

# European Real Estate Monitor

**In this issue:**

**“Flight to Prime” and Europe’s office markets**

Conventional wisdom suggests that prime property will outperform secondary property in a downturn. When it comes to strategic and tactical allocation, should investors now be focusing on Europe’s “prime” markets? This article examines this issue by looking at the resilience of capital values across the cycle in Europe’s office markets.

**Focus on: Eastern Germany**

The former DDR has seen sentiment swing from boundless optimism to resigned gloom since German unification in 1990. But while the smaller cities continue to struggle, Berlin and, in particular, Leipzig and Dresden are showing a smart pick-up in activity which is starting to translate into real estate performance.

**Market Monitor: A capital markets shock**

Though re-pricing is causing returns to slow temporarily, the current dislocation is limited to the capital markets, with occupier markets in good health. So long as it remains that way – and there is every sign that it will – there is no reason to think that there will be anything other than a short-lived correction which will lead to more attractive pricing, especially at the higher-risk end of the spectrum.

**European snapshot**

Summary of key market data

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## “Flight to Prime” and Europe’s office markets

As the European Real Estate market has adjusted to the post-credit crunch landscape, several aphorisms have become common to hear. Presentations, newspaper / magazine analysis and agent chat are littered with phrases such as “re-pricing of risk”, “no-one wants to catch a falling knife” and “flight to prime”. The latter of these is particularly prevalent, reflecting the widely held expectation that over 2008 and 2009, “prime” property will outperform “secondary” and investors should seek to adopt strategies that maximise exposure to prime real estate and minimise exposure to secondary.

The notion that secondary property capital values will decline further in a downturn than prime makes intuitive sense. Over the long-term, secondary property should be valued on a higher income yield to reflect the return required to compensate an investor for more risk in the income stream: secondary property is subject to greater occupier risk on a building level and market level. Secondary property therefore produces higher income returns. However the flip side is that prime is better quality and should have higher rental and therefore capital value growth. Yield and rental growth should have an inverse relationship: the higher the prospects for rental growth, the higher the prospects of capital growth and the lower yielding the property / market should be. The result? Secondary property is higher risk with greater volatility in capital values but this risk should be reflected by higher total returns over the long-term.

**Exhibit 1: Ranking table of European Office Markets**

London (WE)	1	Luxembourg	2	Gothenburg	3
Paris (20 districts)	1	Oslo	2	The Hague	3
London (City)	1	Berlin	2	Utrecht	3
Paris (La Défense)	1	Birmingham	2	Warsaw	3
Frankfurt	1	Hamburg	2	Rotterdam	3
Munich	1	Amsterdam	2	Malmö	3
Zurich	1	Düsseldorf	2	Bologna	3
Dublin	1	Milan	2	Prague	3
Stockholm	1	Manchester	2	Lyon	3
Madrid	1	Edinburgh	2	Lisbon	3
		Barcelona	2	Århus	3
		Rome	2	Budapest	3
		Brussels	2	Marseille	3
		Helsinki	2	Turin	3
		Copenhagen	2	Antwerp	3
		Vienna	2	Athens (Central)	3
				Lille	3
				Istanbul	3
				Bucharest	3

Source: JPMorgan Asset Management

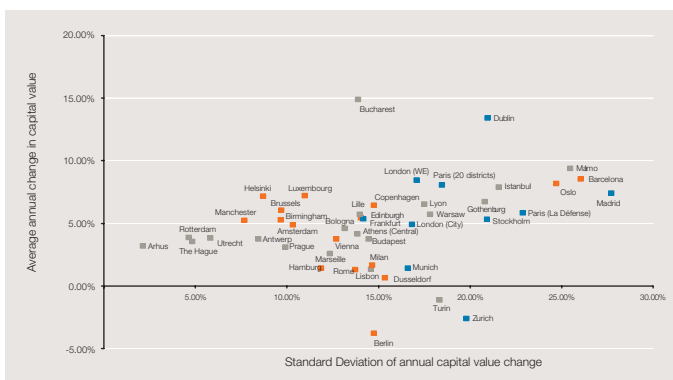
In a bull-run, the weight of capital chasing real estate assets grows, inflating the value of secondary relative to prime as investors become less discriminating in stock / market selection and in the prices they are prepared to pay. This ultimately leaves an insufficient risk premium between secondary and prime assets making secondary pricing more vulnerable once sentiment starts to turn. We would expect secondary yields to move further out to reflect risk, reducing the capital value of secondary property relative to prime. In essence, prime should be a more defensive asset in a downturn.

