Ammonities, extinction events and the real estate funds industry

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Ammonities, extinction events and the real estate funds industry

This paper was originally produced in the autumn of 2010 as a write-up of a presentation at that year's PwC European Real Estate Client conference. The conference presentation and the paper reflected upon the regulatory and other pressures facing the real estate industry in the aftermath of the Lehman collapse, as well as providing some predictions as to how this might unfold over the two years to the autumn of 2012. Two years later, four years after the collapse of Lehman and at the time predicted in the original report as the point of maximum pressure on the real estate investment management industry, we are issuing an update of the report. The original conference presentation opened with an image of an ammonite.



Photo: Jurassic ammonite, found in Charmouth, Dorset. Photo from www.discoveringfossils.co.uk

The palaeontology

Millions of years ago ammonites filled our oceans, with species from a few millimetres across to huge examples over three metres in diameter.

251 million years ago there occurred what is known to scientists as the Permian—Triassic extinction event, or more evocatively as 'the great dying'. This was the Earth's most comprehensive mass extinction and at a time when the majority of life on this planet existed in the ocean, the event killed over 95% of all marine species, including over 90% of ammonite species. However, in the period following the extinction event, new species evolved, including a wide variety of new ammonites. Diversity returned.

About 205 million years ago, the planet suffered another mass extinction, the Triassic-Jurassic extinction event. In the seas over 90% of ammonite species again became extinct. Once again after the extinction, news species evolved. The extinction left the dinosaurs as the dominant land animals and a huge variety evolved. In the oceans, new ammonite species evolved to fill the gap left by the extinction.

Then about 65 million years ago the planet suffered the Cretaceous—Tertiary extinction event or K-T extinction. About 75% of species became extinct. Although statistically not the most comprehensive extinction event, it is undoubtedly the most famous as it resulted in the end of the dinosaurs. Mammals and birds emerged as the dominant land vertebrates in the age of new life. The K-T extinction event also finished off the ammonites.

As one might expect, considerable scientific research effort has gone into investigating the circumstances giving rise to mass extinction events. In 2008, Nan Crystal Arens and Ian West published *Press-pulse: a general theory of mass extinction?* This proposed a model which suggests that mass extinctions generally require two types of cause: long-term pressure on the eco-system which they referred to as 'press' and a sudden dramatic event or 'pulse' at the end of the period of pressure. Their statistical analysis of marine extinction rates suggested that neither long-term pressure alone nor a catastrophe alone was sufficient to cause a significant increase in the extinction rate.

The real estate industry

What is the relevance of this to the real estate investment management industry? What if press-pulse theory is as applicable to real estate fund managers as it was to ammonites? For the real estate funds industry in the United States and the United Kingdom, a period of pressure has continued largely uninterrupted to date since the liquidity crisis in the summer of 2007. This pressure became global in the aftermath of the collapse of Lehman Brothers and the bail-out of AIG over the weekend of 14th and 15th September 2008. The central message of the original paper was that the pressure from the weak economic situation and the aftermath of the financial crisis would last until at least 2013, and that a raft of regulatory changes all scheduled to come into effect on the same day, 1st January 2013, might provide the pulse that pushed real estate investment managers into extinction.

This paper looks at how matters have developed in the intervening two years. The economic outlook remains extremely challenging. 2007 and 2008 marked the end of a long and sustained expansion in UK and other Western economies. Conditions which supported this period of growth are not set to return quickly. Prolonged structural readjustment is underway in response to financial crisis and East-West rebalancing. There are significant parallels with disappointing growth and volatility of the 1970s and early 1980s.

The two years since the original paper was written has seen two major points of transition for the global economy that are of huge long-term significance for the real estate industry:

- According to the United Nations population statistics, the proportion of the world's population living in towns and cities reached 50% in 2010. In 1950 it was 29% and by 2050 it will be 69%. The world has therefore passed a landmark point where the majority of its population is now urban.
- According to the *IMF World Economic Outlook* published in April 2012, developing economies are expected to overtake advanced economies in share of world GDP from 2012 onwards. Emerging economies are set to grow much faster than those of the G7 for the next four decades. PwC has updated its long-term global economic growth model to compare shares of world GDP at purchasing power parities (PPPs) for key global country groupings in 1992, 2012 and 2032, as summarised in the table overleaf.

