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COMMERCIAL REAL ESTATE

Analysis and Investments



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INTERNATIONAL REAL Estate investments: Markets, strategies, and Implementation

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Appendix 24 Useful Web Sites for International Real Estate Investment

LEARNING OBJECTIVES

After reading this chapter, you should understand:

- The rationale of international real estate investment
- The major obstacles and disadvantages to investing in real estate in foreign markets
- The nature of international institutional investment portfolios and capital flows and the practical considerations shaping them
- The nature of the institutions enabling a successful international real estate strategy
- Risk management strategies associated with successful international real estate investment

Real estate investment was traditionally a very local business, but real estate capital markets are gradually getting more international, as global capital market integration progresses. Cross-border capital flows have increased in all asset markets. Real estate markets have been relatively slow to follow suit, but now seem beyond the tipping point, where more international investment leads to new investment products and supporting institutions that in their turn facilitate yet more international capital flows. The development feeds on itself.

The preceding chapters have looked at real estate markets on a regional or national level, with the last three chapters looking at real estate portfolio theory, capital market theory and the development of the U.S. REIT market. The next logical step is to look at real estate markets from a higher level and broaden the universe from which investment portfolios can be constructed: the global universe. This chapter will begin by looking at the global universe and at international capital flows, and will discuss the institutions aiding the internationalization of the global property markets. After that, we will consider the key arguments for international real estate investment: return opportunities abroad, diversification, and the export of portfolio management and development skills. We will also examine the obstacles and problems associated with international property investment, such as additional costs and risks. The key issue here is the informational disadvantage international property investors are at relative to the local players.

Finally, we will synthesize these issues to come up with viable portfolio strategies for international property investors, based on a combination of direct property investment and the use of the global property share market. One of the key arguments is that different types of investors have different optimal international investment strategies. Especially important in that regard is the question whether one is an intermediate investor, whose shareholders can diversify themselves, or an end-investor, who does not have diversifying shareholders. The chapter ends with suggestions for implementing these strategies, including country allocation, indexing, and currency risk management.

24.1 There's a Big World Out There

Much is happening around the world in terms of the emergence of a global real estate market, and this can be measured by looking at invested capital and capital flows, as well as the size of the market and market segments. This parallels the growth of international corporations with real estate needs around the globe. Besides that, the institutions of globalization are emerging in real estate. In any sector, there is a chicken-and-egg situation where international capital flows are aided by transparency-enhancing market institutions, but in order for these institutions to emerge and be sustained, the capital flows have to emerge. Beyond a certain threshold, the two feed on each other, and the emergence of institutions of international transparency is both a sign of and a catalyst for advancing globalization.

24.1.1 The Global Real Estate Capital Market: Size and Flows

In general, investors favor their own markets above asset markets far away. This so-called home bias has been documented for stock and bond markets, and real estate markets are no different in that respect. The mantra "location, location, location" suggests that real estate markets could be even more local than other asset markets: both supply and demand are driven by local factors. American real estate investors in particular have been reluctant to expand internationally. Of all foreign direct investments made from the United States in the decades through 1995, the average real estate investment has been a mere 0.3 percent.¹

But internationalization is underway, and the global market has become bigger and more transparent. Exhibit 24-1 depicts size and composition of the institutional real estate markets of Europe and the Asia-Pacific region between 2007 and 2010, divided along the lines of the capital market matrix, as discussed in Chapter 1. In Europe, the market was valued at \$3.2 trillion in 2010. The crisis apparently did not hurt market growth in the Asia-Pacific region, and its size has now surpassed that of Europe, reaching a value of \$3.5 trillion in 2010. Although the Asia-Pacific market is now the largest in the world, this market value is still very small compared to its likely future value. One should consider that the population of the Asia-Pacific region, including the populous countries of India, Indonesia, and China, is more than ten times that of the United States. When these markets are fully developed, they will require a comparable per capita quantity of real estate as the mature, developed parts of the globe. With such a large population, the combined current value is relatively very low, and a fully developed market could be expected to far surpass the U.S. market in value. In other words, it is likely that the Asia-Pacific real estate markets will need many billions of additional capital over the next decades.

¹Lapier (1998) provides very interesting statistics regarding inward and outward private real estate investments in relation to total foreign direct investments for a number of countries starting in the 1960s and extending through 1995. On the whole, international private real estate investments do not seem to go up as a share of total investments.



EXHIBIT 24-1 The Composition of Foreign Institutional Property Markets *Source:* DTZ Research (2011).

Another important take-away from Exhibit 24-1 is that, both in Europe and in the Asia-Pacific region, the real estate market is still predominantly a private market in both the debt and the equity segments. Regarding securitization, Europe seems a bit more developed in the debt markets, and Asia-Pacific in the equity markets.

It can also be seen that international capital markets are integrating, especially within Europe. Cross-border real estate capital flows among European countries are expanding, and they tend to grow faster than domestic investments. However, many investors stay local, which is illustrated by the behavior of listed property companies. In the global universe of property companies, as measured by Global Property Research (GPR), only around 10 percent are international, in the sense of having any serious holdings in real estate outside their own country. This percentage is rather stable, illustrating that the real estate companies have largely remained local.

In short, this evidence, although incomplete, suggests international capital market integration along regional not global lines. This notion is in line with existing empirical research, which also implies that real estate markets are integrating on a regional basis.²

²See Eichholtz, Huisman, Koedijk and Schuin (1998), who provide evidence that property markets are increasingly driven by continental not global market factors. Gerlach, Wilson and Zurbruegg (2006) show that the Asian crisis of the late 1990s resulted in stronger integration among Asian property markets. More recent, evidence for regional integration are Gallo and Zhang (2010) and Zhou (2011).

EXHIBIT 24-2 The Global Property Share Market (US\$ billion), 1983–2011 Source: GPR.



24.1.2 The Institutions of Globalization

International capital market integration requires institutional help, both through the emergence of investment products catering to international investors, and through reliable information sources that make markets more transparent. To start with the former, the development of the public real estate markets, both on the equity and on the debt side, makes it much easier for property investors to allocate significant amounts of capital outside of their home market. Exhibit 24-2 illustrates that the global property share market has been growing in the last three decades. Starting at approximately \$25 billion in 1983, the total capitalization of the global property share market had reached \$1.2 trillion by 2011, just over 35 percent of which was in North America, with Europe and Asia-Pacific splitting most of the rest. Africa accounts for 1.5 percent of the total market capitalization. The market development has not followed a smooth trend, but instead has been growing in fits and starts, showing strong growth in boom periods, stability in other times and a virtual implosion in 2008, when the global market lost more than half of its value. Interestingly, this was a global phenomenon, as was the equally spectacular recovery that followed.

The overall growth of the global property share market is helped by the proliferation of tax pass-through structures all over the world. The success of the U.S. **REIT** market has prompted regulators in many countries to introduce similar—but differently named—structures. The REIT structure is making rapid progress in many countries. Exhibit 24-3 provides a global overview of tax pass-through property vehicles: property investment entities that do not pay tax at the corporate level, like United States REITs. As the table shows, the REIT structure has been adopted in 22 countries since 2000, among which are important property markets like the United Kingdom, France, Germany, Hong Kong, and Japan.³ This is an important development for the internationalization of property markets. Without tax transparency, property companies are handicapped relative to direct property investments.

³The European Public Real Estate Association (www.epra.com) provides and updates an excellent overview of listed tax-exempt property vehicles all over the world.

Country	Structure	Inception	Debt Ceiling	Minimum Payout
Americas				
Brazil	FII	1993	N/A	95% of net income
Canada	MFT	1994	no restrictions	100% of net income
Chile	FII	1989	limit set by internal rules of fund	30% of annual profits
Costa Rica	REIF	1997	50% of real estate / 10% of other assets	no
Mexico	FIBRAS	2004	thin capitalization rules	95% of taxable income
Puerto Rico	REIT	1972	no restrictions	90% of net income
USA	REIT	1960	no restrictions	90% of net income
A. f:				
Africa	DUT	2002	2004 6	
South Africa	PUI	2003	30% of assets	capital gains must be reinvested
	PLS	2009	Imited by internal rules of fund	no
Europe	,			
Belgium	SICAFI	1995	65% of assets	80% of net profit
Bulgaria	SPIC	2004	short terms loans $<$ 20 % of assets	90% of net income
Finland	Finish REIT	2009	80% of assets	90% of net income
France	SIIC	2003	thin capitalization rules	85% of tax exempt profits; 50% of capital gains
Germany	G-REIT	2007	55% of assets	90% of net income; deferral of 50% of
				capital gains
Greece	REIC	1999	50% of assets	35% of net profits
Israel	REIT	2006	60% of real estate / 20% of other assets	90% of profits
Italy	SIIQ	2003	limited by internal rules of fund	85% of real estate income
Lithuania	Reit	2008	75% of assets	no
Luxembourg	SIF	2007	no restrictions	no
Netherlands	FBI	1969	60% of real estate / 20% of securities	100% of net income
Spain	SOCIMI	2009	70% of assets	50% of capital gains; 90% of rental income
Turkey	REIC	1995	short-term credit $<$ three times NAV	minimum 20% as first dividend ratio
UK	UK-REIT	2007	interest cover test	90% of net income
Acia/Pacific				
Asian acine	IDT	1071	no restrictions	100% of net income
Dubai	REIT	2006	70% of access	80% of net income
Hong Kong		2000	15% of accets	90% of net income
India		2003	45% of assets	90% of income: 00% of capital gains
lanan		2000	20% of assets	90% of income, 90% of capital gains
Japan Malaysia	J-NED Unit Truct	2000	50% of accets	90% of total income
WididySid	Unit Trust	2005	50% Of dssets	
New Zealand		1900	possible thin capitalization rules	
Dakistan		2007		
Pakistan		2008		
Cingapore		1000	55% OF assets	90% of income
Singapore	S-KEII	1999	55% OI assets	90% of net income
South Korea		2001	00 % 01 assets	
Theiler	KEII	2003	35% OT ASSETS	pursuant to the KEIT contract
Inaliand	PFP0	1992	porrowing prohibited	90% of net income; 90% of capital gains

EXHIBIT 24-3 Tax Pass-Through Property Structures and Characteristics

The spreading of tax pass-through property vehicles reverses this disadvantage, allowing international property investors to use the full benefits of the listed property markets, which, due to their relatively efficient pricing, seem particularly fit for acquiring international property exposure.

