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Here, Ziman and Anderson economist Stephen D. Oliner presents new data on the length of the planning process for commercial real estate projects.

How Long Did it Take to Plan That Building?

Long and Getting Longer, Says the First Comprehensive Study on This Topic

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Before construction can begin on a commercial real estate project, a great deal of preliminary work has to take place. The developer must acquire the land, work with architects and engineers to draw up plans for the site and the building, hire the contractors, and navigate the many steps to obtain regulatory approval for the project. Developers know how long this process takes for their own projects and may have a general sense for other projects in their market. But, until now, there was no hard evidence on planning periods across the entire country.

> **"These findings do not tell us whether the current regulatory process is too burdensome, but more stringent regulations have tended to be associated with longer planning times."**

Recent research, which I conducted with Jonathan Millar of the Federal Reserve Board and Daniel Sichel of Wellesley College, fills this gap by presenting the first comprehensive estimates of planning times for commercial construction projects across the United States. We analyze roughly 82,000 projects nationwide for which planning was initiated between 1999 and 2010, using data obtained from CBRE Econometric Advisors/Dodge Pipeline. The projects in the dataset include office buildings, retail stores, warehouses, and hotels. About 95 percent of these projects involve the construction of a new building; the remainder are additions or alterations to an existing building or conversions to a new use.

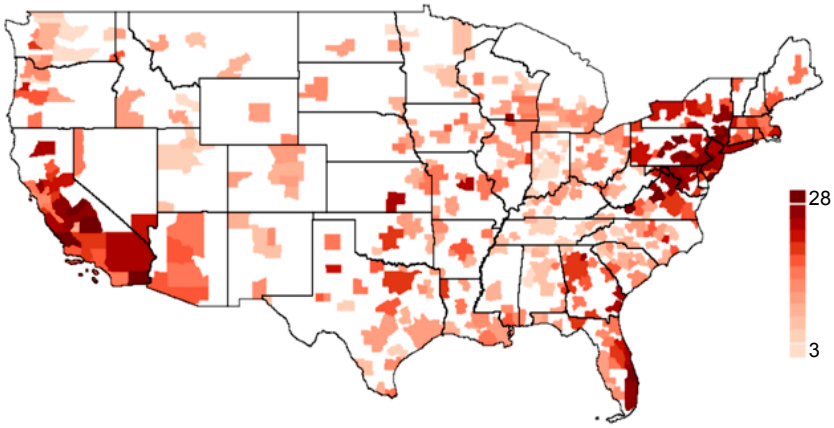
For our analysis, we define the planning period as the time between the hiring of an architect to draw up preliminary plans and the start of construction. Some planning surely occurs before an architect comes on board. If nothing else, the developer will have given the project enough thought to believe it's worthwhile to incur the cost of an architect. Our dataset, however, provides little information on this initial stage of planning. Excluding the very beginning of the planning process means that the full timeline is even longer than what we find.

Our analysis reveals that the average planning time across the 82,000 projects is about 17 months. This is a substantial period considering that many of the projects in the sample are small (the median project is a single-story building with an estimated construction cost of about $1.5 million). In calculating the 17-month average, a small project has the same weight as a mega-project for which construction costs are many times higher. When each project is weighted by its construction cost, the average planning time rises to more than 28 months, reflecting the greater influence of larger, more complex projects. The 28-month figure tells us the average planning time associated with each dollar of construction spending and thus is the appropriate measure for assessing the macroeconomic consequences of planning lags. Clearly, commercial real estate projects require a lot of planning time before any construction dollars are spent.

The full distribution of planning times around these averages is very wide. Some of this variation reflects differences in project characteristics. For example, a ten-story building takes about six more months to plan than a single-story building, all else equal. Another important factor is whether a project is ever deferred during the planning period. About 13 percent of the projects in our dataset were deferred at some point, with the deferral adding roughly two years to the planning period.

In addition, we find wide differences in planning times across metropolitan areas. The "heat map" in **Figure 1** displays the estimated time for the metro areas in our sample.[1] The areas with longer times are represented by deeper shades of red. The longest times are concentrated in California and the Northeast corridor, while times generally are shorter in the central part of the country. We explore whether differences in land-use regulations across localities can help explain this variation. Perhaps not surprisingly, our results show that the length and intensity of the review process is associated with a substantial part of the difference in planning times across metro areas.

Figure 1. Estimated Planning Duration by Metropolitan Area
for Baseline Project, in months



And planning times are increasing: They grew by 3 to 4 months over the sample period (1999-2010). The lengthening occurred for all types of buildings and in metro areas of all sizes. By region, the shift toward longer times was greatest along the Pacific coast, with sizable increases as well in the Mountain states and along the East coast but only a modest rise elsewhere.

To gain further perspective on this upward trend, we consulted with firms that are directly involved in real estate development and with industry analysts. An overwhelming majority concurred that planning times had lengthened since the late 1990s. Several noted that the lengthening trend started at least a decade earlier. The reason cited most often for this trend was that the regulatory process for the review and approval of construction projects had become more time-consuming. Specific factors mentioned by our contacts included greater citizen involvement in project review, tougher environmental standards, and an increase in the number of government agencies whose approval is required.

It is important to emphasize that these findings do not tell us whether the current regulatory process in any given locality is too burdensome, only that more stringent regulations have tended to be associated with longer planning times. An assessment of the costs and benefits of land-use regulations, while obviously important, is beyond the scope of this paper.

To sum up, our study provides the first estimates for the United States on how long it takes to plan commercial real estate projects. From a macroeconomic perspective, the long lags that we document help explain why commercial construction spending generally is slow to recover when the economy emerges from recession. And from a micro perspective, we now know that planning times tend to be longest on the coasts, have trended up over time, and are influenced by the local regulatory environment.

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1 To focus on the pure effects of geography, the figure shows the planning time across metro areas for a standardized project with a fixed set of characteristics.