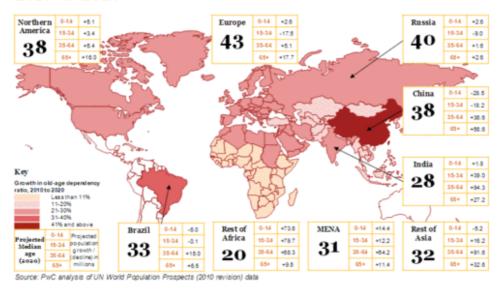
World GDP	arowth	projections
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Country groups	% of world GDP at PPPs		% real GDP growth			
	1992	2012	2032	1992-12 (% pa)	2012-32 (% pa)	Cumulative 2012-32
G7	51.3	37.8	27.4	2	2*	+49%
Other advanced	12.9	12.3	9.9	3.3	2.5*	+64%
Advanced	64.2	50.1	37.3	2.3	2.1	+52%
Developing Asia	11.3	26.0	37.1	8.0	5.5*	+192%
Other developing	24.5	23.9	25.6	3.4	4*	+119%
Developing	35.8	49.9	62.7	5.3	4.8	+157%
World	100	100	100	3.6	3.6	+105%

Over the course of the current decade the world will also experience dramatic changes in its demographic profile, as the figure below shows. Industrialised countries in the Northern hemisphere are expected to see their populations age and exit the labour force – an inevitable consequence of declining fertility levels and increased longevity - while significant numbers of the young in the Southern hemisphere will 'come of age' and enter the workforce in droves.

Population growth prospects

2010 vs. 2020

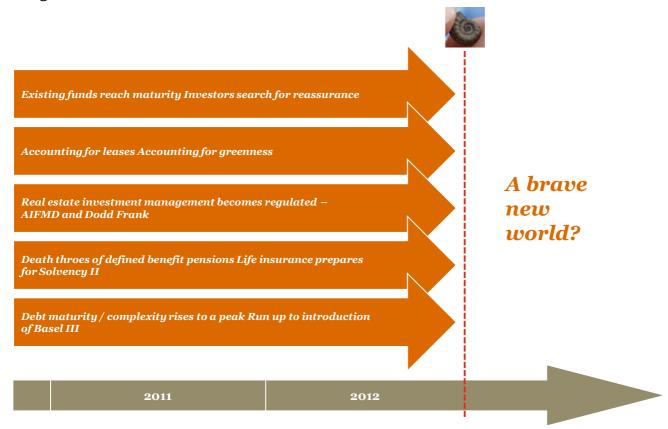


For the foreseeable future, the driver of global economic growth will be the youthful, urbanising population of the developing world, whilst traditional markets stagnate. This poses some major challenges for the real estate industry, as discussed later in this paper.

More information on our outlook for the economy is available on the PwC economics website, http://www.pwc.co.uk/the-economy/index.jhtml

Over the coming years, the real estate investment management industry will also continue to face the specific and significant challenges outlined in the original paper.

2013



Debt

At the time this paper was originally published in the autumn of 2010, there had already been considerable discussion of the looming debt bubble. This had focused on the volume of debt to be refinanced and whether or not there is sufficient capital to fill the void. There was also concern that it was not only the volume, but also the complexity that was set to increase as the proportion of the debt represented by syndicated loans and Commercial Mortgage Backed Securities (CMBS) increases significantly. With this, the process of negotiation becomes more complex and the eventual outcome in each case less certain.

The other huge concern was the impact of regulatory change, in particular the pressure on the banks as they cope with the introduction of Basel III. It was clear even then that the banks would need either to raise new capital or to reduce the volume and risk profile of their loan assets. The situation facing the banks has become significantly tougher since 2010. The sovereign debt crisis and the uncertain future of the Eurozone has created major issues for the financial sector as a whole and further undermined those banks with large exposures to the most vulnerable countries. The banks have also faced a significant liquidity challenge that has exacerbated the problem. The availability of funding for the banks has reduced and the cost increased significantly. Although margins to borrowers have risen, for many banks this does not fully reflect their own increased cost of borrowing. This has been an important driver for deleveraging. The regulatory challenge for the banks also increased in the intervening two years. On 15th July 2011 the European Banking Authority published its 2011 EU —wide Stress Test Aggregate Report. The EBA subsequently detailed the EU measures to restore confidence in the banking sector (26th October) and published Recommendation and final results of bank recapitalisation plan (8th December 2011) setting European banks a target to achieve 9% tier one capital by 30 June 2012. Perhaps even more significantly, on 20th July 2011, the EU Capital Requirements Directive (CRD IV) was published. This Directive will bring the regulatory standards of Basel III into EU law.

Basel III remains scheduled to come into effect on 1st January 2013, with a phased introduction over the next ten years. Higher minimum capital requirements will be introduced from 2013 to 2015 followed by the phasing in of a new 'conservation buffer' from 2016 to 2019. Increasing capital requirements will require the banks to raise new equity or reduce their Risk Weighted Assets.

For lenders in the EU, there is now uncertainty as to the date at which Basel III will start to take effect. It had been anticipated that the EU Parliament would adopt CRD IV in July 2012. This did not happen, delaying the process of implementation until the autumn. On 1st August 2012, the Financial Services Authority in the UK issued a statement 'On this basis it does not appear feasible that the legislation can enter into force in line with the implementation date of 1 January 2013 as included in the original European Commission proposal of July 2011'. http://www.fsa.gov.uk/library/communication/statements/2012/crd-iv.shtml

Despite the extended implementation timeframe for Basel III and the uncertainty within the EU as to the start date, many financial institutions are starting to tackle the balance sheet consequences of the new regime now, in some cases quite dramatically. The flurry of regulatory announcements for banking in the summer of 2011 was followed by the announcement of the withdrawal from real estate lending in autumn 2011 of Eurohypo and Societe Generale (Soc Gen). We have also seen a number of disposals of real estate backed loan books by major banks.