The global market can also be viewed from a debt point of view. Globally, the market for Commercial Mortgage-Backed Securities (CMBS), which are useful vehicles for real estate debt investors to step into foreign debt markets, had been growing until the 2008-2009 crisis, but has been more or less closed down since then. That crisis has also demonstrated the disadvantages of property market globalization: securitized debt markets have been an important transmission channel of the crisis from one country's banks and investors to the next. Here, international investment turned out to increase risk, rather than reduce it through diversification.

Emerging globalization seems to go hand in hand with a trend for global property markets to become more public. This, in turn, facilitates more internationalization. It is far easier for an investor in Amsterdam or London, for example, to invest in a securitized market in the United States by buying shares of a listed property company on the exchange than to travel there physically, open an office, and set up business as a direct investor. So while the emergence and growth of the securitized market has not by itself made the market international, it has been a conduit and enabling factor for internationalization. On the other hand, the crisis of 2008–2009 has shown that this internationalization also has important drawbacks. The crisis in the U.S. real estate market has become a global banking crisis mainly through the mortgage-backed securities market and its offspring.

Besides the increasing publicness of real estate markets, other new institutions are becoming important for international investors wishing to make direct investments in private real estate. In a private market, the relevant knowledge the real estate investor needs to be successful and perform well remains largely local in nature. In the past, this knowledge was not shared as there were no associations, agencies, or advisors willing to share it, but these are now being created.

This results in the establishment of standards in information quality, governance, and professionalism, both via professional organizations and for-profit firms. National and international research consultants, data providers, and property brokers increasingly supply local data and can help the investor to build up local knowledge. These data include performance benchmarks, up-to-date market information on rents, vacancies, and yields, and information regarding rent contracts. And the quality as well as availability of these data are constantly improving. However, this holds true mainly for the mature markets, as in North America, Europe, Japan and Australia. It is not yet the case for important emerging property markets like those of China, India, Turkey, and Brazil.

Increasing transparency is demonstrated by Jones Lang LaSalle's transparency indicator, a global real estate indicator that measures and ranks countries in order of transparency. Until the crisis of 2008–2009, this indicator was showing ever-increasing transparency, and since its inception in 1999, no country had decreased its transparency. That, however, has changed since the crisis. Especially some of the more transparent countries have shown a decrease, which is mainly due to a lack of transparency in the real estate debt markets. But among the countries that were not very transparent before, Turkey and China have made important steps forward. At the bottom of the list, countries like Ukraine, Egypt, Indonesia, and India have stayed the same and are still opaque. So while transparency is increasing in general, this does not hold for some large and potentially interesting markets. Transparency clearly remains a problem in these markets.⁴

To sum up these developments, we can say that the long-term trend is for real estate markets to become more international, aided by institutions like a growing public market, performance indices and reliable and accessible market information. This leads to the question why these developments are taking place, and what investors should do about them.

⁴Lieser and Groh provide a comprehensive analysis of 66 real estate markets, ranking them on their attractiveness for institutional real estate investments.

INSTITUTIONS OF INTERNATIONAL TRANSPARENCY

The internationalization of real estate capital flows has lead to the emergence of supporting institutions. These institutions, some of which are industry associations, while others are forprofit companies, create common international standards and definitions, compare best practices and provide market information. These efforts result in increasing transparency, which facilitates yet more growth in international real estate capital flows. The list below gives information regarding some of the most useful of these institutions.

The Asian Pacific Real Estate Association (APREA) represents the real estate sector in the region. Besides that representative function, it is a network for institutional real estate parties in Asia, and it aims to provide best practice standards. It is also a repository for research on the region, available to members.

CoStar is a data provider for commercial real estate markets, and provides detailed information at the building level, covering prices, rents, quality, and tenants. Its data still cover mostly the United States, but the company is expanding its coverage to the rest of the world.

The European Public Real Estate Association (EPRA) aims to promote, develop and represent the European public real estate sector. EPRA fosters these goals by establishing standards for listed property companies, and by providing information to potential investors. It is the European equivalent of America's National Association of Real Estate Investments Trusts (NAREIT), and besides its European property share indices, it produces a global index in cooperation with NAREIT all together with FTSE.

The European Association for Investors in Nonlisted Real Estate Vehicles (INREV) aims to improve transparency and accessibility of market information and to increase the liquidity of the nonlisted real estate vehicle market in Europe. The organization provides information about this market, tries to foster its professionalism and establishes best practice standards. It is the European equivalent to America's National Association of Real Estate Investment Managers (NAREIM).

Investment Property Databank (IPD) provides investment performance indices for direct property markets. The company has an ever-growing range of indices covering 23 countries (2011). It maintains indices for the standard institutional investment categories, but also covers, depending on the country, the social housing sector, land, and forestry. Representativeness depends to a strong degree on the country.

Global Property Research (GPR) provides performance indices for all listed property share markets in the world. The indices and GPR's database go back to 1984. GPR closely tracks the global universe of listed property companies.

Jones Lang LaSalle provides research rapports on property markets all over the world, and collects market information for over 80 countries to construct their Global Real Estate Transparency Index. Index numbers are based on legal factors, regulatory burden, availability of market information, financial disclosure and governance rules, and availability of investment performance indices.

Real Capital Analytics (RCA) provides information on commercial property transactions all over the world. That involves prices and other transaction details, and also property details and information on the tenants, the buyers, and the sellers. Data coverage is country-dependent. The company also does research based on these data.

Does it mean they should rush to go international and if so, how should they do this and what kind of strategy should they employ? In the next section, we consider the rationale for and obstacles to going international.

24.2 Going International: Rationales and Obstacles

There are strong arguments in favor of international real estate investment. First, there may be good investment opportunities offering better returns outside the home country, especially if the home country has a well-developed, mature property market with little or no growth. Another rationale is that international investment provides diversification benefits, because markets do not move in a synchronized way. The third reason could be to export superior portfolio management or development expertise, especially in emerging markets, where such expertise is likely to be in demand.

However, there are also obstacles and risks attached to going international. International investment entails various costs that are difficult to recoup, and the foreign investor is likely to be at an informational disadvantage relative to his local competitors. Secondly, going

international leads to additional risks, like currency risk and political risk, and since international investments are likely to be less liquid than local property investments, these risks could be harder to manage abroad than at home. Lastly, the international investor may be hampered by discriminating regulation, like property ownership restrictions or adverse taxation. The remainder of this section discusses these rationales and obstacles in depth.

24.2.1 Return Opportunities

Prospects of better return opportunities than in the home country come in two varieties. First, return opportunities can be structural, relating to economic development, relative capital scarcity, and demographics. Secondly, return opportunities abroad may be of a cyclical nature. The investor's home market may be at the top of the property cycle, with a big boost to returns beckoning from switching to another market at the bottom of the cycle.

Let's start with the **structural return opportunities**. In economically mature markets, economic growth will be relatively low, and so will growth in property demand. But in emerging markets, rapid economic growth will spur growth in property demand. Similarly, there are mature and immature demographic markets, but these two factors are not the same. Eastern Europe is economically an emerging market, but demographically mature. China is an economically booming emerging market, but about to phase out in demographics, with its population peak expected in 2026 because of its one-child per family policy. In India and Malaysia, on the other hand, there is no peak in population in sight.

Regarding the first type of structural return opportunity abroad, economic development is obviously not evenly spread across the globe and the differences are partly of a structural nature. As economic growth in mature markets in the United States, "old" Europe and Japan is weak, so is growth in property demand. Average GDP growth in the euro area has been less than 0.5 percent since 1995, and is forecast to be bad because of the euro-induced austerity measures in a large part of the continent. United States' growth has averaged 2.4 percent since 1995. By contrast, emerging markets in Asia, "new" Europe and the Americas have much higher economic growth. China's economic growth has averaged 10 percent in the past two decades with no slowdown in sight, with India at nearly 8 percent since 2000. Central Europe has shown average growth surpassing 3 percent since 1999, comparable with Brazil. With the exception of Central Europe, these regions have mostly not been very strongly affected by the crises, and continue catching up with the mature economies. They are likely to sustain their impressive growth, even though the growth path will probably not be very smooth.

Economic growth goes hand in hand with property demand. A characteristic of emerging economies is rapid urbanization. China, for example, is creating cities in the millions at a startling pace, housing the rural migrants partaking in the economic boom. Meanwhile, those already living in the cities are becoming richer and consume more space in the form of better housing. This is likely to continue.

Developing societies also need industrial and office properties to accommodate the workers. Cities attract migration from the countryside because there are jobs to be had, initially in manufacturing and distribution, and this requires industrial space such as warehouses and factories. Subsequently, service industries begin to grow rapidly, requiring office space. And finally, as societies gradually become more prosperous, populations adapt similar spending patterns to the West, creating demand for facilities like shopping centers and leisure projects.

