KNOWLEDGE

SFI Knowledge Center —
Impact Story

Pricing Volatility for Profit

Professor Suzanne de Treville was searching for a way to capture the value of supply-chain responsiveness. She teamed up with SFI Professor Norman Schürhoff. Together, they created a tool that is changing how managers work with demand volatility, and is being used to improve companies‘ profitability and competitiveness.

Challenge

Manufacturing companies have been offshoring production to low-wage countries. The resulting need to make production decisions before knowing demand has exposed these companies to demand volatility, and managers have seen expected profits melt away. Suzanne de Treville, Professor of Operations Management at the University of Lausanne, realized that companies positioned to gain major competitive advantage from being responsive were not investing in cutting lead times. "They were not able to measure the profit impact," she explains. "Measuring that impact required that we look at things from a finance perspective."

Solution

Swiss Finance Institute (SFI) brought Suzanne together with Norman Schürhoff, SFI Professor of Finance at the same university. "When Suzanne explained the problems managers were facing, I quickly realized that they did not solve them in a finance way," he explains. Together, they created the Cost-Differential Frontier (CDF) Calculator. Introduced by the US Department of Commerce, the CDF tool helped US companies to profitably relocate their production to America. The White House welcomed the results and announced that Commerce will promote the tool to US SMEs.

Results

Naturally, this goes for other countries as well. Large enterprises, such as Nestlé Switzerland, Nissan Europe, and GSK Vaccines, have already benefited from the insights provided by the CDF. SFI is supporting the two researchers by raising the tool‘s profile in Switzerland, particularly given manufacturing companies‘ need to offset the pressure caused by the abandonment of the euro cap and to strengthen Swiss industrial production.

"When supply-chain managers put on finance glasses, they see a whole new set of opportunities."

Professor Suzanne de Treville teaches operations management at the University of Lausanne.

Cost-Differential Frontier (CDF) Tool

This innovative tool uses quantitative finance techniques to calculate the real value of producing close to demand. It allows managers to easily determine how much cheaper an extended-supply-chain product needs to be to compensate for an increase in mismatch cost arising from a longer lead time. The tool can be used free of charge by all managers and policy makers in Switzerland and is available at http://cdf-oplab.unil.ch/.

Contact
Désirée Spörndli
desiree.spoerndli@sfi.ch
www.sfi.ch/catalyst