European Economic Integration and Commercial Real Estate Markets: An Analysis of Trends in Market Determinants

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Abstract. **Economic theory predicts economic integration in the European Community (EC) will result in single markets for individual goods, services and factors of production. The specific characteristics of commercial real estate make it unlikely that a single market will result. However, even without a single market, theory predicts that markets for similar real estate (commercial office, industrial and retail) will converge as a result of economic integration. This paper examines several market determinants to see if we can find evidence of the predicted convergence. Looking at data from 1983 to 1994 we find evidence of some convergence but the extent is small and major institutional differences within the countries remain. Implications are that barriers to the efficient flow of investment funds into real estate remain and distinct markets will continue to characterize real estate within the EC.**

Introduction

For over thirty years, countries of the European Community have experimented with economic integration. The welfare gains created by removing impediments to the efficient allocation of resources of production within the European economy have provided the principal rationale for this pursuit. The EC's experience with economic integration over this period has been mixed. However, with the passage of the Single European Act (SEA) in 1986, progress toward the goal of a single unified European market has improved. Although the deadline for achieving a Single European Market (SEM)—1992—has come and gone without a completely unified market, significant progress toward this goal has been made. In this paper we examine the impact of European economic integration on real estate markets within certain of the EC member states. We describe how the market for real estate differs from other markets for goods, services and factors of production (labor and capital), and explain why one would not expect to see a single market for real estate.

This research provides a descriptive analysis of the numerous institutional differences found within individual member countries of the EC that we believe are likely to impact commercial real estate investments in Europe. We highlight differences between the individual real estate markets within each country, as well as the financial, fiscal and economic environments that indirectly influence the real estate markets. Furthermore, we indicate how these differences represent impediments to efficient capital flows going into European real estate investments.

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To examine the impact of the SEA on real estate markets in the EC member states, we analyze the data over the last decade to determine the extent to which economic theory's prediction has been realized and has led to convergence. This is accomplished by noting whether or not the real estate market determinants within the individual member countries have been converging over the past decade.

Background of the Single European Market

In 1957, the Treaty of Rome was signed by the then six member states. The major objective of the Treaty was to remove all tariffs and quotas between the member countries within twelve years. Over the first several years, the Community was so successful that by 1968 many of the tariffs and quotas were significantly reduced. However, nationalism resurfaced in the early 1970s in response to a global recession, and Europe's progress toward economic integration came to a halt. The collapse of the Bretton Woods system created monetary chaos and the worldwide energy crisis prompted countries to establish new border taxes, reintroduce national production and trade quotas, increase national subsidies, and set up other trade barriers. Not only did these policies stop progress toward a single European economy, but member states lost ground toward their ultimate goal of becoming one strong economic power.

In 1985, Lord Cockfield, the head of the European Commission, began to organize the process for the elimination of the major barriers to a true European common market. He produced a document entitled, *Completing the Internal Market*, popularly referred to as the White Paper.[1] The White Paper specified 279 Directives aimed at harmonizing pan-European services which were to be approved by December 31, 1992. The program implemented by the EC was further expedited by the SEA which amended the 1957 Treaty of Rome, the EC's founding charter. The Act spells out the following major objectives:

- completion of the European internal market by 1992 to create a continental trade area;
- improved regional research and technical development;
- progress toward a European economic and monetary union;
- improvement of the environment and working conditions in the European countries.

The main advantage of the SEA, enacted on July 1, 1987, is the simplification of the process used to pass Directives. In the past, a unanimous vote was required for passage of all legislation but the new law allows most of the Directives to be adopted by a "qualified majority" vote. The only areas requiring a unanimous vote are issues that overlap onto the sovereign rights of member states including land tenure and fiscal policies.

Economic Theory and the SEM

Both the EC Commission and the Cecchini Report (1988)[2] maintain that the economic benefits of the SEM are the result of two distinct but interrelated processes. The first of these occurs in the short run and is essentially static in nature. The immediate and direct economic benefits of the removal of barriers to the free movement of goods, services and

factors of production is the fall in a firm's costs of production and the fall in prices of traded goods and services which in turn should lead to a higher demand. The second, is in the medium to long run and is essentially dynamic in nature. The removal of barriers is expected to have indirect effects on production levels and on efficiency (further decreasing costs and decreasing prices) by enhancing competitive pressures within the single market. Increased competition allows firms to take advantage of economies of scale and reallocates the factors of production to their most productive uses, leading to increased productivity and efficiency. The ultimate outcome of these processes is predicted to be significant welfare gains for the member states of the EC.

Removal of barriers to the free movement of goods, services and factors of production is the starting point for the SEM. The EC Commission has categorized non-tariff barriers (NTBs) into three classes: physical, technical and fiscal. The Commission's objective as far as physical barriers are concerned is to abolish them entirely. However, for the other two barriers, the Commission's objective is "neutrality". Attempts to harmonize technical regulations and indirect taxes have been made to ensure that factors of production flow into their most efficient uses without being influenced by differences in taxes or technical regulations between countries. Tax harmonization (specific measures designed to standardize tax rates and coverage rather than a reliance on market forces) has concentrated on indirect taxes rather than corporate or personal taxes partly because indirect taxes directly affect prices but also because of sovereignty issues associated with the latter taxes. Therefore, the Commission's approach to direct taxation has been to rely upon greater competitive pressures that will ultimately cause tax structures to converge.

Real Estate Markets and the SEM

This paper focuses on real estate markets and examines issues within selected European market places which make it unlikely that a single market in real estate will evolve. Although one would expect some areas to converge, real estate is primarily an inefficient market and a field with nonstandard pricing. Even in a country like the United States, where for many things a single market does exist, there is no single market for real estate. In fact, the value of most real estate is derived from the local market conditions with local regulations that impact the supply of real estate, the demand for real estate, and hence the value of a piece of property.

Having said that, there are many institutional investors who would agree that the market for high quality, institutional grade investment real estate in the U.S. is becoming more efficient as investors have access to the same data and utilize the same methodology in pricing the real estate. Therefore, as the European member states begin to represent a more unified market it would not be unlikely that for similar investment grade property we might begin to see a convergence of the determinants of value for real estate, as major markets compete for capital investment.

Interestingly, nothing in the single market legislation addresses real estate directly and not one of the 279 EC Directives even mentions property markets. In fact, Article 222 of the Treaty of Rome states that "This treaty shall in no way prejudice the rules in member states governing the system of property ownership." Therefore, it is necessary to examine the key variables that are determinants of value for a commercial real estate investment (institutional grade property) to see if over time they have begun to converge.

The remainder of the paper is structured as follows. In section two we briefly review recent literature on the topic of European real estate markets. In section three we characterize real estate markets in the EC and provide a brief explanation of the determinants of value that we will focus on in this paper. In section four we analyze the trends in these variables, examining their evolution over the period, 1982–1993. In section five we summarize the findings, draw some conclusions, and suggest areas for further research.