Of course, real estate investment is rarely straightforward: what do we mean by “prime” and “secondary”? Is the key consideration the asset or the market? How does one relate the best building in a poor market to an average building in a good market? As pan-European investors, an important part of our strategy is a top down approach to the selection of different markets. If prime markets are more defensive then in a downturn, investment should be focused on prime (low risk markets) and away from secondary. In this article, we look at European office markets to examine whether this is an appropriate strategy.

So which are Europe’s prime cities? Exhibit one shows our classification of cities into three groups. These rankings have been calculated from: population; employment; stock size; demand (rents and yields) and; liquidity / transparency. If the theory is correct, then we should be moving out of the more volatile cities (to the right of the table) into the more stable (on the left). For each city, we have calculated value per square metre by capitalising prime rent per square metre by prime market yield. From this quarterly data – in many cases going back to 1980 – we are able to establish a capital value series. Exhibit 2 shows annual average growth in capital values and standard deviation in annual capital value change for each of the cities.

As we would expect, there is a positive correlation between average growth rates and volatility. The cities with the highest volatility also tend to be the cities with the highest average annual capital value growth, though this is not the case through the whole series. Our group of prime office markets are broadly clustered to the right of the chart illustrating higher growth and volatility: the most obvious conclusion from this chart is that it is the secondary and tertiary cities that display significantly greater stability.

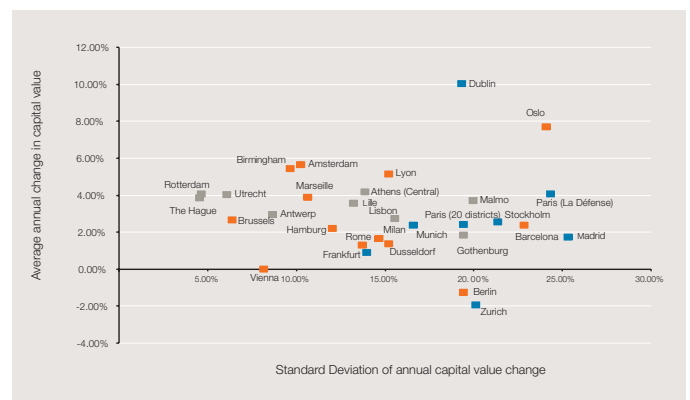
**Exhibit 2: Average Capital Value Growth versus Volatility**



Source: JPMorgan Asset Management; DTZ

For this analysis, we have used the longest possible data series for each city. However given the cyclical nature of office markets, the start year makes a significant difference to the average annual growth rate in capital value. Ideally, we would have data back to 1980 for all markets (comprising three upswings and two downswings) but this only exists for 8 markets. Some of the outlying data – the strong performance of Bucharest and the weak performance of Berlin – is directly attributable to the start year. We do though have data for 33 markets since 1990 which allows better comparison of markets. This is shown in Exhibit 3. In this chart, there is a much weaker relationship between average capital value growth rates and volatility. Indeed whilst again our prime cities are grouped towards the right of the chart, reflecting higher volatility, they have not, over an 18 year period, delivered higher capital value growth. This goes against intuition and our initial theory. So why would this be the case?

**Exhibit 3: Average Capital Value Growth versus Volatility (1990+)**



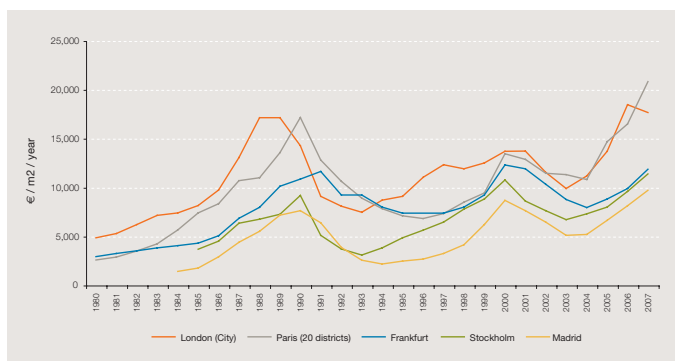
Source: JPMorgan Asset Management; DTZ

One possible explanation could be that our secondary markets have benefited from a larger inward movement in yields in the bull-run of recent years. However the evidence does not really support this: from 2001 to 2007, prime yields moved in from 6.75% – 7.00% to 5.25% – 5.50% in Amsterdam, Malmö and Brussels against 6.25% – 6.50% to 4.25% – 4.50% in La Defense and City of London.

