FEATURE

Five Levels of Synergy Potential to Create Real Estate Value

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PROFESSIONALS IN THE REAL ESTATE INDUSTRY FREQUENTLY use the word "synergy." An Internet search in early 2010 using the search string "real estate synergy" resulted in 980,000 hits on Google and 1,130,000 hits on Bing. Downloading a sample of these sites indicated that "synergy" is used primarily as a marketing concept.[1] The concept of synergy is commonly used by industry groups such as property developers and shopping center operators. There is, however, little explicit discussion on how synergy creates new value. Standard real estate valuation textbooks indicate little coverage of the concept and its applications.[2]

The objective of this article is to propose a definition for real estate synergy; further, to identify how synergy may be applied to real estate assets on five separate levels. Because of such innovations as the Internet, globalization, securitization of mortgage markets and other changes, real estate analysis requires thinking more about linkages that can create synergy. Many real estate projects are affected by changes in a set of networked externalities that affect the internal economics of the project itself. Synergy is a useful analytical concept for considering value potential for linkages to externalities.

SYNERGY AND REAL ESTATE

The root of the word "synergy" is the Greek word *synergia*, which is defined as joint working, working together, collaboration or cooperation. It may be useful to rethink the real estate value in the context of the General Systems Theory. The biologist Ludwig von Bertalanffy is credited with articulating this theory in 1936. It was quickly adopted and extended by others in many fields. Systems theory describes connection, organization and interdependence of relationships. The advantage of a systems

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approach is that the decision maker can better understand how small changes in one part of the environment can produce unexpected effects on components of the real estate project or deal.

Dean Schwanke, writing for the Urban Land Institute, has touted synergy as one of the key benefits of mixed-use development.[3] Synergy benefits developers of these products with "premium prices or rents or faster sales or leasing." Another area in which synergy concepts apply is vacation timeshares. Timeshare developers and operators have found many ways to create synergy by building projects as part of hotels, by marketing to hotel customer lists for hotel-sponsored projects, by tying timeshares to vacation clubs, and/or by using a point system or "right to use" for a set period of years instead of fractional fee simple ownership.

A search of journals published by the American Real Estate Society produced one hit using the search word "synergy." This was an article on real estate joint ventures.[4] Even though the synergy vocabulary has not been explicitly used by real estate scholars, the synergy and systems theory concepts are implicitly understood. For example, Roulac applies to the real estate value chain concepts similar to synergy.[5] James R. DeLisle has summarized many scholarly studies that evaluated synergy in the context of shopping centers.[6]

A PROPOSED DEFINITION OF REAL ESTATE SYNERGY

Following is a proposed definition for real estate synergy:

A process of recombining, adding, subtracting or otherwise affecting relationships of internal or external factors associated with a real estate asset that results in increased overall value at a specific point in time.

This definition is related to the appraisal concept of highest and best use. A conventional definition of highest and best use has been developed by the Appraisal Institute: "The reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported and financially feasible, and that results in the highest value."[7] The Appraisal Institute's flagship textbook requires appraisal professionals to answer this question as part of their highest and best use analysis: "Should the existing improvements on the property be maintained in their current state, or should they be altered in some manner to make them more valuable, or should they be demolished to create a vacant site for a different use?"[8]

Also influencing the definition is the work on feasibility analysis by James A. Graaskamp. He noted that a real estate client who is putting together a deal has the ability to design or change variables but must work within a set of constraints. Graaskamp wrote: "He can give form to these variables, but this form must be compatible with the context of all those factors which he cannot change and which place demands on the solution or form which he selects."[9]

Classical appraisal theory has always understood that real estate includes connections to non-realty factors. For example, Frederick M. Babcock, in the seven valuation approaches described in his treatise, contemplated income distributed to chattels and income distributed to business.[10]

ECONOMIC ELEMENTS HAVING SYNERGY POTENTIAL

Real estate is more than just the physical property and its improvements. This article suggests that real estate assets may be evaluated for synergy potential on five separate but interconnected levels (see Figure 1).