Literature Review

Although a significant amount of work has been done to examine the overall impact of the Single European Market, very little specific research focuses on the likelihood of a single real estate market. The majority of the literature that does address the effects of economic integration on European real estate markets has emphasized the impediments to achieving a single market in real estate. Rydin, Ellison, Griffiths, Hayward, Parsa and Taylor (1990) examine the potential development of a European property finance network after 1992. They find significant barriers to the flow of real estate investment across European borders which include: planning systems and development incentives, property ownership, property law, taxation structures, and real estate financing. Parsa (1993) provides a very brief summary of the barriers to the development of an integrated European property market. Adding to Rydin et al. (1990), Parsa (1993) identifies an additional set of barriers including social, cultural and political differences, as well as a lack and disparity of data within many of the member countries.

Boydell and Clayton (1993) examine the role of property in the institutional investor's portfolio. The authors contrast the property investment markets in the EC countries and highlight the major differences between them. An alternative descriptive analysis of the European markets is found in a report produced by Healey and Baker (1992) that examines the prospects for commercial property in the 1990s in the U.K. and continental Europe. They discuss both convergent and divergent trends influencing the move to a single European real estate market and identify as major divergent trends between the member states: lease structures and tenure, planning and real estate valuation issues.

Lizieri and Denham (1993) also discuss international property portfolio strategies and find that there are many problems associated with trying to invest internationally. These authors advocate the necessity to return to the fundamentals of supply and demand and to model expected returns rather than rely on ex post data that is often of poor quality and results in unrealistic allocations to real estate. However, these authors do detect a tendency for market convergence among developed economies in an increasingly interlinked world economy.[3]

Hartzell, Eichholtz and Selender (1993) also look at the diversification issue and examine economic diversification in European real estate portfolios. They employ regional employment characteristics in seventy-four European regions to get an insight into the economic diversification possibilities. These researchers find that regionally diverse investments may not be economically diverse investments so naive diversification strategies of simply investing in several cities in different countries may not be appropriate. Furthermore, they find many regions that are also internally diverse. This implies that an investor needs to be careful to study economic conditions of the regions to examine if they should be combined in a portfolio context. Unfortunately, like most of

the international research, these authors examine a single period with only one individual variable. Furthermore, there is no discussion about the stability of their employment variable over time.

Brühl and Lizieri (1994) take a similar approach to this research but examine only two countries. In their work, they suggest that within the European context the political and administrative structure of nation states may have a significant impact upon the performance of regional markets. They propose that a strategy that concentrates solely on office buildings in major metropolitan centers linked to international financial circuits offers very limited gains in terms of diversification benefits. Given the international instability, they suggest this diversification strategy may even result in a higher level of risk. Unfortunately, the authors examine economic fundamentals for only two different countries (Germany and France) which represent a centralist and federalist political and administrative structure. Furthermore, like most of these studies they examine the issues for only one period of time.

Lizieri and Goodchild (1993) examine the impact of the SEM on industrial property markets and argue that corporate restructuring, new production techniques, economies of scale, and the agglomeration of economies will be the driving force for economic change. In their opinion, this will alter the spatial pattern of demand and the nature of industrial property markets.

A new reference that attempts to systematically compare the planning systems in the EC member countries is a series on *European Urban Land and Property Markets*.[4] The fact that only a few of the countries have been covered thus far and each one has a complete book written by experts in the local market provides strong evidence that the planning systems differ significantly between the member states. We do not explicitly consider planning systems in this paper and refer the reader to this source for detailed information.

An example of research that attempts to estimate a predictive model for Western European property markets is Giussani, Hsai and Tsolacos (1992). They use annual data for the period 1983–1991 to test the relationship between changes in European rental values and fluctuations in economic activity. They find that real GDP is the most significant demand-side explanatory variable for rental values.

A common feature of almost all the research on the convergence of the European property markets is a reference to the severe constraints researchers face in terms of the availability and reliability of real estate-specific data. The limitations imposed by the quantity and quality of data should not be underestimated. Our paper represents one of the first attempts to systematically explore trends in real estate market determinants in order to examine the effects of the SEM on those markets. Furthermore, this research is unique as it examines the markets over a period of time that includes not only the passage of the SEM legislation but a few years after the 1992 deadline, to identify which determinants are converging and which seem to be diverging.

Commercial Real Estate Markets in the EC

Changing Patterns of Real Estate Development and Investment

Real estate is a unique industry that is multidisciplinary in nature and encompasses many fields of expertise. In some countries, it is a major source of investment activity, while in

other countries real estate is simply a cost of production without the status of an independent industry. Differences between the member countries of the EC exist with respect to the degree of liquidity associated with a real estate investment, the extent of transaction costs, the amount of property available, the level of institutional capital in the market, and the number of participants in the marketplace.

In the past decade, many institutional investors have seen an increased prominence of real estate in their portfolios. In many countries the insurance companies and pension funds have been given the authority to invest or lend on real estate projects both domestically and across borders. Typically, these companies and funds are tax-exempt so the investors have different investment parameters and objectives than the traditional real estate entrepreneur using bank financing. Furthermore, the stock market crash of October 1987 has also had a positive impact on real estate's position as a diversification tool. Therefore, there has been a slight increase in the demand for institutional grade properties on a worldwide basis. With the opening of the EC markets, it seems likely that institutional investors will look to the European markets as a way to diversify their property holdings.

Determinants of Value in a Real Estate Market

Within the real estate market there are numerous factors that are determinants of value. Obviously, one of the most important factors for a commercial property investment is the expected income streams to be generated from the investment and the anticipated yields on the investment. Closely related to the rental rates obtainable is the way in which the rent is collected—which is typically spelt out in the leasing contract between the tenant and the landlord. The stated contract rent is clearly important, but the term, renewal clauses, the division of the expenses, and the legal institutions that tend to govern who has more rights—the landlord or the tenant—can also influence the value of a particular investment. To some extent, the rental rates and yields are impacted by the supply of space in a particular area. Therefore, additional real estate determinants of value include the construction costs, transaction costs and financing costs associated with a real estate investment.

Fiscal policies and general economic conditions are also variables that can influence the value of a real estate investment. Direct and indirect taxes are expenses associated with a real estate investment and can reduce the income benefits. Real GDP and unemployment are indicators of what is happening in the real sector of the economy while inflation and exchange rates are indicators of what is happening in the nominal sector of the economy. To the extent that there is real and nominal convergence in the economies of the member states of the EC there will be convergence in important supply and demand determinants in commercial real estate markets.

Analysis of Trends in Market Determinants

To examine the market determinants for evidence of convergence since the passage of the SEA, we analyze several real estate-specific market determinants, some financial market determinants, some fiscal policies, and several indicators of economic conditions over time.

The *International Property Bulletin* was the primary data source used for the analysis of the property-specific variables.[5] We have included selected Western European countries where the real estate data were complete for the entire time period, from 1982 to 1993.[6] The core group of countries for which we have the most complete set of historical data includes Belgium, France, Germany, the Netherlands, Italy, Spain, and the U.K. The tax data were taken primarily from selected editions of *Inventory of Taxes Levied by the State and Local Authorities*, while the economic data were gathered from the *European Economy Report*.