In an ordinary office market cycle rental growth is driven by demand and supply. Demand is determined by industrial structure: markets with exposure to more cyclical employment sectors (predominately financial services and technology) experience greater variance in gross demand (take-up levels). New supply responds to, but inevitably lags demand: shortage in demand booms and glut in demand contractions causes rental spikes and troughs. And it is prime markets – due to their greater volatility on both demand side and supply that show the greatest movement in rents. In the growth phase of a typical market cycle investors will pay more for prospective rental growth.

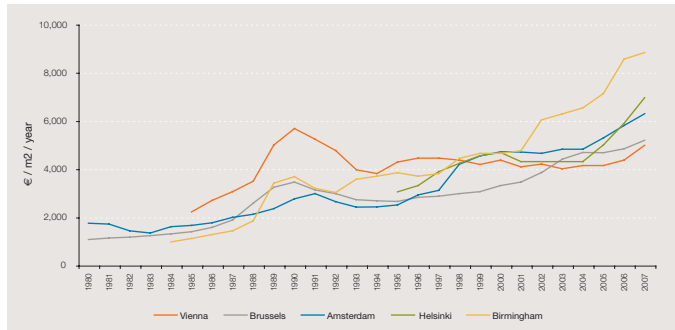
As rental growth prospects fade pricing should adjust accordingly. Whilst movements in yield in the last five years have been significantly influenced by structural factors – the pricing of real estate relative to other asset classes / risk free rate – over the past two years, the cyclical improvement in most office occupier markets has driven further inward yield movement. This is most notable in our prime office markets, suggesting that capital value in prime cities should grow rapidly in an upswing but be at greater risk of falls in a downswing. The charts below illustrate that the cycle, in capital value terms, is less pronounced in secondary cities than in prime suggesting that values may be more resilient in a downturn.

**Exhibit 4: Nominal Capital Value 1980- 2007 – Tier 1 Cities**



Source: JPMorgan Asset Management; DTZ

**Exhibit 5: Nominal Capital Value 1980- 2007 – Tier 2 Cities**

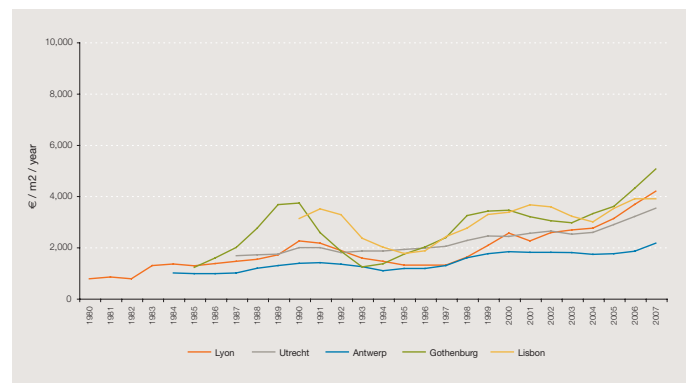


Source: JPMorgan Asset Management; DTZ

Capital market conditions are currently determining yield levels. These outward yield movements are less market specific but reflect a wider re-pricing of real estate risk. Whilst we remain confident that re-pricing will be modest (covered in previous editions of the EREM), if yields are moving out then we need to identify markets where either rental growth is sufficient to compensate, or outward yield shift is relatively small. Which will these markets be?

As suggested above, the current gap between pricing in prime cities and secondary cities – <4.0% yields in Paris, Madrid, Munich against >5.0% in Brussels, Amsterdam, Vienna – can be explained by relative rental growth prospects. Movements in pricing in secondary cities – for example Brussels from 6.25% to 5.25% – can be explained by investors re-risking these cities than the expectation of rental growth. It would seem just as plausible that this gap in yield would narrow slightly as rental growth in prime markets eases.

**Exhibit 6: Nominal Capital Value 1980- 2007 – Tier 3 Cities**



Source: JPMorgan Asset Management; DTZ

Indeed the cyclical picture is changing with the demand outlook a little less positive than six months ago particularly from financial services. Supply is on the increase – most notably in London and Paris – which would tend to suggest that prime rental growth has peaked. Admittedly there is little expectation amongst market analysts of falls in rents of the scales seen in the early 1990's and the early 2000's; Bucharest and the City of London are the only markets where falls in prime rent are expected in the next 18 months. But forecasters do tend to underestimate the magnitude of upward rental growth rates in market upswings and rental declines on the way down.