These property needs translate into large **structural capital needs**, as housing people at work or home in high-growth urban areas absorbs huge amounts of capital. By contrast, many of the mature economies have mature capital markets, with large institutional investors and a structural oversupply of capital. This is nothing new: in the eighteenth century, the Dutch had a small economy with a big capital market, so their capital went abroad and financed the American economy. Capital markets shift capital from places where it is in surplus to places where it is needed. This probably explains why Dutch and British property investors traditionally have been relatively international: they have had large capital markets relative to their own real estate markets.

Turning to **demographics**, the other major structural factor that could influence returns, it is equally obvious that the demographic tide varies widely across countries. Populations in some countries keep on growing, while in others, they are leveling off or already shrinking. Real estate markets provide the space that people need—working space, living space and recreational space, and these needs are to a large extent driven by population size and composition, i.e. by demographics. To get an idea of future property demand, we need to know how many people there will be as a whole and in different age categories.

As well, different property types are exposed to different aspects of demographic change. Demand for office space depends on the number of people of working age, as these will populate the offices. Demand for retail space depends partly on the total population (because everyone needs clothes and food), and on the population composition as some age groups consume more than others. Purchasing power is a key issue: there are far fewer shops per 1,000 inhabitants in Eastern than in Western Europe, but if purchasing power rises to Western European levels, shopping space will also reach these levels. Housing demand largely depends on household formation, which is driven by population size, but also by average household size: even if the population shrinks, but the average household size also shrinks, the number of households could remain stable or even grow.

However, the exact relationship between demographics and property demand remains unclear. Early research from the late 1980s predicted a fall in American house prices due to the end of the baby boom.⁵ The market has proved these predictions wrong by producing the biggest housing boom in recorded history. In effect, what happened is that supply reacted adequately to the new demand situation. More importantly, the end of the baby boom in the United States is a rather nondramatic event compared to demographic developments in other countries, since it implies not a shrinking population but merely a slowing down of population growth: the United Nations does not predict an end to U.S. population growth before 2060. But in some important markets outside the United States, the population is indeed shrinking, and for real estate markets, with their inelastic supply, there is a fundamental difference between slow growth and a shrinking population.⁶

Office market models show that the driver for demand is employment. Over time, employment fluctuates with the economic cycle, but the underlying trend is still determined by the number of people of working age. Job creation matters for office demand only as long as there are people to take the jobs. Exhibit 24-4 shows index numbers of the labor population—the number of people aged 25–64—in Asia, North America, Europe, and the world as a whole starting at 100 in 1960. Asia shows the fastest growth, but will top out at about 2045. North America has had strong growth and keeps on growing through 2060, albeit at a lower pace. In Europe, the situation is totally different, with the labor population already topping out and projected to fall right back to the 1960 level by 2060, though there will be a structural difference as virtually all women will work in 2060 compared with hardly any in 1960. This also means there is some potential for growth in the active labor force left in countries where few women currently participate in the workforce.

Among the mature markets, in the immigration-based group of economies such as Australia and the United States, there is no steady state in sight even in 2060. The labor population growth will continue, albeit at a slower pace. But in mature economies elsewhere, Germany and Japan are already past their peaks; Italy and the Netherlands have reached their peaks and Singapore and Spain are close to it. So besides the immigration-based countries, there are two categories of mature markets: the "not-so-bad" group, like France, Sweden, the United Kingdom, and Singapore, where labor population is projected to be stable or just slightly falling, and the shrinking labor force group, including countries like Germany, Italy, Japan and South Korea, which will all see their labor population go down more than 25 percent until 2060.

⁵In 1989, Mankiw and Weil predicted that house prices would fall at the end of the baby boom, but subsequent research and market developments demonstrated that they were wrong.

⁶Glaeser and Gyourko (2005) have theoretically shown that decreasing population may lead to strong declines in property prices.



EXHIBIT 24-4 International Labor Force Statistics and Projections (age group 25–64) *Source:* United Nations World Population Prospects Database.

One solution could be to shift the property allocation to emerging markets. Here, we can see that non-European markets like Brazil, Chile, and India, plus tenuously European Turkey, look much more promising regarding demographics. But in Eastern Europe, growth is topping out as in the Czech Republic or already falling as in Hungary. These projections may be less reliable in countries that have gone through so much change, as fertility could increase, for example, but the picture looks quite negative apart from Turkey. Central and East European countries may be economically emerging markets, but are demographically mature.

The next question is whether the working population even needs offices. Here the answer has traditionally been yes, because employment growth in the United States, Japan, and Europe in the past decades has only occurred in services. This looks set to continue, but future service employment may require less office space than in the past. The organization of work in services is likely to change fundamentally due to the revolution in communication technology. People will probably work more at home or in the so called "third place," meaning anywhere they happen to be or want to be.⁷ This is another reason for less office demand, and it is a global phenomenon.

The data do appear to suggest a gloomy future for European office markets, but there may be some offsetting forces. First, a permanently tight labor market may induce more immigration, later retirement, and stricter social benefits policies. However, in view of the political strength required for such reforms, this will take time, and these developments are much less easy to predict than the demographic growth the markets have been used to. Another key factor will be emigration within countries, with attractive, growing regions and cities pulling in labor from stagnant areas. In real estate, competition between cities will grow with the increasing differences between fast-growth and stagnant cities. This will imply more uncertainty regarding the demand for real estate, in therefore more investment risk.

⁷See Malone (2004) for a vision of the business organization of the future, and the role of place in it.

Where the office market used to be driven by a constantly humming demographic engine, with regular and predictable annual growth, it must now rely on unpredictable political and social developments. Even if all possible mitigating factors do emerge, global office demand will grow more slowly due to less labor and the increasing use of alternative locations for work. Either new supply will have to slow down, or prices will fall, and developers as well as investors will feel this.

Macro-demand for retail space, on the other hand, is driven by the number of people and their purchasing power. The number of people and their age composition will determine the quantity of demand: people over 40 are the bigger consumers, and younger people consume less, and consequently need less retail space.⁸ The type and location of retail space required and the success of retail formats are also partly driven by the composition of the population. Meanwhile, total purchasing power will determine quantity and quality. Net new space will only be needed if these variables grow, otherwise only replacement space will be required. Nonetheless, expected growth in wealth could maintain the attractiveness of retail real estate in the next decades.

Exhibit 24-5 shows strong variety in historic and expected population developments. Until 2060, the U.S. population is expected to grow approximately 36 percent, while a shrinking population is expected in some European countries—especially those in Central Europe and in Japan and South Korea. In general, the numbers look better than those for the labor population, with strong expected population growth especially in emerging and immigrationbased economies.

Moreover, purchasing power, the second quantitative driver of the demand for retail space is likely to continue growing. Simple extrapolation of GDP real growth since 1970 suggests that by 2030, even the relatively slow growers in Western Europe and North America will be substantially better off than in 2012, suggesting plenty of scope for growth in retail property. In the rest of the world, the potential for real GDP growth is larger, which will translate into more demand for retail space. And as consumers become more affluent, they will demand a western-style shopping experience, rather than the more informal retail arrangements that are currently prevailing in many emerging economies.

But other than in the past, these developments will not translate automatically into consumer spending in physical shops. The global communications revolution breaks down the traditional relation between growth in population and affluence and the demand for retail space. Currently, the money spent on Internet shopping is still a small percentage of overall retail trades. Even in the United States, it is still just around 5 percent. But while high growth rates in Internet retail continue, sales growth in physical shops is sluggish. For example, consumer spending in the crisis of 2008–2009 shrunk in many countries, even as sales in Internet retail kept growing. And this is not a phenomenon that is exclusive to mature economies: China is expected to surpass the United States as the largest e-commerce market in the world by 2015. So even countries where brick and mortar retail is not yet affected very much by this development will surely feel its effects in years to come. Retail property developers and investors will have to rethink the role of their product in societies that spend much of their money on the Web.

The final question is how demographic changes will affect the housing market. This market is driven by income trends, interest rates, and planning rules in the short term, but ultimately by household formation, as every household needs at least one home. Household formation is a function of population size and average household size. Households are generally still getting smaller, partly offsetting the expected decreases in population in many countries. For example, in Europe the number of households is expected to fall from 2015 onwards, but this decline is not nearly as big as the drop in the labor population and will for some time be more of a leveling off.

For countries in which the population is expected to keep on increasing, the decreasing average family size is a driver of even higher growth for housing. Especially in emerging economies, the potential for increased housing demand due to reduced family sizes is big,

⁸This is according to Green and Hendershott (2007), who rigorously analyze the relationship between the population age composition and consumption.

	Total Population	Cumulative Growth		Peak in
	2010	1960–2010	2010-2060	
A. Mature Economies				
Australia	22,268	116%	47%	
Canada	34,017	90%	33%	—
France	62,787	37%	18%	—
Germany	82,302	13%	—12%	2005
Italy	60,551	22%	-5%	2018
Japan	126,536	37%	—18%	2009
Netherlands	16,613	45%	2%	2036
Singapore	5,086	211%	18%	2042
South Korea	48,184	92%	46%	2041
Spain	46,077	52%	8%	2049
United Kingdom	62,036	18%	19%	—
United States	310,384	67%	36%	
B. Emerging Economies				
Americas				
Brazil	194,946	168%	11%	2042
Chile	17,114	124%	15%	2046
Mexico	113,423	195%	26%	2050
Asia-Pacific				
China	1,341,335	104%	10%	2026
India	1,224,614	173%	40%	
Indonesia	239,871	161%	21%	2050
Malaysia	28,401	248%	60%	—
Europe				
Czech Republic	10,493	10%	1%	2027
Hungary	9,984	0%	-9%	1980
Poland	38,277	32%	12%	1996
Russia	142,958	19%	16%	1993
Turkey	72,752	158%	25%	2051
C. World	6,895,889	127%	39%	

EXHIBIT 24-5 Population (× 1000 persons) in International Perspective, 1960–2060

Source: United Nations World Population Prospects Database.

since economic development is very closely connected with lower fertility rates and smaller families. So even if population growth slows down due to that same lowering of the fertility rate, the growth in the number of households is set to continue for decades, ensuring ongoing demand growth for housing. For example, the average household size in Turkey according to the latest census is 4.5 persons, and it has dropped in each census since 1975. If Turkey's

household size falls to the European average in the long run, this alone would lead to a doubling in the demand for housing units.

