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**FINANCING PROGRESSIVE DEVELOPMENT**

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# Financing Progressive Development

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## I. INTRODUCTION

Greek mythology recounts a particularly inventive torturer named Procrustes, who made a practice of waylaying travelers and making them lay on a twisted bed. Procrustes forced his victims to contort themselves on his bed and would either painfully stretch them to fit it if they were too short or cut off their limbs if they were too tall. The Procrustian bed was intended to make everyone the same shape and size...in today's parlance; one size fits all.

The last decade has seen the beginning of a great debate about American real estate development. On one side there is what has been called "conventional" development; predicated on the fulfillment of the desire for privacy, convenience, income segregation, and automobile accessibility. Conventional development results in land consumption that outpaces population growth (1 percent population growth in a metropolitan area generally means at least 7 percent increase in land usage as a direct result of conventional development), and has thus led to the unprecedented sprawling of America. Conventional development has been codified into 19 standard product types, as will be discussed below. These product types define America's built environment over the past half century, particularly commercial strips, regional malls, neighborhood centers, power centers, office parks and walk-up apartments, as well as low density, for-sale housing tracts.

On the other side is a growing cadre of critics of conventional development and proponents of community building, environmental sustainability and multiple transportation options. These reforms have been called "new urbanism," "smart growth", and "sustainable development". For the sake of simplicity, they will be referred to as "progressive development". Progressive development advocates argue that development can be mixed-use, pedestrian-oriented and mixed-income.

Proponents of progressive development are constantly confronted by the difficulty of financing. The financial markets are by necessity conservative, whether for equity or debt. The lack of a long track record of successful projects means that virtually all progressive developments now

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being planned will have difficulty obtaining financing. That difficulty translates into higher cost of capital, which makes the feasibility of a progressive development even more tenuous. In addition, progressive projects appear to perform financially in a fundamentally different way than do conventional developments. This means that applying conventional financing techniques to progressive development is not only difficult and costly, but also may impede a project's ability to meet the social, environmental, market, and ultimately, the financial goals of its sponsors. Ironically, the few financial successes of progressive development projects have resulted in some of the highest for-sale housing prices and retail and apartment rents in the project's region. Progressive development creates special places, unlike conventional development. As a result, prices and rents tend to rise well beyond that experienced in the local market. According to a *New York Times* article, Seaside in Florida changed the neighboring area around its 80 acres from the "Redneck Riviera" to the "Hamptons of the Southeast" in 15 years, with real estate values to match. Prairie Crossing, a progressive (conservation) development community in the far northern Chicago suburbs, sells as fast as any of its competitors but at a 40 percent price premium. The potential for price premiums for progressive development will eventually mean it may be somewhat easier to finance. However, this is not a certainty since the bulk of financial returns come in the mid-term and long-term, a time period not considered important to nor measured by conventional underwriting practices. The financial profile of progressive development does not fit the criteria uniformly employed today in evaluating prospective real estate investments.

A recent study by Gyourko and Rybczynski ("Financing New Urbanism Projects: Obstacles and Solutions" in *Housing Policy Debate*, Volume 11, Issue 3) showed that there is no inherent hostility to progressive development on the part of real estate underwriters. Underwriters reported that they would finance progressive development if it fit their criteria. This criteria, however, is not appropriate for all projects, although it may be appropriate for certain classes of investments and even parts of a real estate investment. Unfortunately, the broad application of these criteria and measurement methodology creates a Procrustian bed that twists and cripples the industry, investors and the built environment. It creates the "one size fits all" and the "could be anywhere" nature of how we build.

Unfortunately, there is at present no alternative way for investors to evaluate progressive development opportunities. They are blinded by the methodology and a mindset that was created for – and therefore encourages and rewards – conventional development. This essay attempts to remove those blinders by examining the implications of conventional investment expectations. It will then suggest financial strategies that could reward the appropriate investors and encourage progressive development.

## **II. THE SHORT TERM BIAS OF CONVENTIONAL FINANCING**

For the past 40 years, business schools have been teaching discounted cash flow (DCF) methodologies for comparing alternative investments. DCF and its various derivatives, such as net present value (NPV) and internal rate of return (IRR), are means by which different projected cash flows can be easily compared over time.

The assumption behind DCF calculations is that a dollar tomorrow is worth less than a dollar today. The amount an investment dollar falls in value over time is determined by the “discount rate,” which is determined by the cost of investor capital. The discount rate is a means of measuring the risk of the investment: the higher the discount rate, the higher the probable risk. With the discount rate one can evaluate the projected cash flow of a potential investment. For example, using a 15% discount rate, a lower middle of the range rate, a dollar received one year from now is worth \$.87 in “current” dollars, \$.50 after five years and only \$.25 after 10 years.

Internal rate of return is a DCF methodology for determining a specific rate of return of a projected cash flow over the life of an investment. The IRR is the discount rate at which the cash flow would be equal to the initial investment in current dollars. IRR is the most common method of evaluating a real estate investment. For a real estate development of moderate risk, the acceptable range for the IRR is between 15 percent and 20 percent per year. For riskier investments, this can rise to 35 percent. As the perceived risk of an investment increases, so does the IRR expectation. Most conventional project types, for example, which have a long and well-documented track record, would need a relatively low expected IRR to obtain financing, while a project with less of a track record would need a higher one. This results in a higher cost of capital for a progressive development, which could make the project unfeasible.