However, irrespective of timing, we should expect an adjustment in pricing as rental growth slows. If a “normal” office market cycle is in operation, pricing should adjust the most in any markets with rental decline. We have established that prime markets are more vulnerable to rental declines: secondary markets have much lower rates of rental growth and indeed tend to see this rental growth later in the cycle. Yield movement in most of our secondary cities appears to have primarily been driven by structural factors rather than in the expectation of rental growth. If the cycle were to move into a downturn, the impact should be greater on those cities where capital values have surged over the last two years, which tends to be prime markets.

We have used our latest rent and yield forecasts to determine five year forecasts of capital value growth and volatility. The highest ranked markets for capital value growth over this period are a mix of prime and secondary markets. However forecast volatilities are significantly below historical average in most markets, either reflecting the reasonably benign prospects of the markets, or some of the limitations of the forecasting process. Nevertheless, whilst duty bound to state that the past is not necessarily a guide to the future, historic capital value volatility does give us some indication of the relative risk for each city. Using our historic series, we have calculated the probability of a >10% fall in capital values for our set of cities. The “top 10” markets (<8% probability) are all secondary, including Brussels, Amsterdam and Luxembourg. The “bottom 10” markets (>22% probability) includes six of our ten prime markets.

This analysis appears to understate the risks for CEE markets with the exception of Budapest, partly due to a lack of time series data. However this broadly makes sense: the markets with the greatest fluctuation in demand and supply have the greatest volatility in prime rents and therefore in capital values. These are Europe's prime markets and whilst in the majority, the demand supply balance currently looks in reasonably good shape there is the risk that over the next 18 months, the picture will become less positive. Demand is vulnerable – the sharper any downturn in the US economy, the greater the effect will be – and new supply is increasing. Markets that we would be particularly cautious about are Madrid, Stockholm and the City of London. These risks appear lower in some of Europe's secondary office markets, good examples being Brussels, Lyon and Helsinki.

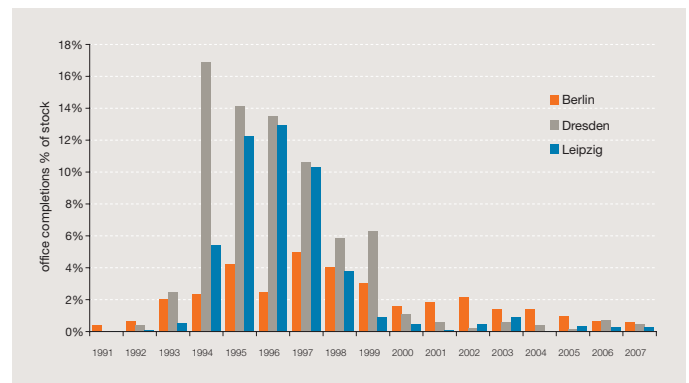
Of course we have to be careful in drawing too many concrete conclusions: this analysis is focused on office markets and would not apply in the same way to retail or warehousing markets. And it not is necessarily the case that all our secondary markets will outperform: in running our current forecasts to look at capital value impacts, a mix of markets comes out. It is essential to understand the underlying supply and demand dynamics to gauge which markets will be hardest hit by softening of tenant demand if macro-economic conditions continue to weaken. There is a retreat from risk in real estate as in other asset classes, in response to global financial market conditions. But this simple analysis suggests that when it comes to developing a top-down strategy, investors cannot simply assume "prime" equals more resilient.

## Focus on: Eastern Germany

When the former DDR merged with the rest of Germany in October 1990 the economic outlook looked bright. The former eastern states would benefit (it was argued) from a rapid catch-up in productivity and spending power with the west, fuelled by massive fiscal transfers and the transfer of government and corporate offices to Berlin, restored to its historical position as the capital of a united Germany.

By the mid 1990s, it was clear that things were not going to plan. It was proving more difficult than imagined to turn around the huge, inefficient state businesses that had made up the bulk of DDR production, with bankruptcy being often the only achievable exit. Berlin was struggling to attract businesses from the west – even the government took until 1999 to move. Fiscal transfers were spent mostly on social security payments and, while this no doubt helped to keep spending more buoyant in the east than it otherwise would have been, it also crippled the western German economy and helped to push it into a decade and a half of stagnation. And above all, the eastern population simply decided to move en masse westwards, understandably preferring to benefit immediately from western living standards rather than waiting for catch-up.