Figure 1

Economic Elements	Explanation and Examples
Level 1: Physical	Tangible elements fitting within the conventional definition of real estate such as land, improvements, utilities, water, minerals, etc.
Level 2: Activity	Elements that encompass the economic uses or internalities of the real estate such as going concern values incorporating tangible and intangible elements contributing to the overall project.
Level 3: Relational	Physical and economic linkages between the real estate and the rest of the world. These include situs (location and access), leasing lock-ins, branding, market power, etc.
Level 4: Financial	Deal structuring, influencing access to capital, tax subsidies, leverage and investor base, all of which create financial synergy possibilities.
Level 5: Intangible	Various tools provided by the legal system: contracts, intellectual property and public entitlements.

Source: Ordway and Friedman, 2010

LEVEL 1

Level 1 consists of the physical, on-site elements of real property. Most real estate professionals have significant experience analyzing and describing existing or planned real estate assets. The traditional elements that are typically evaluated in the standard appraisal methodology under the Uniform Standards of Professional Appraisal Practice (USPAP) are the basis of Level 1 analysis. USPAP Standards Rules 1–2 require an appraiser to:

- identify the characteristics of the property that are relevant to the purpose and intended use of the appraisal, including:
  - its location and physical, legal and economic attributes;
  - the real property interest to be valued;
  - any personal property, trade fixtures or intangible items that are not real property but are included in the appraisal;
  - any personal property, trade fixtures or intangible items that are not real property but are included in the appraisal;
  - any known easements, restrictions, encumbrances, leases, reservations, covenants, contracts, declarations, special assessments, ordinances or other items of a similar nature;
  - whether the subject property is a fractional interest, physical segment or partial holding.

Level 1 is the traditional foundation of most real estate analysis. Synergy is created when the internal built product is combined with land that has important linkages (for example, a shopping center that is developed near an intersection with streets that connect with populated housing areas).

The synergy questions that must be addressed include: Is the land developed to its highest and best use? Is it the right-sized improvement on the right-sized land built at the right location at the right time and for the right price?

LEVEL 2

Level 2 addresses the issue of how activities on the site affect the overall project. Appraisal theory includes in its scope a broad definition of real estate assets that goes beyond land and its improvements. In recent years, the appraisal literature has added more consideration of going concern value, incorporating tangible and intangible elements that contribute to the land and improvements. For example, there was a discernible expansion of coverage and detail on this topic between the 11th (1996) edition of the Appraisal Institute's primary textbook and its 12th (2001) edition.

A classic example of activity-based synergy is the typical American shopping mall. The mall generates reciprocal synergy from the tenant mix of anchors, specialty stores, restaurants and entertainment venues. Synergy might be improved by a better relationship of stores, improvement of traffic flow patterns, and marketing and promotions. In recent years, some shopping centers have experienced increases in gang activity and a growing crime problem. This problem is the opposite of synergy, and is sometimes called antergy or dyssynergy. A synergistic solution that some of these centers have undertaken is to provide space in the center of the mall for city police substations.

Likewise, brownfields and superfund sites suffer from antergy. Because of strict liability issues for clean-up responsibilities, many stigmatized sites suffer a severe market discount. In some cases the problem is incurable, but in other cases some developers have found that remediation of the defects can result in a synergistic value gain.

Part of the valuation problem faced by the real estate professional is how to properly design the site to maximize its functionality and architectural appeal. Paradoxically, aesthetics can result in diminished value. For example, in a mixed-use project in Atlanta, the retail component was designed around an ice-skating rink. This amenity created noise and restricted customer access. By removing the rink, the freed space was used for dining areas and free flow of customers. It also allowed for an integration of a hotel that had been previously isolated. This resulted in enhanced value to the overall project.

LEVEL 3

Level 3 deals with how the real estate project relates to off-site, trade-area, regional relationships, and the real and virtual world. Synergy could be created by better management of the supply chain, physical access, and different types of human, structural, customer capital and brand capital.

- **Human capital** is employee and organizational know-how consisting of skills, tacit and explicit knowledge, and competence. Human capital depends on management policies and techniques that begin at the top of the organization and permeate throughout the entire structure of the organization, with particular emphasis on the point of sale and servicing levels. One area often overlooked is the proper maintenance and supervision of the property management and leasing team. To some extent, these assets can be kept intact with a carrot-and-stick policy. The carrot can include stock options, bonuses and positive feedback. The stick includes a well-maintained trade secret program including confidentiality agreements, non-solicitation contracts and non-compete contracts.