To analyze the extent of the convergence (or divergence) in market determinants over time, our methodology is to examine the mean, minimum and maximum (range), and the coefficient of variation for countries in our sample over two time periods: 1982–1993 and 1989–1993.[7]

Analysis of Real Estate-Specific Determinants of Value

The descriptive statistics for the rental rates of office, retail and industrial space in major cities of selected member states are detailed in Exhibit 1. There is some evidence of convergence between the countries for these variables over the decade. The coefficient of variation for office rental rates declined from .72 in 1982 to .39 in 1993. From 1986 to 1988 there was evidence of divergence, but the trend to convergence picked up again over the subperiod 1989–1993. Not surprisingly, average rental rates expressed in nominal terms increased over the decade from £11.2/sq. ft in 1982 to £25.3/sq. ft in 1993. Fluctuations in average rental rates occurred within the context of this upward trend.

The results are similar for retail and industrial space. In both cases there is evidence of convergence over the decade with the coefficient of variation for retail declining from .6 in 1982 to .42 in 1993, and for industrial, declining from .38 in 1982 to .23 in 1993. In both cases there is evidence of periods of divergence but the trend to convergence picks up again in the 1989–93 subperiod. Furthermore, average nominal rental rates have increased over the decade for both retail and industrial. For retail space, the increase was from £59,286 per shop unit per year in 1982 to £136,794 per shop unit per year in 1993. For industrial space, the average rental rate was £2.09/sq. ft in 1982 which increased to £5.36/sq. ft in 1993.[8]

Different legal regimes among member states is another factor in creating different investment environments across the European Community. The SEA does not propose harmonization of the different legal systems. With regards to property, there is a significant difference between Britain and Ireland, which are under a common law system (based on case law that is somewhat flexible), and continental Europe, which is under a civil code that controls real estate markets more directly. Some of the main consequences of these different legal regimes are: (1) the legal system has resulted in very different lease structures that directly impact the performance of the real estate investment in each market, and (2) the different degrees of legal complexity found within each country have resulted in different transaction costs increasing the overall cost of an international investment (Rydin et al., 1990).

In most income property investments, the property is encumbered by leases. Since the cashflows create value, the structure of the lease is also a determinant of value for a real estate investment. Corgel, Jaffe and Lie (1993) point out the importance of these institutional differences and attempt to measure their impact on value. Our paper focuses

Exhibit 1
Descriptive Statistics for Rental Rates for Selected European Countries (1982–1993)
(pounds per square foot)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Office (pounds per square foot per annum)												
Minimum	3.80	4.25	5.85	6.80	9.11	9.00	8.00	10.10	12.50	13.50	16.17	14.35
Maximum	30.00	32.50	36.00	35.00	45.00	55.00	69.00	70.00	65.00	47.50	46.58	39.92
Mean	11.20	12.59	15.72	15.36	20.31	22.43	25.57	31.47	33.93	31.29	31.90	25.30
Std Dev.	8.07	8.79	9.49	9.11	11.49	14.73	19.29	18.84	16.74	11.67	10.67	9.91
CV	.72	.70	.60	.59	.57	.66	.75	.60	.49	.37	.33	.39
Retail (pounds per shop unit per annum)												
Minimum	23,000	24,500	34,000	39,500	61,242	56,000	58,000	70,000	73,200	70,100	85,264	70,923
Maximum	120,000	140,000	166,500	165,000	233,871	275,000	311,000	290,000	271,500	231,200	245,894	211,500
Mean	59,286	64,714	81,000	80,286	112,510	112,714	134,286	162,857	155,671	149,114	156,719	136,794
Std Dev.	35,791	39,480	44,617	44,862	67,097	71,725	77,945	74,593	66,896	52,875	51,453	56,931
CV	.60	.61	.55	.56	.60	.64	.58	.46	.43	.35	.33	.42
Industrial (pounds per square foot per annum)												
Minimum	1.05	1.10	1.45	1.30	2.04	1.90	2.40	3.30	3.55	3.65	3.85	3.72
Maximum	3.50	3.50	3.95	4.25	5.65	6.00	8.00	9.50	9.50	9.55	7.70	7.65
Mean	2.09	2.08	2.64	2.63	3.60	3.71	3.99	5.49	5.76	5.81	5.94	5.36
Std Dev.	.80	.82	.77	.91	1.28	1.41	1.84	2.54	2.40	2.19	1.41	1.25
CV	.38	.40	.29	.35	.36	.38	.46	.46	.42	.38	.24	.23

Data includes the following countries: Belgium, France, Germany, the Netherlands, Italy, Spain, and the United Kingdom.
Source: *International Property Bulletin*, 1983–1994.

on recording any changes in the lease structures over the study period that could be considered indicative of convergence in this determinant of value.

From an investor's perspective, there is a substantial difference between the common lease structure found in the U.K. and the lease structures found in the other European countries. The twenty-five year, upward-only rent review with the tenant responsible for all repairs and maintenance is substantially different from the one-year Portuguese lease where the tenant has an automatic right for renewal and the landlord is responsible for most of the upkeep costs.

Exhibit 2 is a summary of the 1993 lease terms in selected EC member states that was primarily taken from our major source of data, *The International Property Bulletin*. For countries that were not provided in the reports we have used other sources: Healey and Baker (1992), Lofsted (1993) and Baum (1993) and Chesterton's (1994) to supplement wherever possible. To examine the lease structures over time for any signs of change, the lease descriptions in each country were compared with the lease description for the following year.

Although it is unlikely that a single lease structure will be in place for all twelve member states, particularly given the different business cultures in the various countries, a few changes have occurred or are expected to occur in the near future. Probably the most significant change has been the movement away from the traditional institutional lease to shorter term leases in the U.K. with tenants also negotiating break clauses in the long-term leases. With this institutional change, the investment characteristics of the British real estate asset changes. Investments are no longer like bonds with a constant stream of income for a relatively long period of time (twenty-five years). Instead, the level of risk associated with buildings that have the new lease structure has increased since tenants now have the right to vacate the premises after five years. The space could then, of course, be rented for lower rates or, in the worst case scenario, remain vacant and provide no cashflow for the investor.

Apart from the U.K. change, there has been some proposed legislation to change leases in other countries that have historically been more onerous for the landlord. For example, the investment market in Portugal has been virtually nonexistent due to lease laws that allow tenants to remain indefinitely in their space. This law provides no chance for market rent increases. In some circumstances, tenants are also allowed to sell their lease, or "trespass," and pass on the below-market rents to a new tenant. In 1993, a new commercial lease law was drafted but has not yet passed. If passed, the new law would dictate five-year leases with fixed terms for retail space and three-year leases with fixed terms for office space. With these reforms in place, it is likely that institutional investors may consider the Portuguese market more seriously than they have in the past.

