International Real Estate Portfolio Strategies

By Norm Miller, Director of the Real Estate Center at the University of Cincinnati, Visitor at DePaul through June 2004
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January 26th, 2004

PRRES 10th Conference
Sponsored by
Thammasat University (Thank you Professor Niputh Jitprasonk)
and the
Valuers Association of Thailand (Thank you Director Sopon Pornchokchai)
And Dr. Naris Caiyasoot, Rector of Thammasat University

Thank you for this invitation!! ขอบคุณครับ
I am honored to participate.
How Geography is Taught by US Pres. Bush

(source AMP Henderson Global Investors)

The world according to the United States of America
Let’s quickly jump into some interesting market evidence…. Little Known Previously Secret Empirical Relationships Found After Exhaustive Review

Significant at the 5% level
Sales of Karaoke Players and Tokyo Office Rents
There are others that we don’t have time to review today such as

- US “liberating” attacks on smaller countries and the value of Real Estate in Cuba (negative correlation)
- The price of miniature Buddha's in Thailand and the rent on Class B retail space.
More seriously (but not totally seriously) today we will cover:

- **The case** for and against international real estate investment with a review of some key studies (not too many)…
- **The evidence** in terms of returns and risks (diversification).
- A review of some investment advisor approaches to international real estate.
- A proposed strategy going forward.
- Some direct investment criteria.
- Summary and conclusions
Some research credits before we begin

**Research Firms**
- DB Real Estate
- GPR (Netherlands)
- DTZ
- IPD
- Prudential (Liang, Gordon, Lowrey)
- Jones Lang LaSalle
- Henderson Global (Pierzak and others)
- RREEF now part of DB
- Colliers International
- Ibbotson and Assoc.
- Ernst and Young
- Deloitte, Touche, Tohmatsu

**Some Leading Authors**
- Piet Eicholtz, Hans Van Opt’Veld and GPR
- Martin Hoesli with Jon Lekander and Witold Witkiewicz
- Patrick Wilson and Ralf Zurbruegg
- A.J. Ziobrowski
- Glenn Mueller
- Dave Geltner
- Andy Baum
- Addae-Dapaah

Only authors who have treated me nicely will be mentioned ☺️
The Case for Going Global

Lower Portfolio Risks Through Diversification
- Highly dependent on our return correlation measures and our investment horizon

Increase Returns
- Highly dependent on our view of market efficiency, cycles and the ability to forecast trends as well as liquidity and transaction costs
- Note stated objectives versus ex-post reality

Lower Risks and Increase Returns
International Portfolio Diversification Key Questions

- **What is our investment horizon?**
  - Influences how quickly we judge performance

- **Do investors really care about risk?**

- **What is the appropriate horizon for measuring correlations and how stable are the correlations we use to judge diversification?**

- **Is there enough data history?**

- **What is the appropriate portfolio?**
  - RE or All Assets
International Portfolio Diversification Key Questions

What is our investment horizon?

Note that Andre Perold (Harvard Bus) published a study on the average holding period for stock.

Has our horizon shrunk or our activity increased?

1960 8 years

1975 4.5 years

2002 1 year
Do investors really care about risk?

Until the Tech stocks crashed in 1998 we saw that when returns were high investors seemed to forget about risk.

It can be difficult to remain objective about risk until you get burned.

And remaining objective can be hard.
But Who Thinks About Real Estate When Stock Markets Soar?

Stock Market Returns in % During 2003 Top Ten

- Brazil
- Thailand
- Argentina
- Turkey
- India
- Chile
- Indonesia
- Israel
- Czech Republic
- Germany
International Diversification
Indirect or Securitized Evidence


■ Supporting
- Asabre, Kleinman & McGowan (1991)
- Eicholtz & Koedijk (1996)
- Addae-Dapaah & Kion (1996)

■ Not Supporting or Qualified Support
- Liu and Mei (1998)
- Ling and Naranjo (2002)
- One major caveat of all such studies is controlling for currency risk. Mull and Soenen (1997) found this impaired the use of RE stocks. This is the same concern of most international investments, you win or lose because of a currency move. Hedging can be expensive and difficult.
- Stevenson (2000) found that international RE stocks did not enhance a portfolio’s return or risk attributes.
International Diversification Studies Using Securitized Real Estate

Supportive

– Asabre, Kleinman & McGowan (1991)
  Found low positive correlations between US REITs and Non-US real estate equities but the modern REIT was not yet born.

