

## **Property investment results of Dutch pension funds: international diversification is disappointing**

Many Dutch pension funds have reorganised their property portfolios and have internationally diversified their portfolio in doing so. Other Dutch pension funds regularly consider whether international diversification is a good strategy. Among the pension funds that have taken the step to make their portfolio more internationally oriented the reasoning is that international diversification helps to realize a better return-risk profile. A one-sided domestic approach is regarded as too high a risk and therefore not acceptable for a pension that is supposed to spread its investment risk in the best possible manner.

Many Dutch property investors have already gained a lot of experience in implementing an international property investment strategy. On the other there are still pension funds that continue to take a (mostly) domestic approach. Now that the markets have shown a downward correction, the time is ripe to see whether international diversification has resulted in added value. Have pensions that diversified internationally done better in recent years than the pension funds that pursued a mainly Dutch investment strategy? Have they achieved a higher return and/or have they through international diversifications improved their risk profile? These questions will be examined below in the light of a study into the results of the property investments over the period 2004-2008 by the 30 largest pension funds<sup>i</sup>.

### **Basis of the study**

The study was conducted on the basis of the annual reports over the period 2004-2008 from the pension funds included in the study. The property return is calculated on the basis of what the pensions themselves have stated in their annual reports<sup>ii iii</sup>. The risk is derived on the basis of the standard deviation over these returns.

The period 2004-2008 reveals an interesting picture of the consequences of the strategic investment decisions that were taken<sup>iv</sup>. What is interesting about the period 2004-2008 is that it includes both high return and low return years in the property investment market. In the period 2004-2006 there was a boom in the property sector, whilst after the subprime crisis broke in the USA the change began in 2007 for the stock-exchange listed property funds. The non-listed property funds followed a year later. Taking both good and bad years into consideration offers the opportunity of analysing the property investment strategies of the pension funds and examining whether that leads to significant differences<sup>v</sup>.

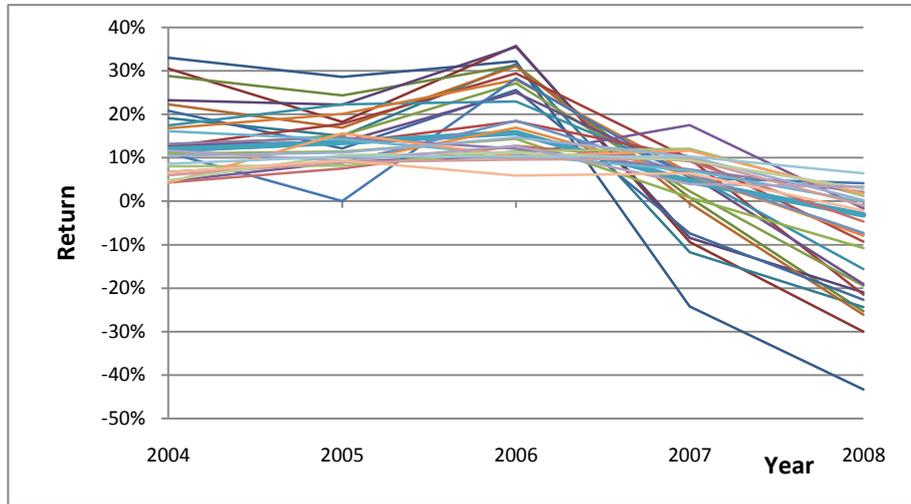
### **Returns over the period 2004-2008**

The average return that the 30 Dutch pension funds achieved over the period 2004-2008 was 7.3%. The highest average return achieved by a pension fund in that period over its property investments was 12.0% and the lowest -0.6%. The average return is better than the IPD Global Index (in euro) that stood at 6.8% but was lower than the results on Dutch direct property and the IPD Global Index

(Local Currencies). The Dutch ROZ/IPD scored an average return of 9.0% over this period. The IPD Global Index (Local Currencies) scored 8.5% in this period.

The best year for property investors was 2006 when the 30 pension funds realized an average return of 20.0%, the worst year was 2008 when the average return was -10.1%.