Table 1 shows two projected cash flows as evaluated by IRR. Figures for each year represent cash inflows or outflows for different hypothetical projects. The figure for the final year includes the cash flow for that year plus a theoretical sales price, estimated as 10 times the annual cash flow, a so-called 10 percent “cap rate” or capitalization rate. The first example is a short-term investment that is sold after seven years, while the second is a mid-term investment that is sold after 15 years. The amount of each initial investment is the same, but the short-term example shows more immediate cash flow. The mid-term example, by contrast, shows returns that are less attractive in the first few years but improve significantly after the seventh.

**TABLE 1  
COMPARING SHORT-TERM AND MID-TERM CASH FLOW RETURNS**

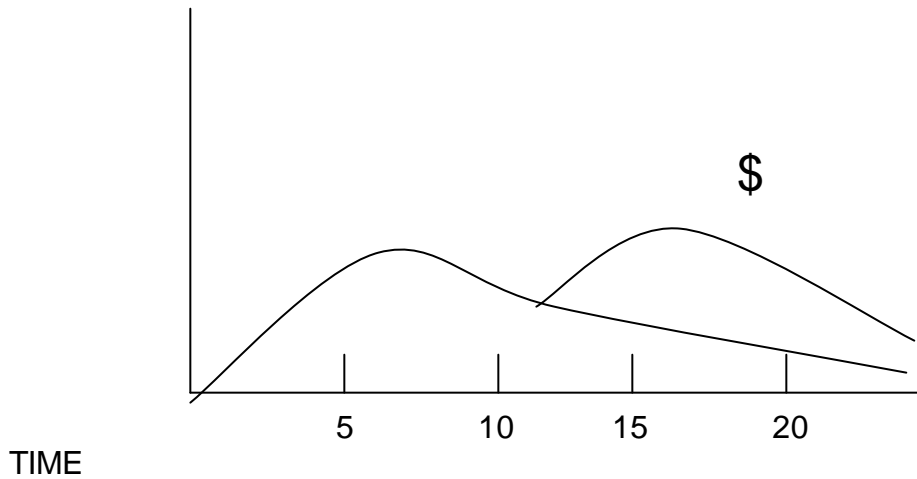
	Initial Investment	YEAR															IRR	
		(000)s	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15
Example #1 (short-term Investment)	100	0	8	11	13	14	15	176										<b>15.1%</b>
Example #2 (mid-term Investment)	100	-5	-5	0	5	11	13	14	17	20	23	25	27	28	29	330		<b>13.7%</b>

The short-term investment has a higher IRR than the mid-term, and would be selected by most investors. This is because the return of the mid-term example, when brought back to current dollars, represents only a fraction of its value in year 10 and beyond: the \$23 income projected in year 10 is only worth \$5.69 in current dollars. The IRR methodology gives investors an incentive to favor those projects that produce short-term cash flow, almost regardless of the strength of the mid-term cash flow. IRR also makes the implied, but never stated, assumption that all investors will want to continually re-invest their short-term gains into another short-term investment.

The primary way to achieve these desired short-term returns is to reduce the cost of construction. However, this shortens the productive life of the development. The lack of a financial evaluation methodology that measures mid-term and long-term cash flows means that there is no reason to build for the mid-term or long-term. Real estate is a long-term asset class—that is the reason the IRS depreciates real estate over 39 years—yet real estate is financed using the short-term bias of the current underwriting methodology as if it is a five to seven year asset. Why build a project for the next two generations when only short-term cash flows are measured and given credit in the financial underwriting process? Instead, build a project that is built to last less than half a generation. In spite of the common sense conclusion that real estate by its very nature should be productive for generations, a motivation behind real estate investment for centuries before the invention of DCF methodologies, current equity investments must be paid off by within three to five years. Our measurement methodology, considered so sophisticated and unassailable, has twisted, contorted and cut off the financial power of this 39-year asset class.

This short-term bias has had an immense impact on the character and quality of the built environment. The investment cycle for many income-oriented, conventional developments peaks around year seven, as graphically shown in Table 2. While a new peak can be achieved in subsequent years, it is usually the result of a major investment of additional capital, generally to reposition the project, shown as the second peak in Table 2. This new investment can only be justified if the local market has maintained its viability, i.e., urban sprawl has not moved the market further out to the fringe of the metropolitan area. For example, many well-located neighborhood centers can maintain their market viability if the location has not deteriorated *and* major reinvestment is made every seven years or so. Many inner suburban neighborhoods in the best sections of a metropolitan area, such as McLean outside Washington D.C. or Park City near Dallas, bear this out. In essence, due to the lack of confidence that a location will maintain its viability for longer than seven years, investors will only commit to a short-term real estate investment, building it cheaply. If the location maintains its viability, then another capital infusion will occur. This serial investment strategy, rather than a higher quality, longer-term approach robs investors of the heart of real estate's financial power. It also creates a throwaway built environment that few can be proud of.

**TABLE 2**  
**CONVENTIONAL DEVELOPMENT INVESTMENT CYCLE**



If the decision is made not to re-invest in a conventional development, the project begins to decline in value. The perverse logic of conventional development forces projects to build minimal construction quality to achieve the required DCF returns. As a result, conventional projects decline in appearance in a few years while operating costs increase, reducing their real estate value. This leads to a downward spiral of dis-investment in the project, which then infects the surrounding conventional projects. Without significant reinvestment, this contributes to the decline in the neighborhood, which leads people to move further out to the next new frontier on the fringe, where it is played out again.