Chart 1: New office completions as a % of stock 1991-2007

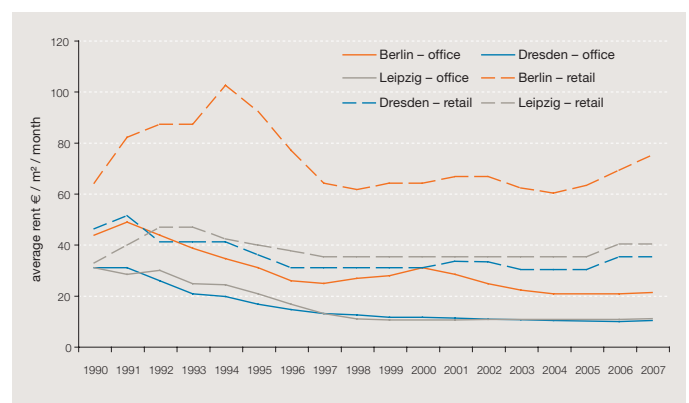


Source: Bulwien, JPMorgan Asset Management

This boom/slump pattern was mirrored and even magnified in the real estate market. As chart 1 shows, by the mid-1990s new office construction was running at well over 10% of stock in Dresden and Leipzig. But the expected demand was not forthcoming, rents slumped, and many developers lost a good deal of money. The story in Berlin was somewhat different; construction, while robust, was never as rampant as in the twin second cities, and values even saw a modest pick-up as the decade drew to a close, coinciding with the installation of the German government. However, this fuelled a second boom in construction levels and by 2004 Berlin prime office rents were down to €20/m<sup>2</sup>, with prime retail pitches at €60/m<sup>2</sup> (chart 2), an extraordinarily subdued level for a capital city of over 3.5 million people.

As a result of this poor performance, investment volumes slumped and yields drifted steadily outwards – the opposite of what was seen in the major CEE capitals where the effect of falling rents on capital values in the late 1990s and early 2000s was largely countered by declines in cap rates.

Chart 2: Prime office and retail rents, 1990-2007



Source: Bulwien, JPMorgan Asset Management

However, the economies of Dresden and Leipzig have seen a sea-change in fortunes over the last few years. The weakness of the eastern economy during the 1990s had one positive effect, at least so far as investors were concerned; it kept wages low.

In 2004 (the most recently available data) average wages and salaries per worker in western Germany were just under €40,000 per annum, while in the eastern states they were €26,000. In addition, the German state and the EU continues to offer generous incentives which allow companies to recoup up to 50% of capital expenditure, 30% of R&D costs, and, for a period of six months, 30% of wages when they locate in eastern Germany. Yet education and skill levels in the eastern states are for the most part the equal of those in the west.

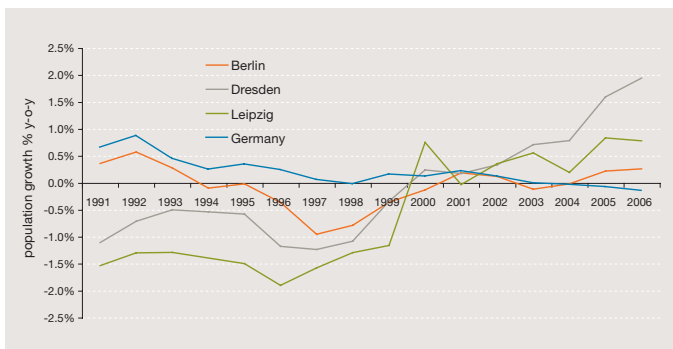
As a result, both cities have seen significant inward corporate investment over recent years. Dresden has attracted numerous hi-tech and new economy businesses in the past few years with AMD, GlaxoSmithKline, ABB, Infineon Technologies and Alstom all making the city their base of operations for Germany and Central Europe, leading to the area's "Silicon Saxony" epithet. This clustering has both encouraged and been sustained by the growth of the Dresden University of Technology (TUD), which has nearly 40,000 students and is responsible for world-leading research in the engineering and computer science fields.

Leipzig was a little slower to join the party but has certainly made up for it in the past few years. BMW, Amazon and Porsche have all located major manufacturing and distribution centres to the city, reflecting in large part the region's status as a major distribution hub (Leipzig boasts Germany's second largest rail hub after Berlin).

The capital itself is seeing a similar, though less marked, revival in fortunes but other cities in the east have fared less well. One of the reasons that Dresden and Leipzig have attracted capital is that they are able to offer a high standard of living and thus attract workers – something that is unfortunately not the case of many of the DDR's former "smoke stack" towns.

The effects of this structural shift are shown most clearly in the population figures (chart 3). Having fallen throughout the 1990s, the populations of the three largest eastern cities bottomed out at the turn of the decade and, in the case of Dresden and Leipzig, have been growing at an accelerating rate. Dresden in particular saw almost 2% population growth in 2006, the sort of number more normally associated with the developing world. For Germany as a whole, by contrast, population hit a peak in 2002 and is now gently declining.