In the UK, of more immediate concern for the real estate industry than the introduction of Basel III is the possibility of enforcement of slotting on UK banks by the FSA. The FSA is not satisfied with banks' Basel II internally-generated models for commercial real estate lending and is therefore looking to enforce the more rigid allocation of loans secured over income producing real estate to specific categories or 'slots', one of the treatments provided for under Basel II. This will generally increase the level of provisions that banks are required to make against real estate loans, although it will, perhaps counter-intuitively, potentially reduce the level of provision against the poorest real estate loans. The IPD have produced a simulation study of the likely effects using IPD data:

http://www1.ipd.com/Pages/DNNPage.aspx?DestUrl=http%3a%2f%2fwww.ipd.com%2fsharepoint.aspx%3fTabId%3d4002.

Although the FSA has not publicly finalised its requirements, nor confirmed from when they will apply, they have encouraged banks with commercial real estate (CRE) portfolios to press ahead and put in place a slotting approach. The focus of the FSA is now on bilateral discussions on a bank by bank basis. At the same time the banks have been under pressure to improve their data in this area. The effect on the banks of slotting will be to require them to raise substantial additional equity or reduce their loan books. Furthermore, the impact will rise over time as the increased capital requirements under Basel III/ CRD IV come into effect. The FSA's bilateral approach is pragmatic but has largely eliminated any public comment as to progress, making it very difficult for lenders and borrowers to understand the current state of play.

As we anticipated two years ago, there is pressure on the banks to take on less risky assets, continued pressure on loan-to-value covenants and a greater inclination to lend on the more liquid assets. Borrowing to fund assets that are more challenging, for example development, is likely to become increasingly difficult.

Also as we predicted, the retreat of the banks has created new opportunities as new sources of capital and new lenders have come into the market. The capital markets have played a more important role as some of the large Real Estate Investment Trusts (REITs) and others have been able to issue bonds. Some of the larger insurers have started to enter the market as real estate lenders although the uncertainties over Solvency II, discussed below, are not helpful. There remains an opportunity for real estate mezzanine funds and other innovative products to fill a gap in the capital structure. Again regulatory uncertainties are an issue. The Economic and Monetary Affairs Committee of the European Parliament published its draft *Own Initiative Report on Shadow Banking* on 23 August 2012. This is at a very early stage and it is not clear at this stage how regulation in this area will develop.

In the short-term the period of significant uncertainty continues. Banks continue to concentrate on the issues arising from Basel III and the refinancing situation, whilst the new sources of real estate finance may take some time to mobilise in sufficient force to play a significant role. Despite the ongoing regulatory uncertainties, the retreat of the banks from real estate lending represents a very significant opportunity for new entrants to the market.

Provision for old age

Provision for old age creates two of the major sources of capital for real estate investment, pension funds and life insurance companies. Both face significant changes.

The impact of demographic change will affect pension provision as the developed world ages and a new middle class in the emerging economies looks to provide for its old age. Across the globe there is a continuing switch from defined benefit to defined contribution pension provision. In the UK, employers continue to close or reduce defined benefit provision, and most see defined contribution as their prevalent workplace pension provision in future. This represents a significant challenge for the real estate industry as defined benefit plans have been the more significant investors in real estate as an asset class. For real estate to continue to be a significant asset class for pension provision, the real estate industry needs to create product to appeal to defined contribution plans and defined benefit plans in run-off.

At the time this paper was published in 2010, we identified the looming threat for the real estate industry of the introduction of Solvency II, a major overhaul of the Directive regulating insurance companies in the EU. In the intervening two years, this has become a major preoccupation for various real estate trade bodies. Although the process for the passing of the Omnibus II Directive to introduce Solvency II is well underway, there are still areas of very significant uncertainty. The introduction of Solvency II and equivalent for pension schemes will have a major impact on the way in which European life insurance companies and defined benefit pension schemes consider real estate as an asset class. The most immediate effect will be in 2013 (and possibly 2014) as insurance companies prepare themselves to be regulated by Solvency II. Beyond that, the impact will be broadened as Solvency II type regulation is planned to be introduced for pension schemes. Looking further out, the effect is likely to be even more far-reaching. The regulation may help accelerate the demise of traditional retirement products. Unit-linked life products, defined contribution pension schemes and other new products will increase their dominance as more primitive species face extinction. The real estate industry is not yet well adapted to the new environment.

