INTRODUCING THE GPR 250 PROPERTY SHARE INDEX

Contents

Real estate investors with an international perspective can benefit greatly from the recent growth of the global real estate securities market. They can use this market to build up international real estate exposure much faster and at much lower expense than through direct purchases of buildings and land. In the past decade-and-a-half, the global real estate securities market has grown nearly tenfold in real terms and is currently about $348 billion in size. This development was a truly global phenomenon, with substantial growth in North America and in Europe, and even stronger growth in the Far East. In all three regions, both the number of listed property companies and their average size has grown tremendously.

This growth has spurred a virtual circle of more liquidity in the markets, increased interest from institutional investors, more trading and investment activity, more growth, and even more liquidity. The liquidity has enabled investors to vary their exposure to specific markets and market segments quickly and without high transaction costs.[1] Growth of the market has also led to increasing analyst coverage,[2] which makes it easier for investors to obtain reliable and comparable information regarding the real estate securities markets as a whole as well as on specific property companies. Such information on real estate securities is important for all investors, but especially for international investors, who are not at home in the foreign property markets. A continuous increase in analyst coverage will therefore support the international dimensions of the real estate securities markets. In sum, the global real estate securities market will be an important conduit for international real estate investments in the future.

Investors wanting to implement an international real estate investment strategy through this market are confronted with the choice of an appropriate benchmark, and, consequently, an appropriate weighting of the portfolio. This is not a trivial issue. As with most common stock indexes, the commonly used global real estate securities indexes are market-weighted and do not take into account the liquidity of securities. In theory, this does not pose any problems, but for a fund manager, tracking such indexes can be hard, or even impossible. The property share markets are not efficient in the sense that all markets are liquid. Shares are sometimes held in large proportions by governments or strategic investors who do not intend to sell any of the stocks they hold. Moreover, even if shares are available in principle, trading activity may be so thin that acquiring positions according to a straight market-weighted benchmark can be very difficult, time-consuming and costly.

To help international real estate securities investors solve these problems, Global Property Research has developed a new global index, the GPR 250 Real Estate Securities Index. This new index only includes property companies with a minimum of $50 million of freely available market value, and high

liquidity in terms of average last-year stock trading volume. The least traded property company has a trade volume of around one-tenth of the company with the highest turnover.[3]

In this article, we present the new GPR 250 Real Estate Securities Index. First we provide a general discussion regarding the choice of an index. Next, we describe the construction of the GPR 250 Index in detail, followed by a description of the historic performance of the new index, both in absolute terms and relative to the GPR-LIFE Index. Summary statistics are provided, as well as the weights of the different countries in the index. The report then moves to issues relevant to the practical use of the new index. To study the historic performance of a portfolio managed according to the GPR 250 Index in a mixed-asset context, our last section analyzes the relationship between the GPR 250 Index and a common stock index for the world as a whole and for individual countries. This is done by calculating the correlations between these indexes for a three-year rolling window. Results are presented in numerical and in graphic form.

The Choice of an Index

When choosing an index, the first issue of importance is that the performance benchmark used should be replicable in practice. Most indexes are market-weighted. Theoretically, that does not pose any problems. In practice, however, it does, since for most companies some of the shares outstanding are not traded but rest firmly in the hands of long-run investors. A first example of such an investor is the government, which may deem the company to be of special importance to the public. Once the government owns a stake in a company, this stake is usually kept for a very long time. Another example of such a long-run shareholder can be the family which founded the company. Corporate cross-holdings are yet another example. In all of these cases, the so-called "free float" can be considerably smaller than the total market capitalization of listed shares. This implies that part of a company's shares are not truly available for outside investors.

If the widely accepted index is market-weighted, and investors would structure their portfolios according to such an index, then there would be excess demand for the shares with a low "free float." This would put an upward pressure on the prices of these shares, and consequently, they would generate a lower return. This is nice for the long-run shareholders, but bad for the outside investors. Thus, in markets with a high variety in the relative free floats, and where index tracking is important, a market-weighted index causes distortions for outside investors.