There are now countless examples of this dis-investment throughout the country, such as Memorial Drive east of Atlanta. Known as the “Miracle Mile” in the 1980s as the highest concentration of restaurants and car dealers in the entire metropolitan area, it is now filled with over 15 dead or dying strip malls.

The irony is that, although consumers have an unbelievable amount of choices in supermarkets, real estate investors have only one type of financial returns, i.e., short-term cash flows that must be constantly reinvested. There are many investors who would prefer mid- to long-term investments that can gain substantial value due to intrinsic variables, such as quality construction, location and emotional importance to consumers due to the architecture. The financial underwriting of conventional development implies that investors must accept a “one size fits all” short-term logic since DCF ignores mid- and long-term returns.

We marvel at the architectural design and quality of construction seen in the great retail emporiums, apartment buildings and office blocks built before the Second World War. We treat them

as if the builders were unknowable “ancients”, blessed with immensely more wealth than we have. In reality, of course, the country’s per capita gross domestic product is three times higher today in real terms than in, say, the 1920s. The difference is that real estate investments made before discounted cash flow became widely used were generally built for the ages, and not for short-term returns. We have all been waylaid by Procrustes.

### **III. MARKET’S DRIVE FOR STANDARDIZATION; THE EMERGENCE OF 19 STANDARD PRODUCT TYPES**

Another factor to be considered in understanding investor bias in favor of conventional development is the desire of investment bankers and financial traders, whether on Wall Street or any other financial market, to trade similar products like commodities. Pork bellies, for example, were first uniformly classified and graded according to quality in the late 19th century. This innovation allowed for the trading of huge quantities of pork bellies by commodity traders who had not seen the actual raw item in years, if ever.

A similar system has been adopted recently by real estate investment bankers. “Market makers” in various real estate products have devised standardized categories. For instance, a “neighborhood center” is a retail product that occupies 12 to 15 acres, anchored by a supermarket/drug store of between 50,000 and 70,000 square feet. It also includes in-line stores of national chains and franchises. The buildings occupy 20 percent of the site and are set back from the street; the balance of the land is surface parking. The location has a minimum of 20,000 people living within a three-mile radius and will have demographic characteristics appropriate for the particular supermarket chain. The center will be sited on a street with at least 20,000 cars per day passing by. It will preferably be on the “going-home” side of the street.

Neighborhood centers throughout the country are built according to this formula; the only difference is superficial ornamentation such as Mediterranean roof tiles in California, Colonial cupolas in Virginia or art deco color schemes in Florida. If a proposed neighborhood center fits this formula, it can easily obtain relatively inexpensive financing in the current market. If it deviates, however, it will encounter difficulties. Even if financing can actually be found for a shopping center not built according to a formula, it will be more expensive than a conventional project, and therefore less likely to be financially feasible.

The need for such standardized real estate products has increased since the early 1990s real estate depression, particularly because equity and debt controlled directly or indirectly by Wall Street have been a significant portion of recent real estate financing. While life insurance companies, pension funds and banks still play a major role in real estate finance, Wall Street financial “instruments,” whether they are real estate investment trusts or securitized mortgages, set the definitions for real estate products. These products are judged to be “conforming.”

As shown in Table 3, conformity has led to a short list of 19 real estate products that are acceptable for Wall Street and the rest of mainstream financial providers. This list of acceptable products will change in response to market conditions in certain places or overbuilding in certain

products, but holds as a general rule. Of the income-oriented products, all but two – urban entertainment and high-density rental apartments – must locate along or near strip commercial corridors and thus produce sprawl. And most urban entertainment and high-density apartments are built along sprawling strip commercial corridors anyway.

**TABLE 3**

**19 STANDARDIZED REAL ESTATE PRODUCTS  
(AS OF 3<sup>RD</sup> QUARTER, 2000)**

**Income Products**

***Office***

Build-to-suit  
Speculative suburban low-rise

***Industrial***

Build-to-suit  
Speculative warehouse (>28' clear span)  
Research and Development/Flex

***Retail***

Neighborhood (between 80-120,000 sq. ft.)  
Power (between 120-400,000 sq. ft.)  
Urban Entertainment

***Hotel***

Limited service  
Full service business

***Apartment***

Low-density suburban  
(Over 150 units @15-20 DU/acre)  
High-density suburban  
(Over 200 units at over 20 DU/acre  
stick-built construction)

***Miscellaneous***

Self storage  
Assisted living

**For Sale Products**

***Residential***

Entry level attached  
Entry level detached  
Move-up attached  
Move-up detached  
Executive detached

SOURCE: Robert Charles Lesser & Co.

The combination of discounted cash flow methodologies, with a bias towards short-term returns, and Wall Street’s need for standardized real estate products leads to a financial machine that creates sprawling strip commercial and sub-division housing. It creates the social and environmental problems of our suburban development patterns. Conventional development is well-understood, relatively easy to finance, simple to build and modular in nature so it does not need to relate to the surrounding built environment. These are daunting advantages.