**Chart 3: Annual population growth 1991-2006**

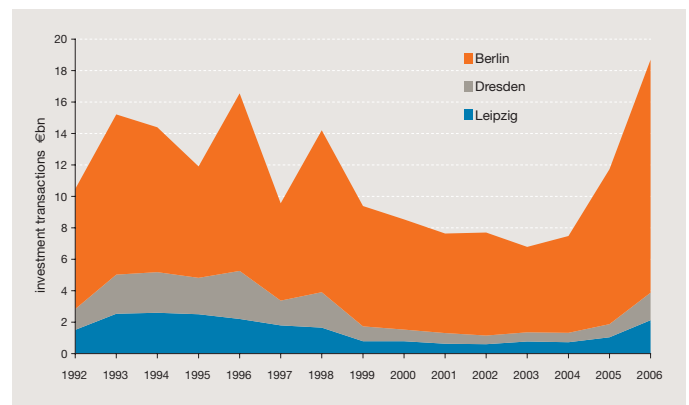


Source: Bulwien, JPMorgan Asset Management

So far as real estate is concerned, supply is now extremely subdued as, for the most part, capital values of new buildings are less than development costs. As a result we would expect these economic and demographic developments to have an immediate effect on real estate values and, to an extent, this is true. As chart 2 shows prime retail rents began to recover three years ago while 2007 saw office rents grow (albeit modestly) in all three cities for the first time in many years. However office vacancy rates remain relatively high (especially in Leipzig where they remain in excess of 20%), which is likely to keep rental growth subdued for another year or two.

As a result of this pick-up in the occupier market, investor money has also started to flow back into eastern Germany (chart 4). One landmark deal was the sale in 2006 by the Saxon state of much of Dresden's social housing stock to Fortress for €1.2bn, a deal which wiped out the city's entire public debt (but caused a degree of political tension). In 2006 investment transaction volumes hit their highest level in aggregate since unification and while the rate of increase is likely to have slowed over the course of 2007, we believe that levels will be higher once more for the year as a whole.

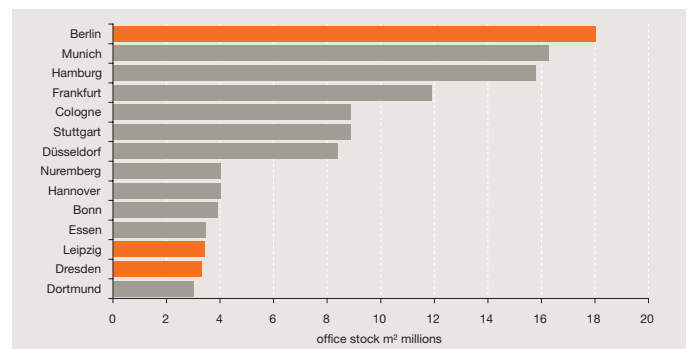
**Chart 4: Investment transaction volumes**



Source: Bulwien, JPMorgan Asset Management

This in turn has staunched, and indeed started to reverse, the rises in cap rates seen during previous years. Office yields began to decline in Berlin in 2006 and in Leipzig last year, though Dresden has so far been a little slower to react.

**Chart 5: Total office stock: top 15 German cities, 2007**



Source: Bulwien, JPMorgan Asset Management

A note of caution needs to be sounded here. While Berlin is the largest market in Germany with 18 million m<sup>2</sup> of office stock, neither Leipzig nor Dresden are particularly liquid; in terms of office stock they are the thirteenth and fourteenth largest cities in Germany respectively, sandwiched in between Essen and Dortmund in the rankings (chart 5). Typical annual take-up runs at around the 50,000m<sup>2</sup> mark in Dresden and 80,000m<sup>2</sup> in Leipzig, so lettings are likely to be lumpy and the timing of exits less certain than in larger cities.

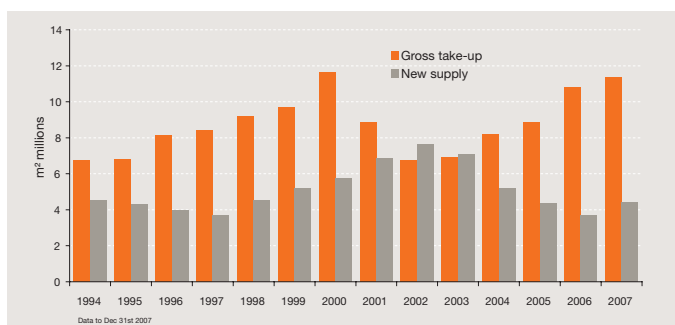
However, in our view going-in yields provide a more than adequate liquidity premium. Net income returns of 6.5-7% for city-centre office properties in dynamic cities inside a major EU economy are, we believe, very attractive; and if these are pushed downwards by other investors with similar views, this can only boost performance in the medium term.

