

Making the move from global to local

The Brexit vote and election of Donald Trump show that major disruptions are underway that signal a move from global to more responsive local supply chains

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We are living in an ever more uncertain world, where “business as usual” is becoming the least likely option for the future. Companies and investors need to adapt quickly to this new normal environment, if they want to maintain revenue and profit growth. One example of this process in action comes from the American company 3M, which has become legendary for its ability to identify new trends. Their latest insight continues this tradition, as CEO Inge Thulin has explained:

“Our strategy has changed. If you go back several years, there was a strategy of produc-

ing at huge facilities at certain places around the world, and shipping it to other countries. But now we have a strategy of localisation and regionalisation. We think you should invest in your domestic market as much as you can.”

Clearly this insight has major implications for many chemical companies. As Thulin suggests, there is plenty of evidence that global supply chains have reached their sell-by date. Political pressures are just one example of the challenges they now face, with America’s President Trump leading the way in starting to redraw the global trade map:

■ He has already withdrawn from the Trans-Pacific Partnership, which would have linked 11 Pacific nations with the US

■ He has also notified Congress of his intention to renegotiate the North American Free Trade Agreement with Mexico and Canada

■ This month, he announced his intention to withdraw from COP-21, the Climate Change Agreement signed in Paris two years ago

Similar disruption to previous trade patterns is also underway in Europe, where the UK’s Brexit vote to leave the European Union (EU) means that at least 759 treaties will have to be renegotiated – covering not only trade, but also key areas for business such as air traffic rights and financial services. This process will not be easy in the UK’s febrile political atmosphere, given the Conservative Party’s failure to win an outright majority in this month’s election.

SPARE PARTS

Origin of parts used in cars built in the UK

Destination of production from Nissan’s Sunderland plant (the biggest in the UK):

Origin of some parts for the UK-manufactured Nissan Qashqai

NSK (Headquarters: Japan): electrical power assist **steering** from factory in **Poland**

Denso (Japan): **compressor** from **German** factory; crank sensor from Japan factory

Sogefi (Italy): **coil springs** for suspension system from **UK** factory (front) and **Spain** factory (rear)

ZF Friedrichshafen (Germany): **shock absorbers**, electric park brakes, airbags, camera systems and steering wheels from factories **all over the world**

Faurecia (France): **various parts for seats** (including tracks, recliners and height adjusters) from factories in **Portugal, Poland and France**

Bridgestone (Japan): **tires** from factories in **Poland and Spain**



SOURCES: The Wall Street Journal; Society of Motor Manufacturers & Traders (origins, destinations); the companies (all other)

One key concern is that tariff barriers are probably the least of the UK's challenges – having taken part in trade negotiations myself, I suspect that reaching agreement on the application of critically important EU rules and regulations such as REACH will prove a real test for the negotiators.

Brexit, of course, does not just impact UK-based firms. Anyone who supplies into a UK-related supply chain will likely be impacted – either directly or indirectly as the Nissan Qashqai example confirms. It highlights how 55% of production at the UK's largest car plant currently go to the EU, with parts being supplied from all around the world.

LOCAL SUPPLY CHAINS, NOT GLOBAL

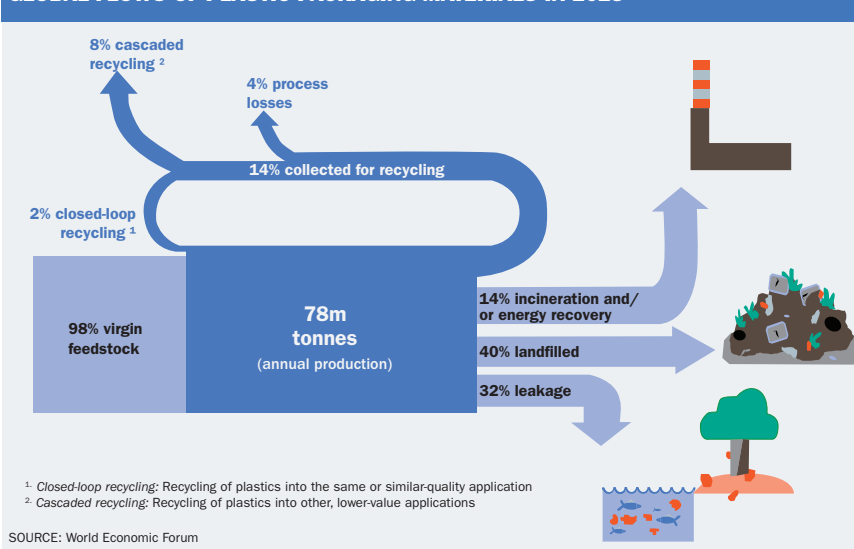
This example highlights the paradigm shift that is taking place as global supply chains are challenged by growing protectionism, as well as by a desire to reshore manufacturing operations back to western countries. Reshoring is already economically viable for many firms – particularly if robots can be used to replace workers in the new factory. As a result, formerly successful business models which involved shipping raw materials around the world are now under major threat.