Until quite recently, the global property share market was not dominated by index trackers, but more by investors taking strategic stakes in certain companies. Therefore, the available market capitalization may differ considerably from the total market capitalization of these property companies. These markets are changing, however, and benchmarking an index is becoming more important. Institutional investors and international property-share mutual funds demand the transparency and accountability derived from using an index. Thus, for the property-share markets, an index has to be used which takes the "free float" into consideration.

Another important issue when replicating an index is the liquidity of the shares included. Even pure index investors trade just to keep their portfolio weights in line with the index weights. Most investors are less passive than that and try to outperform their benchmark. That necessarily involves trading. Since trading costs are a function of liquidity, actively tracking a benchmark is cheapest for the most-liquid stocks. For a fund manager, keeping trading costs low is essential in getting outperformance. High trading costs will make outperforming the index much more difficult and an index that does not take liquidity into account can therefore be very hard to beat.

The GPR 250 Index is designed to take care of these two issues: availability and liquidity. It is an index weighted by available market capitalization and only consists of the 250 most liquid property shares in the global market. The new index combines these two important new features with those of the existing GPR-LIFE Index.[4]

In an international real estate securities index, it is very important to distinguish between property investment companies and development companies. The shares of property investment companies that engage in relatively little development are most relevant to institutional investors who want to invest internationally, since these shares represent real estate portfolios. The performance of property investment companies is probably somewhat counter-cyclical. On the other hand, property developers are highly cyclical. Putting both types of companies into one index would imply a comparison of two quite different things. Making the distinction is therefore crucial to the quality of the index, and this

allows for meaningful international performance comparisons between markets. For that reason, pure developers are excluded from the GPR 250 Index and only property investment and investment/development companies are included.

Performance measurement takes place at different levels in the organization. Although the overall performance of an investment organization should be measured by a broadly used global index, special benchmarks are needed to measure the performance of individual strategic decisions and of individual portfolio managers. These benchmarks should reflect these strategies and the mandates of these portfolio managers. For example, the performance of a portfolio manager who is only allowed to invest in European orifice and retail companies should be compared to an index that includes only these companies. Comparison to any other portfolio would result in a tracking error for which the portfolio manager would not be responsible. Therefore, indexes used for portfolio management should be available in different compositions, according to investors' needs.

A final issue we want to discuss here involves the country weighting of global real estate securities indexes and of the portfolios constructed according to these indexes. The GPR-LIFE Indexes take the U.S. dollar market values of the property companies as weights, as is the case with most indexes. However, wide differences exist between countries in the extent to which real estate is securitized. This implies that a worldwide index overestimates the weights of the highly securitized markets (which happen to be the smaller countries), and underestimates the other markets. The clearest example of this is the huge weighting of Hong Kong in all existing global real estate securities indexes. A recent study[5] shows that the Morgan Stanley (41.7%) and Salomon Brothers (26.1%) real estate securities indexes assign a weight of over 25% to Hong Kong in the Global Index.

The nice thing of the GPR 250 Index is that the so called "Hong Kong problem" is reduced substantially. The weight of that country drops from 16.48% in the GPR-LIFE Index to 14.89% in the GPR 250. The weight of Singapore is also reduced to 2.51% in the GPR 250 Index from 4.51% in the GPR-LIFE Index. Compared to the other available global indexes, the GPR 250 Index is even stronger on this point. Thus, the GPR 250 universe is much more balanced in terms of country weighting than the GPR-LIFE Index and the other available global real estate securities indexes.

Construction of the GPR 250 Index
In this section we present the GPR 250 Real Estate Securities Index, and show its risk and return characteristics. First of all, the inclusion criteria are defined in Exhibit 1, to determine the universe of property companies in the GPR 250 Index. We will then discuss how the index is actually constructed and maintained.

Rebalancing
Revision of the index takes place once a year on July 31. New funds will be included whenever last year's volume ranks within the 250 most traded companies and the fund matches all other requirements. Exclusion takes place if a fund ranks above the 250th position in liquidity, or flit fails any of the other requirements.