The other side of the demographic coin is that societies age, and this also seems to have an important impact on the demand for housing. Recent research suggests a strong and positive relation between human capital and the qualitative demand for housing, and it also suggests that this relation is stronger for older families.⁹ Since younger generations are better educated than their elders in almost every country, our societies will increase their human capital as time progresses. This, together with the average age of the population, will create demand for higher-quality housing, which implies the need for a continuous adaptation of the housing stock.

Summing up demographic developments, we can say that property markets in many countries are turning into replacement markets; good quality will drive out bad quality, and competition among cities and regions will increase. At the same time, fundamental uncertainty in these property markets will grow as population growth comes to a halt. Market effects will first be felt in the development and construction markets. Because different property types are exposed to different aspects of the demographic tide, demographic changes will first affect office markets and only later, retail and housing markets. Europe and some countries in Asia are very mature demographically, while many emerging countries and countries with a tradition of immigration will follow these trends much later. Thus, investors from demographically mature markets should make strategic allocations abroad, especially to demographically immature markets. This echoes the argument for economically mature markets, but as we have seen, stages of economic and demographic maturity may be in parallel or in opposition, and investors also need to be aware of this.

What does this imply for a property investor? That depends on the home market. For European investors, these numbers provide a clear rationale for investing internationally, and that also holds for investors from Japan and South Korea. For American investors, where the demographics at home look much better, it means they have to be very careful where to invest to achieve a better return/risk profile. They should be aware that there is no strict one-to-one relationship between economically emerging markets and demographically emerging markets. The same holds for investors from other countries in which the demographic situation looks favorable.

In short, for one group of investors, demographics provides a rationale for going international; for another group, it is something they have to be wary of.

The structural return opportunities abroad require a long-run perspective on foreign markets, but **cyclical return opportunities** are a matter of timing the cycle and thus more short-run and opportunistic. The existence of cycles is well documented, and at any given point in time, and for any property type, there will probably be markets around the world at every phase in the cycle. Looking at international cycle snapshots supports this notion.

This may provide market timers with investment opportunities. For example, an opportunistic office investor who feels that the home office market is at the top of the cycle can sell assets and go into foreign office markets close to the bottom of their cycle. Such a strategy of opportunistic international cycle surfing sounds attractive, but to put these cyclical movements into practical investment policies, they need to be predictable. There is some evidence that this is indeed the case, and that the persistence in real estate return series allows profitable tactical allocation policies, even after adjusting for transaction costs.¹⁰ Nevertheless, this has not been tested internationally. Most of the available data is backward-looking, providing a snapshot of situations at various points of time. This may be suggestive of the future direction, but does not really make the market predictable. In that respect, the fact that these cycle snapshots are sometimes called property "clocks" is misleading, since the essence of a clock is its perfect predictability.

⁹See Eichholtz and Lindenthal (2012).

¹⁰Key and Marcato (2005) looked at British private real estate return series and showed that active momentum strategies based on time series information generated from these series are profitable, even allowing for the additional transaction costs associated with these approaches. They do assume instantaneous transactions, which may not be very realistic for private real estate markets.

The international dimension makes matters even more difficult. Opportunistic international property funds investing in, for example, Central and Eastern Europe and in Asian markets like India, have been popular with investors for a while, but generally have not seemed to be very successful in terms of performance. Predicting property markets is hard, and this illustrates that it is even more difficult to make good predictions for someone who is located far away. There is the option of paying a local expert to provide knowledge about the market, but it is questionable whether local players with genuine knowledge will pass it on, rather than keeping it to use for their own benefit. After all, foreign investors are easy to exploit. Advisors may share knowledge for a fee, but how can the foreign investor be sure of the quality of the knowledge?

24.2.2 International Diversification

In considering cyclical rationales for going abroad, we have concluded that markets are not very predictable, and even if they are, acting on the predictions is very difficult, especially for foreign investors. But we do know that markets act in nonsynchronous ways, and this can still be used for diversification. Intuition and straight economic reasoning support this, as diversification is the creation of exposure to different aspects of the economy in such a way that if one part goes down, the other parts still provide protection. Creating exposure to different parts of the property market and different economics provides diversification because business cycles are not synchronous but move out of phase. Countries also have different economic bases, with for example the Netherlands almost entirely a service economy, South Korea a very strong industrial economy. Canada a mining and agriculture economy, and the United States a big mixed economy. Exposure to different economies also provides diversification via exposure to different economic bases and thus reduces risk. Besides that, supply is partly driven by local circumstances such as capital availability and the interest rate, and these vary from country to country as well.

The effect of diversification can be measured by looking at correlations. If the fundamentals driving property returns-like GDP growth, inflation, and interest ratesshow low international correlations, this is likely to translate into weakly correlated property markets, and therefore strong diversification potential. To take a look at that, we have calculated correlations for these fundamentals across a number of important economies and property markets, based on annual data going back to the mid-1980s. The resulting international correlation matrices are depicted in Exhibit 24-6. These numbers look promising for international diversification potential, as the correlations are generally low. For example, the correlations between the Euro-area's GDP growth and that of the other economies are negative or close to zero, with the exception of the United States and Japan. Correlations with and among emerging economies tend to be lower than those between mature ones, and that also holds for interest rates and inflation. In short, the fundamentals suggest strong diversification potential, and that is clearly visible in the timing of property cycles across the continents. These show phase variability: there are markets to be found in any phase of the cycle whenever a snapshot is taken, and this holds for all property sectors.

Additionally, rental cash flows and their volatility are driven by local market institutions such as rental contracts. In the Netherlands, for example, rental contracts are linked to inflation, partially protecting an office landlord from inflation risk, whereas in other countries, that's not so. But there, retail rental contracts may be linked to turnover, directly linking the investor to consumer confidence and consumer spending. As such practices differ across countries, this creates diversification. The international differences in rental contracts provide diversification benefits through different cash flow streams and risk exposures, as Exhibit 24-7 shows.

Similarly, zoning rules vary, with strong investor protection from strict zoning rules seen in some countries and regions, but paired with less growth, and less zoning protection but more growth in other countries like Poland or China or the United States. Diversification across these can also create a more stable and more predictable return.

Panel A: Correlation Matrix Real GDP % Change									
	Argentina	Australia	Brazil	India	Turkey	Indonesia	China	Eurozone	Japan
Australia	-0.28								
Brazil	0.33	0.23							
India	0.13	0.24	0.09						
Turkey	0.29	-0.01	0.22	0.10					
Indonesia	0.05	-0.34	0.18	-0.06	0.19				
China	0.55	0.23	0.45	0.22	0.14	0.11			
Eurozone	0.09	0.20	0.07	-0.11	0.27	0.01	-0.10		
Japan	0.05	0.12	0.10	-0.07	0.41	0.43	-0.04	0.74	
United States	0.02	0.62	0.17	0.02	0.32	-0.20	0.10	0.70	0.53

Panel B: Correlation Matrix CPI Annual % Change

	Argentina	Australia	Brazil	India	Turkey	Indonesia	China	Eurozone	Japan
Australia	0.43								
Brazil	0.56	0.12							
India	-0.10	-0.10	0.07						
Turkey	0.08	-0.07	0.32	0.18					
Indonesia	-0.08	-0.29	-0.12	0.11	0.17				
China	-0.02	0.15	0.55	0.01	0.41	-0.21			
Eurozone	0.72	0.11	0.79	0.28	0.60	-0.02	0.28		
Japan	0.52	0.23	0.41	0.21	0.35	-0.01	0.19	0.67	
United States	0.56	0.51	0.36	-0.11	0.16	-0.20	0.21	0.51	0.66

Panel C: Correlation Matrix Short Term Interest Rate

	Argentina	Australia	Brazil	India	Turkey	Indonesia	China	Eurozone	Japan
Australia	0.38								
Brazil	0.14	0.35					-		
India	0.46	0.29	0.18						
Turkey	-0.12	0.03	0.03	-0.10					
Indonesia	0.09	0.27	0.20	0.42	-0.05				
China	0.38	0.60	0.63	0.44	0.07	0.28			
Eurozone	0.62	0.51	0.14	0.58	-0.34	0.29	0.36		
Japan	0.38	0.20	-0.12	0.46	-0.24	0.09	0.25	0.55	
United States	0.25	0.69	0.35	-0.01	0.00	0.02	0.49	0.33	0.02

EXHIBIT 24-6 International Correlations of Selected Market Fundamentals across Economies

Source: Authors' calculations based on Thompson Datastream.