Spain has also drafted a bill to liberalize rent controls that have been in existence since the 1940s. The regulation of rent (which was partially amended in 1986) has also distorted the investment market in this country. Under the new legislation, leases for office and commercial property would be completely deregulated over an eight-to-sixteen-year period, depending on the nature of the business and the period of time during which the lease contract has been in force. In essence, the contract rental rates for commercial real estate would adjust to market levels, and this market may also become more attractive to the institutional investor. Both the actual changes in the U.K. leases and the proposed changes in Portugal and Spain indicate that further convergence may occur over time within the European property markets in terms of the negotiated contracts for rental

Exhibit 2
Summary of Comparative Office Lease Structures in 1993

Country	Typical Term	Break Option	Security of Tenure	Indexation and Rent Review	Service Charge	Tenant Costs	VAT on Rent
Belgium	9	3 & 6 yrs Negotiable	No automatic right to renewal.	Annual index to CPI Possible review every 3 yrs.	12–25%	IR,IN, LT,ST[a]	No
Denmark	5, 10	No	No automatic right to renewal.	Annual index by % or index Market review every 4 yrs.	n.a.	IR	No
France	9	Every 3 yrs. Tenant's choice	Tenant has automatic right to renew. LL must renew or pay compensation to tenant.	Annual or 3-yr index to INSEE (Cost of Construction).[b]	15–30%	IR,IN,LT	18.6% or 2.5% stamp duty
Germany	5, 10	No	Tenant has no right to renew beyond contract.	Periodic open market rent reviews or increase with a cost of living index.	10–15%	IR and LT increases	15%
Greece[c]	6	No	LL can terminate lease only if premises are required for own use. Tenant is protected.	Reviewed annually. Minimum increase 15%.	n.a.		No
Netherlands	5, 10	Every 5 yrs Tenant's choice	Tenant has one option to renew for 5 yrs. No security of tenure after option.	Cost of living index Open review at end of initial term.	See (e)	IR, part of LT 1/3 Property tax	18.5%[g]
Ireland	2–35	No	After three years of continuous occupation tenant has right to renew at end of lease.	Open market rent reviews every 5 yrs.	10–20%	IR,IN,LT, SR	No
Italy	6	No	Tenant has automatic right to renew for 6 yrs.	Annual index 75% of retail price inflation.	10–15%	IR 2% reg. tax[d]	19%[g]
Portugal	1	Yearly	Tenant has automatic right to renew and thus enjoys effective perpetual security of tenure.	Annual increase with a government index.	n/a	IR	No
Spain	5, 10	No	Tenant has no right to renew.	Annual indexation.	10–15%	IR,IN,LT	No
U.K.	10, 25	Yrs 5 and 10 Tenant's choice		Open market rent review every 5 yrs.	10–20%	IR,SR,IN LT or rates[f]	17.5% LL discretion

Notes: IR=Internal Repairs, IN=Insurance, LT=Local Taxes, ST=State Taxes, SR=Structural Repairs.
[a]Office occupiers in Brussels also pay a regional tax of BFr 6600 per occupier per year; [b]Tenants can call for a rent review if index increases by 25% in three years; [c]Information on Greece was obtained from Healey and Baker (1992); [d]Registration tax split between LL and tenant; [e]Service charge for offices in the Netherlands are Dfl25–60 per m²; [f]Rates can be 25–40% of the rental value; [g]Healey and Baker (1992) indicated VAT was paid on rent.
Source: *International Property Bulletin,* 1994.

space. However, overall lease structures remain quite different between the countries with only slight levels of convergence.

Another very important determinant of value is the yields that can be generated from a particular investment. Exhibit 3 details the descriptive statistics for the annual yields on office, retail and industrial investments in selected countries of the EC member states from 1982–1993. The yields represent the initial returns receivable by the investor for prime property, fully leased to a first-class tenant at market rental rates.[9] For both office space and retail space there is evidence of some convergence over the decade. In the case of office space the coefficient of variation declined from .22 in 1982 to .13 in 1993. However, the decade was characterized by substantial variability around this trend with years of divergence and others of convergence. For the subperiod 1989–1993, there was actually a slight trend toward divergence. The average yield on office space declined from 7.25% in 1982 to 6.29% in 1993 but increased from 5.32% to 6.29% over the subperiod.

Similarly, for retail space, the decline in the coefficient of variation from .29 in 1982 to .16 in 1993 provides evidence of convergence over the study period. However, considerable variability also is associated with this trend. For the subperiod, the converging trend is still evident for retail. Similar to the office markets, the average retail yields declined over the decade from 7.48% to 7.07%. In the industrial market, there was no evidence of convergence over the decade. The coefficient of variation was .17 in 1982 and in 1993. However, as with office and retail, there was considerable variation in the

Exhibit 3
Descriptive Statistics on Annual Yields for Real Estate Investments for
Selected European Countries (1982–1993)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Office												
Minimum	4.75	5.00	5.00	5.00	4.75	4.75	4.00	4.50	4.50	5.00	5.00	5.00
Maximum	10.00	11.00	10.50	8.00	7.50	7.00	6.50	6.00	6.50	6.80	7.00	7.25
Mean	7.25	7.07	7.07	6.57	6.25	6.07	5.39	5.32	5.36	5.83	6.44	6.29
Std Dev.	1.56	1.92	1.76	1.18	1.12	.89	.80	.51	.67	.69	.71	.81
CV	.22	.27	.25	.18	.18	.15	.15	.10	.13	.12	.11	.13
Retail												
Minimum	3.85	3.50	3.50	4.00	4.00	4.00	4.25	4.50	4.50	4.50	5.70	5.00
Maximum	10.00	11.00	10.50	9.00	8.00	7.50	7.50	7.50	7.00	8.00	7.50	8.25
Mean	7.48	7.21	7.29	7.00	6.57	6.32	6.11	5.86	5.93	6.11	6.81	7.07
Std Dev.	2.21	2.25	2.15	1.67	1.37	1.23	1.18	.99	.86	1.15	.59	1.12
CV	.29	.31	.30	.24	.21	.19	.19	.17	.15	.19	.09	.16
Industrial												
Minimum	7.00	7.00	7.50	8.00	8.00	8.00	7.50	7.00	7.00	7.00	7.00	7.00
Maximum	12.00	12.00	12.00	10.00	10.00	10.00	10.00	9.00	10.50	10.25	10.50	13.00
Mean	9.57	9.57	9.66	9.07	9.14	8.75	8.54	8.25	8.71	8.96	9.07	9.71
Std Dev.	1.61	1.59	1.57	.78	.69	.72	.85	.64	1.16	1.02	1.18	1.67
CV	.17	.17	.16	.09	.08	.08	.10	.08	.13	.11	.13	.17

Data includes the following countries: Belgium, France, Germany, the Netherlands, Italy, Spain, and the United Kingdom.
Source: *International Property Bulletin*, 1983–1994.

yield coefficient of variation, with several years of convergence until 1987 but then there was a reversal over the subperiod with the coefficient of variation increasing from .08 in 1989 to .17 in 1993. Average yields on industrial property did not change much, ranging from 7.0% to 8.0% over the entire study period.

Building costs are also a determinant of value for a real estate investment. As illustrated by the descriptive statistics in Exhibit 4, the evidence on convergence is mixed for the different classes of real estate. For office space there was slight evidence of convergence over the time period. The coefficient of variation declined from .3 in 1982 to .29 in 1993. However, there was considerable variability over the period as noted by the fluctuations in the coefficient of variation and a definite convergence trend for the latter subperiod. In the case of retail space, there is clearer evidence of divergence in building costs over the decade. The coefficient of variation increased from .31 in 1982 to .4 in 1993. There also was considerable variability over the entire period and the divergent pattern is even more apparent for the 1989–1993 subperiod with the coefficient of variation going from a low of .25 to a high of .40.

The industrial market showed evidence of convergence over the entire study period as the coefficient of variation decreased from .23 in 1982 to .18 in 1993. Industrial building costs were also characterized by rather substantial fluctuations in the coefficient of variation around the downward trend but were relatively constant for the 1989–1993 subperiod.