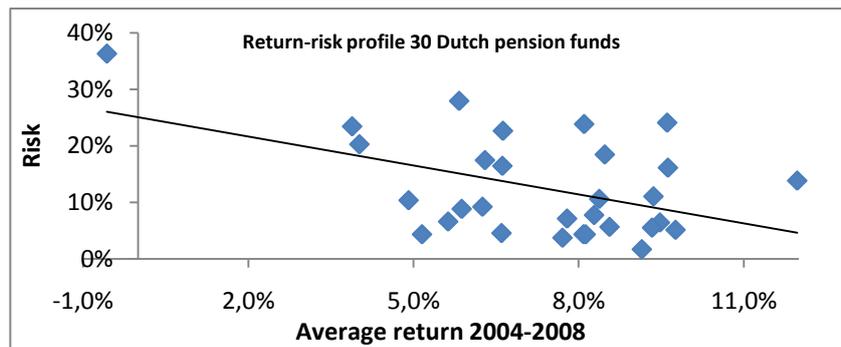
The graph below shows the course of the returns of 30 pension funds over the period 2004-2008.



*Returns from property investments made by 30 pension funds over the period 2004-2008*

### Return-risk profile over the period 2004 - 2008

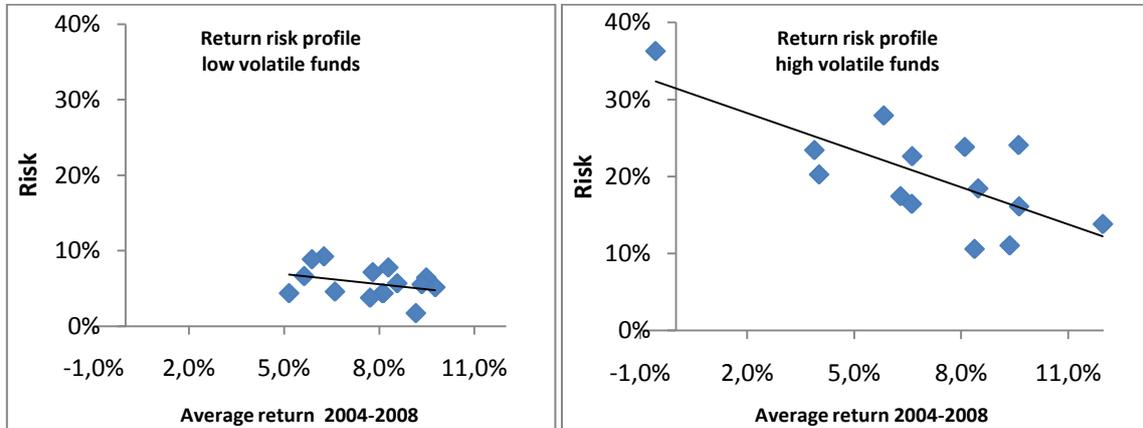
The question is whether pensions funds that have achieved a higher return have also run greater risks in the last five years. The graph below shows the return-risk profiles of the 30 pension funds over the period 2004-2008.



*Return-risk profile property investments of 30 pension funds over the period 2004-2008 with trend line*

The graph above shows that there is no positive correlation between the risk taken over the period 2004-2008 and the return. Apparently the implementation of a more risky property investment strategy does not lead to a higher return (at least not in the last five years). The graph in fact shows the contrary is more likely. The trend line indicates that the higher the risk taken the lower the return has been.

This picture is confirmed by separating out the 15 pension funds with the lowest risk (low-volatility funds) and the 15 pension funds with the highest risk (high-volatility funds) and analysing them independently. The 15 low-volatility funds achieve a higher average return (7.7%) than the 15 high-volatility funds (6.9%). Also among the low-volatility funds the correlation between return and risk is negative.