**IV. THE VALUE CREATED BY PROGRESSIVE DEVELOPMENT**

Most progressive developments have one thing in common: they are pedestrian-oriented. These developments, as an alternative and supplement to conventional development, appear to have substantial market, environmental and public policy support throughout the country. However, progressive development also has a significant challenge. Pedestrian-oriented developments must include a complex mix of many different uses within “walking distance,” which is about a quarter-mile, and has been for thousands of years since mankind first started building cities.



To walk that far, pedestrians must have an interesting and safe environment. This means that there has to be a multitude of different shops, hotels, and offices, housing, public institutions and other things to look at and experience along the way. The mix of uses and experiences creates two crucial aspects of the environment: other people to look at, which is something that people greatly enjoy, and a feeling of safety. Even if a place has the lowest crime statistics in that section of a metropolitan area but there are no people on the street, pedestrians will feel a degree of insecurity and are prone to not walk.

Additionally, people need multiple transportation options to get to and around the clustered development, though cars will be the preferred means of travel for many years to come. Many of those cars have to be parked in parking structures—rather than surface lots—to make the place truly pedestrian-oriented. These parking structures cost approximately \$10,000 per space to build. However, they must be plentiful and free, at least initially, to compete with suburban commercial strips.

There are two ways of creating value in a pedestrian-oriented progressive development. The first is to create a “green-field” project from scratch or to revitalize a depressed older section of a city, such as a dead downtown. To create a pedestrian environment from scratch takes considerable effort and will take time, assuming one does not have the nearly unlimited financial resources, such as Disney Corporation did at Celebration in Florida. There needs to be a certain critical mass, generally at least a couple of completed blocks of housing and approximately 40,000 to 60,000 square feet of retail, which will take a few years—at least three to five—to build, sell or lease, or a huge amount of up front capital<sup>2</sup>. As the development struggles to create the critical mass, it generally requires additional investment and/or generates less cash flow than a conventional development.

The second way is to stretch the boundaries of an existing “alive” pedestrian-oriented section of town, most times just by a block or two. The extension of an existing area, adding more housing or commercial activity, is the very thing that continues to increase values in the core area, without the core area doing much more than maintaining the property and keeping current with retail trends. These extensions of urban vitality are the very thing that propels mid- to long-term value creation in real estate.

Extending a pedestrian area is less risky than creating or revitalizing from scratch but there are many examples of projects financially failing by being only a hundred feet or so too far from the edge of vibrant areas. As a result, when a new area is being pioneered, even an extension of an existing area, financial returns will be less than conventional development until a certain build-out

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<sup>2</sup> There are two problems with attempting to create the critical mass up front with a large capital infusion. The first is that there are few real estate investors with the wherewithal to pool that much capital, though it does happen on occasion. The second is that what is subsequently built is built by one hand and thus appears contrived. Pedestrian-oriented, special places are best if they emerge over time and have had multiple developers bring their unique vision to the project. The contrast between Main Street in Disney World and a real main street is the clearest example of this.

and “panache” has been achieved. With a walking-oriented place, a distance of even a single block can make a great difference in foot traffic, perception of safety, and real estate values. A high-end new night club that recently opened in downtown El Paso, two blocks from the fanciest and most popular restaurant in the city and one block from the only four star hotel, may turn out to be a block too far at the moment. Until other high-end commercial uses are attracted to the block, the project will probably struggle to lure its natural clientele the additional 100 feet. Yet this is how urbanity and vital pedestrian-oriented districts are created and extended.

Once a pedestrian-oriented district is established, real estate values tend to escalate to the highest levels in the metropolitan area. For decades, the highest real estate values in the country have been in the few vital downtowns in the country, such as Midtown New York, and the downtowns of San Francisco, Chicago and Boston, all examples of the “old urbanism”. Even selected pedestrian-oriented places in the suburbs, such as downtown Lake Forest, outside Chicago, Country Club Plaza and the Harvard Square area in Cambridge, have seen as high or higher commercial rents than regional malls in the area. The high density residential that has recently developed around these special places is equally high value.

The new generation of revitalized downtowns and alternatives to downtowns is witnessing the same relative level of rents and sales prices per square foot. Downtown Denver, Uptown Dallas and Midtown Atlanta, all very or relatively depressed twenty years ago, are now among the highest or the highest priced real estate in their metropolitan areas. Even green field suburban developments, such as Reston Town Center, Valencia Town Center outside Los Angeles, The Avenue in Baltimore and Carillon Point in Seattle, are all testaments to the relatively high value creation potential of pedestrian-oriented development compared to conventional development in the same market area. High value residential has followed the commercial in each of these cases since a “there there” has emerged.

Recent projects have also created and sustained value in excess of their competitors, though their short-term performance was sometimes inferior to nearby conventional development. Mizner Park in Fort Lauderdale, Hyde Park in Tampa, Valencia Town Center north of Los Angeles, The Avenue northeast of Baltimore, Harbor Town in Memphis, and Seaside in Florida are all examples of this. They were all generally slow in establishing the critical mass necessary to ensure success. Once they did, however, returns increased impressively.

