Europe has had a listed property market for over a century. British property companies like Cardiff Property and Warner Estates were established in 1886 and 1891, and the continent even preceded England in this respect, with companies like the French Compagnie EMGP (1850) and the German Concordia Bau und Boden (1860). These companies are all still listed on European stock exchanges.

Despite this early start, the European property share market did not really get off the ground very quickly. For most of the early 20th century the European market consisted of only a handful of primarily British companies. Gradually, however, the market grew, and by 1984 the European listed property market consisted of 67 companies, which were listed in eight different countries with a total market capitalization of $12.31 billion. At that time the North American listed property share market consisted of 28 companies representing a total market capitalization of $5.28 billion.\(^1\)

Since then, the European property share market has grown much more quickly. This article will show how the European property share market has developed in the last two decades. We will first describe the key market developments that have helped the European listed property market mature, paying particular attention to the rise and performance of initial public offerings during the 1990s.

**RECENT MARKET DEVELOPMENTS**

Over the years, and especially during the 1990s, the European and North American markets grew rapidly both in numbers of property companies and in market values. This development is illustrated in Exhibit 1, in which the market capitalizations of both markets are plotted against each other for the period 1984-2001. From this graph, it is clear that the European market has experienced a rather steady growth path, while the North American market has had two distinct phases of growth around 1992 and 1997, and has shown little growth outside of these.

Exhibit 1 also suggests that the North American market has been more volatile than its European counterpart, creating significant diversification opportunities for United States investors by investing in the relatively stable European listed property. The market statistics, which are presented in Exhibit 2, highlight these differences in market characteristics. The mean total U.S. dollar returns of both markets hardly differ, even after incorporating the effects of the relatively weak euro in recent years. The real difference between the respective continental markets seems to lie in the relatively high volatility of the North American market over the sample period: the monthly standard deviation was 4.3%, while the corresponding number for Europe was 3.8%. The combination of these results indicates that during the sample period the European listed property market offered slightly superior risk-return characteristics.
The European market has grown thanks to a rising number of listed property companies as well as an increase in the average size of individual listed property companies. The former development has meant that a substantial number of property company initial public offerings (IPOs) have occurred. We now address the attractiveness of these IPOs to investors in European property companies.

**IPO OPPORTUNITIES**

IPOs tend to provide interesting opportunities both for investors and academics. Over the years numerous studies have reported the anomalous price behavior that is associated with the debut of a stock on the public market. Ibbotson [1975] was among the first to show the underpricing of IPOs by documenting initial-day excess returns of 11.40% on United States common stock IPOs. Since then many studies addressing this issue all have confirmed this remarkable finding, indicating that IPOs generally are interesting investment opportunities. Ling and Ryngaert [1997] have investigated this issue for United States equity REITs by analyzing 85 issues that occurred in the period 1991-1994. Their results showed a mean market-adjusted initial day return of 3.60%, indicating that IPO underpricing also occurred in the relatively transparent listed real estate market, but that the underpricing was substantially less severe than it was in common stocks.

Following this example we gathered a sample of 83 European property companies that were first listed on the market in the period 1990-2000. We analyzed both the initial-day and aftermarket performance in order to determine both the short- and long-run appeal for investors. Exhibit 3 shows the breakdown of our European sample across years and countries. From this table, we can conclude that the United Kingdom has been by far the leading market in number of IPOs, and that Sweden and France have also been quite important.

By comparing the closing price of the first day of trading with the offering price of the IPO, we derived the initial-day return. After correcting these returns for the corresponding market return we documented the results presented in Exhibits 4 and 5. For the sample as a whole we document a significant average market-adjusted initial day return of 3.43%, which is in line with the 3.60% that Ling and Ryngaert [1997] documented for the U.S. equity REIT market. The relatively modest initial-day returns correspond with findings of Alli, Yau, and Yung [1994], who documented differences in IPO price behavior resulting from sectoral differences regarding transparency and uncertainty. They analyzed the price behavior surrounding IPOs in the heavily regulated financial sector, and reported a 5.28% initial-day return. By comparing these outcomes with results from other sectors, they distinguished a direct link between sectoral risks and IPO underpricing.

Given the relatively stable and transparent nature of the real estate sector our results confirm this sectoral hypothesis, but still indicate a modest anomaly for the very short-run. A recent study by Aaij and Brounen [2001] examined the price behavior of European IPOs in the most risky sector of all, the high-tech industry. For a sample of 361 European high-tech IPOs from 1998 onwards, they reported an average initial-day return of 47.24%. For comparison, we also report the distribution of these initial-day returns in Exhibit 4. The initial-day returns for the high-tech sample are much more strongly spread out on the upside, while the downside looks similar to the property share market. These positive outliers cause the large difference between the mean and median for the high-tech sample, and can be diagnosed by the high kurtosis and skewness values. For the relatively stable listed property market the distribution is much more concentrated around its mean, resulting in a lower kurtosis and skewness and a much smaller difference between the mean and the median initial-day return. An interesting finding is that the relationship between the number of positive and negative initial-day returns is nearly the same for both industries.

Although the first blow is half the battle, investors are typically interested in the long-run performance of an investment. Ritter [1991] observed that the strong initial performance only lasts for a few weeks and that IPOs in general perform relatively weakly in the long run. For a sample of 1,526 common stock IPOs between 1975 and 1984, Ritter found an underperformance of a control sample of matching stocks by 27.39% during the first three years after listing.