– Eicholtz & Koedijk (1996)
  Found less correlation among real estate stocks than for other international securities or bonds. Suggested higher returns with lower risk but did not control for currency risk.
International Diversification Studies Using Securitized Real Estate

- Addae-Dapaah & Kion (1996) took a Singaporean country viewpoint and used data from 1977-1992 with 7 countries. They found substantial diversification benefits but warned about correlation stability problems.

- Eicholtz (1997) controlled for currency risk and compared real estate stocks to common stocks. Found that the correlations between real estate stocks and common domestic stocks varied by country. We now know that the correlations change as the market matures.

- Again the US Modern REIT did not materialize until 1992. I.e.
Note how US REIT return correlations have changed over time according to Ibbotson Associates in a recent study for NAREIT see [www.nareit.com](http://www.nareit.com).

<table>
<thead>
<tr>
<th>Period</th>
<th>Small Stocks</th>
<th>Large Stocks</th>
<th>Bonds</th>
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<tbody>
<tr>
<td>1970’s</td>
<td>.74</td>
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Modern REIT period
Note how US REIT return correlations have changed over time according to Ibbotson Associates in a recent study for NAREIT see [www.nareit.com](http://www.nareit.com).

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Modern REIT period

Which statistic is most valid looking forward?
International Diversification Studies Using Securitized Real Estate: More Support


Used a multifactor model to examine correlation with the continental market, like a continental beta. Found continental interdependency except in Asia Pacific suggesting that most investors would be wise to look beyond the closest shore.
International Diversification Studies
Using Securitized Real Estate
Warnings and Insights

– Liu and Mei (1998) found much risk and some diversification was inherent in currency fluctuations.

– Ling and Naranjo (2002) found that markets were becoming more global and integrated and as such found a world wide market beta factor. The capital markets are definitely becoming more integrated. (10 year government bonds have nearly converged in terms of real rates for developed countries)
Invest in global firms domestically based?

– Just buy Coca Cola or P&G?
– Some US REITs are now becoming global and providing some international diversification. For example these US based REITs are starting to invest internationally:

  Chelsea Property Corp (CPG) retail
  Archstone Smith (ASN) residential
  Shurgard (SHU) storage
  AMB Property (AMB) industrial
  Prologis (PLD) industrial
  First Industrial (FR)

  Still it is a small list with a small portion of foreign real estate!
International Diversification Direct Evidence
(90% + of the data but harder to study)

- Why has it been so hard to do such studies?
- Direct data is harder to get.
  - Most early studies have been completed by those who controlled the data or have been inside team members or consultants.
– Major players didn’t want the details of their properties revealed so they only wanted aggregate data to be available.

– The market wants transparency but not all the investment advisors.
What is the big concern with using direct data?

- Smoothing or understating true price volatility based on infrequent appraisals and biased appraisals that do not adjust fully to current market conditions. (Geltner 1989+)
  - Most studies today will unsmooth the data and make assumptions about underlying risk.
  - Data history is often too short and emerging markets need to reach a certain threshold, large enough to attract institutional investors before the return trends stabilize.
## International Diversification Direct Evidence


<table>
<thead>
<tr>
<th>Study</th>
<th>Key Issues Raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newell and Webb (1996)</td>
<td>Appraisal smoothing lowered risk by 34%-47%, also currency risk</td>
</tr>
<tr>
<td>Geurts and Jaffe (1996)</td>
<td>Political risks, corruption, unfair laws, lack of property right enforcement.</td>
</tr>
<tr>
<td>McAllister (1999)</td>
<td>High information costs, high execution costs proved significant barriers.</td>
</tr>
<tr>
<td>Hoesli, Lekander and Witkiewicz (2003)</td>
<td>Controlled for currency risk and smoothing, found real estate stocks seldom entered the efficient portfolio while direct real estate did.</td>
</tr>
</tbody>
</table>
**International Diversification Direct Evidence - Not Supportive**