For example, Seaside began selling its eighth-acre lots (approximately 5500 square feet) in 1984 for \$15,000, and only sold twenty in the first two years. However, when a fully built-out street, built at a human scale, emerged, supported by local-serving, initially developer subsidized, retail within walking distance, potential buyers could see the value of what was being created. As the critical mass was reached, around 1987, it became apparent that Seaside would be successful and the sales pace and prices escalated. In 2000, the last hotel pad was converted to for-sale lots. The first eighth-acre lot carved out of this parcel sold for \$1.4 million or a nearly 100-fold increase over the initial lots sold 15 years earlier. A year later these lots are selling for over \$2 million. Meanwhile, Seaside’s downtown, comprised of retail, office and rental apartments, was appraised for \$60 million

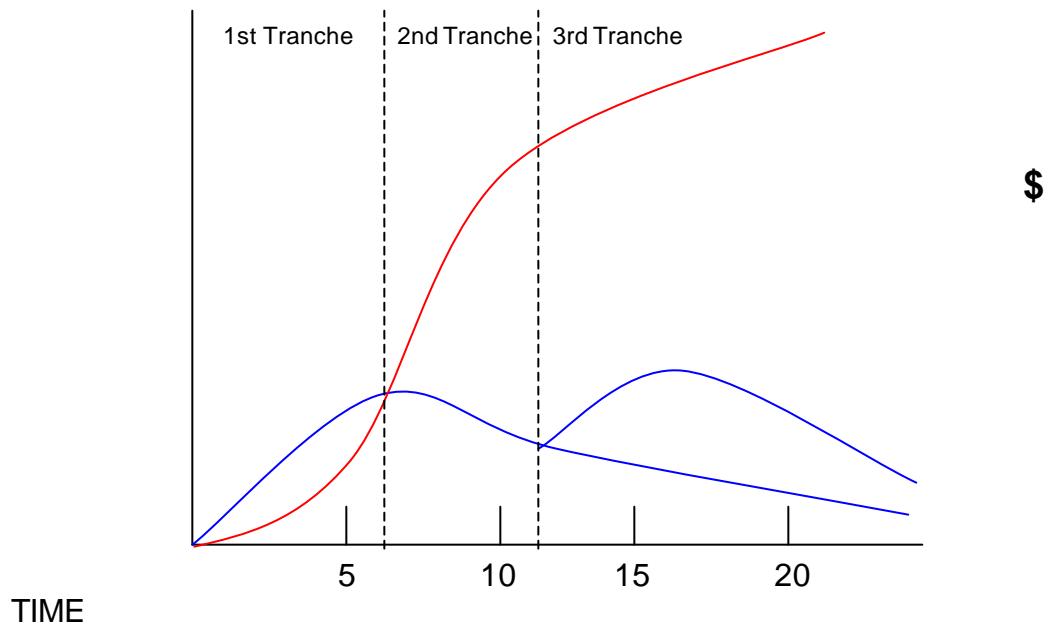
in 1998. Given that the property was only worth a million dollars when the project began and was located on the so-called “Redneck Riviera,” the current value of Seaside is testament to the appeal of new urbanist development. It is probably one of the most financially successful resort projects ever developed.

The major reason progressive development seems to yield higher mid- and long-term returns and has a longer life is the pedestrian nature of its design. In stark contrast to conventional development with its car-dominated character, progressive developments create special places that are rather rare in this country. Tourists traveling to European cities or the few great American downtowns do so to experience this special, pedestrian quality. Visitors to Disney World pay handsomely at the gate to experience a somewhat similar, though obviously artificial, environment.

Ironically, obtaining financing today for a new Seaside would face significant obstacles. Conventional underwriters can not see and do not value the mid-term to long-term value that it creates as being important. Even with a standing model to point to, a green-field replication in another section of the country would probably be hard to finance.

The challenge of financing progressive development is to prove that there are different investment characteristics of these types of projects. While it has not been definitively proven, there may well be an investment curve, as shown in Table 4, for progressive development that shows less return in the first few years of a project’s life but mid- and long-term returns that are far superior to *and* longer lasting than conventional development. This seems to fit the investment curve at Seaside and the few other successful developments.

**TABLE 4**  
**PROGRESSIVE AND CONVENTIONAL DEVELOPMENT INVESTMENT CYCLES**



However, there have not been retrospective financial assessments of these projects to demonstrate their performance. This is not unusual. There are rarely retrospective financial assessments of conventional projects either. This means that, in essence, virtually all capital allocations made to real estate development are based upon theoretical assessments of future performance, using IRR, and rarely with verifiable evaluations of actual, historical performance. Once the prospective evaluation has been done to make the investment or loan, only anecdotal evidence indicates whether the investment was sound or not. Therefore, while documented proof of progressive development's financial performance is certainly required and necessary, it is a standard that conventional development does not meet.

#### **V. MATCH APPROPRIATE INVESTORS WITH APPROPRIATE TYPES OF RETURNS**

Conventional development tends to limit consumer choice; one can shop along a 1980s commercial strip, or... one can shop along a 1990s commercial strip. As Tom Wolfe said in his recent book, *A Man in Full*, commenting on the infamous American commercial strip, "The only way you could tell you were leaving one community and entering another was when the franchises started repeating." The same narrow range of choices is available for buyers of, say, new upper-middle end housing. One can have a single-family detached house in a \$400,000 neighborhood or one can have a single-family detached home in a \$600,000 neighborhood. This is a direct result of the 19 standard real estate products.