There are also theoretical underpinnings to the idea of international diversification. Chapter 21 discussed modern portfolio theory and the concept of the efficient frontier, showing how diversification can enable an investor to reach for a higher expected return with a given level of risk, or a lower risk with a given expected return. The efficient frontier shown

			Rent Reviews		Index	kation Basis
Country	Lease Length	Right to Renew	Period	Basis	Period	Basis
Asia-Pacific						
Australia	Indef. / 3-10 years	Varies	Varies	Varies	Annual	COL
China	2–3 years	Yes	Expiry	Market	N/A	N/A
Hong Kong	` 26 years	No	2–3 years	Market	N/A	N/A
India	3–9 years	Yes	3 years	Market	N/A	N/A
Japan	2–5 years	Varies	6 months prior to lease expiration	Varies	N/A	N/A
Korea	1–2 years	Yes	1–3 years	Market	N/A	N/A
Singapore	2–3 years	Yes	2–3 years	Market	N/A	N/A
Americas						
Argentina	3/5/7/10 years	Not guarantee	2–3 years	CPI	Annual	CPI
Brazil	3 years	Negotiable	End of term	Market	Annual	CPI
Canada	1/3/5 years	Negotiable	End of term	Market	Annual	CPI or specific amount
Mexico	3–10 years	Negotiable	Annual	CPI	Annual	CPI
United States	3–5 years	Negotiable	N/A	Market	Annual	CPI or specific amount
Europe						
France	3/6/9 years	Yes	Expiry	Market	3 times per year or annual	Construction cost
Germany	5–10 years	No	varies	CPI	Annual	CPI
Netherlands	5—10 years	Yes	5—10 years	Market	Annual	COL
Poland	3—7 years; 10 years max	Yes	N/A	N/A	Annual	CPI
Russia	3–5 years	No	6 months—1 year	Varies	N/A	Varies
Spain	1–25 years	Yes	Negotiable	Market	Annual	COL (ipc)
Turkey	1–5 years	No	N/A	N/A	Annual	CPI
United Kingdom	Up to 25 years	Yes	5 years	Market (upwards only)	N/A	N/A



in that chapter represented the best possible portfolios in the home market. The question is how the position and shape of the efficient frontier would be affected by going international. Exhibit 24-8 provides a graph of the national and global efficient frontiers. When we look at the global market, we find that the global efficient frontier dominates the national frontier, providing less risk and higher returns. A bigger universe to choose from means greater diversity, so the correlations are lower and the risk is reduced, hence the lower risk of the minimum variance portfolio. As well, it will be possible for a U.S. investor to find a market with higher expected return—and higher associated risk—than would be possible in the American market alone, hence the higher expected returns at the right side of the frontier. Essentially, picking from a larger investment universe provides more diversity, more potential on the upside and more protection on the downside. As a result, EXHIBIT 24-8 Domestic versus Global Efficient Frontier © OnCourse Learning



the investor holding domestic portfolio A can reduce his risk by going to international portfolio B or improve his expected return by going to international portfolio C. He can also aim for a combination of these two goals by choosing a portfolio between points B and C on the efficient frontier.

Chapter 22 showed that the risk of an investment can be split in two parts: market risk and specific risk. The more assets and diversification, the lower the risk. If the universe selected from is limited to the local market, the total risk can be reduced only to some extent. But if the market is widened to the global universe, this provides more diversity and more diversification potential. So in a typical situation, the global market risk will be lower than the domestic market risk. A downward shift of market risk can be achieved through an increased universe of assets, as illustrated in Exhibit 24-9. This is not true at any point in time for any market, but holds generally, for a long-run investor. This means it is possible to diversify away a greater part of the total risk and run less risk for a given return. On these grounds, one could argue that all investors should be international.

Looking at Exhibit 24-9, one would be tempted to conclude that the main conclusion from the one-country CAPM could be easily extrapolated to a global setting and that all investors should hold the same **global market portfolio**. However, this is not necessarily the case. The decisive question here is whether capital markets are internationally integrated or segmented. If assets are priced in integrated markets, expected returns will be in accordance to the global systematic risk as depicted in the lower horizontal line in Exhibit 24-9. If, on the other hand, assets are priced in segmented markets, their returns will be in line with the systematic risk of their domestic market. Since this is generally higher, the expected return will be higher as well. This implies that an investor who is able to avoid the cause of this market segmentation will enjoy special benefits from international diversification.

So, the question is whether international asset markets are integrated or segmented. For stocks, the evidence points into the direction of increasing integration, and for the publicly listed real estate market, the same has been documented.¹¹ But it is not likely that private real estate markets are as integrated as their public counterparts. Direct legal barriers to foreign real estate ownership, and more indirect informational barriers putting international

¹¹Bardhan, Edelstein and Tsang (2008) show that increasing international openness of the real estate markets leads to lower excess returns relative to the risk-free rate, even though this openness may also increase rents and asset prices.





investors at a disadvantage still exist, allowing sustained international price discrepancies. But as noted in the previous sections, markets are slowly becoming more transparent, and foreign ownership restrictions are gradually weakening, so price discrepancies will probably diminish over time.

From a theoretical asset pricing perspective, the difference between a country and the world is that a country has only one currency, while the world has many. The difference between the International Asset Pricing Model (IAPM) and the traditional single-country CAPM discussed in Chapter 22 therefore has to do with currency effects. The IAPM starts with the assumption that investors care about risk and return expressed in their own currency. This seems reasonable. Besides that, two more conditions are required: purchasing power parity holds and investors all have the same consumption basket, so inflation is measured the same way in all countries. All assumptions of the single-country CAPM are also applicable to the IAPM. If these assumptions are valid, the outcome of the IAPM as a prescription of what investors should optimally do is very much in line with that of the singlecountry CAPM: investors should hold a portfolio consisting of risk-free bonds denominated in their own currency and the world market portfolio, optimally hedged against foreign currency risk. In other words, the separation theorem also holds for the IAPM. However, the empirical problems associated with the single-country CAPM are also relevant for the IAPM, and probably even more so. Holding the global market portfolio is even more difficult than it is to hold the home-country market portfolio, especially when it involves private markets-as is still predominantly the case for real estate. As with the single-country CAPM, beta does not explain international return differences very well, and especially financial distress seems not to be captured well by the standard IAPM.¹² But that is no reason to discard the model altogether. Global beta may not be the whole story when it comes to explaining asset returns on an international level, but it is a big part of the story, just like the beta of the singlecountry CAPM. Additional risk factors probably should be incorporated into the model.

The empirical evidence in the literature regarding international diversification is mostly supportive. The diversification argument critically depends on international correlations, on the question of how synchronized different markets behave. Thus, if correlations are high, the diversification argument is weak, but if they are low, it is strong. Generally, researchers find that international correlations are low: the correlations between real estate markets may be even lower than those between stock and bond markets. This would suggest a clear argument for international investment in real estate, stronger even than for international investment in stocks and bonds. This holds especially when looking at the global universe of property investment opportunities. Within Europe, on the other hand, correlations are quite

¹²Ling and Naranjo (2002) show that a global market beta is a significant driver of expected returns on listed property companies and Bond, Karolyi and Sanders (2003) extend this property share research in a multifactor framework.

high, nearly as high as across the regions within the United States. But across Europe, North America and the Far East, correlations are low.¹³ The evidence is not all supportive of international real estate diversification, though. Some authors find a dominant global factor driving real estate markets—both public and private—suggesting the international diversification effect is not so great. Others find increasing international integration between real estate markets.¹⁴ However, looking at the body of empirical evidence regarding this matter, it is probably safe to say that international diversification in real estate portfolios is a good idea.

Reviewing the case for international diversification, it is clear that the diversification effect depends on the correlations between international real estate markets. So the question is how stable these correlations are. Unfortunately, they are not stable at all; they tend to move around, even over short horizons. That would probably be acceptable if the correlations merely fluctuated up and down, but if they move in a structural way against the investor, this is a problem. If the correlation would start low and then move in the direction of one, the whole diversification effect would disappear.

At first sight, one might expect globalization and capital market integration to mean that correlations are high and the diversification effect is low. However, pure globalization is not actually what's happening; instead, there is a trend towards regionalization. Continental factors are important and actually increasing in importance. Within the regional blocs, correlations are going up but between regions, they are not. The most defined regional blocs are North America and Europe, while within Asia, the same effect can be seen but it is weaker: correlations are going up in a far weaker way than in Europe and the Americas.

The second question is whether the low correlation is there when it is needed. Diversification is essentially a form of risk management. So when some markets are going down very rapidly, an investor wants to be protected by the others. But in practice, correlations tend to go up in times of crisis, which is when you most need them to be low. Ample evidence shows this effect for stocks and bonds, but in real estate, the correlation increases in times of crisis appear to be somewhat less pronounced. So the diversification effect in real estate is weaker in times of crisis, but still favorable compared to other asset classes. Finally, all of this depends on the investment horizon. If it is long enough, the investor can simply wait out the higher correlations in a crisis, making sure to have a sound international real estate position, with exposure to strong economies and demographics.

24.2.3 Managerial Considerations

The third possible rationale for going international consists of managerial considerations, like exporting management expertise and servicing global customers. To start with the former, it seems obvious that the know-how in real estate investment management built up by investment managers in the mature property markets has a value, and could be exported to emerging markets in Asia and Central and Eastern Europe, for example. With their skills at managing real estate portfolios and developing projects, one would think they could carry out projects that a local player might not be able to do with the same degree of success. Unfortunately, an advantage in know-how in the financial markets is inclined to evaporate rapidly, especially in view of international labor markets and the international market for higher education. Those working for a U.S. investor can also work for a local player and come up with the same projects. Without natural monopolies, advantages in know-how quickly disappear as knowledge is dispersed.

Another question is, how valuable is know-how in general in property investment? Publicly listed property investment companies are sometimes priced at a premium to net asset value—the value of the assets minus the debt and thus the tangible assets in the company.