Determination of Free Float
The free float is defined as the market capitalization of the company minus cross holdings, strategic and government interests. We assume all holdings over 10% of shares outstanding to be strategic.

Index Construction
The GPK 250 Index is constructed on a total return basis with immediate reinvestment of all dividends. Index construction is in three steps. The first step is to make a total return index for each individual property company. At the start of the measurement period, we assume that one share of stock is bought. Each subsequent dividend payment is then reinvested at the prevailing stock price. Stock prices and dividends are adjusted for stock-splits, reverse stock-splits and stock-dividends by multiplying the stock price and dividend observations after the split by the split ratio in order to maintain comparability.

Next, the time series of returns for all individual property companies are combined in an index for the whole country, and in several sub-indexes within that country. This is done with the property companies' freely available market capitalization in U.S. dollars as weights. The last step of the procedure involves the combining of the country indexes in the global index and the continental sub-indexes. Again, free float values are used as weights for this.

The GPR 250 Index, Market Capitalization
As of September 1997, the number of property companies for which the free float is more than $50 million is 280. To determine which 250 companies are included in the GPR 250 Index, the additional liquidity criterion is used. Only the 250 most frequently traded property companies (the property companies, with the highest absolute trade volume in U.S. dollars) are included in the GPR 250 Index. The liquidity criterion is only applied whenever the number of companies exceeds 250. Whenever this number falls below 250, only the free float criterion is applicable. The base date of the index is January 1990, as before this time the breadth and liquidity of the market was not sufficient to provide a well-balanced index. Exhibit 2 shows the development of the market capitalization of the GPR 250 Index over time. In the first year, the market value of the index drops, and then floats around $80 billion until the beginning of 1993. After that year, a gradual increase in available market capitalization sets in, and has continued until the present. The GPR 250 universe now has a combined available market value of $194 billion.

Country Weights
As discussed before, an important aspect of an international real estate securities index is country weighting. In Exhibit 3 the weighting factors by country are given. These weights are the sum of the weighting factors of the individual constituents in every country. In the index all constituents are free-float weighted. Apart from available market values, the exhibit also gives the number of companies included in the GPR 250 Index per country.

The fact that the GPR 250 has only 243 constituents at year-end is due to a number of mergers and acquisitions that took place in 1997. The weight of Europe in the GPR 250 Index is a bit lower than it is in the GPR-LIFE Index. This is due to the fact that open-ended property companies are excluded, which substantially decreases the weight of Germany and Switzerland, and eliminates Austria from the index. As a consequence, the United Kingdom somewhat dominates the GPR 250 Europe sub-index with a weight of 14.58%. The weights for North America and the Far East are 39.72% and 36.69%, respectively. Within the Far East sub-index, the so-called Hong Kong problem is only of very limited importance. The lower weights for Hong Kong and Singapore are matched by higher weights for Japan. Looking at the numbers of companies, the GPR 250 index is even more evenly spread over the three regions than it is in terms of market value. As of December 1997, Europe has seventy-four constituents, North America ninety-six and the Far East seventy-two.

Performance of the GPR 250 Index
In this section, we provide an insight into the performance of the GPR 250 Index. A graph of the GPR 250 Index is provided in Exhibit 4A, while Exhibit 4B provides the sub-indexes for the Far East, Europe, and North America. For all indexes, the time period is January 1990 through December 1997. Exhibit 4A shows that a Dutch guilder invested in 1990 according to the GPR 250 index was worth 1.17 guilders eight years later. The index showed especially strong performance in 1993 and in 1996. Exhibit 4B shows that the real estate securities boom of 1993 was not only driven by the developments in the U.S. REIT market. All three regions showed strong performance in that time period.

To get a better picture of the market performance, we have calculated means and standard deviations of returns of the GPR 250 Index and the continental sub-indexes. These numbers are given in the first columns of Exhibit 5. When calculated in Dutch guilders, the GPR 250 Index has shown an annual average return of 1.29% with a standard deviation of 17.44%. This moderate performance can be attributed to the crisis in the Far East. The average return for the Far East is -2.93%, while Europe's is 4.03%. North America has performed best in the period since 1990, with an average return of 4.79%.