- **Structural capital** consists of assets such as information and databases, customer lists, internal manufacturing and management processes, and other organizational capabilities used to work with customers in the marketplace. External structure and processes consist of supply chain management, suppliers, other service providers and regulators, and brands and image.
- **Customer capital** consists of customer loyalty and satisfaction. Customers can lead to repeat business and referrals. Failure to understand the value of this intangible capital can ruin a company. Solid brand promotion and management can maintain this asset. Customer loyalty programs (such as hotel guest loyalty programs or supermarket discount cards) also can be used with some real estate products or services.
- **Brand capital** is created by the establishment and promotion of an image that is directed to a defined target market. Brand capital is enhanced by the legal tools described under Level 5. For image creation in a shopping center, care should be taken in attracting a tenant mix that is consistent with the expectations of the targeted customers. For example, including a Tiffany & Co. with a used-clothing store may create a discordant message.

Mastering Level 3 possibilities are such companies as Walmart, Disney and McDonald's. Walmart has been relentless in driving down prices by managing its supply chain and its just-in-time inventory system. The company also has been able to rationalize its real estate in the context of a global distribution system. One of Disney's strengths with respect to its theme parks is the close attention it pays to the customer experience. Its employees undergo continuous training to positively engage with the public. It is difficult to find any Disney person without a smile, with the possible exception of Grumpy on the Snow White ride. McDonald's has mastered the system of clean restaurants, excellent locations, and a system that delivers fast and dependable food on a global basis. It does so by managing its human and structural capital to constantly build a loyal customer base, starting with children in its play areas to retired customers with its discounted "senior coffee."

LEVEL 4

Level 4 recognizes the importance that financial capital plays in the capital structure of a real estate project or company. Timing and cash flow amounts associated with mortgage financing can create risk-and-return synergies. Playing into the mix are the covenants and conditions required by lenders and equity investors.

Financial synergies offered by real estate may be demonstrated by fractionating the property into various ownership components such that the value of the sum of its parts exceeds the whole.

In its simplest form of fractionating a property, a purchaser arranges mortgage financing at market rates and terms. The purchaser, who gains ownership of the equity, leverages the investment. Leverage magnifies returns, whether negative or positive.

The mortgage lender seeks a competitive rate of return on investment, through receipt of interest, and a recovery of investment through amortization receipts or repayment of principal in a lump sum. A mortgage at a higher-than-standard principal may be arranged in exchange for a below-market interest rate. A second or third mortgage might be arranged.

The ownership may be fractionated further, and often is, especially for commercial property. The land may be sold and leased back, releasing immediate cash to the seller, who becomes obligated for future payments as lessee. The rental rate to be paid will depend on the security of the land lease, depending on subordination (or its absence) to prior liens.

More complicated financing or ownership arrangements can be made by selling various tangible or intangible components of the property to those who appreciate the characteristics offered.

In addition, the equity itself may be fractionated by one of a variety of syndication forms including corporate, partnership, limited partnership, limited liability companies or tenancy in common. Each may have unique liability, income tax, control or other consequences.

Each possible partial interest, entity or variation may add value such that the aggregate value of the individual parts exceeds the whole.

The successful entrepreneur attempts to carve out various ownership interests, each of which is sold to a party with a special appetite for that component. Raising more money to purchase real estate by selling individual components demonstrates the power of financial synergy.

Complicating synergy possibilities are constraints put on the financing structure by lenders requiring certain covenants and conditions as consideration for their participation. This can limit management flexibility and put a ceiling on value growth potential.

LEVEL 5

Level 5 addresses intangible property associated with real estate ventures. Of particular importance are such issues as copyrights in the architectural designs, trade dress and branding. There may also be some issues associated with patents of business models.