## Market Monitor: A capital markets shock

Three or four years ago it was fashionable to remark that there was an unusual disconnect between the capital and occupier markets for real estate, with returns at that time being driven by strong inward investment flows and falling yields despite occupier markets being weak. The situation is now exactly reversed. Capital markets are in retreat, and this is leading to increases in yields and slowing returns in many markets; yet in most locations occupier markets are in rude health. And while the credit crunch might have some negative impact on leasing, the rising cost of credit should compensate by cutting back on new supply.

Chart 1 shows supply and demand – more specifically new supply and take-up – for forty one European office markets over the past few years. Because these are both gross measures (the concept of net absorption is still alien to most European agents), we cannot meaningfully subtract one from the other – demand measured this way is almost always greater than new supply because some of it is take-up of existing space. Nonetheless, the picture is clear. 2007 was the strongest year since 2000 in terms of take-up, while new supply, although up somewhat on 2006, is still a long way below its historical average. Meanwhile, the gap between supply and demand measured this way is greater than at any time during the 1990s. The office markets could hardly be stronger – and the other commercial sectors are not far behind.

**Chart 1: Office supply and demand, 1995-2007**

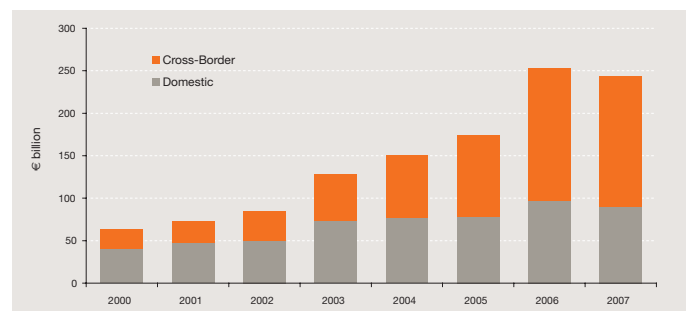


Source: DTZ Research, JPMorgan Asset Management

Of course, economic growth is likely to be slower following the credit “crunch”. However, the current consensus for European real GDP in 2008 is around the 1.5% mark (the current JPMorgan Economic Research forecast is 1.7%), and if this happens demand for space is unlikely to be hit hard. Meanwhile supply – which might under other circumstances have been expected to pick up sharply in 2008/9 – is likely to remain subdued as projects expire on the drawing board for lack of finance, it being the riskiest investments – including speculative developments – that are least likely to find debt finance over the next eighteen months. Overall, therefore, there is little reason to think that this favourable supply/demand balance will be adversely affected by the current turmoil, even if there are some markets – most notably London where financial service employment is predominant and the supply cycle is further advanced – for which the risks are greater.

It is the capital markets that have borne the brunt of the credit crisis. As chart 2 shows investment showed a decline for the first time this decade in 2007, albeit only a very modest one on an annual basis (most of the decline took place in the final quarter of the year), and this is reflected in yields, which have come off sharply in the UK and are under pressure in most of the established western European markets.

**Chart 2: Investment in European real estate 2000-2007**



Source: Jones Lang LaSalle

However, this is very different from previous cycles, such as the early 1990s, where yield rises have been sustained by a deteriorating rental outlook resulting in a prolonged and painful pricing adjustment. Real estate income streams are for the most part still set for growth and institutional investors still as a whole believe themselves to be underweighted to the asset class. As a result the current adjustment is likely to be more a of a one-off change that will be over just as soon as fair value has been achieved – value that is “fair”, that is, relative to the new set of conditions relating to risk appetite and financing costs.

As a result there has been a lot of effort devoted in recent months to the concept and measurement of fair value. Of course, in a sense this is a circular exercise. A critical component of fair value is the real estate risk premium, which has probably increased but we can only know for certain by how much when a new set of prices has established itself. Nonetheless, we can be sure that the extent of re-pricing will vary by risk profile. Bond-like investments will probably behave not that differently from bonds -and bond risk premia have actually fallen in the past six months. It is prices at the top end of the risk spectrum that will be hardest hit, which means -given that the underlying market outlook remains buoyant – that by the second half of 2008 there should be some very interesting buying opportunities available in opportunistic space.

