

State must invest today to capture future trade

At times, economic predictions can be compared to Northwest weather forecasts—often foggy, mostly cloudy, and seldom perfect. But every now and then economists stumble upon something that you can take to the bank. Take the Dutch Nobel Laureate, Jan Tinbergen. In 1962, he discovered the “gravity formula” to predict trade flows between countries. The formula can easily be used to forecast the upcoming trade bonanza for Washington state.

Newton’s law of gravity stipulates that all objects are attracted to each other depending on their size and distance. Tinbergen borrowed this insight and suggested that trade between countries depends upon their size (measured by their gross domestic product) and their distance to each other. This seems, of course, preposterously oversimplified. But it turns out that distance and GDP are amazingly accurate predictors of trade flows, and the gravity formula is heralded as one of the most successful equations in all of economics.

The point is that the gravity formula is an amazingly powerful tool. Independent of a person’s views of the world as to whether trade is “good” or “bad,” and independent of a country’s competitiveness, the formula allows us to cut straight to the chase and forecast trade flows.

Let’s start with distance. In the past decade, we have experienced a dramatic reduction in the cost of information flows, more efficient transportation, relentless division of labor, and greater access to cheaper and better products. The catch-all term here is globalization. Globalization exploits technological change and makes the world smaller—it effectively reduces the distance between countries. And remember that distance was one crucial ingredient in the gravity formula. As the distance between countries declines due to globalization, the gravity formula predicts that trade volumes will increase.

How about size? By a stroke of luck, Washington’s geographic advantage is its proximity to the Far East. The ports of Seattle and Tacoma are geographically the closest U.S. terminals for Asian shipping vessels by as much as a day. It is no surprise, then, that the ports’ top 10 trading partners are all Asian (China, Japan, Korea, Taiwan,

Hong Kong, Thailand, Indonesia, Malaysia, Vietnam and Singapore), combining for over \$63 billion in trade in 2005. About 65 percent of all U.S.-Chinese seaborne trade passes through the ports of Seattle and Tacoma.

No matter how you view the world, as the U.S.-Asian distance shrinks due to globalization—and as Asian GDP continues to skyrocket—the gravity formula predicts that trade will increase spectacularly in Washington state in the next decade. I applaud those policy-makers who face this challenge with vision and planning in order to position the region in a way that allows us take advantage of these rising tides.

What’s to plan? Transportation logistics and trade infrastructure. Washington’s 6 million inhabitants consume only a fraction of the goods that pass through the ports and the state—goods on their way to 290 million other Americans. It is imperative that the necessary transportation logistics are in place, especially in terms of trucking and railroads, to funnel the increased volume through the state. Improving the capacity and efficiency of Washington’s ports will be crucial to our success.

Globalization is occurring right now. If Washington is not ready to take advantage of the opportunities that are unfolding, another region will gladly pick up the slack. ■



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