Exhibit 4
Descriptive Statistics for Building Costs for Selected European Countries (1982–1993)
(pounds per square foot)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Office												
Minimum	26.00	27.00	35.00	31.00	39.00	37.00	40.00	51.00	58.00	63.00	57.00	54.00
Maximum	60.00	64.00	77.00	73.00	78.00	78.00	89.00	131.00	136.00	105.00	134.00	128.00
Mean	39.00	40.57	50.86	45.57	54.21	51.43	56.71	73.71	79.00	72.14	84.05	76.90
Std Dev.	11.81	12.84	13.95	14.66	15.37	14.97	17.09	26.10	26.04	13.78	22.46	22.62
CV	.30	.32	.27	.32	.28	.29	.30	.35	.33	.19	.27	.29
Retail												
Minimum	21.00	22.00	26.00	20.00	24.00	28.00	32.00	36.00	38.00	37.00	35.00	31.00
Maximum	48.00	50.00	59.00	56.00	68.00	62.00	64.00	75.00	80.00	85.00	106.00	102.00
Mean	28.29	29.14	36.29	31.57	37.91	36.43	39.57	47.86	50.71	50.14	58.16	52.97
Std Dev.	8.63	9.17	10.44	11.17	13.32	11.24	10.66	12.03	13.09	14.95	20.95	21.16
CV	.31	.31	.29	.35	.35	.31	.27	.25	.26	.30	.36	.40
Industrial												
Minimum	8.00	8.00	12.00	11.00	13.00	13.00	14.00	18.00	21.00	24.00	26.00	23.00
Maximum	16.00	17.00	27.00	23.00	25.00	25.00	31.00	34.00	36.00	35.00	44.00	42.00
Mean	12.57	12.86	17.86	15.71	19.50	18.71	21.29	26.14	28.14	29.14	33.82	31.95
Std Dev.	2.92	3.31	4.73	3.61	3.39	3.28	4.80	4.70	4.67	3.68	5.64	5.61
CV	.23	.26	.27	.23	.17	.18	.23	.18	.17	.13	.17	.18

Data includes the following countries: Belgium, France, Germany, the Netherlands, Italy, Spain, and the United Kingdom.
Source: *International Property Bulletin*, 1983–1994.

Because they increase costs and decrease returns, the transaction costs involved in a real estate investment can be very important, particularly if they are large and vary significantly from country to country. Exhibit 5 provides a summary of some of the most important transaction costs, including registration duty, legal fees, agent's fees, and VAT on the professional fees as they applied to real estate transactions in 1993. The transfer or registration duty on real estate transactions has the most significant variation with a tax of just 1% in the U.K. and up to 19% in France. The combined legal and agent's fees also vary substantially between countries ranging from a low of 1.5% in the U.K. to a high of 6.5% in Germany.

These costs were also compared over the study period to see if there had been any significant changes. Very few changes were found and the most significant change was in France where the registration tax was increased from 16.6% to 19% in 1986. This is actually a divergence from the other countries since France already had the highest registration duty of all the countries. The Netherlands, Ireland and Italy have all had slight increases in their legal fees over the period but these changes were minor. Finally, numerous countries changed their VAT rates over the study period, mostly to comply with the EC Sixth Directive.[10] Although they vary substantially, there is no evidence of any convergence in the transaction costs for property over the study period.

Financing Costs

As indicated earlier in this paper, financing costs are one area where one might expect convergence as the barriers to an open economy between countries are removed. Exhibit 6 provides evidence that this is the one real estate value determinant that has shown a large amount of convergence over the last decade. The coefficient of variation declined

Exhibit 5
Transaction Costs in 1993 for Property Transactions for
Selected European Countries

Country	Transfer or Registration Tax (%)	Legal Fees (%)	Agent Fees (%)	VAT on Purchase (%)	VAT on Fees (%)
Belgium[1]	12.5	.5–1	3.0	N/A	20.5
Denmark	1.2	.5	3.5	N/A	N/A
France[2]	19.0	1.0	3.0	18.6	18.6
Germany	3.0	1–1.5	3–5.0	N/A	15.0
Netherlands	6.0	.5	1.25–2.25	N/A	17.5
Ireland[3]	6.0	1.0	1.0	N/A	21.0
Italy	10.0	.5	2–5.0	19.0	19.0
Portugal	10.0	1.2	3.0	N/A	17.0
Spain[4]	6.0	1.0	3.0	N/A	13.0
U.K.	1.0	.5	1.0	N/A	17.5

[1]Registration duty of 12.5% can be partly recovered—60% is recoverable if the property is sold within 2 years of acquisition; [2]If the property is less than 5 years old and is being transferred for the first time, there is a VAT on purchase—otherwise the 19% registration tax applies; [3]Stamp duty at 6% on values over 60,000 pounds; [4]If the property is new or to be developed the VAT of 12% replaces the transfer tax.
Source: *International Property Bulletin*, 1994.

Exhibit 6
Annual Costs of Financing for Real Estate Investments for Selected European
Countries (1982–1993)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Minimum	8.00	8.50	8.00	7.00	6.75	6.70	7.00	7.75	9.25	9.50	8.00	5.50
Maximum	24.00	19.00	18.00	18.00	14.00	13.00	14.50	16.25	17.00	16.00	14.50	9.50
Mean	14.29	13.50	12.50	11.09	9.82	9.85	10.36	11.36	12.25	11.16	10.44	7.49
Std Dev.	5.28	4.18	4.05	3.90	2.75	2.37	2.78	3.08	2.71	2.18	2.48	1.19
CV	.37	.31	.32	.35	.28	.24	.27	.27	.22	.20	.24	.16

Data includes the following countries: Belgium, France, Germany, the Netherlands, Italy, Spain, and the United Kingdom.
Source: *International Property Bulletin*, 1983–1994.

from .37 in 1982 to .16 in 1993. Within the context of a trend to convergence there was some variability over the decade but in three of the last four years of the 1989–1993 subperiod the coefficient of variation declined. The average cost of financing also fell over the decade, from 14.29% in 1982 to 7.49% in 1993.

Fiscal Policies

An important component of eliminating barriers to the free movement of goods, services and factors of production is the removal of fiscal barriers. The EC Commission is pursuing a policy of tax harmonization with respect to indirect taxes so we should expect to see some convergence in VAT rates across the member countries. However, with respect to direct taxes, the Commission is relying upon market forces and competition to put pressure on countries to bring their taxes into line with one another—so we should not expect quick convergence in these taxes. Furthermore, there are more property-related taxes that are important determinants of value but have been difficult to track over the study period.

   Indirect tax rates, also referred to as Value Added Taxes (VAT) vary from country to country. More importantly for this research, the array of goods to which they apply also differs substantially between member countries. This is a very complicated area and it is often difficult to determine precisely what items are subject to VAT. However, Exhibit 7 provides some examples of how the countries have different VAT regulations for real estate, including: VAT rates for new construction; the transfer of real estate; and rental payments. In some countries the VAT for new construction does not apply, such as in Germany and Luxembourg, but in countries where VAT is imposed on new construction it ranges from 10% in Ireland to 19.5% in Belgium. Furthermore, in France and Germany VAT is also imposed on rental income at 18.6% and 14%, respectively. According to the SEA, the Directives that impact fiscal policies will require unanimous agreement between the countries before they can be passed. Therefore, the debate on VAT rates and coverage is certain to continue and the indirect taxes in the various countries are unlikely to converge over the next decade.