In the short-term, there is continued uncertainty as to exactly what will come into effect and precisely when. Both the Council of the European Union (Council) and the European Parliament Economic and Monetary Affairs Committee (ECON) have been working on their proposals for the Omnibus II Directive. Council published its final findings in September 2011. ECON took rather longer, only voting on its amendments on 21st March 2012. There are substantial differences between the two texts, which need to be resolved through the Trialogue negotiations between Council, ECON and the European Commission. The expectation had been that the final text would be voted on by the EU Parliament in September. This has recently been delayed with the vote postponed until 20th November 2012. This does not, however, mean the end of the uncertainty, particularly for the real estate industry. Much of the detail that impacts the treatment of real estate as an asset class will be contained in the level 2 regulations and level 3 guidance rather than the Directive itself. Working towards completion of this can only occur after the Directive is finalised. The expectation is now that the introduction of Solvency II, which had been delayed until 1st January 2014, will be delayed further until 1 January 2015.

Furthermore, a major concern for the real estate industry is how insurers will treat real estate as an asset class in their own internally-generated models with the pressure on banks causing them to retreat from real estate lending, many in the real estate industry had hoped that the attractive risk-adjusted returns for property senior lending would attract insurers into the market. As widely covered in the real estate press, a number of large insurers have established teams to allow them to expand into lending. Fund managers looking to raise debt funds were also targeting insurers, potentially opening up the opportunity to those too small to set up their own teams. Unfortunately, the treatment of real estate lending under Solvency II, which had been looking attractive, is now significantly less appealing and less logical.

Aside from the fundamental question as to whether Solvency II and similar legislation will change the behaviour of insurers and pension funds in the way they perceive real estate as an asset class, fund managers and others will also need to address the reporting implications. Apart from the direct requirements of the regulator, there are two further drivers for greater detail in reporting:

- Many of the larger insurers will be using their own internally-generated models rather than the standard model. The level of detail that they require will be determined not only by the minimum standards set by the regulator, but also by the specific requirements of their modelling.
- One of the consequences of the capital cost of investing in real estate as an asset class can be expected to be a greater focus on the returns achieved. Investing in poor performing real estate that only gives a bond level of return is penalised? Punished is a very strong word! under Solvency II. Insurance investors should become more thorough in understanding and evaluating performance and underperformance. To do this, one suspects that they will become even more demanding of information.

A more detailed analysis of the impact of Solvency II and IORP on real estate is available on the PwC website http://www.pwc.co.uk/insurance/issues/solvency-ii-and-real-estate.jhtml

Although the introduction of the new insurance and pension rules create many challenges for the real estate investment management industry, they do also create opportunities for those that adapt most quickly. The main issue at the moment is the prevailing uncertainty as to what is going to come into effect and when.

Real estate investment management becomes regulated

Regulation will be a major consideration in the future. Most obvious is the European Union directive that lays down the rules for alternative investment funds managers (AIFMs), including real estate fund managers. The Alternative Investment Fund Managers' Directive (AIFMD) sets the framework for the authorisation, operation and transparency of AIFMs that manage and/or market such funds in the EU. The AIFMD was passed by the EU Parliament on 11 November 2010. At the time this paper was written two years ago there are currently a number of areas of uncertainty that needed to be resolved. At that time it was anticipated that the adoption of Level-2-Measures would take place in 2011 with .implementation into national law expected by 1st January 2013. The Level-2 measures are still awaited but are imminent.

One of the hold-ups on the adoption of the Level-2-Measures was the approach to delegation. The proposed wording required AIFMs to manage delegation such that 'the totality of the tasks delegated by the AIFM was not greater than those retained.' This raises a number of questions in an industry which uses a significant number of service providers. There are further provisions on the use of depositaries, which will have an oversight function in addition to specific tasks such as cash flow monitoring. In addition, remuneration structures may need to be revisited. The start date for compliance is July 2014 but this may be applicable in certain circumstances from as soon as July 2013, subject to clarity from Europe and home regulators. This is a short lead-in time and real estate managers who are not already preparing themselves are at risk of being left behind. This is also starting to become a concern for investors who are seeking assurance during due diligence, prior to committing new funds, that managers are scoping the impact of the measures on their business.

Issues arise from the interaction of the AIFMD with other regulation. In particular, managers regulated by the AIFMD will be caught by the European Commission's proposed European Market Infrastructure Regulation (EMIR), which seeks to regulate derivatives. Businesses that are caught will be required to post cash collateral to cover margin calls on derivatives. Crucially for real estate, this would currently include 'out-of-the-money' interest rate swaps. This requirement stipulates that collateral needs to be for highly liquid assets, which is a problem for funds with illiquid assets. It may be that the industry may move to fixed rate debt or caps and collars to hedge future interest rate risk, both of which may command a higher margin – placing further pressure on income return. Current derivative portfolios will not be affected due to grandfathering provisions. Another important interaction is with the Markets in Financial Instruments Directive (MFID), which will determine which investors are covered by the passporting benefits of the AIFMD.

