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Creating Tax Efficient Supply Chains

A Penny Saved is Not Always Penny Earned; New Support from Network Planning Software

SCDigest Editorial Staff

The topic has been around for quite awhile, but the subject of "tax efficient" supply chains is still one that is relatively little understood by most supply chain professionals?

What is a **tax efficient supply chain**?

The most simple definition is that a tax efficient supply chain is one that maximizes the after tax profits of the corporation. The reality is that most companies look at designing the ***lowest cost*** supply chain networks, but often do not take into considering in detail the tax implications of that design, meaning the lowest cost design may not be the one that maximizes after tax profits.

Globalization Drives Need

Supply chain tax efficiency is of small interest for companies that operate primarily in a single domestic market. But with the explosion in global trade over the past two decades, for both sourcing and market expansion, issues such as tax rates, where value and profits are generated, and how product actually flows can have a huge impact on profitability.

That's in large part because tax rates and tax methods (such as a business income tax versus a "value added tax", or VAT) vary dramatically across the globe. The top corporate tax rate in the US, for example, is about 39%; in Ireland, it's just 12.5%. Where profit is recognized can therefore make a huge impact on the bottom line.

"The reality is that a penny saved is not always a penny earned," said **Derek Nelson**, a product manager at IBM, on a recent Supply Chain Videocast on tax efficient supply chains broadcast by SCDigest. "Depending on where that penny is saved by the supply chain, the company can have significantly different after tax profits."

The good news is that providers or supply chain network design software are providing increasingly robust support for tax efficiency in their analysis of the optimal network designs.

The broadcast is now available on-demand. To view, please go to: [Creating Tax Efficient Supply Chains Videocast.]

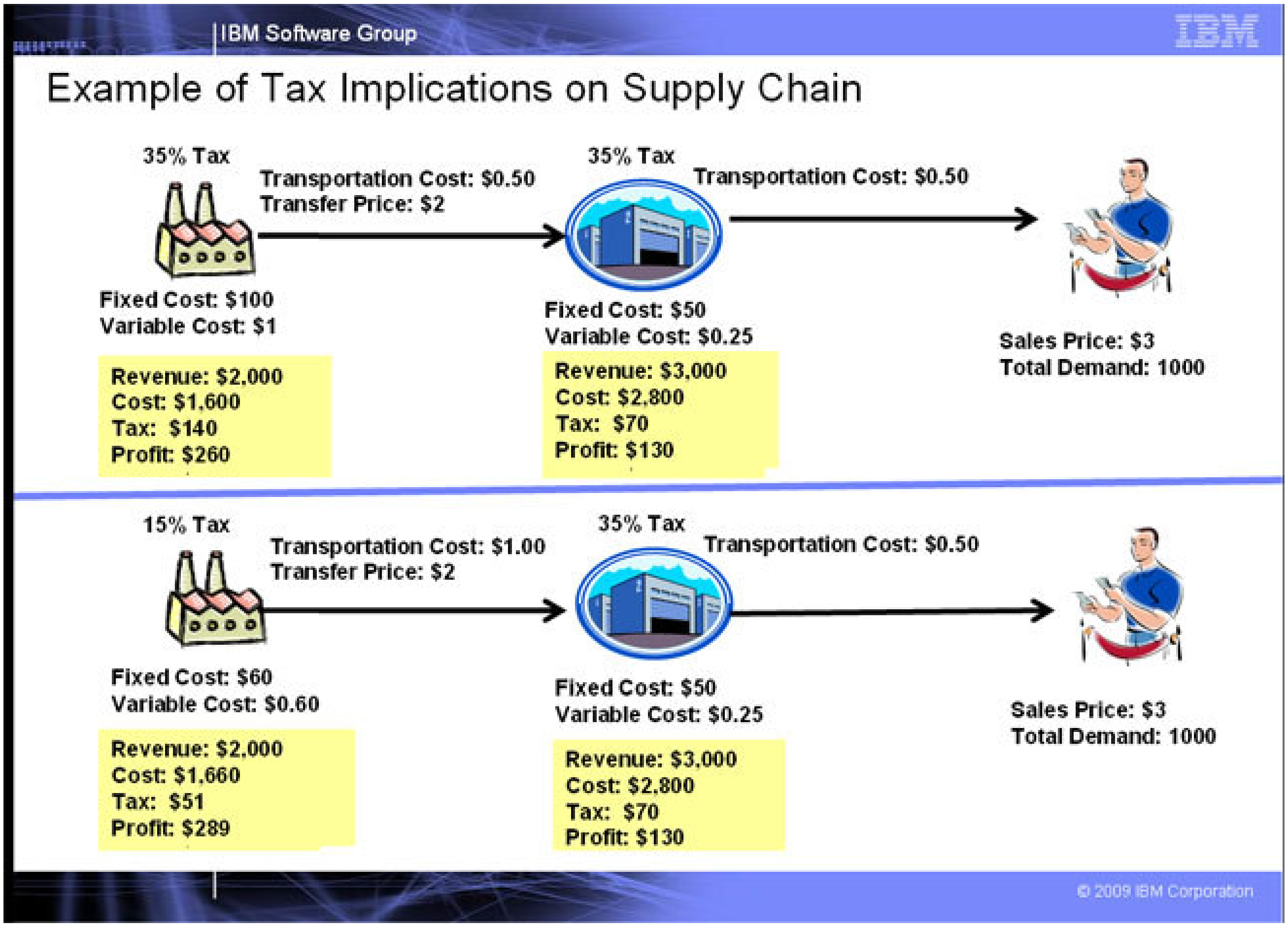
Above and Below the Line

According to Nelson, companies need to consider tax efficiency in their supply chains from two perspectives:

- **Above the Line:** includes duties and tariffs, duty drawback, VATs, local, state, and property taxes and fees that are incurred before a company calculates its profit before income taxes
- **Below the Line**: Corporate income taxes which may be both national and local in nature.

Depending on what products a company buys and sells and the nature of its global footprint and supply chain flows, one or the other of these two types of taxes can be more important, or they can

Creating Tax Efficient Supply Chains (Con't)



be equally important.

For a global company with many operating units, the issue of tax efficiency can be quite complex – and doubly so since the tax experts are usually somewhere in the finance department. Often, there has not been close collaboration between those tax experts and supply chain managers, simply because they were in different functional areas and just didn't speak the same "language;" supply chain network designers didn't understand tax implications, and tax experts didn't really understand supply chain design.

To understand the complexity inherent in this issue, consider an equipment manufacturer that sources hundreds of components from around the globe before assembling the final product. What countries those components are sourced from, whether they are produced by company-owned factories or from contract manufacturers, whether the company buys the parts for contract manufacturers or doesn't, internal "transfer pricing," and more all have a significant impact on taxes and thus net profits.

"The lowest cost supply chain is often not the one that delivers the highest profit to the corporation," Nelson says.

The good news is that providers or supply chain network design software are providing increasingly robust support for tax efficiency in their analysis of the optimal network designs. By modeling tax implications of various scenarios, the most profitable after tax supply chain, not just the lowest cost one, can be identified. (See simple example above.)

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Nelson says the subject of transfer pricing – the price at which a company "sells" products made in one location to another part of the business – is especially tricky. That transfer price will determine the "profit" in that location, and thus tax liability. Given the wide range of corporate tax rates, this can make a big difference in the net profit of a company.

"There are both legal and ethical issues around transfer pricing," Nelson said. "It's usually important to bring in some real experts in this area."