<table>
<thead>
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<th>Study</th>
<th>Key Issues Raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ziobrowski and Boyd (1991)</td>
<td>Used leverage and foreign debt to offset exchange rate risk but then the leverage induced more risk than benefit.</td>
</tr>
<tr>
<td>Ziobrowski and Ziobrowski (1993)</td>
<td></td>
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<tr>
<td>Ziobrowski and Ziobrowski (1995)</td>
<td></td>
</tr>
<tr>
<td>Ziobrowski, McAlum and Ziobrowski (1996)</td>
<td>Currency options used to hedge exchange rate risks but failed to find compelling reasons for adding US real estate to foreign portfolios. Same old story from Ziobrowski.</td>
</tr>
<tr>
<td>and with Rosenberg (1997)</td>
<td></td>
</tr>
<tr>
<td>Quan and Titman (1997 and 1999)</td>
<td>Found mixed results in multi-national portfolio as they sought economic fundamental drivers of direct and stock returns.</td>
</tr>
</tbody>
</table>
“International Evidence on Real Estate as a Portfolio Diversifier”
Research paper N 70, University of Geneve, July 28, 2003 by Hoesli, Lekander, and Witkiewicz

Probably the most complete international study to date covering both direct and indirect real estate, with and without currency hedging, using unsmoothed direct return data.

Supports use of a Bayes Stein mean expected return approach which diminishes the influence of short term returns (chasing winners).

Concludes that the real estate allocation should be about 15% to as much as 25% of an optimal portfolio. Finds significant benefits from international investment.

Note that investment advisors to pension funds and others routinely use higher real estate and stock correlations, higher measures of return standard deviations and lower estimates of future returns in order to bias the results against real estate where they have less experience and fewer investment advisors to choose from. They want to see 5% to 10% not 15% to 25% and in fact the market could not easily absorb this much capital.
Bringing Forecasting and Better Expected Return Estimates Into Real Estate Portfolio Construction Process

We know that real estate prices are serially correlated. (Case and Shiller, 1989) and (Miller and Sklarz, 1986) Even US Treasury Bills show some autoregressive behavior so why not use this for deriving expected returns?

This is one step beyond a Bayes Stein approach but the problem is spotting turning points in trends. Nevertheless, one real estate portfolio paper attempts to do this is a fashion.

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They find benefits from using past return trends and determining a mix that is based in part on history and trends that might be behavioral in nature.

The problem is that tweaking direct real estate portfolios or rebalancing every year is very very difficult.
Bringing in Herd Behavior and Psychology as a Way to Predict Trends

DeBrondt and Thaler have shown that the market reacts in sometimes predictable ways that oscillate around fundamental trends.

In a recent working paper by DeBondt, Fung, and Lam (2003) “The Speculative Dynamics of World Equity Markets” they study stocks from 18 industrialized countries since 1970 with some fascinating results:
Werner DeBondt, DePaul University, Chicago

- Authors assume excessive optimism or pessimism and model strategies one of two ways, either follow current short run momentum or use longer run reversals (contrarian approaches).
- Fundamental selection approaches did not prove as useful as these behavioral approaches.
- You could do well chasing winners but only for a short period of time.
- If you followed three year losers you did better than if you followed three year winners, something like this:
DeBondt, Fung, and Lam (2003) “The Speculative Dynamics of World Equity Markets” Here we see the effects of picking a basket of country stocks based on prior relative performance.

Currency Adjusted % Returns

- Past 3 year winners
- Past 3 year losers
Cycles and Picking Winning Countries or Regions

Can we apply contrarian investing to direct real estate or consider the momentum of trends? Is she on her way up or on her way down?
Investing in the Right Regions

Is it return or risk we are concerned about?

Total Property Returns by Region

- Asia
- Cont Europe
- UK
- Australia
- US

Back to Asia maybe Ireland? Time to consider Japan? Russia?
Even Indirect Securitized Real Estate Timing Can Be Hard

Remember the investment horizon question?