# European snapshot

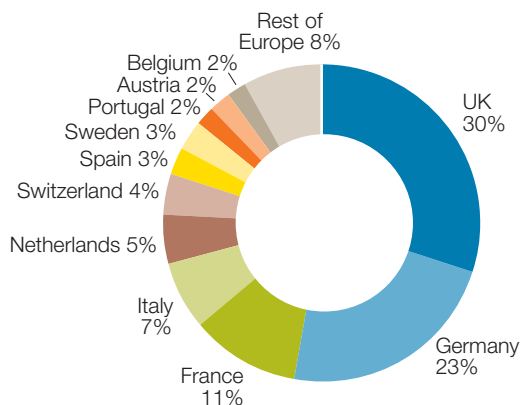
## Standard office lease terms

Country	Term length years	Break rights	Transfer tax (approx)	Other notes	Invested stock € billion
UK	10-15	Rare	4.0%	5-yr upward-only review; tenant right to renew	797
Germany	10	Every 5 years	3.5%	Annual indexation	601
France	9	Every 3 years	4.8%	Annual or 3-yr indexation; tenant right to renew	296
Italy	12	Every 6 years	4%	Annual indexation (75% of index)	187
Netherlands	5-10	No	6%	Annual indexation	131
Switzerland	5-10	No	3%	Annual indexation; renewable for a further 5 years	99
Spain	3-5	No	3%	Annual indexation	83
Sweden	3-5	No	3%	Annual indexation; tenant right to renew	80
Portugal	5	No	6.5%	Annual indexation	61
Austria	5-10	No	4.5%	Annual indexation	60
Belgium	12	Every 3 years	12.5%	Annual indexation	59

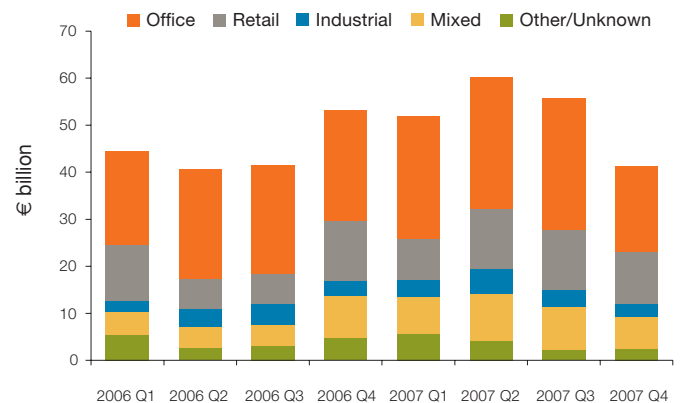
## Major cities – market size

Country	City	Market size € billion	% of country	Yields		Rents			
				Prime initial yield % pa office	retail	office	Prime rental level €/m <sup>2</sup> /year 2008	retail	2008
UK	London	275	34.6	5.00	4.00	1608	↔	7750	↔
	Birmingham	56	7.0	5.25	4.75	475	↔	4752	↔
	Manchester	47	5.9	5.50	5.00	417	↔	4460	↔
Germany	Frankfurt	102	17.0	4.05	4.45	480	↑	2640	↔
	Munich	68	11.2	3.50	3.70	408	↔	3180	↔
	Hamburg	52	8.7	4.25	4.05	276	↔	2400	↔
	Berlin	53	8.9	4.00	4.00	276	↔	2340	↔
France	Paris	201	68.0	3.75	4.00	780	↑	7350	↔
	Lyon	7	2.5	5.50	6.75	230	↔	1820	↔
Italy	Rome	42	22.5	5.30	5.10	390	↔	2200	↔
	Milan	42	22.7	5.15	5.00	500	↔	2400	↔
Netherlands	Amsterdam	19	14.8	5.25	4.85	330	↔	2000	↔
Switzerland	Zurich	32	32.7	4.50	4.00	512	↔	3916	↔
Spain	Madrid	27	32.7	4.75	5.25	460	↑	1900	↔
	Barcelona	11	14.0	4.75	5.25	335	↔	1950	↔
Sweden	Stockholm	51	63.6	4.25	4.25	477	↑	1538	↔
Portugal	Lisbon	30	48.9	6.50	6.50	252	↔	840	↔
Austria	Vienna	30	50.7	5.30	4.50	264	↔	2760	↔
Belgium	Brussels	30	50.0	5.50	4.25	285	↔	1350	↔

## Invested stock as % of Europe



## Net real estate Capital flows € bn



Sources: DTZ Research, IPD, JPMorgan Asset Management estimates and calculations