¹³Such supporting evidence has been put forward among others by Eichholtz (1996), Conover, Friday and Sirmans (2002), Hoesli, Lekander and Witkiewicz (2003), De Wit (2010), Liow (2010), and Kroencke and Schindler (2012). The evidence shows that international correlations are relatively low, and especially so across continents and economic blocs. This results in significant benefits from international investment.

¹⁴Examples are Goetzman and Wachter (2001) and Ling and Naranjo (2002). Good literature reviews can be found in Sirmans and Worzala (2003a and 2003b). Recent evidence for increasing integration can be found in Yunus (2009).

But more often they are priced at a discount, suggesting that the market does not perceive management as a value creator. This does not say much for the value of know-how, and if it does not have much value, there is not much to export and the whole argument collapses. It would seem evident that there is know-how that is important in property development, but even that management premium is doubtful, as recent research suggests that only the land contracts in development have value, and not the management. It would appear that management in real estate companies in general is more or less without value.

The other managerial argument for becoming an international property investor is to follow one's customers. As corporations become more global, so too do the companies that service them. Property investors are part of the business services community. If corporations centralize their global purchasing of services, as they have generally done with accountancy and banking, for example, then it makes sense for the service providers to have the same global footprint as their clients.

To judge the strength of this argument for international property investment, two issues need consideration. The first is how international the property users really are, and the second is how central the corporate real estate decisions are made within these organizations. Concerning the first issue, it is likely that the sector in which the company operates plays a role. For example, the distribution and logistics industry is a global business. That means it makes sense that property companies providing space to that sector are global as well. The American firm ProLogis is a prime example of this strategy, and seems to be doing well.

Retailing is not that international: hardly any of the great American retail chains has successfully set foot in Asia or Europe, and vice versa. However, retail seems to have become more international in the last decade. True global retail formulas are still rare, but European chains, traditionally confined to their own country, are branching out to other European countries. As result, the property companies servicing them, like Rodamco and Corio, are becoming pan-European as well.

The last two main institutional property types, offices and multifamily housing, are even less international than the retail sector. For offices, this may have something to do with a seeming lack of global space occupancy decisions among office users. For housing, demand is simply not international, and likely to remain so. In short, the power of the "follow your customers" argument depends on the property type, but is generally not very strong.

24.2.4 Obstacles to International Property Investment

Having reviewed the advantages and attractions of international real estate investments, we should now consider the disadvantages and obstacles involved. Here, we shall look particularly closely at the costs of investing abroad, including transaction costs and a key element, information costs, where the remote investor is at a major disadvantage. Liquidity is even more of a problem for the international than for the local investor, and this is also true of political risks. Political risks are in any case higher for real estate than for virtually any other asset, as real estate and land is often considered part of the national heritage and therefore emotionally and politically sensitive. Foreign investors are more vulnerable, with their weak political clout. Other obstacles can include unfair laws and even corruption, while in general, the low liquidity of directly held real estate assets makes all these obstacles and risks harder to escape and manage.

One obvious cost disadvantage, particularly for the U.S. investor, relates to property **transaction costs** abroad. In the United States, property transfer tax, for example, scarcely exists, but in many other countries, it is quite high, particularly in countries like Spain (7 percent), Australia (5.5 percent), Korea (4.6 percent), France (5.1 percent) and Brazil (up to 4 percent). Exhibit 24-10 provides information regarding transaction costs for selected international property markets. Besides transfer taxes, investors are faced with agents' fees and legal fees. Agents' fees are also high, while legal fees vary widely. This means the transaction costs of going international in real estate are both high and variable. Total costs for selling a property in countries like France, Brazil, and Spain, for example, will add up to about 10 percent. So investing abroad will either require a fantastic timing strategy or a long-term commitment, in order to recoup these extra costs (or else an indirect approach, such as using public markets or derivatives).

Country	Transfer Tax	Agent's Fees	Legal Fees
Asia-Pacific			
Australia	5.50%	2.50%	0.5–1%
China	1.50%	1.0–2.0% (1–2 Months)	Varies
Hong Kong	0.01-3.75%	1.0%*	Varies
India	6–8%	2%	Varies
Japan	0%	23% [†]	Varies
Korea	Varies (Seller) / 4.6% (Buyer)	1–2%	Varies
Singapore	3% minus \$5400‡	1-2%†	Varies
Americas			
Argentina	2 50%	5% [§]	By Agreement
Brazil	Up to 5%	57%	5%
Canada	Varies by Province	1.5–4%	By Agreement
Mexico	2%	5%	By Agreement
United States	Varies by State	1–6%	By Agreement
Europe			
France	5.09%	1–4%	0.9–1.5%
Germany	3.5–4.5%	1–6%	1.50%
Netherlands	6%	1.25–2%	0.25–0.5%
Poland	2%	1–4%	By Agreement
Russia	Nominal	1–3%	By Agreement
Spain	7 or 16% VAT	2–5%	By Agreement
Turkey	1%	1–3%	By Agreement
United Kingdom	4% over £500,000	1%	0.50%

*Both buyer and seller pay (B/S)

[†]Paid by seller/buyer (PBS/B)

[†]Paid by buyer (PBB)

[§]Buyer and seller split the fee equally (50/50)

EXHIBIT 24-10 Transaction Costs in Selected Private Real Estate Markets

Source: NAIdirect.com.

However, the major issue here is information costs. These are extremely important in private real estate markets. There is overwhelming academic evidence showing that the public stock markets are mostly efficient in an information sense, implying that the available and relevant information is reflected in asset prices. Having access to information then becomes meaningless, because the information is already incorporated in the prices, and it is not possible to outperform on that basis. This may sound disappointing, but the flip side of the argument is that it not possible to underperform either, at least not due to a lack of information. In such markets, where all assets are fairly priced, it is safe for even completely uninformed investors to make big bets. They only have to make sure they are properly diversified. This, of course, is great news especially for international investors, since they are likely to be the underinformed parties in any market.

Private real estate markets, on the other hand, do not fit this ideal model, and are not efficient at incorporating new information in asset prices. Chapter 12 already discussed the investment implications of this inefficiency, including the danger of doing a bad deal: paying too much, or receiving too little, and doing that in a consistent way. So in the private real estate markets, having access to information probably is a key driver of performance. It is possible to beat the market consistently, and also to be beaten by it consistently, depending on information or the lack of it. It is important to note here that being informed does not accord with the Hamlet principle of "to be or not to be." Rather, it is a matter of degree. Players in domestic real estate markets probably have different degrees of market information, but it is likely that foreign investors are generally badly informed relative to most local investors. Logically, if there are both local and international investors in the market, the local investors will be the insiders, already holding the vital information, while the international investors are more likely to be outsiders without this information. If this is so, it should be reflected in performance.

There is relatively little research providing firm evidence, but the two existing studies do indeed show that this inefficiency issue is an important driver of performance in international real estate markets.¹⁵ Both studies compared the performance of listed property companies holding an international portfolio of private real estate with the performance of property companies investing only in their domestic market. In order to separate the performance effect of information from allocation effects, they looked at the country allocation of each international real estate company for every year, and then constructed a mimicking portfolio of domestic real estate companies with the same country allocation. This was done for every year and every international property company, after which a return index was calculated for each mimicking portfolio. They then aggregated these mimicking indices for the individual companies into one overall index, constructed of local real estate companies with precisely the same portfolio composition as the internationals, to compare the performance of the overall mimicking index with the performance of the index for the internationals, thus eliminating the allocation effect and isolating the information effect. Overall, these two studies cover the period from the mid-1980s to 2007.

What emerges is that international property companies underperform their mimicking index of domestic investors. The difference in return is substantial, at 2.7 percent a year, and this is more or less consistent over time, applying even for subperiods. Only during the last few years does this outperformance of the local investors decrease, which may be related to the increasing international transparency of property markets we have been discussing before.

This strongly suggests that information costs are indeed important performance drivers for international real estate investors. However, it should be noted that this reflected the average underperformance of the universe of international property companies. Within that universe, there were also companies that outperformed their benchmark. The results therefore suggest that information costs make it very difficult to perform well in foreign markets, but that it is not impossible.

The information costs can come in two varieties, both leading to underperformance. The first is that investors do not have the necessary information and therefore make mistakes. They buy lemons; they pay too much when they buy and get too little when they sell. Alternatively, they could try to solve the problem by buying information, for example from local brokers, or by establishing local offices and employing local people. However, that would simply translate the cost of the information disadvantage into the payment of fees and salaries, likewise eroding the return. In any event, these information costs imply that diversification, dubbed as the only free lunch in financial markets, is no longer free.

Along with problems of costs and liquidity, there are specific risks attached to international real estate investment. These can be grouped as political, economic and currency risks. **Political risk** looms larger in real estate than in any other asset class, with the possible exception of art, especially for foreign investors. This is because real estate and land are often considered part of the national heritage. Strong national emotions are then involved. For example, in the late 1980s, when Japanese investors were buying up companies in the United States, the Japanese acquisition of the Rockefeller Center caused more furor than any other transaction at the time. These emotions can provide political support for continuous impediments to foreign real estate investors, and there can be similar ownership problems in Central and Eastern Europe. In China, ownership of land and buildings is still a serious

¹⁵See Eichholtz, Koedijk and Schweitzer (2001), and Eichholtz, Gugler and Kok (2011).

problem, heavily disfavoring foreign investors. Although there may be ways around these types of problems, they are sure to be expensive. There may also be impediments to repatriation of profits from foreign direct investments including direct real estate, wiping out any incentive to invest. Although these issues are gradually becoming less important, especially within trading blocs, this process will take a long time.

