THE FUTURE OF BUILDING ECONOMICS: A NOTE

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ABSTRACT

Building economics has been long in emerging because it still lacks theoretical foundations. The notion of building process should play a central role in this regard, as it points at the fundamental indeterminacy underlying the building activity from conception to demolition. Building economics needs to shift its focus from investment decisions to problems of managing building portfolios in their entirety. The professional basis for this development is in corporate real estate and facilities management.

Keywords: Building process, Real estate portfolio, Corporate real estate, Facilities management, Chief real estate officer

WHENCE AND WHITHER?

Where has building economics come from, and where is it going? I was thinking about these questions in May 1998 in preparation for the CIB World Congress a month later. Almost exactly a decade earlier, in May 1988, I ruminated about these very questions as I was writing the Preface to my 1989 book, Building as an Economic Process: An Introduction to Building Economics (Bon, 1989: xii):

Building economics emerged as a distinct field in mid-1970s, induced by the so-called energy crisis [which led to a surge in operating costs, R.B.]. More than a decade later, it is still in its infancy. The economics profession does not recognize it as a field in its own right. Yet, in most economies, buildings represent a large part of the capital stock, as well as the annual capital expenditures. Why then is building economics
developing at such a sluggish pace, and what are the reasons for its lack of professional recognition? In my opinion, both questions have a simple answer: the field lacks theoretical foundations. My objective is to offer a first step toward a theoretical framework for building economics.

The situation we face in 2000 is not very different. Neither is my answer from 1988 to where building economics ought to be going (Bon, 1989: xiii):

The main idea behind this book is rather simple. Heretofore, building economics has focused on forecasting the economic consequences of a building decision on the basis of ever more extensive historical data about individual buildings and their components. However, I believe that another key task of building economics is to assist the decision makers concerned with building economy in their day-to-day operations involving the entire real property holdings at their disposal. The problem with the old focus of the field is twofold. On the one hand, economic history of building activity is an important area of study in its own right, but the practical significance of building economics hinges on the field's sensitivity to the anticipation of continual economic change facing decision makers. On the other hand, economic forecasting is not convincing over the extended periods of time associated with the building life cycle. The focus should therefore shift from investment decisions to decisions concerning the use of capital. Such an active orientation to problems of building economy of course requires theoretical underpinnings.

And this is what I attempted to do in that book. To the best of my knowledge, my predictions have not fallen on fertile soil. Building economics remains preoccupied with the front end of the building process. Just as Stone (1967, 1980) was about project evaluation, so are Ruegg and Marshall (1990), as well as Johnson (1990). Only Raftery (1991) has made a few brave forays into economic principles, rather than applications, but he ultimately offers an eclectic theoretical base for building economics. For completeness, Flanagan et al. (1989), need to be added to this list, but they explicitly deal with life-cycle costing only, as the title of their book clearly shows. I will return to this subject shortly. Of course, all these books are useful, but they do not break new theoretical ground. By the way, I am mentioning only a handful of books in building economics because they all came out at about the same time—late 1980s and early 1990s.

BUILDING PROCESS

I should mention one more book, published in the same period. Although Groák (1992) does not focus on economics, including building economics, he does pay
great attention to the building process. Indeed, this is one of the key words in his book, as well.

Let us pause for a moment to focus on the term “process” itself. This is an important concept in economics, but its meaning is not immediately apparent. The process can be regarded in two different ways: *ex ante*, as a plan, and *ex post*, as historical accounts (Bon, 1989: 13). Economics is about the former view; accounting is about the latter. As time unfolds, learning takes place and plans are revised. When we speak of the building process, we mean to say that it is not possible to know *ex ante* how it will unfold. We must plan, but we must not expect plans to be fulfilled exactly. Only as time unfolds will we learn and adjust as new knowledge becomes available.

In short, the word “process” in economics does not stand for something involving many interconnected steps, stages, or phases, but something fundamentally unknowable in advance, that is, something knowable only in many steps, stages, or phases. The reasons for this uncertainty or indeterminacy may have to do with costs and prices, technology, tastes and preferences, etc. In fact, Groáč (1992) provides a fine discussion of all these aspects of the building process.

CORPORATE REAL ESTATE AND FACILITIES MANAGEMENT

Returning to the task at hand, the following alternative faces me at this moment: either I declare my original prediction wrong, in which case I must come up with another one, as well as with the reason why it turned out to be wrong, or I declare it still valid, albeit off by an entire decade, in which case I must tackle the reasons for my prediction’s delay. As you have already guessed, I will opt for the latter possibility; the former strikes me as a bit too demanding.

So, the future of building economics is in fields like corporate real estate and facilities management (which went under the name of real property portfolio management in my 1989 book). To the extent that these fields inform the building process as a whole, its front end will be affected, as well. Namely, buildings will be designed and constructed with the entire building process—that is, the whole building life—in mind.