Security Real Estate Prices in XYZ Regional Fund

[Graph showing security real estate prices from 1995 to 2003, with fluctuations and general upward trend.]
Security Real Estate Prices in XYZ Regional Fund

With linear trend line

But we see about 2 years between troughs.
Security Real Estate Prices in XYZ Regional Fund

With 3rd order polynomial trend line
The Probabilities of Deal Success with Cycles

80% of the deals turn out worse than expected

80% of the deals turn out good
Any idiot could have made money back then!

I just wasn’t lucky!

“Any idiot could have made money back then!”

“I just wasn’t lucky!”

The Rhetoric of Cycles
It takes real courage and intelligence to go in when everything has been heading down.
How to go global?

Direct?

– Most big investment managers have a study that shows the benefits of going global and they have a plan ready to show how they can put your money to work. All of them have no doubts about the benefits of going global.

– We will look at some of their work in a moment.
How to go global?

Indirect? (Public securities)
– We did not have enough product until recently to consider this question.
And if you are in the US you must be willing to ignore US return history and explain it away to want to go direct based on recent US real estate performance.....
US Direct vs Indirect Evidence

NAREIT Equity and NCREIF NPI Total and Price Return Indexes
(1978-2003:Q3; benchmarked at December 31, 1977 = 100.00)
Isolating the Price Effect US Only

Less Risk or simply smoothed returns? In the long run they are both driven by the same market fundamentals but which is a more efficient vehicle?
Going Global With Advice From:

- Global Henderson (London based)
- Prudential (NY/NJ Based)
- DB (RREEF) German and US
- Strazsheim Global Advisors (CA US)
- Jones Lang LaSalle

Each approach will be briefly examined

Most rely heavily on GDP growth as the key variable – of course supply should matter as well – but we do not have such data readily available except at the very local level.
Going Global with Global Henderson

Use GDP driven rent forecasts and 6 risk criteria:

– Default risk, legal risk, political (currency risk and inflation), liquidity risk, and market transparency to devise risk premiums for foreign investors.

– Selected risk premiums are shown on the next slide.
Global Henderson’s Risk Premiums

Risk Premium By Country Over Government Bonds

0 2 4 6 8 10

US
UK
Australia
France
Japan
Belgium
Luxembourg
Netherlands
Denmark
Germany
Austria
New Zealand
Singapore
Sweden
Hong Kong
Spain
Portugal
Ireland
Italy
Greece
Finland
Thailand
Philippines
Malaysia
Global Henderson’s Efficient Frontier Using Continental Groups is Based on the Following 5 Year Return Correlations
Note this supports the work of Eicholtz

<table>
<thead>
<tr>
<th></th>
<th>Asia</th>
<th>A-NZ</th>
<th>Europe</th>
<th>Con Erpr</th>
<th>UK</th>
<th>US</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>100</td>
<td>29</td>
<td>45</td>
<td>53</td>
<td>0</td>
<td>-47</td>
<td>53</td>
</tr>
<tr>
<td>Asia</td>
<td>25</td>
<td>41</td>
<td>50</td>
<td>-4</td>
<td>-50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>AUS – NZ</td>
<td>95</td>
<td>91</td>
<td>94</td>
<td>64</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
<td>99</td>
<td>84</td>
<td>56</td>
<td>99</td>
</tr>
<tr>
<td>Cont Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>76</td>
<td>48</td>
<td>99</td>
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<tr>
<td>UK</td>
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<td></td>
<td>79</td>
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<tr>
<td>US</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>78</td>
<td></td>
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</tr>
</tbody>
</table>

Notice how well Asia combines with UK and US portfolios in search of diversification.
Prudential

Estimates the world market of real estate at 12.5 T $US which includes owner occupied and rentable. This is 250% of what is considered investable by other studies that focus on “core”.

The three largest regional markets:
- US/Canada at $4.86 T
- Core Europe $2.23 T
- Japan $1.91 T

They conclude (from the US perspective) an international portfolio provides a 35% higher risk adjusted return than a US only portfolio.
Going Direct With Prudential Advice
Selected Risk Premiums by Country

Prudential has Switzerland, Luxembourg, Netherlands, the UK, Germany and Norway as less risky or the same as the US.

Slight risk premiums are required for Finland, Austria, Denmark, Belgium, Canada, Sweden, Ireland, Spain, Italy, Singapore and Australia.