This narrowing of choices has taken place for financial investors as well. There are different types of real estate investors with different needs. On the debt side, there are banks that are looking to make construction loans for a short period of time. Then there are institutions that will make permanent loans that they will keep in their own portfolio or sell to the secondary loan market. On the equity side, there are publicly traded real estate investment trusts that have a short-, mid- and long-term need for sustainable cash flow. There are foundations, university endowments, insurance companies, and pension funds that have well defined, predictable, short-, mid- and long-term cash flow needs. This latter group is the largest single category of real estate investors. Then there are individual investors with cash flow needs along the entire time spectrum. Yet every one of these investors, and their business-school-trained real estate advisors, use the same short-term biased methodology, and the same list of “conforming” products, to evaluate investments. One size fits all and the built environment has been contorted to match.

The real goal, then, is to connect appropriate investors with the appropriate investment. A possible solution borrows a concept from the commercial mortgage backed securities industry, a multi-hundred billion dollar secondary market for commercial loans. Various “pieces” of the debt of an individual project, so-called “tranches,” are divided according to the risk associated with each of them. For instance, the first position loan (the A tranche), is the loan that will be paid off before all others. It has the lowest yield because of its relative lack of risk. The mezzanine piece (the B tranche) is paid off next. It has higher risk and is therefore priced with a higher yield.

*Time* tranches could be introduced to match investors who have different investment horizons with the appropriate “piece” of an investment. An example is shown in Table 5. In it, the various cost elements of a project are divided into three categories: building development (the vertical component), land development and parking (the horizontal component), and land. Each of these pieces has a different cost associated with it, and is associated with a different investment time frame.

**TABLE 5**  
**AN EXAMPLE OF THREE TIME TRANCHES OF INVESTOR RETURN**  
**CASH FLOW DISTRIBUTION**

<b>TRANCHE</b>	<b>Cost Components</b>	<b>Years 1-5</b>	<b>Years 6-12</b>	<b>Years 12 +</b>
<b>1ST</b>	Building Development (65%)	90%	20%	10%
<b>2ND</b>	Land Development And Parking (25%)	10%	70%	45%
<b>3RD</b>	Land (10%)	0%	10%	45%

SOURCE: Arcadia Land Company

Short-term investors who want to get in and out within five years will receive the bulk of the cash flow during the first five years. These investors are likely to be construction lenders on the debt side and equity investors looking to constantly turn their investment capital. They will probably employ DCF methodologies, which are appropriate for a short-term investment. These investors are not as likely to value the mid- to long-term cash flows of a real estate project as much as the assurance of getting their capital and return back within five years. The percentage of projected cash flow is determined by that amount required to achieve, for instance, an 18 percent IRR on invested capital for an equity investor. The beauty in this approach from an urban design perspective is that only a portion of the costs of a project, 65 percent in the example outlined in Table 5, are being amortized over the first five years. As a result, a project of much higher quality can be built since 35 percent of the costs do not need to be amortized in the early years.

The second time tranche pays off the mid-term investors who receive most of the cash flow after the first tranche investors have achieved their expected returns. In the example, these investors receive 70 percent of the cash flows between years 6 through 12. They are willing to trade-off financial returns in the relatively poorly performing early years, to the left side of the s-curve in Table 4, for a large share of the mid-term returns. These will be entirely equity investors since the debt provided by banks will always be in a preferred return, short-term position.

Finally, the third time tranche investors receive the bulk of their returns in the long-term, after year 12 in the example. The third tranche investors will usually have other reasons besides the receipt of short or mid-term cash flow from the project as a motivation for taking this position. It could be that the investor is investing for future generations of their family, such as the Grosvenor family in London who has leased much of the land in the West End over the past 300 years. As a result of their patience, this family of former farmers are now one of the wealthiest families in the world. Another likely third tranche investor would be a municipality. They may be interested in

improving their downtown or other areas for political or quality of life reasons. These cities, towns or counties also benefit on a current basis from increased tax revenues, though some of these may be abated to help the financing of the project. If these municipalities do abate taxes, they should probably invest the abatement into their capital account to justify a larger negotiated stake in the long-term returns.

Certain landowners also have environmental or social reasons to contribute their land to a project and to accept long-term returns. They want their land to be developed in an environmentally sensitive fashion, as an antidote to sprawl or to create a vital place for people of all incomes and races to congregate. This non-financial compensation may be as important or more important than the financial compensation. Arcadia Land is working a joint venture with a church on thousands of acres of church-owned land to create a new urbanist development that is consistent with the church's religious mission. The church wants financial returns in addition to meeting their non-financial mission.

The difficulty in quantifiably evaluating mid- and long-term investments cannot be minimized. One option is a "current cash flow" (CCF) analysis. Such an analysis would evaluate projected cash flows on a "current" inflation-adjusted dollar basis, accounting for revenue increases driven by market forces when critical mass is achieved. Adding the current – positive and negative – cash flows year by year to see the aggregate totals, as well as judging whether the timing of the cash flows fits the needs of the investor, could be a tool for comparing one investment to another.

Another method to determine if the mid- to long-term investment is appropriate for the investor's mid- to long-term needs is to compare the expected returns to the expected coverage of cash flow needs in the future. Insurance companies, pension funds, universities and foundations can project their future cash flow needs reasonably easily. By investing X percent of their asset base in mid- to long-term time tranches, they may be able to cover some multiple of X percent of their expected cash flow needs in the future. The goal of the institution may be to cover 50 percent of their projected mid- to long-term cash flow needs from investments in mid- to long-term time tranches. This would be a financial base under the organization that may well be worth quite a bit to owners, managers and other constituencies.