   For the most part, personal income tax rates are set as progressive taxes for given bands of income.[11] As indicated in Exhibit 8, there is evidence of some slight divergence in maximum personal income tax rates in the EC member states. The coefficient of

Exhibit 7
VAT Charges on Real Property and Associated Income

Belgium	Work on homes it not taxable. On new buildings a 19.5% VAT for construction costs.
Denmark	Sale of real estate is exempt from VAT.
France	If building is less than 5 years old and transferred for first time, VAT is 18.6%. VAT of 18.6% is also required on some rental payments.
Germany	VAT is not normally payable on purchase or sale of land or buildings and long-term leases. VAT at 14% for rents if demanded by the landlord.
Netherlands	No VAT is paid on the transfer of property. New construction is subject to a VAT of 17.5%. No VAT on the renting of real property.
Italy	VAT of 19% for purchase of property from a corporation. No VAT for purchase of non-luxurious houses or certain rural and artistic real estate. Leases are tax-exempt.
Ireland	VAT for transfer of most real property and services is 10%. This is charged to some types of real estate but not others. Letting of property is tax-exempt.
Luxembourg	The leasing of property is VAT-exempt. New construction pays a VAT of 12%.
Portugal	Sales and leases of real estate are VAT-exempt.
Spain	New buildings have a VAT of 12% but no transfer tax. Homes have a reduced VAT of 6%.
U.K.	VAT of 17.5% is charged on land acquisition and development cost of nonresidential construction

Sources: *International Property Bulletin*, Hillier Parker, 1993; *Corporate Taxes: A Worldwide Summary* and *Individual Taxes: A Worldwide Summary*, Price Waterhouse, 1993.

variation increased from .09 in 1985 to .11 in 1993.[12] The extent of the divergence is not great and the decline in the average maximum personal income tax rate from 64.3% in 1985 to 52.4% in 1993 is quite large. This lowering of tax rates is in line with global trends to lower taxes and is not necessarily evidence of the effects of economic integration.

Similar results are found for corporate income tax rates. As Exhibit 9 indicates there is also evidence of some divergence in corporate taxes. The coefficient of variation increased slightly from .14 in 1985 to .15 in 1993. If we include the data for 1994 there is some evidence of convergence, with a coefficient of variation of .11 for 1994. The decline in the average maximum corporate income tax rate from 46.5% in 1985 to 38.5% in 1993 and 37.6% in 1994 is also in line with the global trend toward lower tax rates.

Additional taxes that impact real estate values but were unavailable on an historical basis to test for convergence are capital gains taxes as they apply to real estate investing, wealth taxes and local property taxes. The local property taxes are a source of confusion for research in this area as these taxes are typically determined locally and no centralized, up-to-date source of all the individual local taxes exists. This lack of centralized information is not surprising since one would have similar difficulties trying to track property taxes within the United States. However, property taxes are an obvious area where further research would be essential for an investor contemplating international real estate investments.

Exhibit 8
Maximum Personal Income Tax Rates in EC Member Countries for Selected Years from 1985–1994

Country	1985 Maximum Marginal Rate (%)	1987 Maximum Marginal Rate (%)	1990 Maximum Marginal Rate (%)	1993 Maximum Marginal Rate (%)	1994 Maximum Marginal Rate (%) (PW)
Belgium	72.0	71.2	55.0	55.0	55.0
France	65.0	58.0	56.8	56.8	25.6
Germany	56.0	56.0	53.0	53.0	53.0
Ireland	60.0	58.0	56.0	52.0	48.0
Italy	65.0	62.0	50.0	50.0	51.0
Netherlands	72.0	72.0	60.0	60.0	60.0
U.K.	60.0	60.0	40.0	40.0	40.0
Minimum	56.0	56.0	40.0	40.0	25.6
Maximum	72.0	72.0	60.0	60.0	60.0
Mean	64.3	62.5	53.0	52.4	47.5
Std Dev.	5.67	6.04	6.03	5.90	10.63
CV	.09	.10	.11	.11	.22

Sources: *Inventory of Taxes Levied by the State Local Authorities*, Commission of the European Communities, 12th, 13th, 14th, 15th editions; *Individual Taxes: A Worldwide Summary*, Price Waterhouse (PW), 1994.

Exhibit 9
Maximum Corporate Income Tax Rates in EC Member Countries

Country	1985 Rate (%)	1987 Rate (%)	1990 Rate (%)	1993 Rate (%)	1993 Rate (PW) (%)	1994 Rate (PW) (%)
Belgium	45.0	45.0	41.0	39.0	39.0	39.0
France	50.0	45.0	37.0	34.0	33.3	33.3
Germany	56.0	56.0	50.0	50.0	50.0	45.0[1]
Ireland	50.0	50.0	43.0	40.0	40.0	40.0
Netherlands	43.0	42.0	35.0	35.0	35.0	35.0
U.K.	35.0	35.0	25.0	33.0	33.0	33.0
Minimum	35.0	35.0	25.0	33.0	33.0	33.0
Maximum	56.0	56.0	50.0	50.0	50.0	45.0
Mean	46.5	45.5	38.5	38.5	38.4	37.6
Std Dev.	6.60	6.50	7.70	5.74	5.83	4.25
CV	.14	.14	.20	.15	.15	.11

[1]Undistributed profits, profits distributed as stock taxed at 30%
Sources: *Inventory of Taxes Levied by the State Local Authorities*, Commission of the European Communities, 12th, 13th, 14th, 15th editions; *Corporate Taxes: A Worldwide Summary*, Price Waterhouse (PW), 1994.

Economic Conditions

In terms of analyzing economic trends in member states we have distinguished between real (GDP and unemployment) and nominal (inflation) sectors of the economy. Exhibit 10 provides some evidence of rather substantial divergence rather than convergence, in the real GDP growth rates of our sample group of EC countries. The coefficient of variation increased from .33 in 1984 to .66 in 1994. Within the overall trend away from convergence, there was considerable variability from year to year with periods of both divergence and convergence. However, during the 1989–1993 subperiod a divergent trend was apparent. The average growth rate of GDP declined over the decade from 2.6% in 1984 to 1.4% in 1994.

In terms of unemployment rates, Exhibit 11 shows some additional evidence of divergence over the decade. The coefficient of variation increased from .48 in 1984 to .56 in 1994. This diverging trend was less apparent for the subperiod where the coefficient went from .53 in 1989 to .56 in 1994. The average unemployment rate had very little variability over the study period and was almost the same at the beginning (10.67%) and end of the study period (10.65%). Over the entire time period, the average rate declined from 1984–1990 but then rose from 1990–1994.