Significant risk premiums are required for E. Europe, China, S. America, Mexico, Thailand and most other countries. Extra high risk premiums are required for Indonesia, Vietnam, Ukraine, Russia and Argentina.
Prudential's Model RE Portfolio
Allocations By Region

Asia 25%
Europe 35%
Latin America 5%
US/Canada 35%

Underweight
Bullish on Hong Kong as the best single diversifier

### Risk/return trade-off improves in an international portfolio

<table>
<thead>
<tr>
<th>Market</th>
<th>Risk (%)</th>
<th>Return (% CAGR)</th>
<th>Risk/return (ratio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>56.3</td>
<td>3.1</td>
<td>18.0</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>38.7</td>
<td>1.3</td>
<td>29.4</td>
</tr>
<tr>
<td>London</td>
<td>22.1</td>
<td>6.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Paris</td>
<td>29.1</td>
<td>5.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>22.4</td>
<td>6.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Milan</td>
<td>32.6</td>
<td>6.8</td>
<td>4.8</td>
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<tr>
<td>Sydney</td>
<td>19.4</td>
<td>1.7</td>
<td>11.6</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>25.1</td>
<td>10.4</td>
<td>2.4</td>
</tr>
<tr>
<td>&quot;World&quot;¹²</td>
<td>11.2</td>
<td>5.5</td>
<td>2.0</td>
</tr>
</tbody>
</table>

¹ standard deviation from trend of annual total returns 1989-2001
² equally-weighted portfolio of above

Source: NCREIF, Jones Lang LaSalle, IPD, Property Council of Australia, FPD Savills, DB Real Estate Research
Transactions costs kill gains from a simple "managed" portfolio...

Source: DB Real Estate Research
With DB Real Estate Research of course…

...but in a "research"-based portfolio gains far outweigh trading costs
Straszheim Global Advisors suggests considering the population age as a factor in future productivity. They are also bullish on China and bearish on Japan. See [http://www.straszheim.com](http://www.straszheim.com)

<table>
<thead>
<tr>
<th></th>
<th>Total Pop (M)</th>
<th>Growth Rate</th>
<th>% Aged 0-14</th>
<th>% Aged 65+</th>
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<tbody>
<tr>
<td>Young</td>
<td>3131</td>
<td>1.5</td>
<td>30</td>
<td>6</td>
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<tr>
<td>Old</td>
<td>753</td>
<td>.5</td>
<td>18</td>
<td>15</td>
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<table>
<thead>
<tr>
<th>Young Ex</th>
<th>Old Ex</th>
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<tbody>
<tr>
<td>Brazil</td>
<td>Australia</td>
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<tr>
<td>China</td>
<td>Canada</td>
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<tr>
<td>Egypt</td>
<td>France</td>
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<td>Italy</td>
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<td>Mexico</td>
<td>Japan</td>
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<td>Pakistan</td>
<td>Spain</td>
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<td>Philippines</td>
<td>UK</td>
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<tr>
<td>Turkey</td>
<td>US</td>
</tr>
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</table>
Dependents—Developing World
Young and Old as % of Working Age Population
from www.straszheim.com

0 -14 = 51%
65+ = 8%

Percent

0 20 40 60 80


0-14 years old
65 years and older
Dependents—Developed World
Young and Old as % of Working Age Population

from www.straszheim.com

0 - 14 = 27%
65+ = 22%
Will population labor force declines constrain office demand?

Brounen & Eicholtz and B. Wheaton suggest that labor will become a problem in some developed countries. UN data show that Japan and Singapore recognize this problem, the US should but Bush just legalized about 6 million illegal immigrants.
A closer view of population growth trends

Skilled labor shortages in Europe constraining office demand soon?

Skilled labor shortages in China constraining growth rates by 2020?

Americans retiring faster than new professionals enter market
Who looks out to 2020 anyway?
So let’s assume you are convinced that there are benefits to international real estate investment.

How about a reality check?
How much investable real estate is out there?
About 5 Trillion in US Dollars by Most Estimates of Core High Grade Property
Or In Yuan = all of them

- America's: 43%
- Asia Pacific: 21%
- Europe: 36%
How much is out there in terms of high grade real estate?