We tracked the performance of the IPOs in our sample up to their first anniversary of public trading in order to distinguish whether this aftermarket slump is also present in the European listed property market. We computed buy-and-hold returns for each company and aggregated these results, generating the aftermarket performance index presented in Exhibit 6. For the sample as a whole we find a first-year total return of 8.04%, on average. In order to correct these returns for movements in
the overall markets we subtract the corresponding GPR-General National returns, and observe an average market-adjusted return of -0.96%. Again, this accords with the literature, and again we document results that are significantly milder than for other industries. This is illustrated by the fact that only 12.72% of the property company IPOs in our sample are trading below their initial IPO offering price on their first anniversary of public listing. For the European high-tech IPOs this number was 38.36%, indicating a more drastic slump in the aftermarket.

Combining these short- and long-run performance results, we can conclude that European real estate IPOs offer interesting opportunities for investors, since modest short-term abnormal returns do exist, while a severe aftermarket slump is rare.

CONCLUSION
In this article we have shown some of the many investment opportunities that are concealed on the old continent. The European listed property market has expanded and performed steadily over the past decade. Non-European investors can use this market to acquire exposure to European property relatively cheaply and quickly. Although consolidations have been numerous, the number of listed property companies has continued to grow due to the steady flow of IPOs. Our analysis shows that these IPOs perform strongly on their first day of trading, offering an initial day return of 3.43%. In the aftermarket this strong performance is transformed into returns that are more in line with the rest of the market.

ENDNOTES
The authors thank Kees Koedijk of Kempen & Co and Jeroen Beimer of Global Property Research, Amsterdam for helpful comments and assistance. The authors take sole responsibility for any errors.

( n1) These numbers are from the Global Property Research database.

( n2) For a broad discussion of empirical evidence regarding initial aftermarket price behavior of IPOs, see Smith [1986].

( n3) This sample is the Pan-European version of the sample in Brounen and Eichholtz [2002].

GRAPH: EXHIBIT 1 Market Capitalization and Total Returns for 1984-2000 (U.S. Dollars)

EXHIBIT 2 Property Share Market Statistics, 1984-2001
Legend for Chart:
A - Market Statistics
B - Europe
C - North America

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Monthly Return(a)</td>
<td>0.69%</td>
<td>0.69%</td>
<td></td>
</tr>
<tr>
<td>Mean Annual Return</td>
<td>8.58%</td>
<td>8.63%</td>
<td></td>
</tr>
<tr>
<td>Monthly Standard Deviation</td>
<td>3.80%</td>
<td>4.30%</td>
<td></td>
</tr>
<tr>
<td>Minimum Monthly Return</td>
<td>-9.75%</td>
<td>-19.84%</td>
<td></td>
</tr>
<tr>
<td>Maximum Monthly Return</td>
<td>12.73%</td>
<td>13.79%</td>
<td></td>
</tr>
<tr>
<td>Market Capitalization 1985(b)</td>
<td>11.96</td>
<td>6.07</td>
<td></td>
</tr>
<tr>
<td>Market Capitalization 1990</td>
<td>63.00</td>
<td>17.51</td>
<td></td>
</tr>
<tr>
<td>Market Capitalization 1995</td>
<td>89.26</td>
<td>33.71</td>
<td></td>
</tr>
<tr>
<td>Market Capitalization 2001</td>
<td>119.87</td>
<td>152.51</td>
<td></td>
</tr>
</tbody>
</table>
(a) Both the mean monthly and annual returns are calculated using geometrical means of discrete returns. The underlying time series are denoted in U.S. dollars.

(b) The market capitalizations are denoted in US$ billions.

Global Property Research.

EXHIBIT 3 European Property Company IPOs by Country and by Year
Legend for Chart:

A - Country
B - Number of IPOs
C - Year
D - Number of IPOs

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>4</td>
<td>1990</td>
<td>3</td>
</tr>
<tr>
<td>Belgium</td>
<td>6</td>
<td>1991</td>
<td>5</td>
</tr>
<tr>
<td>Denmark</td>
<td>1</td>
<td>1992</td>
<td>8</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>1993</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
<td>1994</td>
<td>16</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
<td>1995</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>1996</td>
<td>12</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>2</td>
<td>1997</td>
<td>7</td>
</tr>
<tr>
<td>Norway</td>
<td>1</td>
<td>1998</td>
<td>5</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td>1999</td>
<td>11</td>
</tr>
<tr>
<td>Sweden</td>
<td>12</td>
<td>2000</td>
<td>10</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total IPOs: 83

GRAPH: EXHIBIT 4 Initial-Day Return Distributions of European High-Tech and Property Companies

EXHIBIT 5 Sample Statistics of Initial-Day Returns
Legend for Chart:

B - Real Estate IPOs
C - High-Tech IPOs

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Initial-Day Return</td>
<td>3.43%</td>
<td>47.24%</td>
</tr>
</tbody>
</table>
Median Initial-Day Return               1.29%     17.21%
Maximum Initial-Day Return             31.85%    900.00%
Minimum Initial-Day Return             -10.54%    -45.87%
% Negative Initial-Day Return          14.50%     15.50%
Skewness                                1.69       4.32
Kurtosis                                7.12      30.52

GRAPH: EXHIBIT 6 Aftermarket IPO Performance

REFERENCES

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