Intangible assets and intellectual property (IP) can be a key element in modern real estate value. The nature and importance of IP has been transformed during the last decade. The rules have changed. Initially, the transformation began when IP laws in the United States and in other countries were a part of the World Trade Organization (WTO) process. As a consequence of legal reforms, IP owners were able to successfully bring forth court actions winning large awards for misappropriation and infringement. The message from the courts was heard, as companies were motivated to quickly negotiate licensing agreements.

Four primary weapons provide legal protection over an entire range of assets and activities, creating an edge for companies competing in the global market environment. The weapons are trade secrets, patents, copyrights and trademarks.

A trade secret is business information that has value because competitors do not know it; reasonable steps must have been taken to keep the information secret. Common law and state statutes protect trade secrets. Applicable definitions vary among the states. Some states will protect only technical information (e.g., computer source code, mechanical processes, etc.) as trade secrets. Nontechnical information (business information such as customer lists or pricing data) will require signing confidentiality agreements to provide protection. Criminal law protection is provided at both the state and federal levels. The U.S. federal government put sharp teeth into the protection of trade secrets in the Economic Espionage Act of 1996 (18 U.S.C. 1832), which was signed into law on Oct. 11, 1996. This law makes theft of trade secret information a federal criminal offense and gives the Department of Justice authority to prosecute trade secret violations. The Act is intended to supplement state trade secrets protection rather than to supplant it. Trade secrets can protect real estate data, customer lists and development plans, among other real estate-related assets.

A patent is a government grant of a property right to exclude others from making, using, selling, offering to sell or importing a claimed invention for a specific time period within the territory of the country. Patents encourage technological advancement and economic growth. An inventor has a monopoly for a specific period of time in exchange for a full public disclosure of how the invention works. The inventor is given the incentive to invent by being able to financially exploit the invention and exclude competitors. The patent holder is responsible for taking the initiative to enforce a patent. The holder has the economic incentive to maintain the legal monopoly. By rigorous enforcement of patent rights, it is possible to reap additional licensing fees, collect damages and maintain monopoly pricing to optimize total income under market demand conditions. Patents have limited application to most real estate assets, but some construction processes, materials and business processes (especially those linked to computer applications) potentially create synergy.

Copyright protects original works of authorship including literary, dramatic, musical, artistic and certain other intellectual expressions, covering both published and unpublished works. This protection may last for the lifetime of the author plus 70 years. For companies, the copyright for publications lasts for 95 years or 120 years from creation.

Some people may not be aware that as of Dec. 1, 1990, copyrights apply to architectural drawings and design features incorporated into buildings. Artistic works such as sculptures in a building come under The Visual Artists Rights Act of 1990 (VARA). Some states such as California give similar rights to artists. VARA allows, under some circumstances, for the artist to control the work even if it has been sold by retaining his "moral rights" to the work.[11] The artist can agree to give up these rights as in a "work for hire" contract or other waiver provisions in a contract.

A mark (trademark or service mark) is a name, symbol, combination of name and symbol, or other indication of source and quality that distinguishes a business or products from competitors in the same field. A mark protects a business from unfair competition by those who would pass off their products or services as being those of the mark owner. The most recognized mark, a trademark, is a territorial right and must meet registration and other requirements specified within each nation. The basis for protection in most countries is registration in the national trademark register. In the U.S., this would be the U.S. Patent and Trademark Office. It is also possible to register a trademark in a given state, but protection would then be limited to that state. National registration enables enforcement of trademark rights including activities that might dilute a trademark through the court system. It is also possible to defend under common law an unregistered trademark if prolonged usage has enabled the mark to attain a secondary meaning.

Marks are the underlying basis for protecting brands. Some real estate projects have had enhanced value due to branding. For example, Disney's Celebration in Florida has been able to command premiums for houses because of the Disney brand. Until recently, the Trump brand enhanced the values of luxury condominiums, hotels, golf courses and other properties.

Similar to marks is trade dress protection for real estate assets. Trade dress enables protections under Section 43(a)(1) of the Lanham Act. It can be protected with or without registration. Trade dress consists of a combination of shapes, colors, designs and other elements that create a unified image such as the combinations found in typical McDonald's restaurants and Starbucks coffee shops. The leading real estate case is *Two Pesos, Inc. v. Taco Cabana,* 505 U.S. 763 (1992). The U.S. Supreme Court upheld the general idea that to prevent confusion on the part of the public, one restaurant chain cannot copy the image already developed and promoted by another restaurant chain.