Note these are carried over to the next slide to give you an idea of scale.
Selected High Grade Asian Real Estate Estimates in US B


Not big enough yet? Except for neighbor countries?
How much indirect securitized real estate is out there?

According to Eicholtz & Koedijk and others, securitized real estate is a relatively new trend.

- In the middle 1980’s the entire capitalized value of the global RE securities was about $20 B (US)
- By 1995 this grew to $240 B $US
- By 1999 this grew to $350 B $US
How much indirect securitized real estate is out there?

According to Eicholtz & Koedijk and others, securitized real estate is a relatively new trend.

- Today about $500 B US or about 10% of the total high grade real estate available for investment making diversification possible and easier for a number of investors. Although some estimates of the total securitized portion are as low as 3%. It depends on how we define the denominator or investable portion.
Public or Indirect “Securitized” Real Estate

Which countries offer REITs (Real estate investment trusts) or REIT-like securities?

from [www.realestateportfolio.com](http://www.realestateportfolio.com) and Ernst and Young

- US
- Australia
- Belgium
- Brazil
- Canada
- European Union (proposed)
- France
- Germany
- Hong Kong
- Japan

- Korea
- Luxembourg
- Malaysia
- Netherlands
- Puerto Rico
- Singapore
- Spain
- Taiwan
- Turkey
- Others will certainly follow
How Global Are We in Terms of the Typical Real Estate Portfolio Allocation to Real Estate?

- The Global Average allocation within RE is less than 3%
- The winner?
  - The Netherlands at 12.5%
- But what happens if the major pension funds and mutual funds started going global? Is there enough?
Perspectives from the Largest US Pension Fund: Calpers

CALPERS has $160 Billion in assets and a 9% real estate target recently increased from 8%, that is 1.6 B more. This means $14.4 B allocated to real estate. That’s more than half the high grade real estate available in all of Thailand.

They now have $30 million in international and want more.
What would happen if US mutual funds (over $7 Trillion) and pension funds (over $5 Trillion) increased actual RE allocations from about 3% today to 10%?

- 10% is over 1.2 trillion dollars which explains why they must own direct real estate.
- Just 6% of this is 720 Billion, equal to more than all the securitized real estate in the world as of 2003 or roughly 3.6 times the US REITs total cap value.
- Moving towards 15% is possible (as suggested by most academics, Hoesli etc.) but it will take many years to provide the public vehicles and sufficient international funds with the necessary expertise and global reach.
But what if you were a Singapore Pension Fund?

- No Problem - unless you are really big...
- You can easily diversify and invest anywhere, but it takes a large amount of money to go direct and be able to diversify so indirect probably still makes the most sense.
- So large investors must go direct and indirect and small investors should probably go indirect or join in a commingled fund with others as they lack enough scale to make it worth ramping up an investment program abroad on their own.
- But where?
Investing By Picking the Right Cities
Selecting Cities on the Basis of Demand/Supply, i.e.

Where is there likely Demand for Office Space? 
Sq meters/Capita (ABN AMRO)
Supply Shortages in Retail Space

Despite rapid growth since 1992

Showing up again here as well as office

Chart showing sqm per capita in various cities:
- Moscow: 43
- Budapest: 164
- Hamburg: 190
- Prague: 198
- London: 275
- Warsaw: 337
- Madrid: 351
- Berlin: 354
- Paris: 398

Source: Noble Gibbons
Or noting the loss of white collar service jobs in America

- One country’s loss is another’s gain.
- The internet and communication technology has meant the death of distance for firms like IBM, Microsoft, many Banks and Airline support staff.
- Economics teaches us that when there seems to be a negative trend somewhere there will also be a positive somewhere else.

- According to A.T. Kearney the USA is losing 500,000 jobs a year right now to China, India, Russia, and the Czech Republic. That suggests new office demand in these markets.
Rising Urban Stars: Future Winners?

