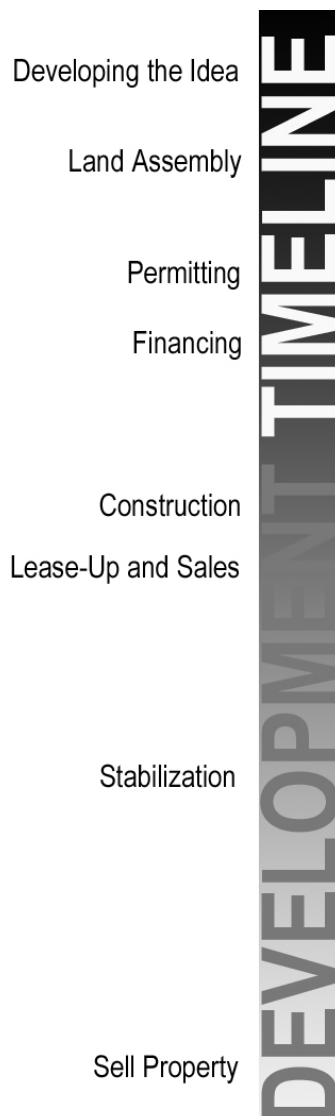


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New Century Cities: Real Estate, Digital Technology and Design

Session 5: Real Estate Value

Five Models for Evaluating Real Estate Development Projects



Model 1 Valuating Real Estate Projects in the Traditional System

- Concepts of discounted cash flow and net present value to valuate a development project
- Some basics of real estate capital markets in general (REITs, Opportunity Funds,...)

Why has this model persisted among developers? What are the advantages and disadvantages of evaluating projects in this way?

Model 2 Capturing Spatial and Amenities Value

- This model is concerned with understanding the demand side for certain real estate amenities (rather than the cost of developing better designed buildings).
- Vandell and Lane attempt to understand the importance of design qualities and amenities empirically. The research draws on data about 102 class A office buildings in Boston and Cambridge and finds three things:
 - Strong influence of design on rents
 - Weak relationship between vacancy rates and design, so soft markets do not unleash a “flight to quality” (in fact profitability is predicted to decline with increased design quality)
 - Construction costs were higher on average for well designed buildings but controls for age, size and height offset some of the costs
- The Stanhope survey of workplace satisfaction provides a more idiosyncratic piece of evidence for the importance of non-productive spatial amenities such as light, landscaping and meeting spaces. Can we extrapolate from these types of surveys to urban spaces in general?

How can we define design and spatial amenities?

What assumptions about design do the various actors in the development process bring to the table?

How often do locational advantages interfere with design features, in other words, are buildings in prominent locations more likely to be better designed? If so, what does that mean for good design in less advantageous locations? Is this a strong argument for holistic development where multiple sites benefit from an overall vision?

Model 3 Business Value

- Capturing the business value or non-location based value of development projects plays an essential role in shopping center development today
- Shopping centers capitalize on the mix of anchor tenants and smaller tenants just as some of the large new century cities developments market the importance of mixing certain industries and uses.
- Eppli studies large-scale shopping centers and tries to understand how anchor tenants enhance the potential for smaller tenants to capture retail business. Some implications he identifies are (however, these are not necessarily true based on more recent trends in retail development):
 - Development opportunities are driven by the level of cross-pollination that takes place among tenants (whether they are similar or different in size)
 - More and more space may tend to be allocated to the driving force in the mix, i.e. the anchor tenant rather than the smaller tenants

Does it seem realistic that developers will be able to capitalize on the mixing value of the communities they build? How would this work across different product categories such as housing, retail, and commercial space?

What are some of the problems with this model?

Model 4 Patient Capital and the Longterm Vision

- Leinberger suggests thinking about value for the longterm from an economic and a physical perspective, which would require new approaches on several levels: different approaches to financing (increase construction costs and equity investments), more varied developments programmatically, context-specific and urban development
- Leinberger argues that developers must invest in their projects for the long term and with more equity capital. He suggests a three-tranche model for equity capital:
 - *Short term equity* for the in-and-out investors who are paid back immediately from the initial cash flow or sales proceeds, no residual ownership, 12-15% returns.
 - *Medium term equity* for cash investors, landowner, building owner, infrastructure providers, developer who share residual cash flow and the “hope certificate of a project that has more financial upside than can be projected” based on how Leinberger suggests mixed-use, walkable, dense, urban projects usually perform.
 - *Long term equity* held by the municipality which is mostly interesting in seeing projects beneficial to the community through to completion.
- The advantages of slicing the equity are: (1) more equity capital in total, (2) a long-term vision that allows you to increase the quality of the project, (3) psychological benefit to more equity than debt. Overall, he suggests that fewer in appropriate projects would result from this approach. (See Albuquerque Historic District Improvement Company example.)

What are some of the examples of other forms of capital that might be more appropriate for these projects?

What are the built-in normative assumptions about city form in Leinberger’s model?

Model 5 Capturing Social Benefits

- Using double-bottom line metrics to capture both financial and social benefits explicitly
- Currently there exists a \$2.6 billion double-bottom line private equity market
- In the last several years, a new type of private equity real estate fund has emerged with an explicit social benefit mandate (e.g. \$100 Million Bay Area Smart Growth Fund and \$26 Million Nehemiah Sacramento Valley Fund)

What are the best criteria to capture the social benefits of real estate development in the context of new century cities?

Do these metrics relate to physical changes in the developments like providing more public spaces in projects?

What incentives do developers have to consider social value?

Conclusions and Questions

How do the issues discussed above relate to a (1) smaller-scale development projects and (2) new century city projects?

Do these alternative forms of evaluation lead to better projects?

What are the underlying assumptions about value in each of these examples?

Selected References

Model 1:

Geltner, David and Norman G. Miller. Commercial Real Estate Analysis and Investments. Mason, OH: South-Western Publishing, 2001.

Model 2:

Vandell, Kerry D. and Jonathan S. Lane, "The Economics of Architecture and Urban Design: Some Preliminary Findings," AREUEA Journal. Vol.17, no.2, 1989, pp. 235-265.

Meyerson, Jeremy. "Workspace Heaven?" Management Today. June 2003, pp. 1-9, www.clickMT.com.

Model 3:

Eppli, Mark J. and James D. Shilling. "Large Scale Shopping Center Development Opportunities." Land Economics. Vol. 71, no. 1. February 1995, pp. 35-41.

Model 4:

Leinberger, Christopher B. "Building for the Longterm." Urban Land. November/December 2003, pp. 95-104. <http://www.cleinberger.com/AdminHome.asp?ArticleID=205>

Model 5:

Research Institute on Social Entrepreneurship, 2002-2003, www.riseproject.org