Reshoring & Sustainability – Beyond the Horizon

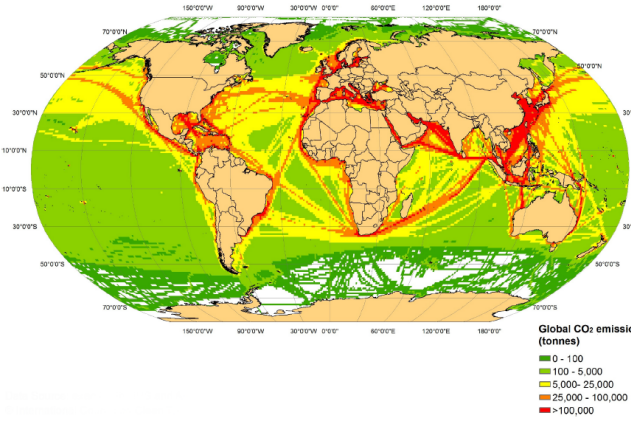
The world around us today, more than ever before, is riddled with radically complex changes. We have entered into an age of incredible achievement in our technological advances and production of industrial and consumable goods. Yet, these impressive milestones have brought about both unprecedented flux and unexpected consequences within the foundations of our natural world. In recent years, climate change has become one of society's largest and most holistic challenges, pushing us to seek out creative and interdisciplinary solutions which might allow us to better preserve our environment and the economy. One such solution is a process commonly known as reshoring, or the act of relocating a firm's manufacturing operations, which are currently taking place overseas, back to the country in which the firm resides. Though a seemingly simple concept, reshoring offers a chance for businesses to move towards a viable balance of environmental sustainability and economic reward.

SHRINKING THE SUPPLY CHAIN

As manufacturing procedures and logistical prowess have advanced in the past century, the ability to conduct commerce across large swathes of the world has become commonplace. More recently, firms have specifically sought out the lower labor costs found overseas to satisfy their manufacturing needs. From 2000 to 2018, the United States lost nearly 5 million manufacturing jobs.[1] Also known as offshoring, this trend has increased the output of pollutants associated with day-to-day operations. The most frequent of these pollutants is carbon dioxide (CO_2), a colorless greenhouse gas which holds a chief role in the development of climate change. As corporations lengthen their supply chains, transporting their products thousands

of miles to reach end-consumers, they simultaneously increase the strain on the environment. The associated impact on climate change is considerable. Ships are responsible for annually emitting more than one billion tons of CO_2 and greenhouse gases, an estimate which is projected to increase by a value somewhere in between 50% and 250% by the year 2050.[2] To put this in perspective, if international shipping was treated as a country, it would have been the sixth largest emitter of energy-related CO_2 in 2015.[2] The following figure[2] highlights the concentration of these emissions within the context of global trade routes, a phenomenon which has been exacerbated by offshoring.

Ships emitted 932 million tonnes of CO_2 in 2015. This illustration shows the distribution of CO_2 emissions from total shipping (international + domestic + fishing) for 2015. Major shipping routes are clearly visible.



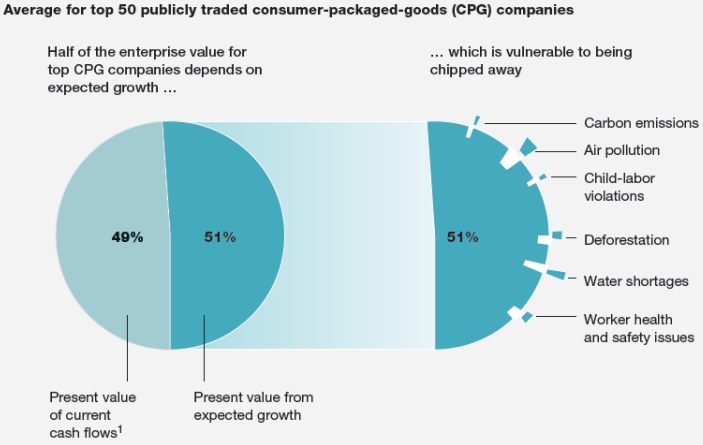
Ultimately, the environmental strain caused by unnecessarily moving products around the world represents a real liability for firms, threatening economic uncertainty in nearly every manufacturing industry.[3] To combat this risk, many firms have invested in proximity manufacturing, commonly known as "local for local," a strategy which focuses on creating goods near the locations in which they will be sold. Within the clothing industry, proximity manufacturing enhances sustainability, through greenhouse gas reduction, and indirectly, through facilitation of sustainable retailing and reverse logistics for recycling.[4] Fast Fashion companies such as Zara and H&M also use local factories to reduce in-transit inventory investment and improve response times to fashion trends. Moreover, reshoring serves to drastically and logically reduce transportation emissions associated with the creation of products. By embracing reshoring, manufacturers can once again shrink their supply chains and take a step toward long-term sustainability.

