Innovative Approaches to Managing the Risks of Multinational Supply Chains

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Innovative approaches to managing the risks of multinational supply chains

Managing supply chain risks is critical to the success of a business, and perhaps most critical in Asia Pacific with its high growth rate, shifting industry trends, increasingly sophisticated consumers and businesses rapidly expanding into the region. The Asia-Pacific Economic Cooperation (APEC) is also getting ready for closer ties and bigger trade flows among member-countries when tariffs are reduced by the end of 2015.

Both nominal Gross Domestic Product (GDP) and total exports for Asia have more than doubled in the last 10 years, illustrating this rapid growth. Nominal GDP for 2015 is expected to reach more than US$23 trillion and total exports US$6 trillion as growth continues.[1] If we look at data for the top 15 countries in the world which import and export intermediate goods, nine of those countries are in Asia Pacific.[2] These include China, Japan, Korea, Hong Kong, Singapore and Australia.

But while Asia's economies are expanding rapidly so too are the risks to companies' supply chains based here. One example is natural disasters (such as the recent earthquake in Nepal and typhoon in The Philippines) which are becoming more expensive as the cost of living rises in these countries along with their GDPs. Another increasing problem is cyber risk as our use of technology grows along with our connectivity. Big data is a good example of this changing risk. While it enables a new source of customer intimacy and competitive advantage, protecting that data involves added risks.[3]

Responding to this shifting landscape, AIG recently brought together a distinguished panel of industry experts in Singapore on 29 April 2015 to explore innovative approaches to managing supply chain risk. The panel included a leading management consultant, an expert in banking industry risk and a renowned logistics academic. The emphasis was on how innovations will help companies tackle their supply chain issues by predicting problems before these arise.

The experts agreed that supply chain disruption can have a devastating effect on a company such as tarnished brand, loss of customers and an overall fall in revenues and share price. All of these can affect market share, liquidity and the ability to secure financing, if not resolved quickly and efficiently.[4] But despite these huge implications, many companies are not devoting enough resources to safeguarding their supply chains.

AIG brought together a panel of industry experts in Singapore on 29 April 2015 to explore innovative approaches to managing multinational supply chain risk. The distinguished panel included:

Jerry Dimos, Partner, Management Consulting ASEAN, KPMG

Geetha Kanagasingam, Board member of PARIMA / Vice President, Group Risk, Barclays Bank PLC

Dr Robert de Souza, Executive Director and Chief Executive, The Logistics Institute, Asia Pacific

Marty Scherzer, President, Multinational and Alternative Risk, AIG

Supply chains growing deeper

As the world becomes more connected, supply chains are becoming longer, spread over more countries and creating even more risk. The risks are continually evolving as new business trends emerge. For example, low-cost manufacturing is beginning to shift away from China's coastal areas to inland provinces. This means the risks to export goods in transit are greatly increased as thousands of miles are added to their routes.[5]

Jerry Dimos, Partner, Management Consulting for ASEAN at KPMG, said: ''Many companies don't devote the time and effort to understanding and mitigating their risks. Some companies have supply chains that run back into many tiers so visibility across that supply chain is critical." Mr Dimos gave an example of the meat production operations of a packaged food company. After a problem with the quality of its meat it took at least six weeks to trace the meat back to its source via a marketing company, processor, packager and other third parties spread across multiple countries. In total, there were seven layers within the packaged food company's meat supply chain. Mr Dimos added: "This is a major source of risk. If you take any major manufacturer, they will have a supplier two or three levels down who fails which has a massive impact. So you are only as strong as your weakest link." To help protect increasingly complex supply chains, AIG offers creative insurance and financing options including fronting and captive and services and global solutions for unconventional risks.

