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Friendshoring and other strategies to reduce global dependencies A Swiss manufacturing perspective



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Background

Against a backdrop of growing geopolitical tensions, trade-policy distortions and skewed supply chains after the COVID-19 pandemic, global strategies of manufacturing companies are coming under increased scrutiny. Many global manufacturers are rethinking their respective strategies in terms of purchasing, production, or sales to reduce their dependencies in supply chains and to balance risks in production through diversification.

Currently, there is a lot of focus in the US on reshoring most of the supply chain to avoid shortages from foreign suppliers and increase domestic production capacity. Alternatively, many European manufacturers are considering relocating critical segments of the supply chain to other growth markets or locations closer to Europe. The **latest ECB survey on Global Production and Supply Chain Risks** indicates an increasing trend of manufacturers for nearshoring, which involves moving manufacturing closer to production sites or growth markets, and friendshoring, which involves relocating manufacturing and sourcing to countries that are geopolitical allies and/or have comparable values.

As geopolitical tensions and trade-policy distortions grow, Swiss manufacturers that are operating globally might consider adopting similar or alternative strategies to boost resilience in uncertain times. The following strategies to reduce global dependency come to mind:



We have discussed the current challenges and strategies to reduce global dependencies with several experts from Swiss manufacturing companies.

Strategies, challenges and actions

1 Friendshoring

Increasing geopolitical tensions and trade distortions are placing greater emphasis on the need to adjust global strategies. This can be a major challenge for many manufacturers. For example, to continue to be successful, companies need to rethink their respective strategies for supply, production, and sales in Asia to reduce dependencies and diversify risk. The biggest challenges are the strategic safeguarding of existing growth markets, the reduction of dependencies, the switch to new markets, the establishment of local sales or service partners and the digitalization of parts of the value chain – especially because investments need to be adjusted in the medium to long term.

The sensible measure is not to try to solve all the challenges at once, but to first set clear parameters for the adaptation of global strategies. In view of the current geopolitical and trade policy problem areas as well as future potential escalations, Swiss manufacturers must think more in terms of scenarios for their global strategies, develop alternative plans and evaluate new locations. Reshoring, which is currently very much in vogue in the USA as an Asian strategy scenes loss relevant for Swiss manufacturers than the relocation





Challenges

- Understand geopolitical changes and impacts
- Adapt strategies in growth markets
- Reduce dependencies
- Adjust investments
- Think in scenarios (plan B) and have alternative strategies ready

Actions

- Evaluate location factors properly (e.g. economic, political, legal, social)
- Look always at both customer and company perspective
- Align your strategies with your company's values



In the country, for the country

Adopting an 'in the country, for the country' strategy to remain competitive and avoid supply chain disruptions can have its benefits, but also entails some risks. In some countries, for example in China, it has become a necessity over the years to win in the market. As Kurt Ledermann stresses, "The 'In China, for China' strategy is essential for us, since China remains an important sales market and assembly location." The deepening localisation with local manufacturing and procurement can make sense, especially when it is demanded by local customers or local policy/regulation. However, the COVID-19 pandemic has shown clearly that manufacturers cannot be completely resilient in every location in the world. There is a great need for manufacturers to regularly re-assess their global and regional supply bases to safeguard against major global supply chain disruptions.



The semiconductor crisis during the pandemic clearly highlighted the risk of shortages of key electronic parts for manufacturing and the problems that can result from relying only on a single source or sources in one market.

Nowadays, dual sourcing or multi-sourcing have become an industry standard to stay resilient, mitigate potential risk and stay competitive. It can make sense for manufacturers to have a local supplier of parts or components for the local market and a second supplier as an alternative that can be also used for production in the rest of the world. Many manufacturers turn their 'in the country, for the country' strategy into an 'in the region, for the region' approach or favour regionalisation over localisation from the beginning. With increased internationalisation, the leveraging of regional supply chains has further accelerated. A regional approach can also help when some suppliers suddenly leave some countries and relocate to other locations in the region.