Time tranches allows for an approximation of an old real estate investment method. Pre-DCF investors expected to subsidize a real estate investment during its first few years and then reap the benefits for decades. Historically, many of the great real estate fortunes were built this way, and there are many examples of the same approach today, generally by individual investors. This approach also offers greater financial stability that helps investors to ride out the inevitable industry downturns, which is important to investors in an industry that may be the most "boom and bust" in any asset category. As a result of time tranches, the risk of development be reduced, due to lower debt to cost ratios, and the quality of what is built can be increased since less of the short-term costs need to be amortized in the short-term.

## **VI. THE KEY TO ATTRACTING FINANCING TO PROGRESSIVE DEVELOPMENT**

There has been some discussion in progressive development conferences, such as those sponsored by Georgia Institute of Technology's "Smartraq" research project into smart growth, about how financial institutions and investors can be convinced about the financial viability of progressive development. The banks, which primarily make short-term construction loans, blame the permanent lenders, such as life insurance companies, since they will not give take-out financing to get the banks out. The developers say the banks will not lend to non-conforming products. Everyone has someone else to blame for why progressive development can not get financing. It has become a classic "Catch-22" problem.

The time tranche approach outlined in this paper points to the answer to the "Catch-22" problem. Time tranches imply that higher equity be invested in a real estate project than is normally the case for conventional projects. But it is the right kind of equity...that very rare equity known as "patient" equity. Whether the increased equity comes from landowners, municipalities, or cash investors, at least a third of the total project costs need to be equity, as opposed to 20 percent for conventional development. Therefore, the way to break the logjam of financing progressive development is through increased equity by equity providers with a mid- to long-term time horizon.

There is an added benefit to increasing the equity that is committed to a real estate project. That is the possibility that the construction loan can be more easily justified as non-recourse. Non-recourse lending means that the individuals or corporations promoting the development will not be liable for the debt if the project goes into default. From an individual perspective, this means less risk and many fewer sleepless nights.

## **VII. NEXT STEPS**

There are many things that need to be done to help progressive developments (and developers) gain access to financing. It starts with the retrospective analysis of conventional development projects to have a comparison for progressive development projects. It is hard to compare the financial returns of progressive development since we do not know the life cycle returns of conventional development, which is amazing given the trillions invested in real estate. Then there is a need for more research into the performance of historic and current progressive projects. There is also a need to define a much broader array of real estate product types than the standard conforming products. The 19 standard product types are too narrow to allow for the needs of pedestrian-oriented places. Mixed-use products, such as retail on the ground level with live/work above, are not included in the standard products.

Perhaps most important is the need to educate investors with a business or institutional need for mid- and long-term cash flows so that they can recognize that the conventional methods of evaluating and investing in real estate investment are not appropriate for all of their real estate investment needs. Private investors, pension funds, insurance companies and municipalities can all be invited to consider a portion of their real estate portfolio as mid- or long-term investments.



The investors most likely to re-evaluate their approach to real estate investment are charitable foundations. Many of the country's largest foundations, including MacArthur, Rockefeller, Surdna, Packard, Hewlett, Mellon, and Heinz, are focused on new urbanism, smart growth, and sustainable development. The environmental and social concerns of sprawl frequently motivate these concerns. By bridging the gap between the money making side of the foundation and the programmatic grant making side, foundations can make innovative real estate investments from the asset base of the foundation. One does not want to minimize the difficulty of bridging the two sides of a foundation. However, instead of investing the assets of the foundation in conventional development – that is, making short-term returns that are then given to various smart growth initiatives which in turn attempt to curb conventional development and promote progressive development – investments could become congruent with the mission of the foundation. In essence, the foundations can do good while earning a superior mid- to long-term return.

### **VIII. DOWNTOWN ALBUQUERQUE AS A MODEL**

The time tranche model is more than a theoretical one; Arcadia Land Company is involved in the redevelopment of downtown Albuquerque. Arcadia knew it needed a mid-term investor, because it recognized that a minimum of three to five years would be necessary to achieve the critical mass required to make the downtown project viable. It turned to the McCune Charitable Foundation, the largest foundation based in New Mexico. Smart growth was part of the foundation's mission, leading the executive director and the board to invest \$6 million of equity in the downtown Albuquerque effort, 4 percent of its asset base, to form the Historic District Improvement Company (HDIC) with Arcadia. This was initially only a "doing good" investment on the part of the Foundation Board, but they have begun to see that they might do quite well.

Downtown Albuquerque is a classic case study of a run-down downtown; there is very little residential property, office vacancy is the highest in the metropolitan area, the retail sector is nearly non-existent and there had not been a private sector building permit in over 15 years when HDIC was formed. It is home to 25,000 jobs in the finance and utility sectors, professional services and government, though the number has dropped over the past 20 years while the metropolitan area as a whole has boomed. It is relatively free of crime, but it does not feel very safe since the streets have few people on them, particularly at night, except for an abundance of the homeless.

A broad based strategy was put in place to turn downtown around in 1998 with strong support from the Mayor and the City Council. Tremendous strides were made as a result of the implementation of the strategy over the subsequent three years—including such achievements as a free downtown trolley circulator, \$25 million of new parking garages, a new transit center, the establishment of a business improvement district, the conversion of one-way streets to two-way, building many new public buildings, among many others. These improvements led a retail trade magazine to conclude that it may be the fastest downtown turn-around in the country's history.