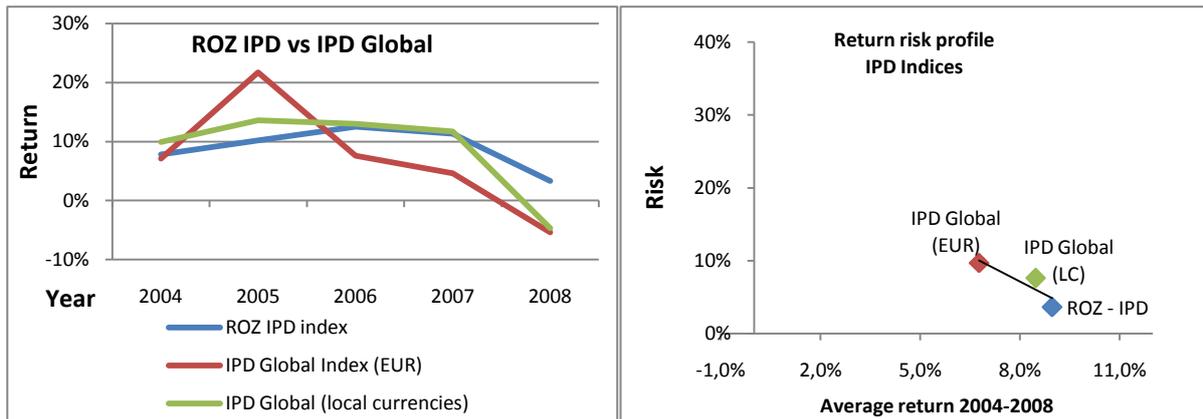
*Return-risk profile of 15 low- and 15 high-volatility pension funds over the period 2004-2008 with trend line*

If the characteristics of the high-volatility funds and the low-volatility funds are examined then it is noticeable that the low-volatility funds invest relatively frequently in Dutch real estate and have little or no exposure abroad. High-volatility funds appear to have many indirect foreign property investments (both stock-exchange listed and non-listed). Within the high-volatility funds the pension funds with a relatively high allocation to stock-exchange listed property funds have the highest volatility. This latter fact is not a surprise because it is general knowledge that stock-exchange listed property funds have a higher volatility than non-listed property funds.

The conclusion that can be drawn from the above is that the implementation of international diversification in the last five years has not led to a lower risk profile for the property portfolio of Dutch pension funds. Also international diversification has not led in the last five years to a higher return. On the contrary, international diversification, compared with pension funds that mainly invested in Dutch real estate, has on average led to a lower return.

### **The usefulness of international diversification.**

Is international diversification of a property portfolio useful? That question cannot be answered on the basis of this study. It is not possible from the above to conclude that international diversification does not work. An indication that international diversification could well work is the comparison between the IPD Global Indices and the Dutch ROZ-IPD.



Return and Risk of IPD indices over the period 2004-2008

What is striking is that the difference between these indices over the period 2004-2008 is less significant than the difference we have seen between pension funds with an international property investment strategy and pension funds with a property investment strategy focussing on the Netherlands. The volatility of the IPD Global Index (both for the euro and in Local Currencies) over the period measured seems to be significantly lower than the volatility of the mainly internationally investing pension funds and more in line with the volatility of the ROZ-IPD. In addition the average return of the Global Index in Local Currencies (8.5%) is better than that of the pension funds that are investing internationally (6.7%) and comparable with the ROZ-IPD (9.0%). Measurement of a longer period than the current five years could also lead to a different conclusion.

Period 2004-2008	Return	Risk
ROZ IPD	9.0%	3.6%
Pension funds that mainly (>50%) invest in the Netherlands	7.9%	5.9%
IPD Global Index (EUR)	6.3%	9.7%
IPD Global Index (local currencies) <sup>vi</sup>	8.5%	7.6%
Pension funds that mainly (>50%) invest internationally	6.7%	19.3%

Effects of (inter)national investment over the period 2004-2008

One explanation for the mediocre performance of the (mainly) internationally investing pension funds in comparison with the IPD Global Index is probably an implementation problem. The IPD Global Index “invests” in direct real estate that is not leveraged with loans and that has no problem with how the stock exchange is behaving. In addition the IPD Global Index does not take account of tax issues and (performance) fees within fund structures. The internationally investing pension funds do have to deal with these matters.