Challenges Understand and respond to local policy changes Compete with local competitors Address local customer needs Deal with rising local costs (e.g. labour, transportation etc.) Monitor local policy environment Build resilience to local and global disruptions Maintain flexibility and agility in sourcing strategy (e.g. multi-sourcing for local and global markets) Focus on efficiencies to safeguard against rising cost

3 Make or Buy

'Make or buy' strategies have been around for some time as part of general business strategy. Some manufacturers are also using them to reduce global dependencies or diversify risk in the current geopolitical environment. As companies come under increasing pressure not only to cut expenses and improve return on assets, but also to stay resilient, they need to decide whether to keep certain functions in-house (make) or outsource them (buy). For example, to further reduce dependencies and minimise risks, the development of in-house skills and insourcing could be considered. Some companies shift away from being primarily equipment manufacturers towards more vertically integrated producers of products and services with new captive business models. Kurt Ledermann says that in response to some shortages of electronic components such as controls and inverters during the COVID-19 pandemic, "We have even insourced some critical components, like software for the controls to decrease the dependency." On the other hand, contract manufacturing can be an opposite strategy for manufacturers to build up more capacities for shifting customer demand as well as spreading the risk.



A make-or-buy analysis needs to be done at the strategic and operational level. This helps to decide what areas/parts are commodities that can easily be outsourced and what areas/parts are strategically relevant or increase resilience and reduce dependencies and must be developed or done in-house. Insourcing can make sense especially when certain manufacturing processes can be automated or digitized.

Challenges

- Cut expenses and improve return on assets
- Minimize risk and manage purchasing, production and sales
- Adjust investments
- React to changes in customer demand
- Conduct strategic and operational make-or-buy analysis

Actions

- Extend make-or-buy decisions beyond manufacturing (e.g. HR, IT, maintenance)
- Evaluate processes that can be automated/digitized
- Partner with third parties to offer customers best products/services

4

Automation/Digitalisation

Increasing automation and digitalisation is not just a way to improve efficiencies, drive productivity and reduce cost in high-cost manufacturing locations such as Switzerland. Automating/digitising parts of the value chain can also help to reduce dependencies and risk across all geographies. "Digitalization and automation are key to efficiently navigate a global supply environment that is impacted by geopolitical risks and trade tensions", says Luis Pachas Pardo. However, for many manufacturers digitalisation continues to be a challenge because there is a high complexity of various in-house developed legacy systems with outdated operating and development environments that have few interfaces and which lack harmonization and standardization with new technologies. In addition, manufacturers often do not know in which parts of the value chain the greatest impact can be achieved with digitalisation, as well as how customers can be included.



There are many digital tools and new technologies that can help to reduce risk and global dependencies. Introducing data exchange, process monitoring or risk analyses across the supply chain will increase resilience. For example, "We have a digital supply chain tool (Control Tower) that helps us to monitor different risks for our top suppliers", says Luis Pachas Pardo. In future, Generative AI (GenAI) can offer completely new opportunities to achieve greater efficiency, transparency and resilience. First successful GenAI application examples in the supply chain are the better prediction of future demand or optimization of routes across geographies. New digital approaches of the smart factory concept (digital twins, Ai, collaborative robots, etc.) make it also possible to achieve further efficiency increases in different production processes and flexibility across different global locations. Process mining is another innovative digital approach that combines data mining and process optimization across the whole business. Based on real-world data, it transmits detailed insights in real time that are crucial for decision-making processes. Previously hidden risks and inefficiencies can be identified much better and ways to improve can be shown.

Challenges

- Harmonize and standardize digital systems
- Increase digital impact in the value chain
- Increase digital know-how
- Collaborate with customers on digital
- Define meaning and purpose of digitalization projects from outset

Actions

- Develop digitalization strategies for all parts of value chain
- Use new technologies and collaborative platforms across whole value chain
- Sharpen customer focus

Expert interviews



Luis Pachas Pardo Head of Procurement Central Europe West Holcim (Schweiz) AG



Against the backdrop of heightened geopolitical tensions, companies are rethinking their global strategies to diversify risk. Currently, we can see an increased trend for nearshoring and friendshoring, e.g., manufacturing and sourcing from countries that are geopolitical allies and/or have comparable values. Are you actively pursuing or planning nearshoring/friendshoring?



Luis Pachas Pardo In a globalised world dependencies for some raw materials cannot be completely avoided. Nearshoring/friendshoring are therefore important strategies to help guarantee the availability of raw materials in times of increased geopolitical risk. Regional sourcing also helps to reduce logistic costs, in addition to reducing dependencies.

In all our locations around the globe, manufacturing building materials is mostly a local business. In Switzerland we source our raw materials mostly locally or from neighboring countries, like France, Germany or Italy. We follow a best cost country sourcing approach when possible.