The performance of the GPR 250 universe can be put into perspective by comparing it to the GPR-LIFE Index. First of all, this comparison is made on the global level, and after that, on the continental level: Europe, North America, and the Far East.

GPR 250 Global versus the GPR-LIFE Global
The GPR 250 Global Real Estate Securities Index has 243 constituents with a combined available market value of $194 billion as of December 1997. The GPR-LIFE Global Real Estate Securities index has 423 constituents and a total market cap of $350 billion. The difference in market value is due to the smaller universe and to the difference between available market value and total market value.

The performance of the GPR 250 Index is compared to the GPR-LIFE Index in Exhibit 6. The graph shows that the GPR 250 universe has underperformed the GPR-LIFE Index during the sample period. However, after 1993 the GPR 250 shows a better performance.

Exhibit 5 provides numerical information on the performance of the GPR 250 universe relative to the GPR-LIFE Index. Another observation is the somewhat higher volatility of the GPR. 250 index. Also, the high correlation between the returns to the two indexes is striking. Over the full period since 1990, the correlation is 0.98.

GPR 250 Europe versus the GPR-LIFE Europe

The GPR 250 Europe Index has seventy-four constituents with a combined available market cap of $45 billion as of December 1997. The GPR-LIFE Real Estate Securities index Europe has 167 constituents and a total market cap of $107 billion. Exhibit 7 compares the GPR 250 Index with the GPRLIFE Index. As was the case on the global level, these two series are very highly correlated.

Exhibit 5 again provides the numerical information and again, the indexes are found to be highly correlated. The GPR 250 outperforms the GPRLIFE index in pure return, but on a risk-adjusted basis, the performance of the GPR 250 index is quite similar to the GPR-LIFE index.

GPR 250 North America versus the GPR.LIFE North America

The GPR 250 North America Index has ninety-six constituents with a combined available market cap of $77 billion as of December 1997. The GPRLIFE Real Estate Securities index North America has 134 constituents and a total market cap of $115 billion. Exhibit 8 shows both indexes graphically. The graph shows that the GPR 250 universe has slightly underperformed the GPR-LIFE Index during the sample period.

Exhibit 5 shows returns, standard deviations, and correlations. As a result of the stream of mergers and acquisitions in the U.S. REITs, the correlation between the GPR 250 index and the GPR-LIFE index is ever increasing, as the North American companies included in the GPR-LIFE are both liquid and sizeable. For the same reasons, the behavior of returns and standard deviations is much the same.

GPR 250 Far East versus the GPR-LIFE Far East

The GPR 250 Far East Index has seventy-two constituents with a combined available market cap of $71 billion as of December 1997. The GPR-LIFE Real Estate Securities index Far East has 114 constituents and a total market cap of $127 billion. The two indexes are presented in Exhibit 9. The performance of the GPR 250 universe is a bit weaker than that of the GPR-LIFE Index. This can be attributed to the fact that the weight of Hong Kong is lower, and that of Japan higher in the GPR 250 Index, since the freely available market capitalization is relatively high in Japan and low in Hong Kong.

The GPR-LIFE Far East Index has outperformed the GPR 250 Far East Index over the entire history of the GPR 250. This is the result of a high weighting of Japan in the GPR 250 Far East Index.

The GPR 250 Index in a Mixed-Asset Context

One of the important advantages of investing in real estate is the low correlation of the returns of real estate with the returns of other asset classes, like common stocks. This low correlation provides diversification benefits. One of the classic arguments against investing in property companies instead of directly held property is that the correlations between property companies and common stocks are relatively high. This would imply that the diversification benefits of property shares in a mixed-asset context are limited. Indeed, historic information suggests that the short-run behavior of property shares shows similarities with that of common stocks. This is confirmed by the correlations presented in Exhibit 10, which shows performance statistics of real estate securities and common stock. Over the full 1990-1997 sample period, property shares have performed worse than common stocks, while the correlations between these two assets varied between 0.37 for Germany and 0.94 for Hong Kong. On the continental level, correlations were 0.78 for Europe, 0.54 for North America, and 0.88 for the Far East.

