June 22, 2020

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The Next Wave of FDI to Vietnam is Coming

Summary

- The next wave of FDI to Vietnam is coming and it will have a ***much bigger impact*** on the economy than previous FDI inflows.

- Vietnam can increase high-quality FDI inflows, by taking ***well-known*** measures such as improving physical infrastructure and ease-of-doing-business rankings.

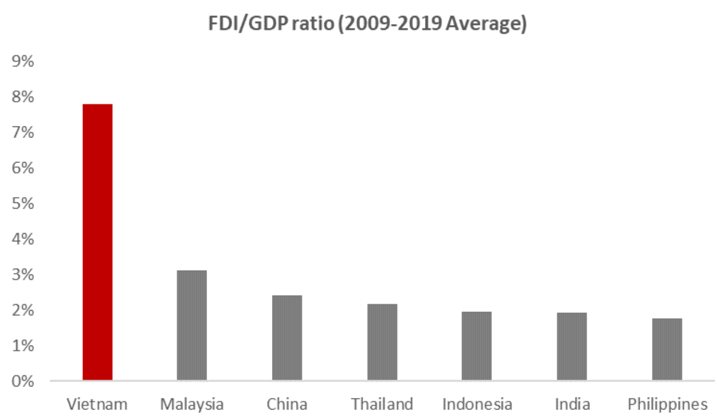
- Policy makers can ***significantly boost Vietnam's economic growth*** by improving Vietnam's FDI attractiveness.

A new wave of foreign direct investment (FDI) into Vietnam is imminent. This is being driven by global events, including the US-China Trade War, the COVID-19 pandemic, and other factors. The amount and quality of this new wave of FDI is largely up to local policy makers because there are few countries in the world as intrinsically attractive to multinational manufacturers as Vietnam.

This next wave of FDI will have a bigger impact on Vietnam's economy than previous inflows because multinational companies now have an incentive to help local firms "move up the value chain", in order to build supply chains in Vietnam capable of supporting those FDI companies. We have highlighted some specific ways this will significantly boost Vietnam's future growth prospects in order to encourage policy makers to take immediate steps to increase Vietnam's already-high level of attractiveness to multinational manufacturers.

The Next Wave of FDI to Vietnam is Coming

Vietnam's FDI inflows have been extraordinarily high compared to its regional peers, and the Prime Minister has identified FDI as one of the main pillars that he expects to drive Vietnam's GDP growth in 2020 and beyond.



The initial waves of FDI into Vietnam were primarily motivated by the high skill level and low wages of Vietnam's work force, as well as by the country's geographic proximity to the supply chains of the garment, furniture, electronics, and other industries in Asia. The next wave of FDI will be driven by companies re-locating their factories out of China. According certain China-based experts who advise FDI investors in Asia, about

20% of China's manufacturing base is likely to re-locate out of the country over the next 5-10 years. Both multinational and Chinese companies will look to set up factories in South East Asia.

Prior to COVID-19 and the US-China trade war, factories had already been re-locating out of China due to higher wages paid to Chinese factory workers' wages compared to those in Vietnam, Thailand, Mexico, and in several other countries. [1] [2] The US-China trade war accelerated this trend, but the COVID crisis will be a much more powerful motivator for firms to re-locate their factories out of China for a variety of reasons, including:

- The supply-chain disruptions caused by the outbreak were a more powerful "wake up call" to corporate executives than were tariffs imposed in the trade war.

- The outbreak spawned negative consumer sentiment towards China. According to a recent article in Bloomberg, nearly 80% of US consumers prefer not to buy products that are made in China. [3]

- Nearly 70% of US consumers believe US firms should reduce their China-based manufacturing, and over half support outright withdrawal of manufacturing from China, according to Barron's. [4]

Further to that last point, about 40% of US multinationals were already considering, or were in the process of relocating manufacturing or sourcing outside of China at the end of last year, according to *The Economist* magazine. [5] COVID will accelerate this trend, and we expect to see increasing numbers of news stories highlighting the move of manufacturing to Vietnam once the medical crisis abates.

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[1] Chinese factory wages surged in the 2010s as the country essentially exhausted its supply of rural labor. Economists refer to the point at which all of a country's available rural workers have already moved from the farm to the factory, as its "Lewis Turning Point".

[2] Factory wages in Vietnam are about two-thirds below those in China.

[3] https://www.bloomberg.com/news/articles/2020-05-17/what-do-americans-think-of-made-in-china-polling-latest

[4] https://www.barrons.com/articles/the-u-s-is-headed-for-a-messy-china-divorce-without-a-plan-51591807403

[5] https://www.economist.com/briefing/2020/05/14/covid-19s-blow-to-world-trade-is-a-heavy-one

The Next Wave of FDI Will Transform Vietnam's Economy

FDI has created jobs for millions of low skilled Vietnamese workers, which in-turn helped foster the emergence of a nascent middle class. The factories currently operating in Vietnam were primarily set up to take advantage of low labor costs. Unfortunately, local firms are not currently able to supply most of the high-value inputs that those FDI factories require to manufacture their products. However, this situation is likely to change dramatically over the coming decade because foreign companies are likely to take a much more active role in developing the capabilities of local businesses and managers.