Another example of nearshoring/friendshoring would be that in the past we sourced all paper bags for cement for the Swiss market from a Russian supplier. Following the sanctions of the European Union and in line with our company's values, we now have an alternative supplier in Spain that even delivers paper bags for cement made with recycled content. In this case we were able to introduce much more sustainable packaging solutions at not much higher cost.

While we still source certain raw materials or electrical parts for our machinery from Asia, we have reduced our dependency on countries that could be at geopolitical risk.



Some manufacturers have deepened their localisation in some countries to remain competitive and avoid supply chain disruptions – in other words adopting an 'in the country, for the country' strategy. Is this an approach that you are considering and what would you have to gain by this?

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Luis Pachas Pardo Building materials such as cement, aggregates and ready-mix concrete have always been very much a local or regional business. Our products are manufactured mostly 'in the countries, for the countries'. In Switzerland it can even be a cantonal business, for example manufacturing in the Canton of Basel for the Canton of Basel. The new supply chain scenario has pushed to the organizations to be aware of their decision according to geopolitics and political economy. Our success will increasingly depend on our flexibility and adaptability to changes rather than rigid strategies and business plans.

While we are dealing with some cross-border competition we can comfortably compete on quality and 'value added'. Our decarbonization strategy in the whole value chain, from production to delivery, is very well perceived by our clients. Circularity is the great opportunity of today together with construction demolition materials (building new from old). For example, we have recently launched our first cement Susteno with 20% construction demolition materials which give us the confidence to have our raw materials on a very local level. This is a work in progress that required all the supply chains well aligned. We live now in the economy of purpose and Holcim is committed to follow accordingly.



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As companies come under increasing pressure to cut expenses and improve return on assets, they need to decide whether to keep certain functions in-house (make) or outsource them (buy). Are you considering/currently engaging in either of these options?



Luis Pachas Pardo The decision to 'make or buy' is not necessarily a key focus for us, however, we always adjust on the buy-side. For example, we used to buy bag filters for our cement manufacturing plants in Switzerland mainly from China. Now we are using alternative bag filters from suppliers based in other countries, for example Turkey. Nevertheless we are moving to clean this big filter bags to a German supplier providing these services. Total cost of ownership (TCO) works out almost the same or slightly lower.



Considering backshoring is expensive for a high-cost manufacturing location such as Switzerland, are you considering automating/digitising parts of your value chain to reduce cost and dependencies?





Luis Pachas

Digitalization and automation are key to efficiently navigate a global supply environment that is impacted by geopolitical risks and trade tensions.

We have a digital supply chain tool (Control Tower) that helps us to monitor different risks for our top suppliers. We have about 120 tier 1 suppliers of a total of 7000 suppliers. With our digital tool we can assess risk for an additional 20-30 tier 2 and tier 3 suppliers that are business critical. We have KPIs defined even for tier 3 suppliers – for example about where they are sourcing from etc. This setup helps us to pro-actively manage risk, detect dependencies, and reduce costs.

In production we have launched a cement plant digital twin for maintenance, as a central platform for accurate data in order to increase workflow efficiency and optimize operations.

Another good example of reducing cost and improving revenue with new digital technologies is switching our internet from local network providers to a satellite based broadband internet system that is more cost-effective. Lost internet connections mean lower online orders from clients. We have now connected some small plants with these antennas and have less drops in internet connection and measurably more online orders.

Using autonomous electrical haulers in our limestone quarries is another example of introducing digital technologies into our value chain that help to increase efficiency and save cost.



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What other strategies do you have to reduce global dependency, diversify risk and improve resilience of your supply chain and production?



Luis Pachas Pardo The first step is to follow the international market; political, geopolitical scenarios, regulations and actively listen to our stakeholder needs.

The strategies of reverse engineering and remanufacturing, driven by the global sustainability and ESG trend, are increasingly important. Designing circular materials and building components for re-use at the end of their lifecycle will also contribute to reducing the overall demand for raw materials.

Switching to hydro and leveraging solar for plants and other facilities will help too, to reduce dependencies and contribute to our sustainability goals.

The other big challenge our industry faces is to find the right talent with the right expertise to build resilience in supply chain together with the issue to adopt norms and standards to new building products that contain circular recycled materials.

We need people committed with our values as we are. Within Supply Chain adding value to communities and environment is mandatory.



Kurt Ledermann CFO, Rieter Management AG(2019-2023)



Against the backdrop of heightened geopolitical tensions, companies are rethinking their global strategies to diversify risk. Currently, we can see an increased trend for nearshoring and friendshoring, e.g., manufacturing and sourcing from countries that are geopolitical allies and/or have comparable values. Are you actively pursuing or planning nearshoring/friendshoring?