CONCLUSION

This article proposes a five-level framework for analyzing potential synergy in real estate projects. The first two levels deal with on-site aspects of the project. The first involves the physical real estate itself; the second level deals with the business activities that take place on the site—both the businesses and the customers who use the site.

The next three levels are concerned with the externalities associated with the site. Level 3 deals with relational externalities including four forms of capital: human, structural, customer and branding. These contribute to the efficiency and effectiveness that can enable the real estate asset to maximize its productivity. A key to achieving full potential is skillful management. The analyst can only recommend what should be done. The management team makes it happen. Level 4 addresses the issue of financial structuring. The decision maker must seek an optimal balance between risk and return, and what lenders and other equity investors will allow. Finally, Level 5 identifies synergies that can be achieved by rethinking how new laws involving intellectual property can enhance value. New doctrines by the U.S. Supreme Court and state courts, new trade secret legislation passed by Congress, strengthened federal and state trade secret enforcement, and the WTO international rules have created new synergy possibilities.

Most real estate professionals have probably implicitly considered each of the five levels of synergy potential at one time or another. Published research has lagged behind cutting-edge practice. Evaluation of real estate developments in the context of synergy principles provides a qualitative approach to better uncertainty/risk assessment. ■

ENDNOTES

1. Both searches indicate the word "synergy" was typically part of the name of a company or a promise that use of services would increase value to the client.

2. *The Appraisal of Real Estate, 11th Edition*, 1996, *12th Edition*, 2001, and *13th Edition*, 2008, Appraisal Institute, Chicago; Byrl N. Boyce and William N. Kinnard, Jr., *Appraising Real Property*, Lexington, Mass., Lexington Books, 1984; H. C. Smith, *Real Estate Appraisal*, 1977, Columbus, Ohio, Grid, Inc.; J. H. Boykin and A. A. Ring, *The Valuation of Real Estate*, *4th Edition*, 1993, Englewood Cliffs, N.J., Regents/Prentice-Hall; G. F. Bloom and H. S. Harrison, *Appraising the Single Family Residence*, 1978, Chicago, American Institute of Real Estate Appraisers; and J. P. Friedman and N. Ordway, *Income Property Appraisal and Analysis*, 1981, Englewood Cliffs, N.J., Prentice-Hall.

3. D. Schwanke, *Mixed-Use Development Handbook*, 1987, Washington, D.C., The Urban Land Institute.

4. F. A. Elayan, "The Announcement Effect of Real Estate Joint Ventures on Returns to Stockholders: An Empirical Investigation," *The Journal of Real Estate Research*, 1993, Vol. 8, n. 1.

5. S. E. Roulac, "Real Estate Value Chain Connections: Tangible and Transparent," *The Journal of Real Estate Research*, 1999, Vol. 17, n. 3.

6. J. R. DeLisle, "The Evolution of Shopping Center Research: A 12-Year Retrospective," *Journal of Shopping Center Research*, 2005, Vol. 12, n. 2.

7. *The Appraisal of Real Estate, 13th Edition*, op. cit., pp. 277–278.

8. Ibid., p. 278.

9. J. A. Graaskamp, *A Guide to Feasibility Analysis*, 1970, Society of Real Estate Appraisers, p. 3.

10. F. M. Babcock, *The Valuation of Real Estate*, 1932, New York, McGraw-Hill Company. Babcock's seven approaches or "methods" were: Income Method (commercial rentals); Income Method (business profits attributable to real estate); Income Method (business profits distributed between real estate and chattels); Income Method (business profits distributed between real estate and business); Replacement Cost Method (business profits); Market-Comparison Method (amenity returns); and Replacement Cost Method (amenity returns), pp. 165–180.

11. VARA attempts to narrowly pattern the international Berne Convention for the Protection of Literary and Artistic Works. It tries to protect creators of fine arts and photographs the right to control the use of their authorship, and limited rights to prevent modification of their works. The most significant real estate impact is the right to protect an artistic work that is part of a building. These so-called "moral rights" can be waived only by a specific signed agreement.