Economic Interrelationships and Impacts of the Aviation/Aerospace Industry in the State of Florida

Topic: Regional Policy Modeling  
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The study provided a detailed description of the interrelatedness of the aviation and aerospace industry with principal industries in Florida and Volusia County (VC) using Input-Output (IO) analysis. Additionally, this research provided an economic impact analysis of the creation of a university research park in Daytona Beach (DB). The economic impact measures included not only direct economic output and industry employment descriptions but also described the multiplier effects in the form of indirect and induced impacts using data for 2012.

This research concluded the average labor income of the aviation and aerospace industry was higher than average labor income in Florida and VC. A substantive difference between the Florida and VC average labor income for the aviation and aerospace industry existed because VC’s aerospace sector was only concentrated in the search, detection, and navigation instruments manufacturing sector. VC’s transport by air sector was one-fifth the size of Florida’s. Differences in the aviation and aerospace industry composition between Florida and VC are important because the economic impacts from a shock to the entire aviation and aerospace industry will be distributed differently.

Since the aviation and aerospace average labor income is higher than the average labor income in Florida and VC, it would be a positive move for Florida’s economy to attract and grow the aviation and aerospace industry. It would be highly unlikely that the entirety of newly created jobs would be resourced from the local population. Nonetheless, growing the aviation and aerospace industry jobs would have a positive influence on the region’s economy and tax revenues. It would be a desirable course of action to spur the growth of this sector, as its direct effect would culminate with additional jobs in Florida that would bring higher wage jobs to the state.

The interdependencies of the aviation and aerospace industry in Florida and VC with other industries had a positive indirect and induced effect in the economy providing almost a two-fold indirect and induced effect. However, the benefits were not equal. Florida’s average labor income of the most sensitive non-aviation and aerospace industry was 15% lower than the average Florida labor income. The average labor income in VC of the most sensitive non-aviation and aerospace industry was significantly higher than the average VC labor income. Industry interdependencies also presented risk. If the aviation and aerospace industry experiences a contraction, then through the interdependencies of the industries, the region would contract twice as much as the aviation and aerospace industry.

The overall impact of a university research park would benefit Florida’s economy. Since the research park project is currently funded partially by public state money, 14 sectors of the economy experienced negative impacts. While the net result was an increase in additional labor income, the employment growth was characterized by gaining more lower-paying jobs while losing less higher-paying jobs. The most expected outcome, an expansion of the aviation and aerospace industry, was not evidenced by the model results.