In the nominal sector, there are some converging inflationary trends. Exhibit 12, which details inflation as measured by changes in price indices over time, shows rather substantial covergence. The coefficient of variation declined from .54 in 1984 to .23 in 1994. However, there was considerable variability over the period with some years of convergence and other years of divergence. A similar converging trend is also found for the subperiod. The average inflation rate for the group of countries in our sample has declined substantially from 6.25% in 1984 to 3.04% in 1994. Furthermore, it has steadily fallen over the latter study period from 1989 to 1994. This evidence of price convergence

Exhibit 10
Annual Growth in Gross Domestic Product for Selected European Countries
(at Constant Market Prices)
(annual percentage change)

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Belgium	2.2	.8	1.4	2.0	5.0	3.6	3.2	1.8	1.4	−1.6	.5
France	1.3	1.9	2.5	2.3	4.5	4.3	2.5	.7	1.4	−.9	1.0
Germany[1]	2.8	2.0	2.3	1.5	3.7	3.6	5.7	4.5	2.1	−1.6	.5
Ireland	4.4	3.1	−.4	4.5	4.2	6.2	9.0	2.6	4.8	2.0	3.3
Italy	2.7	2.6	2.9	3.1	4.1	2.9	2.1	1.3	.9	−.3	1.6
Netherlands	3.1	2.6	2.7	1.2	2.6	4.7	4.1	2.1	1.4	−.3	.9
Spain	1.8	2.3	3.2	5.6	5.2	4.7	3.6	2.2	.8	−.9	1.1
U.K.	2.5	3.5	4.3	4.8	5.0	2.2	.4	−2.3	−.5	1.9	2.5
Minimum	1.3	.8	−.4	1.2	2.6	2.2	.4	−2.3	−.5	−1.6	.5
Maximum	4.4	3.5	4.3	5.6	5.2	6.2	9.0	4.5	4.8	2.0	3.3
Mean	2.6	2.4	2.4	3.1	4.3	4.0	3.8	1.6	1.5	−.2	1.4
Std Dev.	.87	.77	1.30	1.55	.80	1.16	2.43	1.81	1.42	1.33	.93
CV	.33	.33	.55	.49	.19	.29	.64	1.12	.92	−6.26	.66

[1]Figures for 1992–1994 are for United Germany.
Source: European Economy – Broad Economic Policy Guidelines and Convergence Report, Commission of European Communities, 1994.

Exhibit 11
Total Unemployment Rate for Selected European Countries
(percentage of civilian labor force)

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Belgium	12.50	11.80	11.70	11.30	10.20	8.60	7.60	7.50	8.20	9.50	10.70
France	9.70	10.10	10.30	10.40	9.90	9.40	9.00	9.50	10.00	10.80	11.60
Germany	7.10	7.10	6.50	6.30	6.30	5.60	4.80	4.20	4.50	5.60	6.90
Ireland	16.80	18.20	18.20	18.00	17.30	15.70	14.50	16.20	17.80	18.40	18.70
Italy	9.40	9.90	10.50	10.80	10.90	10.90	10.00	10.00	10.30	11.00	11.30
Netherlands	12.30	10.50	10.30	10.00	9.30	8.40	7.50	7.00	6.70	8.20	9.10
Spain	20.60	21.60	21.00	20.40	19.30	17.10	16.10	16.30	18.00	21.20	22.40
U.K.	11.00	11.40	11.40	10.40	8.50	7.10	7.00	8.80	10.00	10.40	9.90
Minimum	3.10	2.90	2.90	2.50	2.00	1.80	1.70	1.60	1.90	2.60	2.60
Maximum	20.60	21.60	21.00	20.40	19.30	17.10	16.10	16.30	18.00	21.20	22.40
Mean	10.67	10.60	10.33	10.00	9.46	8.73	8.16	8.48	9.11	10.10	10.65
Std Dev.	5.13	5.57	5.43	5.35	5.17	4.63	4.38	4.67	5.20	5.78	5.96
CV	.48	.53	.53	.53	.55	.53	.54	.55	.57	.57	.56

Source: *European Economy . . .*, Commission of European Communities, 1994.

Exhibit 12
Price Indices in the EC Member States

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Belgium	5.2	6.1	3.9	2.3	1.8	4.6	3.0	2.7	3.4	2.8	3.1
France	7.5	5.8	5.2	3.0	2.8	3.0	3.0	3.0	2.3	2.8	1.6
Germany[1]	2.1	2.1	3.2	1.9	1.5	2.4	3.1	3.9	5.3	4.6	2.8
Ireland	6.4	5.2	6.5	2.3	3.1	4.6	−1.6	1.0	1.1	2.7	3.8
Italy	11.6	8.9	7.9	6.0	6.6	6.2	7.6	7.4	4.7	4.0	3.6
Netherlands	1.9	1.8	.1	−.5	1.2	1.2	2.3	2.8	2.5	1.7	2.4
Spain	10.9	8.5	11.1	5.8	5.7	7.1	7.4	7.0	6.5	3.9	3.8
U.K.	4.4	5.9	3.2	5.0	6.1	7.1	6.4	6.5	4.4	2.9	3.2
Minimum	1.9	1.8	.1	−.5	1.2	1.2	−1.6	1.0	1.1	1.7	1.6
Maximum	11.6	8.9	11.1	6.0	6.6	7.1	7.6	7.4	6.5	4.6	3.8
Mean	6.25	5.54	5.14	3.23	3.60	4.53	3.90	4.29	3.78	3.18	3.04
Std Dev.	3.40	2.41	3.15	2.09	2.06	2.06	2.90	2.22	1.66	.87	.71
CV	.54	.44	.61	.65	.57	.46	.74	.52	.44	.27	.23

[1]Figures for 1992–1994 are for United Germany.
Source: *European Economy . . .*, Commission of European Communities, 1994.

is an accomplishment for the EC since it is central to the achievement of a single market as well as progress toward a single currency.

Since mid-1992, the European Monetary System (EMS) has experienced a series of crises. As the EMS was transformed in the late 1980s from a system of "fixed but adjustable" exchange rates to a system with no realignments, instability has resulted,

Exhibit 13
Annual Average National Currency Unit per ECU

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	Average	Standard Deviation
Belgium	45.44	44.91	43.80	43.04	43.43	43.38	42.43	42.22	41.59	40.52	43.08	1.40
France	6.87	6.80	6.80	6.93	7.04	7.02	6.91	6.97	6.85	6.64	6.88	.11
Germany[1]	2.24	2.23	2.13	2.07	2.07	2.07	2.05	2.05	2.02	1.94	2.09	.09
Ireland	.73	.72	.73	.78	.78	.78	.77	.77	.76	.80	.76	.03
Italy	1,381.40	1,448.00	1,461.90	1,494.90	1,537.30	1,510.50	1,522.00	1,533.20	1,595.50	1,838.40	1,532.31	115.99
Netherlands	2.52	2.51	2.40	2.33	2.33	2.34	2.31	2.31	2.27	2.18	2.35	.10
Spain	126.57	129.13	137.46	142.16	137.60	130.41	129.41	128.47	132.53	148.62	134.24	6.71
U.K.	.59	.59	.67	.70	.66	.67	.71	.70	.74	.78	.68	.06

[1]All exchange rates are based on West Germany.
Source: *European Economy . . .*, Commission of European Communities, 1994.

primarily from lack of real convergence in the EC economies. This trend has continued in spite of progress on nominal convergence. Exhibit 13 details exchange rates for each country in terms of the ECU. The volatility of the currencies is illustrated by the standard deviation of each of the currencies over the time period analyzed. An F-test for differences in the standard deviations showed that exchange rate volatility differed for most of the country pairs.