> "Third party relationships pose significant risk yet many organisations do not devote significant time and resources to managing this risk."
> Geetha Kanagasingam, Barclays

The consensus was that Asia Pacific is a volatile region when it comes to supply chains due to a number of factors such as natural disasters, political instability and less lead time. Marty Scherzer of AIG said: "Managing these risks can be challenging. In AIG's work with companies over the years, we have found that the majority of them do not have a clear understanding of their supply chains nor an enterprise-wide approach to managing these risks." To help companies address this issue, AIG offers multinational programmes tailored to their needs and preferences, supported by a global network spanning over 200 countries.

Key Facts

- Nine of the top 15 exporting countries in the world are based in Asia
- Supply chains are getting longer
- AIG works with more than 400,000 companies, helping many to protect their supply chains
- It's not uncommon to have at least seven layers within a supply chain
- Food production, infant care and pharmaceuticals are the three highest-risk industries when it comes to supply chain disruption.

A recent finding by the Institute of Internal Auditors Research Foundation and Crowe Horwath showed that more than 65% of organisations rely heavily on third parties.[6] Geetha Kanagasingam, Vice President, Group Risk at Barclays Bank said: "Barclays is one of them and our dependency is growing by the day. Organisations are reliant on external suppliers to provide them with services and technologies."

She explained the reason why so few companies were adequately dealing with these third party relationship risks. "It's not an easy risk to manage and there are some key challenges. One problem is agreeing on the ownership of that risk and which department is responsible, even in a big organisation. Another problem is where to start especially if you have numerous suppliers like Barclays does," she added.

Many of the activities that make the supply chain more resilient — buffer inventory, redundant sourcing, multimodal logistics contingencies and continuity planning are often labelled unnecessary expenses and equated to over protecting business operations.[7]

One of the attendees at the panel discussion was Lau Kim Hoon, chief financial officer (Singapore) at Schenker, a global logistics firm. She said: "We work with many, many suppliers. But what are the small-time suppliers doing about their risk? When we are dealing with customers, the customer will always make us responsible. So whatever we subcontract out we try to hold the supplier responsible. Is there any platform that these small-time suppliers can have some decent form of insurance coverage at a decent cost? We MNCs prefer to work with vendors who are adequately covered." This is an area AIG is actively looking at as it searches for innovations to help companies manage their risk. Marty Scherzer added: "AIG insures over 400,000 companies. We have seen a lot of things go wrong to a lot of companies of all sizes, in all parts of the world. We are using these insights to design products to meet these specific needs."

> "Most managers in Asia know they need to protect their supply chains from serious disruption. Their challenge is to recognise the cost of supply chain risk and strike the right balance between resilience and cost savings." Marty Scherzer, AIG

Geetha Kanagasingam advised: "Know your suppliers. Spend time auditing them. Provide training like you would for your own staff to make sure they are up to your standards. And make them meet minimum criteria that includes ensuring they have BCM/P (Business Continuity Planning) in place and adequate data privacy procedures."

Risk of Financial Failure

While natural disasters and cyber risks have the potential to cause massive disruptions to the supply chain, there is another risk that is often underestimated but can be equally as damaging – financial failure. This most commonly happens to a small supplier that runs out of working capital, goes bust and causes problems for larger companies further up the supply chain.

> "Natural disasters. We may think that we can worry about that tomorrow. The problem in this part of the world is that tomorrow happens every day. It's about preparedness, not just response." Dr Robert de Souza, The Logistics Institute, Asia Pacific

One innovation Mr Dimos suggested was creating a platform for suppliers and buyers to facilitate their working capital and payment needs. "In Asia, access to capital is very difficult. The cost of cash is higher here." The platform would also allow them to use third party sources for their funding needs.

Such a platform would mean more companies will avoid the risk of financial failure which is the key thing that usually triggers supply chain disruption. If one small supplier can't finish their goods or meet deadlines, that can have a massive knock-on effect. Dr Robert de Souza, Executive Director and Chief Executive, The Logistics Institute, Asia Pacific, observed that the cost of mitigating the risks needs to be taken into account. "If it is so expensive to do something then we will never want to do it. One of the things we need to do is to decide who to take part in our supply chain so that you can provide an acceptable level of service."