Thus, these numbers suggest that property share and common stock returns are quite strongly correlated. However, the diversification potential of property shares may be greater than the studies to date and the results presented so far in this article would suggest. When studying correlations between property share and common stock returns, we have found that they show a decreasing trend. For the

U.S., this development has been reported before, but we also find a downward trend for the Far East and especially for Europe.

To investigate this issue more deeply for the GPR 250 universe, we calculated three-year rolling correlations between the GPR 250 Index and the MSCI continental indexes to measure the diversification potential of the real estate securities in the GPR 250 Index in a mixed-asset context. The results are shown graphically in Exhibits 11 through 13 for Europe, the Far East and North America. For all three continents, real estate securities returns show decreasing correlations with common stocks.

In Europe, the correlation has been relatively stable and has been hovering around a level of 0.8 until quite recently. However, in the last three-year period, a significant drop can be seen, and for the thirty-six-month window ending in December 1997, it is 0.39. Of course, this decreasing trend is interesting from the standpoint of overall portfolio diversification for European investors.

The correlation of common stock and property share returns in the Far East has also dropped somewhat, albeit to a lesser extent than in Europe. In the Far East, correlation levels have decreased very gradually during the period we study until quite recently, and have come from about 0.83 to a little under 0.58 for the thirty-six-month period ending in May 1997. The last couple of months showed a slight increase of the correlation. The correlation numbers for the Far East, however, are probably somewhat overestimated, since property companies play an important role in some of the Far Eastern stock markets and therefore also in the corresponding broad stock market indexes. Thus, the real diversification benefit of including property shares in a Far Eastern mixed-asset portfolio is probably greater than the numbers ha Exhibit 12 suggest.

North American property shares provide the best opportunity for diversification of a stock portfolio. The correlation between North American property shares and common stocks has decreased substantially over the sample period. Overall, this correlation went from 0.62 to 0.22. This suggests that property share returns and common stock returns ha North America are now virtually independent. Since this market is far advanced in terms of analyst coverage, information availability, liquidity, and market structure, this finding could indicate that the decreasing trend we find in correlations in Europe and the Far East may continue in the future. Thus, we conclude that correlations between property share and common stock returns are coming down across the globe, and real estate securities increasingly offer diversification benefits.

Conclusion

The GPR 250 Property Share Index has some very important benefits over the currently available global benchmarks for indirect real estate investors. The existing global real estate securities indexes are hard to use for practical performance measurement. Acquisition of the property shares included in these indexes may be difficult for two reasons. First, often blocks of shares are held as strategic investment and are not likely to be sold. Second, trading activity may be so thin that gaining exposure according to a straight market-weighted benchmark is simply too expensive. To cope with these problems, Global Property Research has compiled the GPR 250 Real Estate Securities Index. This new global index only includes property companies of sufficient size in terms of available market capitalization, and high liquidity as measured by average last-year stock trading volume.

The constituents of the GPR 250 Index are weighted by available market capitalization. As a result, the GPR 250 universe is much more balanced in terms of country weighting than the other available global real estate securities indexes. North America has the largest weighting and accounts for approximately 39.70%. The weights for the Far East and Europe are approximately 36.70% and 23.60%, respectively. Within the Far East sub-index, the so-called Hong Kong problem is only of very limited importance.

Among the further advantages of the GPR 250 Property Share Index are the possibility to construct tailor-made, sub-indexes, with a high degree of transparency and consistency regarding inclusion of firms and assignments to sub-indexes.