From: Jones Lang LaSalle, May, 2003

Conclusions of study:

- This will be the Asian Century
- Quality of life will start to drive business location decisions more as retaining labor becomes harder
- Cities will work at improving cultural activities and brand
- Technology will still matter
- Past decade winners: Dubai, Dublin and Las Vegas
## Future City Winners

<table>
<thead>
<tr>
<th>Technology</th>
<th>Environment</th>
<th>Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin, TX, USA</td>
<td>Barcelona, Spain (not based on productivity)</td>
<td>Beijing, China</td>
</tr>
<tr>
<td>Helsinki, Finland</td>
<td>Cape Town, South Africa</td>
<td>Delhi and Mumbai, India</td>
</tr>
<tr>
<td>Raleigh-Durham, NC, USA</td>
<td>SE Queensland (Brisbane), Australia</td>
<td>Guangzhou and Shenzhen, China</td>
</tr>
<tr>
<td>Bangalore, India</td>
<td>Calgary, Canada</td>
<td>Santiago, Chile</td>
</tr>
<tr>
<td>Budapest, Hungary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalian, Suzhou both of China</td>
<td>Copenhagen, Denmark</td>
<td>Shanghai, China</td>
</tr>
<tr>
<td>Tallinn, Estonia</td>
<td>Porto Alegre, Brazil</td>
<td>Chongqing, Xian, China</td>
</tr>
<tr>
<td>San Jose, Costa Rica</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If we picked the top world cities based on employment and population increases 1991-2001 we would choose:

- Dubai
- Guangzhou
- Las Vegas
- Bombay
- Phoenix
- Istanbul
- Atlanta
- Delhi
- Raleigh
- Singapore
- Dublin
- Tampa

But remember you can mess up anywhere and you must account for supply elasticity.
Investing By Picking the Right Countries

Assuming you are allowed to “own” in foreign countries.

You must consider currency risks, taxation, corruption and property rights enforcement, local rule nuances (lease tenant rights or residential squatter rights) and local liquidity, and brokerage costs all in addition to normal fundamentals of demand and supply trends, assuming there is market information (transparency).

Perhaps work ethic and productivity?
Currency Risks

- Malaysia, Philippines and Thailand need to develop currency future markets so that hedging becomes possible, otherwise risk premiums of 2% to 4% will be required by foreign investors.
- Finland and Greece also have significant currency risks.
Taxation: watch out for…

- Annual property tax (typically 1 - 3% of market value per year)
- Ordinary income tax (typically 15 - 30%)
- Capital gains tax (typically 0 – 20%)
- Transfer Tax (0 to 12% range)
- Value Added Tax (0 to 25% range)
- Unexpected Fees (Russia, Ukraine, possibly China and some cities in the USA)
Using the following five criteria equally weighted

- GDP Growth
- Currency Risk and Taxation
- Property Rights Enforcement
- Ease to Start a Business (Regulation)
- Access (measured by airport boardings)

We get the following results as to where we should invest…
Top 23 Countries Based on 5 Criteria

- GDP Growth
- Ease to Start Business
- Prop Rights
- Access
- Currency Risk

Countries: Ireland, United States, China, Chile, Singapore, Germany, Australia, Taiwan, China, Canada, Korea, Rep., Japan, Spain, Thailand, Netherlands, Denmark, France, Sweden, Czech Republic, Norway, Russian Federation, Malaysia.
37 Country Scores with 60% GDP growth, 20% Trans Costs and Taxes, 10% Transparency, 10% Currency Risks

Best

0 1 2 3 4 5 6 7
Top 20 Country Scores with 60% GDP growth, 20% Trans Costs and Taxes, 10% Transparency, 10% Currency Risks

China
Korea, Rep.
Ireland
Thailand
India
Malaysia
Canada
Australia
Philippines
United States
Singapore
United Kingdom
Sweden
Brazil
Hungary
Denmark
Taiwan
Indonesia
Norway
Russian Federation

Best
Top 20 Country Scores with 60% GDP growth, 20% Trans Costs and Taxes, 10% Transparency, 10% Currency Risks

- Brazil
- Sweden
- Russian Federation
- Norway
- Indonesia
- Hungary
- Denmark
- Taiwan
- United Kingdom
- Singapore
- United States
- Philippines
- Australia
- Canada
- Malaysia
- India
- Thailand
- Ireland
- Korea, Rep.
- China

Tenants rights too strong and party central

Not enough real estate

Best
In the absence of long term objective data explaining direct real estate returns

We will rely on arbitrary models with arbitrary weights, i.e. we could have used:
World Trade Growth Rates Top 10 Countries

- China
- Argentina
- Turkey
- India
- Russia
- Korea
- Chile
- Australia
- Thailand
- Indonesia
None of these models ....