Kurt Ledermann

Friendshoring has been a topic that has been around for quite some time now. It was already on the table before the COVID-19 pandemic, when then US president Donald Trump started setting trade barriers on China. Friendshoring requires looking at both the customer perspective and the company perspective.

Currently, a lot of our customers – the producers of textiles – are moving out of China into lower-cost countries such as India, Vietnam, Bangladesh, Indonesia, Turkey, or Central America. In this regard they are following their customers – the big western fashion brands – that have already made this move, because of higher costs and concerns around working conditions in the Xinjiang region.

Within our own production however, there is a difference between assembly of machines and manufacturing of components. We are manufacturing high-tech components for the global market mainly in Europe (e.g., Switzerland, Germany, Czech Republic) and friendshoring is not a topic in this context. However, the assembly of our spinning machines happens in China and India. So if the situation in China changes and the risk of trade barriers or closing borders increases you need to have alternative strategies and build up other capacities. From this perspective, friendshoring is a topic for our production footprint.

While moving an assembly line to another geography is not necessarily that difficult, building up a completely new supply chain can be difficult and takes time. Key factors that need to be in place for any relocation/new location are certainty of the law, available skilled labour, stable energy supply, closeness to the market and political predictability. India – despites some challenges with regard to regulation and bureaucracy – has quite some potential to be an alternative to China.



Some manufacturers have deepened their localisation in some countries to remain competitive and avoid supply chain disruptions – in other words adopting an 'in the country, for the country' strategy. Is this an approach that you are considering and what would you have to gain by this?

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Kurt Ledermann

The 'In China, for China' strategy is essential for us, since China remains an important sales market and assembly location. The region of Xinjiang alone produces 20% of the world's cotton and a lot of it goes into the domestic market. Within China, you normally buy Chinese – so it is difficult to imagine cutting China off completely or serving the Chinese market from other locations. However, in the end it is always an economic decision.

China has become much more expensive in recent years (e.g. higher labour cost labour uncertainty, higher transportation costs etc.), to the extent that you now have almost a similar labour cost for blue collars as you have in the Czech Republic, for example. Even Chinese textile companies are now increasingly investing abroad and moving into Vietnam or Africa, for example.

In addition, concerns around data protection are on both sides, Europe and China high. You could have increased costs, because of the need to implement separate IT systems. Overall, critical know-how/IP needs to be protected and kept in Switzerland or Germany – where the component manufacturing is happening. Our key technologies that need to be protected are fortunately not part of the machines themselves, but rather part of the components. So unlike know-how/IP, the development of machines can be localised and can happen in other countries.



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Considering backshoring is expensive for a high-cost manufacturing location such as Switzerland, are you considering automating/digitising parts of your value chain to reduce cost and dependencies?



Kurt Ledermann

We have some automation/digitisation projects going on within the organisation, especially for R&D, Product Management or administrative processes. However, the far bigger focus regarding automation at Rieter is on driving forward the digitisation of the spinning mill together with our customers. This is not only about digitising some machines or automation on top of the machines, but involves digitising the whole spinnery process, so that all parts/machines are communicating with each other, and a higher yield is achieved.

Digital services/intelligent maintenance options are also increasingly considered when customers buy machines. They can also be retrofitted. In addition, predictive maintenance is a growing field, because it allows for real-time analysis/intervention, so that machines can work without interruption 24/7.

Many of our automation/digitization projects are still being tested with customers, but we are also thinking about more innovative offerings such as subscription models for services to create added value for our customers.

Robotics is an important topic for our customers. For example, our piecing robot fixes yarn breakages that occur while the machine is running is very successful and quite in demand – even though the robot takes twice as long for this cumbersome process than when a worker is doing it manually. Increasing labour cost and availability of labour are the drivers behind.



What other strategies do you have to reduce global dependency, diversify risk and improve resilience of your supply chain and production?





Kurt Ledermann During the COVID-19 pandemic, we experienced certain shortages of electronic components such as controls and inverters. Even though we have European suppliers for controls, these still need components produced in China. We needed to introduce more flexibility into the supply chain by changing from single sourcing to dual sourcing. For our critical components, we already have or plan to build-up a second source.

Multi-sourcing is back in fashion in our industry, after a long period where everybody was introducing single sourcing to reduce cost. We have even insourced some critical components, like software for the controls to decrease the dependency.

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