Which is to say, buildings will be designed and constructed with their continual change in mind. The objective is not to predict every possible change and prepare for it in advance; rather, the objective is to offer strategies and tools for dealing with change if and when it arises. And it will arise with certainty. One simple example of how to deal with change as such is to provide more ample and more robust buildings than presently required. This may be costly in the short run, but it may offer great savings in the long run. The difference between the above two attitudes is fundamental. In my view, the former is utopian and ultimately doomed to failure, whereas the latter is plausible both on practical and theoretical grounds.

THE CHIEF REAL ESTATE OFFICER

At present, the most developed area of building economics concerns investment criteria based on standard discounting principles. This was true when I was
finishing my book, as well. These discounting principles have been borrowed from the fields of capital budgeting and benefit-cost analysis, concerning respectively private and public sectors, and applied to the specifics of the building field. The so-called life-cycle costing analysis is a case in point. The subject has been broached already. Since the two energy crises in the 1970s, it has been standardized and systematized to a considerable extent. However, we need to go forward, as I argued a decade ago (Bon, 1989: 114):

[L]ife-cycle costing methodology should be further developed to monitor continually buildings in use. [...] The emphasis on early stages of the building process is unwarranted. The primary objective of a comprehensive methodology of life-cycle analysis is to maintain an up-to-date picture of options available to the owner and/or the user throughout the life cycle of a building. A host of ostensibly minor day-to-day decisions involving building maintenance and replacement in the aggregate represent significant expenditures escaping adequate control. Of course, this argument applies to capital expenditures in general.

Even more important, considerable work yet remains to be done in the area of monitoring the entire building stock—that is, real estate portfolio—managed by an owner. Many choices involve trade-offs between actions that span several properties: to reroof one building or to replace elevators in another, etc. Furthermore, many choices involve trade-offs between actions affecting all the properties owned: selection of a centralized computer system for preventive maintenance, determination of the overall reroofing budget for a particular year, etc.

There is no-one better placed to understand the building process in its entirety than those who manage portfolios of buildings and land for private and public organizations of all types. I call them chief real estate officers (CREOs). Most of them report to chief financial officers (CFOs), but some report directly to chief executive officers (CEOs). Building economics should become one of the fields most dear to CREOs of this world. The complex problems they face should guide us toward a better understanding of the interface between theory and practice which is central to building economics as an applied field.

CODA

Now, the last bit of business is my explanation for the delay of my prediction’s realization. Once again, it is rather simple: the collapse of the US economy in 1989-90, and the subsequent collapse of many other economies across the globe. The construction and property industries were severely affected, and so was the research concerning them. The bust precipitated widespread rethinking of the related academic fields, as well. What seemed to be on the way up in the late 1980s turned out to be of little consequence in the early 1990s.

Perhaps an entire decade has been lost, as it were, to many fields, including building economics. Until the mid-1990s, the CREOs were mainly concerned with disposition of surplus property, but in the latter part of the 1990s the issues of design of new properties and management of the existing ones have
come to the fore once again. This is likely to continue for several more years, if not longer.

We can only hope that the first decade of the new century and the new millennium will open new vistas for building economics. The appearance of the first volume in the *Foundations of Building Economics Series*, edited by Skitmore and Marston (1999), is a very good sign. Two more volumes are planned for the year 2000, but many more are envisaged for the next century. The series, which is encouraged by CIB, endeavors to organize the extant knowledge in the field by assembling in one place the seminal papers in building economics written to date. Each volume in the series offers a selection of a score of papers, together with an introductory chapter in which the editors review the area entrusted to them. As the Editor-in-Chief of the *Foundations* series, I hope to stimulate its development without unduly constraining it. As an emerging field, building economics is best served by a series of readers, rather than an attempt at its codification. The series is thus unbounded. It remains open to new ideas and additions to the field of building economics. The hope is that these readers will become essential guides for both students and professionals, both those who are beginning to explore the world of building economics and those who already feel at home in it.

The only cloud on the horizon is yet another recession, or maybe even depression, that threatens to derail the development of building economics once again. On top of real economic troubles facing the world, we are also facing the millennium malaise, which is likely to thwart many attempts at fixing the actual problems. Corporate real estate and facilities management generally grow in importance during good years, when property gains in value by leaps and bounds, and it generally declines in bad times, when private and public organizations tend to focus on their core activities. The property cycle affects all property professionals and their several disciplines. The way my predictions have gone so far, chances are I will return to my ruminations about the future of this emerging field at the onset of yet another downturn in the world economy. Judging from the past, I am likely to be back close to the end of the next decade.

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**REFERENCES**