The introduction of AIFMD also creates opportunities. As with all change, those that are able to adapt more quickly will benefit. Investors are starting to become concerned about investment managers' state of preparedness, so those that are better able to articulate their implementation plans will be better able to respond to due diligence concerns. Real estate investment managers that struggle to deal with key areas of the Directive, such as the provisions about the controls' environment, probably have a bigger problem with investors looming. The introduction of passporting should also make the process of fund-raising across Europe somewhat simpler.

This was not the only regulatory change on the horizon. In the US the Dodd-Frank Wall Street Reform and Consumer Protection Act had been enacted in July 2010, but the detailed regulation was at that stage absent. As the detail has become available, it has become clear that it is one of the most complex pieces of legislation ever written. http://www.pwc.com/us/en/financial-services/regulatory-services/publications/dodd-frank-closer-look.jhtml

A further potential administrative burden is introduced by the Foreign Account Tax Compliance Provisions (FATCA), which aims to combat tax evasion by US persons. FATCA requires financial institutions outside the US to report information on US account holders to the US Internal Revenue Service (IRS). Failure to report the required information results in 30% US withholding tax.

These various regulations impose an additional administrative burden on real estate investment managers rather than being market-changing. Dealing with them cost-effectively becomes extremely important.

Changing tenant behaviour

Aside from the commercial challenges faced by tenants, there are changes to regulation that will potentially become drivers of behaviour.

Changes in the accounting treatment of leases are potentially significant. At the time that this paper was originally published, the IASB and FASB had proposed a new approach to lease accounting that would significantly change the way companies across the world account for leases. The proposed model will eliminate off-balance sheet accounting. All assets currently leased under operating leases will be brought onto the balance sheet, removing the distinction between finance and operating leases. This will dramatically change the balance sheets of major property occupiers. The results of a PwC impact survey by sector show an average increase in reported interest bearing debt for all companies of nearly 60% and for retailers, the most severely impacted sector, of over 200%. The percentage of companies with an increase of over 25% in reported debt is 24% for all companies and 71% for retailers. This is likely to encourage acceleration in the existing trend towards shorter lease lengths as well as other changes to lease terms.

The exposure draft did not propose an effective date. We anticipated in 2010 the final standard to have an effective date no earlier than 2012. In fact, two years later the detail is still awaited. It is now expected during the first quarter of 2013, with the changes now likely to be effective from 2015 or later.

It was already apparent in 2010 that another driver of changing tenant behaviour will be the developing focus on sustainability. A broad range of stakeholders, including regulators and investors, are ensuring that sustainability will be something in future that requires measurement and performance reporting, well beyond broad mission statements. At the Rio+20 United Nations conference on sustainable development, the UK Government announced proposals to require mandatory reporting of greenhouse gas emissions from 2013 for companies listed on the London Stock Exchange.

Some companies are already moving much more rapidly than is required by regulation. In 2011, Puma published its Environmental Profit and Loss Account for the year ended 31 December 2010, 'the first ever attempt to measure, value and report the environmental externalities caused by a major corporation and its entire supply chain'. In October 2012, Puma followed this up with its first product level Environmental Profit and Loss (E P&L) accounts identifying and comparing the environmental impacts of more sustainable and conventional products in Euro and cents. The results compare the environmental impacts from cradle to grave of a conventional shoe and T-shirt with more sustainable alternatives and illustrate how a sustainable approach to production reduces the impact on the environment by a third compared to conventional products. This all potentially creates an interesting challenge for retailers (and via them their landlords) of the environmental impact of how the product gets to the consumer.

For major office occupiers, there will be challenges both in respect of the property itself and the activity that takes place within it. As the premises that they occupy is a key element of a company's carbon footprint, the greater focus on sustainability by the broader business world can be expected to be an increasingly significant driver of tenant behaviour.

Sustainability is not the only area in which technological change will fundamentally alter the way in which buildings are used. All buildings face the risk of increasingly rapid obsolescence:

- In offices, space needs to be increasingly flexible, capable of meeting the needs of a workforce that no longer require permanent desks. Buildings not capable of providing open plan space and supporting IT infrastructure will become redundant for the larger occupier.
- For retail property, the shift is potentially even more dramatic. The rapid shift towards online shopping is causing retailers to fundamentally reassess their high street estate and other physical real estate needs. In many cases, customers are undertaking research into prices and products on their mobile devices while browsing physical products in-store, then shopping online for delivery later. Customers point towards factors including lower prices, access to an almost infinite range of products and the freedom of being able to shop any time of the day or night as all driving the online shopping boom. For governments, the impact of empty shops in town centres is of social concern and alternative usage may become a priority.

Whilst all of this represents a challenge for real estate investment managers, it also represents a very significant opportunity as well. In an environment where returns cannot be achieved simply from a rising market, the ability to innovate becomes essential.