- Controls for supply responsiveness to demand
- That requires local market knowledge.
- Some markets are very difficult to enter while others are easy, i.e.
  - Las Vegas where every time there is a new job they build three new houses
  - This is a big risk not explicitly modeled by any global advisor
Pragmatic Property Portfolio Perspectives Toward Global Investing

- We need the ability to shift into and out of real estate (or securities) but this requires a global manager who has discretion over such decisions.
- We are specialists—even those of us in academia. We get our allocation and try to keep it.
- We specialize and we should, i.e.
  - Retail: just follow winners like Walmart, Ikea etc
  - For Residential, office and industrial scale matters and experience so go into more difficult under served markets with trusted local partners.
Developing Trusted Relationships

- A prerequisite to local foreign direct investment.
- It makes no sense to go in and start from scratch a new business but rather to develop partnerships.
- Subordinated contracts with preferred returns make the most sense
  - Master leases (shift leasing and management)
  - Participating mortgages (equity like but without true ownership)
The world is somewhat different since 1992 for American REITs and for Western Europe with the EU (1992) and EU currency (2002). It is also different since 1989 in the old Soviet block countries.

Any yield at all would be good for Japanese Investors

A modest increase in pension fund allocations to international real estate, especially from the US, could quickly overwhelm the market.

Real estate has garnered increased investor interest recently

- Aging population

- A modest real estate allocation pays a disproportionate share of current liabilities for pension funds
Strategic investors that want to be able to re-balance or move in and out of markets will prefer securitized forms of real estate. This requires the liquidity of a securitized vehicle.

Countries that wish to increase foreign investment must develop indirect or securitized vehicles and encourage greater penetration into core property segments. There is an important role for governments to play in helping these markets evolve.

For smaller investors securities are the only reasonable way to diversify internationally.
Summary 3 of 3

- For the largest investors indirect and direct is still necessary for achieving minimum diversification objectives.

- No investment advisor nor academic has a very reliable forward looking model that spans the globe as no one is able to forecast supply reaction to demand without local knowledge.
Conclusions

There will always be global opportunities in specialized sectors.

– You can still do well in weak markets and make big mistakes in strong markets.
A final personal note

Look how global we are today....
ขอบคุณครับ
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Asian Public Properties Country Sample Listings from GPR

- **China (none) except through Hong Kong**
  - Amoy Properties Limited
  - Cheung Kong (Holdings) Limited
  - China Overseas Land & Investment Limited
  - Chinese Estates
  - Dickson Group Holdings Ltd.
  - Emperor Group Homepage
  - Great Eagle
  - Hang Lung Group
  - Henderson Land
  - HKR International
  - Hon Kwok Land Investment Company, Limited
  - Hongkong Land Limited
  - Hysan Development Company Limited
  - Kerry Properties Limited
  - Lai Sun Group
  - New World Development
  - Sino Group
  - Sun Hung Kai Properties Ltd.
  - Tai Cheung Holdings
  - The Wharf (Holdings) Limited
  - Tian An China Investment Company Ltd.

- **Taiwan**
  - Derlee
  - Sinyi Realty
  - Ciputra

- **Japan (many)**
  - Allgreen Properties Limited
  - A-REIT
  - CapitaLand Limited
  - CapitaMall Trust
  - Centrepoint Home Page
  - City Developments Limited
  - First Capital Corporation
  - Hong Fok Corporation Limited
  - Keppel Land Limited
  - MCL Land
  - Orchard Properties
  - The Ascott Limited
  - United Overseas Land Limited
  - WingTai Holdings

- **Singapore**

- **Thailand**
  - Goldenland Public Company Limited
  - Q-Homes
  - Sansiri Public Company Limited

- **Malaysia**
  - Country Heights
  - Hong Leong Group Malaysia
  - IOI Properties

- **Indonesia**
  - Ciputra