In the case of the possible problem of double taxation, this is disappearing more rapidly as more and more tax treaties are concluded and these generally aim to eliminate double taxation.

Besides political risk at a national level, real estate markets are also vulnerable to local politics. In all real estate markets, local government in particular will be extensively involved in matters such as zoning and tenant protection. This will be a far-reaching and structural involvement; local government is not going to go away. Foreign real estate investors are far more vulnerable because of their weak political clout, especially without local partners. They do not represent any voters or contribute funds to election campaigns, nor are they big employers, missing even the political clout other foreign direct investors often have.

Here the information issue resurfaces. One of the big drivers of real estate performance is land use, and the remote investor is not aware of what is cooking politically, either at the level of central government, or at City Hall. The home market investors, on the other hand, will have a much better chance of knowing what is currently being discussed in the corridors of power and what may happen to rules and regulations in the period to come. Land could be changed from industrial to commercial use or from pasture to housing, providing highly profitable opportunities to some, and possible risks to others. To avail of these, the investor needs to be a household name at City Hall, but this is all but impossible for the remote investor, who may not even speak the local language. Besides that, there may also be specific unfair laws against foreign ownership, or laws may be changed against foreign ownership without proper notice to the foreign investor.

Economic risk is partly diversified away by foreign investment, but foreign economies may in themselves be more volatile than the domestic market, especially if the domestic market is mature and the targeted markets emerging. In that case, the higher returns expected in these markets will be accompanied by higher risks, and the investor will move further to the right side of the efficient frontier.

Investors will also be exposed to a **currency risk** if they go abroad, and this could be far bigger than the property risk: volatility in the Eurozone and American property markets, for example, has been lower than the volatility of the euro-dollar exchange rate. In the long run, this is likely to change, due to the general tendency for countries to merge into blocs. The European trade bloc has gone all the way by merging its currencies into the Euro. Although the 2011–2012 travails of the Euro countries do not exactly provide a shining example of how to run a common currency, it is still likely that other regions will also move to link their currencies together. This does not mean that currency risk between blocs will go down, but that it will go down within those blocs, provided these currency links are properly managed.

To end this section, we need to deal with **liquidity**. Always a problem in property markets, but getting more important in far-away markets because the investor will be last in line with the local broker, and will be less successful at monitoring his performance. Especially when pursuing an active trading strategy, this may be problematic. It will be difficult to get into a distant market in times of a boom, as the local people will have seen all the good deals and the international investor is likely to be left with the ones that everyone else has smelled at and walked away from. For example, selling offices in New York when the market is at the top of the cycle to move to London where it is at the bottom may take some time, especially if other investors have similar expectations about the New York market. By this time, London may have moved into a boom with the investor winding up buying near the top of the market instead of the bottom. It will be equally difficult to get out of the market when it turns. The low liquidity of real estate makes the political and economic risks harder to escape. And even if a foreign investor sees economic hardship for the host country on the horizon, he may not be able to liquidate his holdings in time to avoid it.

Some of these risks and obstacles are diminishing in importance through increasing transparency, while others are inherent to international real estate investment. In that case, the international investor either must develop a strategy dealing with these issues, or retreat to the domestic market. The next section will introduce you to some such international investment strategies.

24.3 Developing and Implementing International Real Estate Strategies

Given all the obstacles and risks involved in international investment, how can an investor achieve a satisfactory performance? A successful strategy for international real estate will take advantage of the benefits, while avoiding as far as possible the obstacles and risks: this is effectively the definition of strategy. The way to do this is to determine the key obstacles and risks that are more cumbersome for international than for domestic players, and draw up a strategy to deal with them. They will include information costs, monitoring costs, currency risks, and political risks plus the extra problem of liquidity. The first important resource that can overcome many of these problems is the global property share market. REITs and other listed property companies are mostly local specialists, focusing on their own country. The first question to answer is, to what extent do they overcome the obstacles and risks we have described and what role can investing in REITs play in an international strategy. We can then draw up our strategy, including the question of allocation, and introduce the "home market" concept.

24.3.1 Public Real Estate Investment

To establish how the global REIT market can help the international real estate investor, we will review the obstacles to international investment we have described, and see how REITs measure up. On the costs side, transactions costs for real estate shares (and for shares in general) are low and getting lower. And since the property share market is more or less efficient, information costs are low or nonexistent. Anybody could make a well-informed property share deal in, say, Hong Kong by simply buying shares on the local stock exchange. But if they wanted to buy a private property in Hong Kong, this would be a totally different matter. Listed property companies enable uninformed investors to make well-informed foreign property bets. To make that situation even better, property companies are generally improving their reporting quality, partly forced in that direction by industry associations, but also by accounting rules.

As well, monitoring a foreign real estate portfolio is easy, as investors can free-ride on the local co-shareholders and public information; there will be no need to rush over to Hong Kong to look at your property. Finally, impediments to foreign ownership scarcely arise in the REIT market, as they are simply shares.

Turning to liquidity, this is far better than for direct real estate holdings and comparable to shares in companies of similar size.¹⁶ Besides that, there is a nonlinear relationship between size and liquidity, and since listed property companies are generally growing in market capitalization, their liquidity will go up even more. Discrimination against the foreigner in entering or exiting the market is not likely for listed real estate.

While the economic risk of public property investments is as large as for direct investment, greater liquidity means that investors are better able to defend themselves by withdrawing from the market. The same goes for political risk, with the extra advantage that the manager of the local property company will have the contacts and political clout that the remote direct property investor lacks. Finally, problems relating to regulation will largely disappear, as foreign ownership constraints and barriers to repatriation of foreign-earned returns are usually small or nonexistent for stocks.

In short, the obstacles to international property investment discussed in the preceding section are either not relevant or less important for listed property companies, so they look like an ideal investment channel for global property investors. Indeed, Dutch institutional property investors, who have a long—and sometimes painful—international experience, have exchanged their international direct portfolios almost fully for portfolios consisting of the shares of locally operating property companies in the decades preceding 2012. This has

¹⁶See Brounen, Eichholtz and Ling (2009).

THE DO'S AND DON'TS OF CURRENCY RISK MANAGEMENT

A property investor who crosses the border is faced with currency risk, no matter whether his holdings or public or private. The dollar value of foreign property holdings may go down independently of real estate market movements in the host country, just because the local currency weakened against the dollar. International property investors have to deal with this risk. Over time, different techniques and policies have been suggested to accomplish this.

In the 1970s, when the global regime of fixed currencies was abolished, economists and econometricians aimed to predict currency movements. These predictions could then supposedly be used by corporations and investors as a basis for a currency policy. The idea was to hedge only when the foreign currencies were predicted to fall. However, abundant research since then has shown that currencies mostly follow a random walk, and that currency movements are hard, if not impossible, to predict.

In these circumstances, property investors who decide to run the currency risk if they expect exchange rates to move in their favor do not service their clients well, since they take on speculative positions in a market they probably do not know much about. Besides that, these currency bets take valuable management time, which could better be spent making property decisions. If currency movements are indeed unpredictable, then international property investors will have to hedge not at all or always, and should not make this decision dependent on expectations regarding currency movements.¹

There are good arguments for not hedging at all. First, there are costs involved in hedging, as in any insurance product. The costs equal the forward premium, which varies across currencies and in time. Using options for currency hedging is even more expensive, since they cover the investor on the downside, while maintaining his exposure to the upside. Second, the international efficient frontier is not very strongly affected by the question of whether returns are calculated in the home currency (representing the unhedged situation) or in local currency (representing the hedged situation), especially in the long run. Lastly, in a broad international portfolio, covering many countries and currencies, the currency risk is partly diversified away.

On the other hand, the arguments for always hedging are also rather convincing, especially for real estate. First, currency risk does increase investment risk, especially for portfolios consisting of few countries, and even more so if the countries involved are emerging markets, which often have very volatile exchange rates. Second, institutional property investors are usually looking for a relatively modest risk-return profile, while currency returns can fluctuate rather strongly. For example, the volatility of the euro/dollar exchange rate has historically been much higher than the volatility of the property markets on either side of the Atlantic, so the targeted risk-return profile may well be thrown on its head because of the currency movements. Third, the development of deep and liquid currency derivatives markets in the last two decades has enabled investors to hedge rather cheaply and quickly.

An inexpensive and easy way to hedge a lot of currency risk is to acquire "natural" hedges though local leverage. For example, a property investor with a 40 percent overall leverage ratio could do all his borrowing at home, but from a currency hedging point of view, it would be far more clever to borrow locally and apply that same leverage ratio to each individual country in the portfolio. That way, the remaining currency exposure would only be as big as the equity position.

To hedge this equity currency exposure, an often-used technique is currency overlay, in which the portfolio is regarded in full and the currency diversification effects are included in the analysis. The investor then decides what percentage of the remaining exposure—after leverage and diversification—he wants to hedge. In effect, an overall risk-return trade-off is made for the currency exposure.

From a cost-benefit point of view, it is wise to concentrate one's hedging on the liquid currencies where possible. For example, the liquidity in the U.S. dollar/Swedish krona market is higher than in the Euro / Swedish krona market, translating in much lower bid-ask spreads. So for a Swedish investor who wants to hedge the currency risk on his euro-area real estate portfolio, it is cheaper to buy dollars for kronor, and subsequently buy euros for these dollars, than to buy euros directly. Likewise, a euro-area investor who wants to buy properties in New Zealand is also better off by going through the U.S. dollar than to buy New Zealand dollars directly. However, these bid-ask spreads change all the time, so the optimal route needs to be determined at the moment the hedge takes place.²

happened across the board, including some of the biggest investors like the APG, the pension fund for Dutch civil servants, but also smaller pension funds and life insurance companies. They have largely followed two investment approaches in the global listed market, using a more-or-less passive index tracking approach, or alternatively taking strategic stakes in selected property companies.