Investor behaviour

At the time of our original report, we were expecting an increase in funds coming to a natural end, particularly in the second half of 2012. At the same time a number of closed funds were reaching the end of their commitment periods. All of this means that some fund managers were facing pressure to raise new funds to ensure that they had a continuing revenue stream.

We anticipated that as they sought to raise new funds, managers would face some challenges in dealing with an investor base that had become significantly more demanding as a reaction to events over the preceding three years.

In 2010, we had identified that more demanding investors had become most visible to fund managers in two key areas.

Firstly, investors had become more demanding in respect of fund terms. In particular there had been an increasing a focus on those areas that investors believed would help prevent what is perceived as having been a failure of management:

- 1. Alignment of interest
- 2. Investor influence on decision making
- 3. Ability to remove general partner/fund manager without cause
- 4. Key man provisions

At the same time there was a significant downward pressure on fees, both in general terms and in specific areas such as concern over the charging of fees on undrawn commitments. The size of individual funds was also expected to be smaller in the future, which itself has an impact on absolute fee levels.

Secondly there had been a change in attitude by investors to due diligence. As a result of issues that have arisen in the last three years, investors had been probing more deeply prior to committing to funds. INREV's Recommended Questionnaire for Investment Evaluation – June 2010 Version had been gaining traction with institutional investors. As the introduction to the questionnaire comments, "As the non-listed real estate fund market becomes progressively mature and sophisticated, the industry is demanding a more bespoke due diligence process to assist investors at all levels to access standardised information." Investors were not only looking at the fund, but also the way in which the fund manager conducts its business. Detailed operational due diligence was becoming more widespread. This increased focus on due diligence was having an impact on lead time for investment. More worryingly, the process for some managers was identifying weaknesses that may take time and expense to rectify. Although the impact of this had been relatively limited at the time of the original report, this was more a function of the fact that so few new funds had been raised in 2009 and 2010.

Real estate fund managers were already in 2010 looking at how the process of managing investor due diligence can be made more effective, to accelerate decision making. To a large extent, this will involve advance preparation so that the due diligence process is more actively managed by the fund manager, for example through preparing a response to the INREV questionnaire together with supporting information in advance and through the use of virtual data rooms, which is already commonplace for transactions. Fund managers were also starting to recognise the benefits of third party verification, in particular in two key areas:

- 'Confidence in the performance track record'
- 'Regular assurance over the design and operational effectiveness of controls', achieved through verification under two standards, at that time SAS 70 from the United States and AAF 01/06 from the United Kingdom, which replaced FRAG 21 in 2006. Since then the US SAS 70 has been replaced by ISAE 3420.

All of this means that dealing with the demands of investors has become a more costly and time-consuming process. In order to avoid a surge in cost to manage greater reporting and regulation requirements, fund managers and investors are beginning to look at performance improvement and cost reduction projects. Systems suppliers are experiencing a greater demand for products that will provide robust automation. It is also noticeable that roles for those within the sector are being re-designed and redundancies are beginning to occur more frequently as the sector starts to focus on cost control. At a time of rising cost and greater demands from complexity there is a new imperative to examine operating models to future proof and to stay in the game.

Since 2010, the use of AAF 01/06 or ISAE 3420 has also slowly started to become more widespread in the real estate investment management industry. It is becoming more frequently raised in investor due diligence questionnaires. Furthermore, some managers are seeing this as a way to collate their controls in order to demonstrate their existence and effectiveness in the light of the AIFMD.

Since the original paper was published, we have undertaken a major exercise for the Association of Real Estate Funds that culminated in the publication in January 2012 of a report 'Unlisted funds —lessons from the crisis' http://www.pwc.co.uk/real-estate/publications/unlisted-funds-lessons-from-the-crisis.jhtml

A number of messages from this are important for the real estate investment management industry.

Firstly, it is important to note that despite the unprecedented period of volatility and the unique level of stress to which they have been exposed, both the open-ended and closed-ended fund models in the United Kingdom have largely weathered the storm. However, the clear perception among both fund managers and investors interviewed was that some funds and managers weathered the storm better than others. There is no room for complacency and the full consequences of the crisis have yet to play out. Success or failure will be determined by the market – this will ultimately be reflected in investors voting with their feet.

Although the immediate crisis has passed and the normal flow of money in and out has resumed for openended funds in the UK, this does not mean that the process of selectivity by investors has been fully resolved. There is an inherent inertia in the movement of capital due to the cost of moving out of either open or closedended funds.

In the case of open-ended funds, the ability of investors to switch between funds is restricted by the cost of moving capital. The cost of buying units is greater than the cost at which they can be redeemed (the bid-offer spread). There is no standard formula for calculating this bid offer spread, although in theory all fund managers were reflecting the cost of buying and selling assets, i.e. estimates of future costs of acquisition and disposal. In the case of closed-ended funds, investors are by definition signing up for a ride of more or less fixed duration. Although investors have withdrawn funds from underperforming open-ended funds and used the secondary market to sell interests in closed-ended funds, this has been relatively limited in its extent. There have been few cases of investors acting collectively to change the manager of funds.