Given the variance in the currencies, what is the likelihood of a single Central Bank and single currency in the near future? The Maastricht Treaty (passed in December 1991) amends the Treaty of Rome to include provisions for greater foreign and domestic policy coordination and complete European Monetary Union (EMU) by the end of the century. The EMU was supposed to build on the foundations of the thirteen-year old European Monetary System (EMS), and was designed to promote greater monetary stability within Europe. However, the implementation of the Maastricht Treaty in the near future is unlikely, given the differences in economic conditions and the fear that some countries have of losing control of monetary policy as a domestic stabilization tool. There are sovereignty issues involved in getting member states to agree on the make-up of a Central Bank and single currency. Real winners and real losers will evolve from the establishment of a single currency, so it is not surprising that some countries are in strong opposition to this movement. Under these circumstances, currency risk and exchange rate costs will continue to be factors that impede the free flow of capital into real estate investments within the EC.

Conclusions and Implications of the Analysis

In this paper we have provided a descriptive comparison of some of the institutional differences found within selected countries that we believe are likely to impact commercial real estate investment in Western Europe. We have also analyzed what the trends in these determinants have been over the last decade. The differences we identify and the lack of significant convergence in the real estate market determinants indicate that impediments remain to the creation of a uniform property market within the EC. Differences between the countries make it costly to undertake an international real estate investment within the EC, and the uncertainty associated with European integration increases the risk of undertaking such investments.

Unlike other research, which typically analyzes a single time period, we have systematically analyzed the trends over a ten-year period within selected European countries to ascertain whether or not there has been convergence during two periods, 1982–1993 and also over the subperiod, 1989–1993. As might be expected, the determinants of value that experienced the most dramatic level of convergence were in the costs of financing a real estate investment and inflation rates. With greater capital mobility resulting from the liberalization of capital markets within the EC and globally, financing costs have declined and become more similar among the countries, as economic theory would predict. The European Commission has placed strong emphasis on nominal convergence and so the fact that inflation rates have become more similar over the decade is also not surprising. This convergence in the nominal sector may be partly responsible for the convergence that has occurred to a lesser extent in some of the real estate-specific variables—rental rates and yields.

Areas where one might not have expected to see a lot of convergence are in some of the institutional features of real estate markets such as lease structures and transaction costs. These tend to be tied to sovereignty issues which are often difficult to change. In these areas, significant differences in the real estate markets persist, privileging those with local knowledge. In addition, one would not have expected to see much, if any, convergence in the real sectors of the EC economies. The fact that there has been divergence is not surprising since there has been no explicit harmonization of real economic variables by the European Commission. Furthermore, the real effects of economic integration are longer term and should not be evident over such a short time span.

The evidence suggests that there is some convergence in the real estate market determinants in the EC and this convergence will continue into the future as long as progress toward economic integration continues. This will have the effect of reducing barriers to the efficient flow of investment funds into real estate within the EC. However, large differences remain with respect to many of the market determinants and most do not seem likely to change dramatically in the near future. The more recent subperiod, 1989–1993, did not reveal trends that were significantly different from those observed over the 1982–1993 study period. Thus, the process of market convergence is likely to be slow and barriers to efficient investment flows are likely to remain a reality for European real estate markets for some time to come.

Two avenues of additional research are suggested by this study. First, there has been an obvious trend toward globalization within the financial markets and our results may simply be a result of this phenomenon. This area needs further exploration to help explain the recent trends toward convergence. Secondly, the area of international diversification within the real estate markets of the EC needs to be examined. If there are diverging trends then this would indicate that a portfolio manager could achieve diversification gains by investing either on a regional or national basis within the EC or by property type. But, if the markets are converging, then the diversification benefits from an international investment strategy could be lost. This is an area where additional research is necessary as the institutional investor begins to consider international real estate investments.

Notes

[1]*Completing the Internal Market*, identified as COM (85) 310 Final, Commission of the European Communities, Brussels, June 14, 1985.

[2]The *Cecchini Report* was a research report compiled with the purpose of quantifying the benefits of economic integration for the EC.

[3]It is interesting to note that several reviewers have commented that the trends, particularly in financing costs and inflation, may be more dependent on increased globalization rather than simply the movement to the Single European Market. To some extent this is probably a fair statement, although the globalization is occurring due to the regionalization, so that it is difficult to say which came first—the chicken or the egg. Nonetheless, to limit the scope of this paper we are analyzing only the European markets but in future research we hope to explore the convergence on a more global basis to discern if there are significant trends between the development economies that would then impact international diversification strategies.

[4]See Acosta and Renard (1993), Dieterich, Dransfield and Vob (1993), Needham, Koenders and Kruijt (1993) and Williams and Wood (1994).

[5]Hillier and Parker, an international real estate consulting firm, publishes the annual report. The data are provided by affiliated companies in each of the member countries that practice in the real estate marketplace.

[6]Readers are referred to Worzala and Bernasek (1995) for detailed information on the individual countries within the EC. Furthermore, the working paper contains data for Portugal since 1986 and Denmark and Ireland from 1989. These countries were excluded from this analysis as we only had partial data. Greece and Luxembourg are two EC countries where we could find no historical real estate market data.

[7]The second time period was chosen after surveying several property experts. They felt that it was only after 1989 that the businesses and country administrations actually began to take the 1992 movement toward a single European market seriously.

[8]One of the major problems with trying to compare real estate markets across Western Europe is that the real estate data is very difficult to obtain. To complete our analysis, we have relied upon a report that contains information on the real estate markets but, unfortunately, it is only information on the major cities where real estate agents have major offices of operation. Some may argue that these cities, on the whole, have a similar and converging economic structure—international and business financial networks, for example. That is, they are driven by similar continent-wide (global-wide) fundamental forces (Lizieri and Denham, 1993), and the information from the property bulletins may be showing a convergence but the regions may actually be diverging. Additional research in this area, with better regional data, is necessary. This study represents only a first effort to systematically analyze the trends over time across the major European cities.

[9]The data on the various markets is compiled through surveys of commercial real estate experts. When asked about the yield definitions, the respondents are supposed to report yields based on net operating income and value. However, this is not a completely scientific analysis and they are providing trend information for the entire market. Ideally, we would have an average of actual yields on investments made and sold that year but, given the nature of the real estate market, this data is not available.

[10]The EC Directive explicitly incorporates the Value Added Tax (VAT) rates for each country. The Directive prescribes a range of 4–9% for the lowest rate, 14–20% for the standard rates and complete elimination of the high rate. Countries have converged in line with this. Interested readers are referred to Worzala and Bernasek (1995) for information on VAT rates among the EC member states and progress towards harmonization.

[11]Historical tax policies are very difficult to gather. We have used the primary source for 1985, 1988 and 1993 and then used a Price Waterhouse (PW) summary of both corporate and personal taxes to check the 1993 data and provide for the 1994 rates. Notice in Exhibits 8 and 9 there are some contradictions between the two sources for 1993 which provides evidence that this kind of data is difficult to collect on an international basis and is constantly changing.

[12]The data for 1994 are from Price Waterhouse and are not directly comparable with the data for the years 1985, 1987, 1990, and 1993. They are provided in the exhibit because they are the most up-to-date tax rates available.

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