## Conclusions

In this study 30 Dutch pension funds were analysed in respect of the results achieved on their property investments over the period 2004 – 2008. The conclusion is that the pension funds that mainly invest internationally have incurred a higher risk than those that invested mainly in the Netherlands. At the same time that higher risk has not produced a higher return. Along with the fact that the return-risk profile of the international property investments (IPD Global) in the period measured was less favourable than the Dutch investments (ROZ-IPD) the most important explanation of the unfavourable risk profile lies in the implementation of the property investment strategy. Dutch

pension funds that invested mostly internationally in property have realized a much less favourable return-risk profile in the implementation of the strategy than might be expected on the basis of the index.

Nevertheless it cannot be concluded from the above that international diversification does not work. The results that can be derived on the basis of the IPD Global Index leave sufficient room for the assumption that in the long term diversification does offer potential compared with an investment strategy focussed mostly on the Netherlands. Measured in local currencies, the differences with the Dutch ROZ-IPD are not significant. The difference between the IPD Global Index and the results realized by the pension funds are consequently to a large extent caused by the implementation of the chosen investment strategy.

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### 30 pension funds studied

Pension funds	High volatility	Low volatility
ABN AMRO	X	
ABP	X	
Akzo Nobel	X	
Architectenbureaus		X
Bouw		X
Detailhandel	X	
DSM Nederland (PDN)	X	
Grafische Bedrijven	X	
Hoogovens		X
Horeca & Catering [Hotel/restaurant/cafe/catering]	X	
Huisartsen	X	
ING	X	
KLM fondsen	X	
Koopvaardij		X
KPN		X
Landbouw		X
Medisch Specialisten	X	
Metaal en Techniek	X	
Metalektro		X
PfWZ	X	
Philips		X
PNO Media	X	
Rabobank		X
Schilders-, Afwerkings- en Glaszetbedrijf		X
Spoorwegpensioenfondsen		X
TNT		X
Unilever Pensioenfondsen Progress		X
Vervoer (Beroepsvervoer over de Weg)		X
Woningcorporaties	X	
Zorgverzekeraars		X

## End notes

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<sup>i</sup> See Annex 1. Not included are Shell Pensioenfond and IBM Nederland Pensioenfond that have no property investments. The KLM funds are combined because the returns barely differed.

<sup>ii</sup> A limited number of funds do not report the return on property separately. Whenever a statement was missing an estimate was made on the basis of the reported indirect and direct results in relation to the average invested capital. In addition there are funds that report the return from indirect property and direct property separately but do not report the total return from their property portfolio. For a limited number of funds the annual report for 2004 could not be found and an estimate was made for 2004 on the basis of the data from the 2005 annual report. For one pension fund use is made of the GPR 250 in 2004 because the fund only invested in stock-exchanged listed shares worldwide.

<sup>iii</sup> The basic principle of this study is the return that pension funds communicate via the annual report to their stakeholders. Although these returns can be determined using different methodologies, (the annual reports give no insights into this) it is assumed here that the measurement method does not vary significantly between funds. Currency effects in principle can have a significant effect but appear not to have (on the results of this study). Of the 17 pension funds that invested more than 25% abroad in 2008, there are 6 that have not covered their currency risk within the property portfolio (but had within (sometime partially) the total investment portfolio). In addition it was not possible to determine for one pension fund whether the currency risk was covered within or outside the property portfolio, These 7 funds achieved a higher average return and a lower risk than the 10 funds that had covered the currency risk within their property portfolio. To put it briefly had these 7 funds covered their currency risk then the return-risk profile would have been more unfavourable, which is the conclusion reached in this article.

<sup>iv</sup> The disadvantage of longer periods is that the risks taken become imprecise which means that the view of them becomes blurred and this does not do justice to the risks that implicitly have to be taken during whilst forming the strategic policy (which is reviewed on average every three years).

<sup>v</sup> Examining the 2005-2009 via a simulation (on the basis of the press releases issued by a few large pension funds and the Q4 results of ROZ IPD on property returns realized in 2009) does not lead as expected to a significant different outcome with respect to the risk. It does with respect to the average return because 2004 was an exceptionally good year for many funds.

<sup>vi</sup> The difference between both IPD Global Indices confirms the image in End note 3 that pension funds that have not covered their currency risk (within the property portfolio) have a better return-risk profile than funds that did do that. However, likewise, the conclusion cannot be drawn (nor a recommendation be derived) that from now on the currency risk should not be covered.