While choosing cheap suppliers/manufacturers in emerging markets like Asia looks attractive, a company needs to understand the true cost of doing this. The cost to produce one unit isn't the true cost to the supply chain. One of the key costs, especially in Asia, is risk, which needs to be factored in. For example, a contract may say that you will be paying $0.30 per part which seems cheap when you compare it to $1 down the street. But you need to remember that there could be $3 worth of risk-related costs per part by going to a low-cost provider, so all of a sudden that $0.30 part now costs $3.30. This highlights the importance of working out the true cost through the supply chain.

Innovation and Technology

Thankfully the insurance industry is working on innovations to tackle these growing risks along with tools to predict risks before they materialise. While technology may have brought increased cyber risk it has also brought opportunities to innovate, such as the use of big data. The collection of big data can be used for more predictive modelling and new analytical techniques designed to spot problems in advance. In fact, big data could be the game-changer for the insurance industry.

Technology can also help pool together insurance industry insights to help companies better understand their own risks. "We can take all the data we have as an industry and design a programme to think about risk. The insights we are getting are significant and we are using technologies we haven't used before to gather and analyse data," said Mr Scherzer.

"The industry is also being innovative in tackling cyber risk. Cyber risk didn't occur 20 years ago, transparency on the internet wasn't available five, 10, 15 years ago. Companies now face much greater vulnerability and bad news spreads quickly. The world is a much less tolerant place than it used to be," added Mr Scherzer. About two-thirds of cyber events are the fault of third-party businesses that outsource services for the victim.[8]

So as Asia Pacific becomes more inter-connected and trade flows continue to increase, protecting valuable supply chains from these new and existing risks becomes critical to the success of companies based here.

Case Study

AIG received a claim from a Combined Cycle Power plant in Malaysia where an electrical breakdown occurred at a transformer servicing the steam turbine. Various suppliers were consulted and the supplier with the shortest lead time quoted nearly 6 months for repair work. AIG helped the client to seek out a temporary transformer and found a unit in the UK that had to be upgraded to suit the plant's operations. Despite many technical issues and also natural calamities such as bad snowstorms that hindered the modifications, the transformer eventually arrived by a chartered Antonov and the temporary transformer allowed the plant to resume generation. This is one example of the innovative and flexible approach an insurer needs to take when dealing with businesses with vulnerable supply chains.

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Citations

[1] Economist Intelligence Unit (EIU), EIU Market Indicators Database, Accessed March, 2015.

[2] World Trade Organization. (2014). International Trade Statistics 2014.
Retrieved from https://www.wto.org/english/res_e/statis_e/its2014_e/its14_toc_e.htm

[3] "Supply Chain Game Changers — Mega, Nano, and Virtual Trends — And Forces that Impede Supply Chain Design." Journal of Business Logistics, (2014), Vol. 35, No. 3.

[4] PricewaterhouseCoopers. (2012, July). Resilience: Sustaining the supply chain. Retrieved from
http://www.pwc.com/en_US/us/corporate-sustainability-climate-change/assets/pwc-sustaining-the-supply-chain-july-2012.pdf

[5] Knowler, Greg. (2012, July). Managing Complexity in Asian Supply Chains.
Retrieved from https://www.edb.gov.sg/content/edb/en/resources/downloads/articles/asian-supply-chain-solutions.html

[6] Warren, Rick. (2013). Closing the Gaps in Third-Party Risk Management.
Retrieved from http://cdn.cfo.com/content/uploads/2013/12/Crow_IAA_Study.pdf

[7] Turner, Martha. (2011). Be Prepared to Bounce Back: Building a Resilient Supply Chain.
Retrieved from http://www.strategyand.pwc.com/media/file/Strategyand_Be-prepared-to-bounce-back.pdf

[8] Khalamayzer, Anya. (2013, May 8). An Underrated Supply-Chain Concern: Cyber Events.
Retrieved from http://www.propertycasualty360.com/2013/05/08/an-underrated-supply-chain-concern-cyber-events

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