Tomorrow’s Prosperity Today?

By James Schultz

It may be among the oldest questions asked by humanity. What will happen tomorrow? Those who know tomorrow’s secrets stand to benefit today—not to mention every day following. To slake individual thirst for accurate prediction, seers and prophets, sincere and profit-mongering alike, have long sought to get the future right.

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Not all information is created equal. Forecasting team member Vinod Agarwal, an economics professor and director of Old Dominions graduate program in economics, cautions that some data can be misleading, or simply not fresh enough to be of much use. He says the models especially prize current statistical material because it has the best chance of providing an accurate portrait of always-changing economic conditions.

“One of the problems you run into is, how good is your input? As they say, garbage in, garbage out. As we have learned how the numbers change, we’ve used better numbers.”

Perhaps, not surprisingly, the model is based on software originally designed by aerospace engineers. The forerunner program was used to predict the trajectory of a rocket and to adjust in midflight the rocket’s path to orbit.

“We’re sort of like astronauts,” Yochum contends. “We use the best data available but ultimately end up adjusting so that one thing or the other doesn’t send the ship totally off course. We allow the model to give us a good direction. Then we try to squeeze as much of the randomness out of the future as we can.”

A Better Crystal Ball

Although the forecasting team examines and predicts the behavior of the U.S. economy as a whole, the unique structure of the Hampton Roads economy captures most of their attention. It is an economy home to a large transient population of military personnel, boosted in warm summer months by an influx of sun-seeking tourists to Virginia Beach, as well as home to concentrated pocketholes of high-tech research and development, particularly in the northern portions of the region.

The variability of economic conditions is not limited to consumer spending. In predicting tourism volume in Hampton Roads, for instance, one crucial factor is travel time. How far must visitors drive or fly to visit? For those drawing from other states, the price of gasoline can influence trip duration, spending habits and choice of accommodations. Weather also plays a major role. Hurricanes or tropical storms can quickly empty out the oceanfront, collectively costing merchants millions in lost revenues and damage to property in a matter of days.

“The model performs very well when there aren’t surprises,” explains forecasting team member Mohammad Nijand, an Old Dominion associate professor of accounting and finance. “When there are, we have to step in and make the necessary adjustments.”

Aside from its regional projections, the forecasting team also examines the long-term prospects for the nation as a whole. Generally speaking, the models like what they see. Despite stock market fluctuations, changes in consumer spending and variable unemployment levels, long-term interest rates continue a gradual decline. This is good news for the national economy’s health—despite the occasional emergency in overseas markets.

“I’m cautiously optimistic,” team member Agarwal adds. “If we lived in a vacuum I’d be very optimistic. But what happens in the world affects us here in the United States. The Asian financial crisis is one example. Crisis elsewhere can have a negative effect here.”

The outlook for the Hampton Roads region itself is likewise complicated. Defense spending, as a portion of the federal budget has declined in real terms, adjusted for inflation. Since the late 1980s, military pay for the tens of thousands of sailors and soldiers stationed in the area hasn’t kept pace with inflation, and continued downsizing has resulted in a net loss of both military and civilian workers. In addition, thousands of jobs related to the shipbuilding industry have been lost as fleet buildout plans have been drastically scaled back.

The forecasting team says other factors are counter-
balancing the negative trends. In the northern portion of the region, in particular near the cities of Hampton and Newport News, there has been a net increase in technology employment and a small net gain in defense-related jobs despite the cuts. The modellers say Hampton Roads residents can take comfort in the fact that the local economy remains resilient despite its weaknesses relative to strong growth rates in the suburbs outside Washington, D.C., in northern Virginia. “We know the facts,” in terms of its gross regional product, Hampton Roads has slipped in relation to other parts of the state,” ventures team leader Yochum. “But the regional economy is also experiencing much lower unemployment rates. That’s a very good sign. There will be more pressure on wages and salaries to rise. People are better off, and they’ll pump more money back into the Hampton Roads economy.” Improvements to the forecasting model to improve its accuracy will continue to be made. Its predictive value should increase, say the forecasters. Says Yochum: “Academics are after science. This model is a product of science. Part of the fun of this is learning more about it and learning how to make it better.”

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