real test will be actually in the next decade… previously we've had a crash every 15 to 20 years. So we would expect another crash to occur in the next decade. Will memories have faded as they have in the past, so we do have another one, or will memories of the GFC have been so deeply engrained that we won't make the same mistakes again?*

Topics for Discussion

"The years since the early 1970s are unprecedented in terms of the volatility in the prices of commodities, currencies, real estate and stocks."

– C.A. Kindleberger and R.Z. Aliber: Manias, Panics and Crashes, 2011

The London office market cycle of the early 1970s commands attention because it inaugurated four decades of asset and financial market volatility. If lessons were to be learned from the London events, they do not appear to have been very well learned. Even now there is little agreement on the warning indicators and optimal policy responses to impending market cycles. This case study does not set out to offer a convenient check-list of settled conclusions, but it does pose questions that can be fruitfully debated by real estate market participants, regulators and financiers.

Analyst challenge

- The 1970s office market cycle in London imposed a range of costs, but can also be said to have delivered long-term benefits. What were these costs and benefits, and how could these be estimated?
- Policy-makers, commercial and central bankers, property investors and developers all contributed to the boom and the bust phases of the cycle. What are the key lessons for each of these actors? Have these lessons been learned?
- What indicators emerge from this case study as early warning signals of future real estate market downturns?

Policy challenge

- Urban planning policies were designed to limit the demand for, and supply of, office space in the City of London in the decade prior to 1973. Viewed in isolation, were these policies desirable? Could the same objectives have been achieved in a better way?
- Could the Bank of England have acted differently once the market downturn commenced in 1974? What were the alternatives to the "Lifeboat" strategy?
- What actions could have been taken by commercial bankers and real estate investors prior to 1974 in order to limit their vulnerability to a downturn?
- Given the broader fiscal and labour market challenges faced by the Heath government, including the oil price shock of 1974, the London office market crisis can be regarded as "collateral damage". Discuss.
- "Next time will be different." Identify key differences and similarities between the current state of global office markets and the early-1970s situation in London.
- Deregulation of the banking sector increased the demand for office space in the City and also facilitated access to debt finance to fund construction of additional space. Discuss.

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The World Economic Forum Infrastructure & Urban Development Industries community aims to serve as a forward-thinking, valuable and internationally recognized partner for all stakeholders involved in infrastructure and urban development. In addition, it seeks to shape the sector's agenda, creating unparalleled opportunities to convene leaders, raise global awareness, conceive frameworks and prepare workable recommendations in the context of improving the state of the world.

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