¹In that respect, currency hedging is akin to fire insurance. Since it is impossible to predict if and when your house will burn down, you do not take out insurance on the basis of your expectations regarding this. People rarely regret having paid their insurance premium when their house failed to go down in flames.

²The three leading textbooks on international finance and investments are Sercu (2009), Solnik and McLeavey (2008), and Levi (2009). All three provide much more detailed advice about currency hedging. Sercu is the more analytical of the three. Solnik and McLeavy focus mostly on investments, and Levi is more concerned with international finance.

The proliferation of listed property companies has also spurred the development of the market for (international) mutual funds investing in their shares. These funds mainly cater to private investors and smaller institutions, and mostly invest in locally operating property companies, thus offering the benefit of one-stop shopping for investors who want to build up exposure to the global property share market.

24.3.2 Determining Country Allocation

For an investor who has decided that the global property share market is indeed the best way to build up international property exposure, a practical question is how to determine optimal portfolio weights. A number of ways have been put forward to accomplish that. The first way is to use modern portfolio theory to find optimally diversified international portfolios, the second is to track international index weights, and the third is to use weights based on GDP.

Using modern portfolio theory, a Markowitz framework or optimizer can be used to establish optimally diversified portfolios in the standard risk/return tradeoff. However, the theoretical basis for using that approach within the real estate portfolio is weak, and this approach also encounters a number of practical problems, like data availability. Studies using this approach have mostly been based on historical time series, and the resulting optimal portfolios were usually very period-specific, making them not very useful in practice. They also tend to deliver what are called corner solutions, which are often very timedependent. For example, the model's optimal allocation for high risk/high return investors is usually to allocate 100 percent to the asset or country that happened to have the highest return and risk during the sample period. This is hardly a solution for international diversification.

The logical alternative is to track the composition of the global market using the market weight of the global index. In international equity investment, tracking indexes like the global MSCI Index is a widely accepted and frequently used approach. For property companies, such indices are available also: GPR, FTSE EPRA/NAREIT, and S&P Citigroup are leading examples.¹⁷ But basing the portfolio weights on the index weights is liable to the coincidence that market weights are high in countries that happen to have a well-developed property share market. In Europe, for example, the United Kingdom pulls more than its weight in listed property shares, while Germany is underrepresented and in the Asia-Pacific region, the same is true for Australia, which has a dominant property share market, and a relatively small economy. Tracking a global index without making any adjustments for this will probably create unwanted specific risk.

The wisest solution, then, could be to use a combination of market index weights with GDP weights. Investors commonly possess an intuitive map of what the global market should look like, which is partly based on what the capital market looks like, but probably also partly based on what economies look like, for which GDP weighting can be used. Indices have been created in line with this idea, allowing international investors to measure their performance when choosing their international allocation this way.

24.3.3 The "Home Market" Concept

We have seen that all the obstacles to international real estate investment are much reduced or disappear in the case of investing in property companies. However, well-versed real estate investors with experience may have an information advantage in their home market, which could enable them to outperform in direct real estate.

Besides that, there is some concern regarding the diversification effect of listed property shares in the broader mixed-asset portfolio. The early empirical evidence concerning the performance of listed property companies showed that the correlations between property shares and common stock tended to be high, while those between property share returns and direct real estate returns were found to be low. In other words, property shares seemed to behave

¹⁷Serrano and Hoesli (2009) provide a very useful analysis of the available global property share indices.

more like stocks than like property, making them less attractive as a portfolio diversifier. Even though more recent empirical research results indicates that the correlations between property shares and common stock have decreased and seem to stabilize at lower levels, there exists no clear theoretical argument why this should be the case, so it may be just a temporary statistical fluke.¹⁸ This is another argument to keep at least part of the real estate portfolio invested in private property.

Given that direct property markets are inefficient, investors should concentrate their *direct property investments* on market(s) in which they have an information advantage: their **home market**. This does not necessarily need to be defined in a regional way. It could also be that they have expertise, information and valuable networks in a certain property type. So the home market for an investor could be logistics properties in Northern Europe, regional malls in the United States, or multitenant offices in South East Asia. It could also be defined in an even narrower sense, for example offices in Brussels, or conference centers in Singapore. However defined, the key criterion must always be the potential for consistent outperformance, driven by consistently better access to private information than the competition.

Deciding which markets can be considered true home markets in that sense is a difficult process, in which honesty is required, and ego needs to remain in check. After all, we all like to regard ourselves as potential outperformers. However, there is a simple line of thinking to help this process. The consistent outperformance you strive for will have to be accomplished at the expense of the consistent underperformers: the poor underinformed investors. So a home market can be defined as a market in which you can point out the consistent underperformers. If you cannot, you are not an insider, and you had better not become a direct investor in that market. In that respect, real estate investment is just like playing poker: at any poker table, there is a dummy, and if you cannot point him out, you know who it must be.

An important counterargument against this idea of concentrating the investments on the home market is of course diversification. The fact that information costs exist does not nullify the usefulness of spreading your risk internationally. It only means that there is a trade-off between the advantages of international diversification and the information costs this entails. The question, then, is what position an investor should choose on this trade-off.

The answer to that question depends on the nature of the investor. Let's first consider the intermediary investor, like a listed or unlisted property company. For such an investor, diversification does not add value, since the shareholders on whose behalf he is making investments can most likely diversify their holdings. That implies that the most sound investment strategy for an intermediary investor is full concentration on the home market, thereby enabling outperformance of the competition. Most REITs in the United States seem to do that, as they specialize in property types, and hardly invest abroad.

Nonetheless, where the diversification argument may not hold true for a property company, it will still be important for end-investors like pension funds, private investors or family trusts. These end-investors do not have shareholders who can diversify their exposure to them, so they have to diversify themselves. For such investors, it may still pay to determine a home market, or home markets, for the reasons given above. If they do, they should try to manage information costs with a true local presence in the home market(s), and build critical local mass to get access to the best deals and to the information flow required to outperform. This means an effective strategy in private real estate markets rules out covering too many markets. Unlike the intermediary investors, they should not stop there, though. The diversification requirement makes it wise to build up an international portfolio of listed and locally operating property companies to build up exposure outside the home markets. Alternatively, the end-investors may decide that diversification is more important than the potential for outperformance, and hold all real estate exposure through listed property companies. In that respect, it is useful to look at the experiences of the Dutch institutional property investors again. There, the larger institutions have indeed

¹⁸See Brounen and Eichholtz (2003), Newell (2003), and Hoesli and Oikarinen (2012) for international empirical analyses and more discussion.

held on to some of the private property portfolios in their home markets, mostly by putting them in nonlisted property vehicles. PGGM, the pension fund for the health care sector, for example, which has a long experience in the Dutch housing market, has only maintained private investments in that market. All other private real estate exposure has either been sold, or exchanged for stakes in listed property companies. The smaller institutions have mostly sold all of their private real estate holdings, and invest in listed property companies and unlisted property funds instead.

It is now time to broaden the view a bit, and look at other asset markets beside the real estate markets. The analysis in this section and the previous ones was fully focused on diversification issues within the real estate portfolio. But in Chapter 21, we argued that portfolio considerations should not be limited to real estate holdings alone, and should instead be taking the overall wealth portfolio of the investor into account. Following the same line of reasoning provides slightly different investment advice than the previous paragraph, since it is not clear whether a private real estate portfolio in the home market should be complemented with listed property shares or plain common stocks and bonds to reach on optimum on the trade-off between outperformance and diversification. To find the optimal portfolio besides the private real estate exposure in the home market(s), therefore, one has to take all public investment possibilities into account.

24.4 Chapter Summary

This chapter provided you with an introduction into the global real estate capital market. Our goal was to introduce you to the rationale for international investment in real estate, but also to the obstacles for doing that. We then gave some suggestions for international real estate investment strategies that make sense given the nature of real estate assets and markets.

The reasons for investing in real estate outside one's own country are threefold. First, there may be return opportunities abroad (structural or opportunistic) that are unattainable at home. Second, since global real estate markets move in nonsynchronous ways, there are diversification effects related to international investment. The third rationale for going international may be to export know-how in developing and/or managing real estate assets. However, going international can be cumbersome, due to low international liquidity, additional transaction and information costs, and new risks, like currency risk, political risk and economic risk.

These issues suggest that international real estate investment is a trade-off aimed at maximizing its potential gains, while managing the disadvantages as much as possible. Different types of investors will do that in different ways. End-investors, like private investors and pension funds, should aim for diversification, acquiring direct property exposure in a few markets they know well, and using listed and unlisted property companies besides stocks and bonds in other markets. Intermediate investors like property companies, for whom diversification does not add value, should focus on and aim for outperformance in their home market.

real estate investment trust (REIT) structural return opportunities structural capital needs demographics cyclical return opportunities international diversification

KEY TERMS

international correlations global market portfolio transaction costs information costs informational inefficiencies risks political risk economic risk currency risk liquidity home market

STUDY QUESTIONS

- 24.1. Why do real estate investors invest internationally?
- 24.2. How should an international property investor determine his country allocation?
- 24.3. In what respect is international property investment fundamentally different from international investment in listed stocks?
- 24.4. How can the global property share market help an international property investor?
- 24.5. Currency risk is an added risk factor in an international property portfolio. How should an investor deal with this risk?
- 24.6. Discuss the reluctance of institutional investors to invest internationally in real estate, considering risk exposure and the nature of informational (in)efficiency in the real estate asset market.