The full impact of investors' judgement on fund managers can be expected to play out over years rather than months as investors select where to deploy new capital. Fund managers who are felt to have disappointed their investors will struggle to raise new funds. The winners and losers among fund managers will become more apparent only as new funds are raised. It was evident from interviews with both managers and investors that

there is an increasing diversity of views among investors, with some clearly having a far more active approach to managing their investments than others.

There is a second reason why it is essential to avoid complacency. There are fundamental issues that go to the core of the real estate fund model, for which the jury is out. Real estate is an inherently illiquid asset class. The rapid fall in real estate values following the liquidity crisis of the summer of 2007 exposed the open-ended and closed-ended fund models to a unique degree of stress. In both cases, the challenges of the model were apparent:

- In the case of open-ended funds, there is an inherent risk in providing investors with a theoretically liquid investment in a fundamentally illiquid underlying asset class. In the face of significant requests for redemptions from investors as the market declined, only a minority of fund managers were able to maintain liquidity throughout. The majority at some point suspended redemptions rather than dispose of more assets to meet redemption requests. The timing and process of suspension varied significantly between fund managers, as did the reaction of investors. Not all investors in open-ended funds have invested in such vehicles because they want the liquidity to exit at short notice. Some are there because they want to deploy capital for longer than is generally possible in a closed-ended fund. When fund managers were faced with the prospect of disposing of assets at what they perceived to be the bottom of the market, many were reluctant to sell. The reluctance was in many cases driven by the dilemma for the fund manager as to which assets to sell. The assets that would be easiest to sell in the shortest time were precisely those assets that the manager was keenest to continue to hold. This exposed differences between investors with different reasons for being in the funds, and between those wishing to stay and those wishing to leave. How fund managers dealt with this varied considerably. Striking the right balance between protecting the interests of investors wishing to leave and those wishing to stay is difficult. For the managers, demonstrating impartiality was always going to be a challenge in a model where there is a strong vested interest in maintaining Assets Under Management in order to maintain fees.
- In the case of closed-ended funds, the model is by definition relatively inflexible. Investors provide funding, or more often a commitment to fund, for a fixed period. The investments will also be held for a fixed period after which the assets will be realised and capital will be returned to investors. Volatility is increased by the use of gearing, increasing returns if things go well, but also increasing risk. Timing is clearly key to this model, but it is also a model where the timetable is set in advance. The downturn in 2007, and the rapid fall in real estate values, trapped a number of fund managers in situations where the timing limitations of the model prevented them taking the action that they wanted to without going back to investors. Firstly many funds breached loan-to-value covenants, but could not draw down additional capital as they were outside the investment/commitment period. Funds were also reaching the end of their lives and, as with the openended funds facing redemptions, fund managers were reluctant to dispose of assets at what they perceived to be the bottom of the market. In both situations, going back to investors for permission to extend in some cases exposed a significant lack of alignment between investors.

Creating a real estate fund is an exercise in managing compromises as well as being able to pick good assets. There is a trade-off between liquidity, volatility, performance and risk. It was apparent from interviews with fund managers and investors that there is no 'right' or 'wrong' answer as to the relative importance of each. The objectives of investors vary significantly and often change over time. As mentioned above, investors are attracted to vehicles with open-ended characteristics for two broad reasons:

- The ability to reduce investment and withdraw capital at relatively short notice for example to invest at low points in the property cycle and to realise the investments at the high points of the cycle. Much of the commentary regarding open-ended funds focused on the ability of investors to withdraw capital, and in particular the suspension of redemptions by a number of real estate funds. This is perhaps understandable as retail investors are attracted to open-ended funds because of the ability to withdraw their capital when needed, but also, due to a lack of sophistication, are less likely to understand the detailed provisions that govern money entering and leaving funds. It is also worth noting that authorised funds remained open throughout the period. Institutional investors were also attracted to open-ended funds for liquidity. However, the ability to withdraw funds is not the only motivation of investors for investing in open-ended vehicles.
- Some investors were also attracted to open-ended funds because they provide the ability to deploy capital for the long term. Many investors wanting to invest for the long term are not attracted by the perceived

short-term nature of the closed-ended fund model, where assets are divested and capital returned even though the investors may want to keep the capital deployed. The lack of attractiveness of the closed-ended model in this respect for some investors does not mean that such investors are attracted to the high degree of liquidity of the fully open-ended fund model either.