ENVIRONMENTAL COMPLIANCE

Regulatory compliance is another key component to the environmental sustainability of our manufacturing processes. The laws and regulations which govern commercial production serve to keep surrounding populations healthy and nearby ecosystems safe. Furthermore, these regulations have a major role in the restriction of greenhouse gas emittance. Yet, as firms redirect their manufacturing towards less developed countries with lower labor costs, it often results in heightened levels of pollution. Less stringent environmental regulations have the potential to create "pollution havens", a phenomenon in which firms in high-wage countries export dirty manufacturing processes to low-wage countries in an effort to avoid the costs associated with strict environmental laws. This migration to low cost countries is particularly potent within CO_2 intensive sectors, such as steel refinement and cement manufacturing.[5] Using a sample of over 8,000 firms and 18,000 production plants, a 2017 analysis found a positive correlation between the toxicity and pollution associated with US firms' products and imported manufactured goods from low wage countries.[6] Regulatory laxness found in foreign environmental regulations results in lower cost structures for firms in the short-term. However, when reviewing the economic implications of climate change, a long-term lens shows that a polluting for short-term gain is highly detrimental to the success of organizations. The following figure[7] shows how a lack of environmental sustainability affects growth and profitability in consumer-packaged-goods companies.

For this reason, it is imperative that firms commit to reducing their carbon emissions and environmental footprint, using developed environmental laws as guidance towards less harmful operations. The reshoring of manufacturing is a tangible method for accomplishing this goal. It encourages firms to consider the long-term implications within their industry through consistent environmental stewardship. By keeping manufacturing onshore, we can see the effects of our actions, and we can better understand how to shift away from inefficiencies and environmental degradation.

Sustainability factors could alter the growth projections for consumer-packaged-goods companies, seriously affecting their total returns to shareholders.

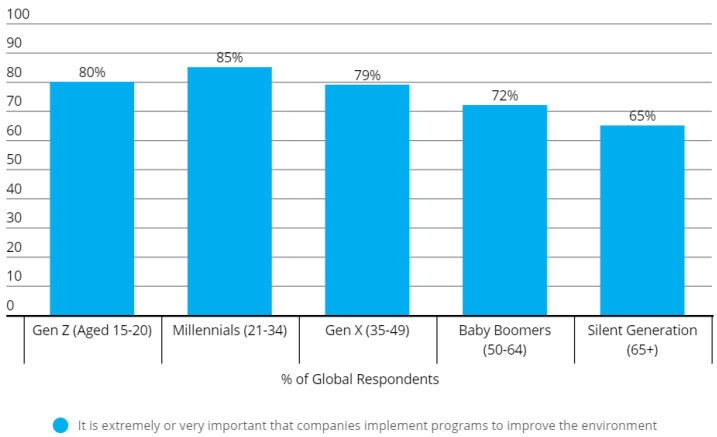


[1]Current net operating profit less adjusted tax (NOPLAT) estimated for latest reported fiscal year held flat through perpetuity (NOPLAT divided by weighted average cost of capital). Value ranges from 18% to 88% across the 50 largest global CPG companies, whose combined market capitalization is $2.68 trillion.

MARKET AGILITY AND LEAN EFFICIENCY

A third way that reshoring allows for greater sustainability is commonly known as “agile manufacturing”. This is an approach that involves utilizing lean operations in order to accomplish rapid responses to consumer needs. In mature markets with high labor costs, such as the United States, agile manufacturing plus automation can provide a competitive advantage for firms that produce their products locally.[8] In fact, a key element to successfully integrating agile manufacturing is the availability of effective human capital.[8] By leveraging flexible and highly-integrated roles, as well as proximity to the market and streamlined lean manufacturing, agile firms can respond to consumers in an accelerated fashion. Almost as quickly as consumers are demanding alterations and engineering changes in products, the very change is also occurring within the firm. This level of efficiency not only reduces the environmental footprint of an organization through waste reduction, but it offers economic backing for relocating manufacturing back to the United States. While agile firms create more sustainable operations through the elimination of unnecessary resource usage, they also provide accelerated innovation in their products and sourcing. This means that as the consumer base for environmentally responsible products and services expands, local agile firms can more readily respond to the call. According to a recent study, 81% of global consumers said that it was extremely or very important for companies to implement programs to improve the environment.[9] The following graph[10] illustrates this data across age groups.

Agile manufacturing, and thus reshoring to markets which have the resource base to support it, provides the means to take advantage of this demand, and it allows firms to be more efficient. With cyclical financial market risk, this level of speed will be integral in maintaining future growth and stability.[11] To be agile, is to be swift. To be swift, is competitive advantage.



RESHORING ENABLES SUSTAINABILITY

In short, reshoring enables firms to be sustainable, and sustainability keeps firms economically viable. Shifting away from commonly accepted offshore supply chains and manufacturing is anything but easy. It requires foresight, accountability, and most importantly, a deviation from the status quo. For firms to achieve advantage over their competitors, they must be willing to evolve alongside the ever-changing landscape of business. This means taking tangible steps to purposefully mitigate risks, reduce long-term costs, and improve revenues. Furthermore, it is a commitment to making decisions based not only upon the obstacles that we can see, but upon the ones that we know to lie beyond the horizon.

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