Endnotes

1. Transaction costs in the private real estate market are typically in the range of 3%-6% in the U.S. European private transaction costs tend to be higher at around 8%-10%. Public markets worldwide only involve very small transaction costs to institutions.
2. The more liquid companies usually are actively followed by a dozen analysts. Smaller, and infrequently traded companies tend to attract less interest from analysts. European shares usually have a smaller amount of analysts than their American and Far Eastern counterparts.
3. 95% of the stocks included has a daily wading volume between 0.042% and 0.472% of total market capitalization.
4. The GPR-LIFE index is a comprehensive, full market capitalization-weighted global real estate securities index, and currently follows 422 companies in twenty-eight countries worldwide.
5. See: Eichholtz and Koedijk, International Real Estate Securities Indexes, Real Estate Finance, Winter 1996.
6. Though many U.S. property investors regard these property types to be acceptable investment alternatives, investors in other parts of the world are more focused towards traditional types of real estate and generally do not accept these property types to be part of their investment universe.

Exhibit 1 Inclusion Criteria of the GPR 250 Index

Criteria	Description
Free float	Companies are included for which the available market capitalization (free float) is over $50 million. In practice, however, this implies that almost all companies have a available market capitalization of at least $100 million.
Stock trading volume	The 250 most actively traded property companies are included in the index. Trading volume is determined on an absolute basis, taking the 250 companies with the highest last year trading volume in U.S. dollars.
Fund types	Companies are included for which 75% of operational turnover is derived from investment activities (the property investment companies) or investment and development activities combined (hybrid property companies).
Company structure companies	Only closed-end structured
GPR	are eligible for inclusion in the
	250 index.
Property type	Included are office, residential, retail, industrial, and diversified property companies. Hotel and health care companies are not included, as the returns are not unambiguously derived from real estate investment.[6] A company is of a particular property type if at least 60% of operational turnover is derived from that property type. If not, the company is considered diversified.

Initial public offerings	The shares of newly listed property companies must rank among the 250 most actively traded in the first year after their initial public offering in order to qualify for inclusion in the index. Therefore, a company must have been traded for at least a year before it can be included. Of course, it must also match the other criteria for inclusion.

Exhibit 3 Country Weights GPR 250, December 1997

Legend for Chart:

A - Country
B - Market Cap ($ billion)
C - Free Float ($ billion)
D - Relative Market Cap in %
E - Relative Free Float in %
F - Relative GDP in %
G - Number of Companies

A	B	C	D	E	F	G
Europe	60.8	45.4	24.6	23.4	31.6	74
Belgium	0.5	0.5	0.2	0.3	1.2	1
France	9.2	5.7	3.8	2.9	6.9	17
Germany	0.5	0.3	0.2	0.2	10.8	2
Netherlands	8.7	7.2	3.5	3.7	1.8	8
Norway	0.8	0.3	0.3	0.2	0.7	3
Portugal	0.1	0.1	0.1	0.0	0.4	1
Spain	1.1	0.8	0.4	0.4	2.5	1
Sweden	1.9	1.1	0.8	0.6	1.0	7
Switzerland	1.3	1.1	0.5	0.6	1.4	4
U.K.	36.7	28.2	14.9	14.6	4.9	30
North America	82.5	77.0	33.3	39.7	33.7	96
Canada	4.5	3.8	1.8	2.0	2.5	4
U.S.	78.0	73.1	31.5	37.8	31.2	92
South America	0.5	0.3	0.2	0.2	0.0	1
Argentina	0.5	0.3	0.2	0.2	N/A	1
Far East	103.6	71.1	41.9	36.7	27.9	72
Australia	9.5	8.9	3.8	4.6	1.6	17
Hong Kong	53.2	28.9	21.5	14.9	0.6	20
Indonesia	0.2	0.1	0.1	0.1	2.2	3
Japan	27.7	26.7	11.2	13.8	22.2	14
Malaysin	0.5	0.4	0.2	0.2	0.3	5
New Zealand	0.5	0.3	0.2	0.2	0.3	4
Philippines	4.4	1.0	1.8	0.5	0.3	2
Singapore	7.7	4.9	3.1	2.5	0.4	7
Total	247.3	193.8	100.00	100.00	100.00	243

Exhibit 5 Performance GPR 250 Index versus GPR-LIFE Index (in U.S. dollars)

Legend for Chart:

A - Average Annualized Return GPR 250 in %
B - Standard Deviation GPR 250 in %
C - Average Annualized Return GPR LIFE in %

