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21 May 2008

James Prosser
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Dear Sir:

This letter is in response to your request for my impressions of the NAHB research on the economic and fiscal impact of homebuilding in Linn County. I am not going to evaluate the research point by point as I am not privy to the actual modeling structure, the value of basic assumptions, nor the specific coefficients that were used. I also do not have the time and resources to fully assess this effort prior to the upcoming June 10th meeting. Instead, I will give my impressions of the soundness of the overall approach in light of my extensive experiences designing economic and fiscal impact models in Iowa and in several other states and in light of my role as an Extension educator and regional economist for Iowa State University.

There are a variety of conventional ways in which we measure economic growth in a region. The most common, if not most banal, approach is to merely count jobs. Others may count aggregate investment activity. Still others, like the U.S. BEA, focus on either income generation or the production of value added (which is the same as GDP). By way of a sequence, when we study the economic changes occurring in an area, we look for timely business investment that requires an increment to area employment, which in turn helps to boost other economic activity that supplies the new firm or firms and accommodates household consumption needs, which are ultimately purchased from local workers' earnings.

While the housing construction industry is job intensive, in and of itself, the industry is a response to the rest of the regional economy. It is not a cause of economic activity regionally in any standard sense. If there is a pace of overall job growth in the region that is of sufficient size and of the requisite income levels needed to sustain housing expansion, then the housing industry will respond to that demand and supply adequate homes. If an area has been growing at more or less a steady rate over a period of years, then the existing housing construction industry will be of a size necessary to sustain annual demand.

Though there are to be expected annual construction effects attributable to the incremental addition to housing in your region, the job and income values of most of this growth are already part of the regional economy – it is not new economic activity, it is sustained activity given the region's historic pattern of growth. And it is sustained only insofar as the rest of the regional economy is producing the jobs and the incomes that demand the housing.

The NAHB research has a very non-typical analytic premise that begins with the construction of homes as the initiating economic event and then, quite oddly, infers economic growth concomitant –

as if the homes caused the rest of the economy to grow. That is not the case, and that is not the manner in which economists conventionally measure an economy or the basis from which traditional fiscal impact assessments are conducted. In addition, their approach allocates average public costs over the time periods assessed on a per-housing unit basis. That too is a deviation from conventional approaches to fiscal impact assessment at the local level. Accordingly, as this is a nonstandard assessment process utilizing nonstandard, if not reversed, assumptions about the determinants of local economic growth, I am inclined to view the findings extremely cautiously due to the likelihood that the model was primarily designed to advance the interests of the sponsoring organization and its membership, not the public's interests.

What follows is the sequence of how we at Iowa State University conduct regional economic and fiscal impact determinations using our modeling capacities:

1. A job or income change occurs in an economy leading to an unarguable expansion in employment and regional productivity. That job change can then be translated, using an input-output account of the actual local economy, into anticipated impacts that take into account increased production across supplying sectors and the sectors that serve households (like the housing industry).

   One generally would not compile fiscal impacts without a clear and concise declaration of the nature of change that is occurring in a regional economy, the income value of that change, and why that change was occurring.

2. A determination is next made using a gravity model or a simultaneously estimated procedure to gauge the likely change in the region's labor force size and participation. This is extremely important to understanding the potential for local public service impacts. An area's labor picture contains people that live and work in their region, people that commute outside of the region for work, people outside of the region that commute in for work, and unemployed people – people actively seeking work. When jobs are added to an economy, they will be filled in five ways:

   a. Existing unemployed persons can take some of those jobs
   b. Local residents currently not part of the labor force may enter it
   c. Persons living outside of the region can commute in to take those jobs
   d. Persons currently commuting out may forgo commuting to take those local jobs
   e. Persons may migrate into the community to take those jobs.

   Growth in the area's labor force, and therefore its population base, only occurs under situation (e), in-migration. Accordingly, analysts who conduct fiscal impacts are very mindful of the relationship between job change in a region and the probability of labor force and population growth.

3. Using sets of local government revenue and expenditure coefficients that were estimated either cross-sectionally (across Iowa's counties) to simulate population change or estimated considering the marginal changes over time (for the study region or the state's averages for all metropolitan areas), we would then apply the expected labor force, population, and local income changes to these coefficients to arrive at determinations of potential receipts and costs for all local governments. As local governments operate with annual balanced budgets, there is inherent a presupposition for revenue and expenditure amounts to converge yielding no fiscal surplus.

A fiscal surplus could potentially accumulate if the overall value of all of the jobs that were created (in the primary industry measured plus all of the other multiplied jobs) exceeded the regional average rate of pay, if that significantly higher pay translated into significantly higher-valued property accumulations among homeowners and rental builders (to include their employers investments, as well), and if those new homeowners only consumed public goods at average costs per capita.

Short of those assurances, however, all government receipts and expenditure categories need to be assessed carefully as some costs per capita rise as population increases, and some costs decline. It is our experience that, overall, for large cities there is an overall tendency for average costs to increase as population grows.

Last, for determining development impact fees or some other appropriate fee structure intrinsic to the sound and equitable fiscal operation of city activities, we would defer heavily to the expertise of local government officials in isolating and defining the relevant factors to assess. No model that we could develop would adequately incorporate the scope of average and incremental detailed costs that the city was incurring due to growth and change, nor would that model estimate the consequences of those short and long term costs on the delivery of other public goods and services nor the impacts on existing taxpayers. From our experience, that kind of determination requires a different set of assumptions, calculations, and methods which would all be developed in close consultation with local government experts.

I hope these points assist you in your efforts to incorporate the NAHB research into your deliberation processes. Please contact me if you have additional questions.

Yours truly,

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