This is why 3M's insight is so important. It highlights how successful science-based companies need to recognise the paradigm shift that is taking place, and adapt to it. Companies instead now need to focus on localising their supply chain - using locally sourced raw materials to manufacture products in local plants and then sell these through local distribution channels. Critically, this process involves moving from today's supply-driven mindset to a demand-led approach. As 3M demonstrates, this means a laser-like focus on developing and maintaining key customer relationships, whilst improving productivity and efficiency to best-in-class standards. Both aspects of the new strategy are critical, if companies want to be able to maintain their sales and margins versus local competitors.

Companies such as Covestro and Arkema are good examples of chemical companies who have already adopted such strategies successfully. In China, Covestro localised its investments in polycarbonates and polyurethanes over a decade ago, joining other manufacturers in turning what was a rice field outside Shanghai into a site where it now produces 400,000 tonnes of polycarbonates, 500,000 tonnes of methyl diphenylene isocyanate (MDI) and 250,000 tonnes of toluene di-isocyanate (TDI). Operating in more diversified downstream markets, Arkema now has eight different manufacturing sites across China in locations such as Jiangsu, Guangzhou and Shanghai.

Of course, this process is inevitably more complex than simply hiring a local sales force to supply the market with imported product.

GLOBAL FLOWS OF PLASTIC PACKAGING MATERIALS IN 2013



But companies who have taken the trouble to put down strong local roots are likely to be the winners in today's new landscape. The reason is that we are living in a fast-moving world, where agility and flexibility are going to be increasingly important for success. And it is difficult, if not impossible, to be agile and flexible from the other side of the world.

SUSTAINABILITY IS A KEY DRIVER

The move away from globalisation towards more local supply chains also highlights the growing importance of sustainability as a key driver for the future. Globalisation was a critically important dynamic during the Baby Boomer-led economic SuperCycle, when demand was rising on a constant basis. But this demographic dividend is now being replaced by a demographic and demand deficit.

Today's globally ageing population means that economic growth is set to decline in many countries. Older people already own most of what they need, and their incomes decline as they move into retirement. Equally important is the trend away from owning "stuff" among the younger generation, as seen in the popularity of streaming services such as Netflix and Spotify. Digitalisation is playing a key role in enabling this aspect of the paradigm shift, and it seems likely that major chemical markets such as autos will now be prime candidate for disruption. We cannot yet know whether car-sharing, or autonomous vehicles, or another yet-to-be-invented business model will eventually dominate the mobility market of the future. But we can be reasonably sure that major disruption lies ahead.

These developments are also very supportive of the sustainability agenda itself, by helping to drive the move towards creating a more circular economy. As the chart from the World Econom-

ic Forum highlights, 95% of plastic packaging "material value" is currently lost to the economy after a short first use, at an annual cost of more than \$80bn. Even worse is the fact that there are already 150m tonnes of plastic waste in the oceans, and on current trends this volume will grow to 250m tonnes by 2025. By then, it will be one-third of the weight of all the fish in the ocean. Clearly something has to change, especially in those parts of the world that wish to be serious about tackling climate change.

These challenges create major new opportunities for chemicals and polymer companies. In the area of food production, it clearly makes no sense to continue with a business model which means that 40% of world output is currently either thrown away, or goes rotten before it reaches the market. Companies who successfully rethink packaging solutions to meet this challenge on a country by country basis via the use of sensors and bio-markers, are clearly going to have a very positive future.

Similar challenges and opportunities exist in almost every market sector. They highlight the paradigm shift now underway, as sustainability replaces globalisation as a key driver for the economy. The shift means we need to move away from the "Think Local, Act Global" business models developed to exploit the opportunities provided by globalisation. Instead, companies need to future-proof their strategies with business models more aligned with sustainability if they want to continue to grow their revenues and profits. "Think Global, Act Local" will likely become the new paradigm for success. ■



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