Whilst this raises challenges for the real estate investment management industry, it also creates opportunities:

- Fund managers with a strong track record, a loyal investor base and fund products that are attuned to the current market remain able to launch traditional funds;
- Other managers have adapted to the market and maintained activity through winning separate account mandates, club deals and joint ventures. This is, however, a challenging area. Investors have become more demanding and these arrangements are often now significantly more complex and sophisticated than they were historically. The cost to the real estate investment manager have risen whilst fee levels generally have not, and indeed in many cases competitive pressures have forced fund managers to reduce fees;
- There would appear to be an opportunity for product innovation, Real estate investment managers that are able to adapt to create products that better match the changing requirements for provision for old-age, the evolving regulatory environment and the changing demands of investors will find investor pools that are not currently being tapped.

In all three of these situations, managers will need to rise to the challenge of meeting investor expectations in respect of transparency and governance.

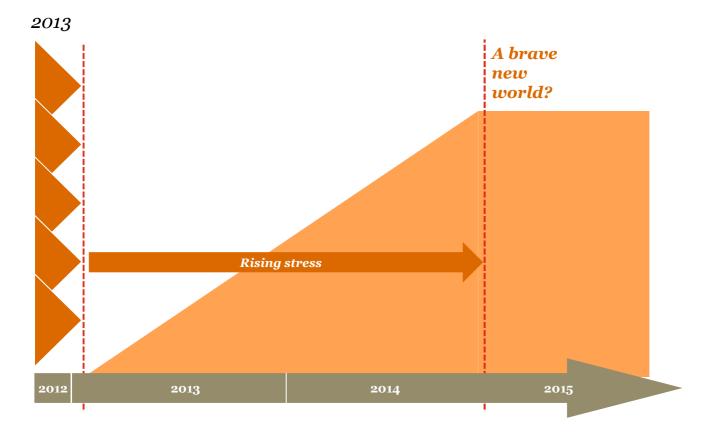
There are also opportunities and challenges arising from investor attitudes to the long-term economic and market situation.

- The developed world faces a period of long-term economic stagnation in which the key drivers of general real estate rental growth and capital growth are absent. To deliver returns requires strong stock selection and asset management skills, and active approach rather than relying on prevailing market movements. This requires resources and people with skills. It also creates challenges when fee levels are under significant pressure. Many investors are attracted to niche players in this environment. However, this is where the cost of dealing with regulation and the increasing demands of investors are at their most difficult.
- The potential for growth is strongest in the emerging and developing world. Investing in real estate in such markets comes with its own range of challenges. Investors are hungry for the returns but have developed an aversion for the risks involved.

Conclusion

At the time that this paper was originally written in 2010, there appeared to be a very real risk of the press-pulse scenario envisaged by Arens and West. The two year period of pressure already experienced at that point was expected to last until well into 2013. The introduction of a raft of new regulation on 1st January 2013, with inadequate time for investment managers to prepare, had the potential to take many to the brink.

The intervening delays in the implementation of the various regulations mean that they are no longer running to the same timetable. The real estate industry therefore faces a prolonged period of pressure stretching into 2016, with the stresses gradually rising as the various regulatory changes come into effect. Whilst the risk of a catastrophic outcome on 1st January 2013 has dissipated, for many real estate managers the prolonged period of stress will prove too much, and we anticipate a period of significant consolidation in the real estate investment management industry over the next two years.



Despite the potential difficulties to navigate, this is not all bad news. For those that are able to adapt and to innovate, there will be opportunities to exploit the changing environment. At one level, merely surviving is a business opportunity. Those that do will find themselves in a reduced peer group. Real estate remains an attractive asset class and the global demand for buildings will rise with urbanisation.

There is, however, a bigger opportunity than this. There is a demand for innovation at all levels:

- At the asset level, changes in technology, the way in which we use buildings and the environment of our planet will be catalysts for innovation;
- At the product level, changing investor demands and the challenges of providing for old-age create an opportunity for innovative product development;
- At the platform level, the cost pressures of meeting the demands of investors, regulators and other stakeholders will drive innovation. Process needs to become more efficient and more global. New business models will emerge.



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His clients are real estate investment managers, investors, real estate investment bankers and other professionals in the real estate industry. John is a leading adviser on international real estate fund structuring and has advised on the establishment of pan-European and global real estate funds and fund of funds, as well as similar vehicles for investment in infrastructure, hotels and other real estate operating assets. He also advises on the structuring of club deals and segregated accounts. John is a tax partner by background, but now also advises on a range of regulatory, governance and operational matters for real estate funds, Sovereign Wealth Funds and similar investment vehicles.

John is the author of the paper 'Ammonites, extinction events and the real estate fund management industry' http://www.pwc.co.uk/real-estate/publications/ammonites-extinction-events-and-the-real-estate-fund-management-industry.jhtml, the recently published report for The Association of Real Estate Funds, 'Unlisted funds - lessons from the crisis' http://www.pwc.co.uk/real-estate/publications/emerging-trends-neal-estate-europe-2012.jhtml He is a member of the IPF working party on Solvency II, the Urban land Institute UK executive committee and is a regular conference speaker.



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