D - Standard Deviation GPR-LIFE in %
E - Correlation

	A	B	C	D	E
Europe					
Total period	4.03	13.43	3.34	11.10	0.94
5-year	13.50	11.61	8.82	9.37	0.91
3-year	12.13	9.77	5.95	8.13	0.87
1-year	9.72	10.45	1.12	9.35	0.92
North America					
Total period	4.79	13.79	6.85	14.97	0.94
5-year	13.93	11.37	17.24	11.19	0.93
3-year	19.61	11.06	19.03	9.95	0.98
1-year	18.68	12.09	18.00	11.31	0.97
Far East					
Total period	-2.93	25.77	-0.45	25.46	0.97
5-year	6.23	22.69	6.78	24.66	0.96
3-year	-4.10	21.26	-4.36	22.42	0.97
1-year	-32.05	30.46	38.83	32.22	0.99
Global					
Total period	1.29	17.44	2.62	15.24	0.98
5-year	11.54	14.67	10.04	14.00	0.97
3-year	6.77	12.23	4.27	11.94	0.97
1-year	-8.56	17.37	-14.62	17.11	0.99

Exhibit 10 Performance GPR 250 Index versus MSCI Index (in U.S. dollars)

Legend for Chart:

A - Country
B - Average Annualized Return GPR 250 in %
C - Standard Deviation GPR 250 in %
D - Average Annualized Return MSCI in %
E - Standard Deviation MSCI in %
F - Correlation

A	B	C	D	E	F
Europe	4.03	13.43	12.60	14.12	0.78
Belgium[*]	0.14	19.83	11.20	13.63	0.55
France	0.26	13.53	8.59	17.26	0.62
Germany	-6.08	13.96	9.98	18.40	0.37
Netherlands	0.54	14.34	18.27	13.73	0.45
Norway	-2.32	25.22	7.20	21.68	0.46
Spain[*]	2.79	26.53	11.45	22.91	0.71
Sweden[*]	-13.27	48.43	13.36	23.64	0.52
Switzerland[*]	9.13	14.36	20.03	16.77	0.47
U.K.	7.73	20.42	14.03	16.00	0.77
North America	4.79	13.79	16.57	12.07	0.54

Canada[*]	-25.51	31.65	7.28	13.82	0.58
U.S.	11.27	13.71	17.21	12.25	0.49
South America					
Argentina	NA	NA	25.01	53.94	NA
Far East	-2.93	25.77	-6.02	24.85	0.88
Australia	11.31	13.28	7.56	17.25	0.72
Hong Kong	17.61	34.82	19.52	27.09	0.94
Indonesia	NA	NA	-13.08	36.76	NA
Japan	-8.91	32.96	-7.24	26.48	0.90
Malaysia[*]	-6.98	45.84	-2.49	28.41	0.76
New Zealand	NA	NA	7.78	20.54	NA
Philippines	NA	NA	0.43	33.33	NA
Singapore	10.14	32.53	4.83	20.71	0.87
Global	1.29	17.44	8.90	13.41	0.88

* These countries have a very limited number of companies in the GPR 250 for most of the time period studied. This results in relatively high volatilities, combined with more extreme returns.

GRAPH: Exhibit 2. Available Market Capitalization GPR 250 Global Index

GRAPH: Exhibit 4A. GPR 250 Global Index

GRAPH: Exhibit 4B. GPR 250 Continental Sub-indexes

GRAPH: Exhibit 6. GPR 250 Global versus GPR-LIFE Global

GRAPH: Exhibit 7. GPR 250 Europe versus GPR-LIFE Europe

GRAPH: Exhibit 8. GPR 250 North America versus GPR-LIFE North America

GRAPH: Exhibit 9. GPR 250 Far East versus GPR-LIFE Far East

GRAPH: Exhibit 11. Europe: Property Shares and Common Stock Rolling Correlation

GRAPH: Exhibit 12. Far East: Property Shares and Common Stock Rolling Correlation

GRAPH: Exhibit 13. North America: Property Shares and Common Stock Rolling Correlation

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