HDIC was chartered as the catalytic development company to build the initial private sector projects anchoring the revitalized downtown, including a 14-screen mega-plex movie theater, restaurants, retail, office and residential. The focus of the development was a six-block redevelopment district, consisting primarily of surface parking lots owned by the city since the 1960s redevelopment days.

HDIC did not take the normal redevelopment approach with the City of Albuquerque, i.e. requesting massive subsidies to make the project financially feasible. Instead, it used time tranche approach. The City assumed the third time tranche in the development as a partner in the venture. This included an investment by the City of \$12 million in the form of land, to-be-built parking structures, infrastructure and tax abatement. In exchange for this investment, the City receives 25 percent of the HDIC cash flows in years 6 through 11 and 50 percent of the cash flows from year 12 until 125 percent of the initial investment is returned or year 20, whichever comes first. In addition, the City determined that they will receive \$30 million in *net* tax revenues directly from the six-block area over the next 20 years, not counting indirect tax revenue increases from surrounding blocks. This approach has rarely, if ever, been under taken in the country.

HDIC assumed the second time tranche of the development with its investment of equity and development effort. It will receive 100 percent of the cash flow during the initial five years of the development, though much of this will be given to first tranche, conventional real estate investors. HDIC will receive 75 percent of the cash flows during years 6 through 11, 50 percent from years 12 through 20 and 100 percent from year 21 on.

Evaluating the proforma projections of the six-block project, as well as other HDIC downtown investments, from a conventional IRR perspective showed a 17.5 percent return over 20 years. This is a marginal return, using conventional DCF underwriting methodology, for a high risk, long-term investment particularly since the bulk of the returns come after year five. However, the foundation board has a long-term perspective. They expect the foundation to be in business for many decades to come so they are interested in putting a secure base under it and its charitable activities, while implementing part of their mission.

Starting in year seven and for years to come, the financial returns from the investment in HDIC showed that the 4percent of the asset base the foundation invested in the project is projected to cover over 20 percent of the foundation's inflation-adjusted projected spending. The possibility of future cash flow covering such a substantial portion of the foundation's needs in the mid- to long-term from the investment of a relatively small fraction of the asset base has proven to be quite satisfactory to the foundation board. The McCune Foundation seems to be finding that the "doing well while doing good" investment strategy can help assure its survival and growth for years to come while it meets its mission.

## **IX. SUMMARY**

The initial conceptualization of sustainable development, smart growth and New Urbanism gave very little thought to how these alternatives could be financed. It has now become evident that

if progressive development is to succeed at the daunting task of changing how America builds, there must be a fundamental change in how we finance real estate. In the final analysis, progressive developments must provide mid- and long-term returns that are superior to conventional development. There is ample anecdotal evidence that substantial investment returns can be achieved by prospective mid- to long-term investors.

However, further research is needed to firmly demonstrate the returns of mid- to long-term real estate investment. That research must focus on the life cycle returns of conventional development as well, which is not known, as well as progressive development.

While this paper has been critical of DCF methodologies, it is only critical of the *exclusive* use of this methodology. For short-term investors and providers of construction debt, it is quite appropriate. However, it is incapable of detecting the inherent financial viability of progressive development. Consider the following analogy: If an observer went into a forest to determine if a falling tree made a sound, and used a thermometer as a measurement device, he would be convinced that a falling tree was silent. He was obviously using the wrong measurement device.

The exclusive use of DCF methodologies and narrow definitions of acceptable product types condemn the country to sprawl and “could be anywhere places”. The Procrustian bed that we are forced to crawl into also ignores a rich source of financial return that is the inherent strength of progressive real estate. Investing in real estate as if it is a mid- to long-term asset class will not only reap unexpected financial returns, it will dramatically improve the environmental, social and built character of the country.

Sustainable Financing for Development. Sachin Chaturvedi (Research and Information System for Developing Countries (RIS)). Homi Kharas (The Brookings Institution). Mustafizur Rehman (Centre for Policy Dialogue, CPD).  
• Encourage other international financial institutions to study the IDA experience to determine if they too can facilitate greater volumes of private financial flows to developing countries, including to low income countries and fragile states  
Project finance is the long-term financing of infrastructure and industrial projects based upon the projected cash flows of the project rather than the balance sheets of its sponsors. Usually, a project financing structure involves a number of equity investors, known as 'sponsors', and a 'syndicate' of banks or other lending institutions that provide loans to the operation. They are most commonly non-recourse loans, which are secured by the project assets and paid entirely from project cash flow...  
Progressive Web App Development. React Native App Development. Native App Development. Portfolio. Blog.  
• These qualities of financial technology lay the ground for further developments such as autonomous finance. Conceptually, autonomous finance revolves around the idea of self-driving funds. (Aligning Development Finance with Nature's Needs) To what extent is their lending dependent on vulnerable nature and can we quantify financially the nature at risk as a result of their lending practices?  
• Progressive can mean many different things, obviously, but you're right to question the range across different jurisdictions and types of public development banks, if you like, or DFIs.  
Sustainable Development Goals Report. Financing for Development. UN Secretary-General's Strategy for Financing the 2030 Agenda. United Nations Reform.  
• The Financing for Development process is centered around supporting the follow-up to the agreements and commitments reached during the three major international conferences on Financing for Development: in Monterrey, Mexico in 2002; in Doha, Qatar in 2008; and in Addis Ababa, Ethiopia in 2015.