The first notable example of this nascent trend is Apple's decision to produce its ~USD350 Airpods Studio Earphones in Vietnam without having first manufactured the product in China. Apple reportedly wants to help Vietnamese engineers and managers learn how to surmount the issues entailed in getting a new product into production (i.e., prototyping, development, assembly, etc.) as a way to reduce its reliance on China. According to an article in the *Wall Street Journal* last month, "*Some (of Apple's) operations executives suggested as early as 2015 that the company relocate assembly of at least one product to Vietnam*." [6]

Background: The Three Waves of Supply Chain Globalization

In the 1990s, pioneering multinational companies began aggressively relocating their manually intensive production activities from high wage developed market countries to those with low wages and an abundant workforce. This initial wave of supply chain globalization, which entailed the development of new factories in countries like China, Thailand, Malaysia, Mexico, was enabled by communications and information technology, by geopolitical developments, and by other factors such as the container shipping revolution of the 1970s-80s. In addition, various trade agreements and treaties resulted in a lowering and/or complete removal of the tariffs entailed in international trade.

These companies saw significantly lower production costs, which in-turn boosted short-term financial performance. Competitors sought to emulate their success and embarked on a second wave of supply chain globalization / FDI into factories abroad. Financial considerations and short-term performance enhancement were the primary criteria that multinational companies used to guide decisions about where to manufacture their products. For that reason, labor costs were among the most heavily weighted factors used in choosing where to locate production activities, especially for products that are highly labor intensive to make such as sneakers.

A Shift from Cheap Labor to the "Total Cost Model"

In the next phase of supply chain globalization, which unfolded in the aftermath of the 9/11 terrorist attacks, firms began to use a "Total Cost Model" approach to evaluate the suitability of individual countries as potential locations for specific production activities. This approach accounts for the hidden costs entailed in maintaining a robust supply chain in addition to the cheap labor costs that

[6] https://www.wsj.com/articles/tim-cook-and-apple-bet-everything-on-china-then-coronavirus-hit-11583172087

firms may benefit from[7]. This shift was prompted by the heightened awareness of possible supply-chain interruptions caused by terrorism and acts of nature.

Over the last 10-20 years, the rise of this total cost model approach, coupled with the heightened awareness of the supply chain disruption issue led to the so-called "China+1" strategy of supply chain globalization[8], as well as to the rise of supply chain management as a business discipline. The latter is reflected in the rise of industry-business school partnerships such as *The Global Supply Chain Institute* at the University of Tennessee.

Vietnam Benefits From "China+1"

Vietnam's participation in global supply chains surged from 2006, during the third wave of supply chain globalization, when the "China+1" investment strategy came to prominence. At the end of 2004, the head of Japan's JETRO gave a speech titled "***China Plus One and The Regional Economy***" which made multinational companies around the world take notice, because Japan was a massive investor in China at that time (China was Japan's second-largest investment destination after the US in the early 2000s).

In the first two waves of supply chain globalization described above, decisions about where to locate factories were largely the province of a multinational firm's financial analysts and its strategic planners. Those executives were trained with Harvard Business School case studies and textbooks illustrating that holding lower levels of inventory and using just-in-time production models lowers the firms' working capital requirements and increases its return-on-equity. However, decisions about which production activities should be located in which specific countries are now increasingly being made by firms' supply chain experts who can evaluate a wide range of criteria in addition to financial considerations, such as the degree of resiliency that should be built into supply chains. Going forward, the COVID pandemic will intensify the focus on achieving a balance between economic optimization and supply chain resilience, and an increasing scrutiny of the fragilities in a firms' supply chain.[9]

How Multinational Companies Choose Where to Invest

Senior managers at multinational companies use a few different approaches to decide which countries to locate the firms' factories in. The discussion on the three phases of supply chain globalization above highlighted that cheap labor has become less of a factor in deciding where to locate factories, but such costs become even less important as the complexity of the products being manufactured increases.

Further to that last point, wages in Mexico have been well below those in China for years, transportation costs from Mexico to the US market are obviously lower than from China, and Mexico is a member of the NAFTA/USMCA trade block. However, despite these apparent advantages, firms

[7] The financial strategy multinationals pursued in the first waves of the globalization of supply chains were analogous to investment strategies in which speculators make certain type of trades that generate immediate, modest profits but have a latent risk of "blowing up" and generating huge losses. An example of this type of investment strategy (which is often characterized as "picking up nickels in front of a steam roller") is when a hedge fund sells put options on the stock market in order to immediately generate income, but then suffers huge losses when there is a stock market crash.

[8] One analyst commented that the COVID pandemic led many firms to realize that they actual had a China supply chain rather than the global one they believed they had.

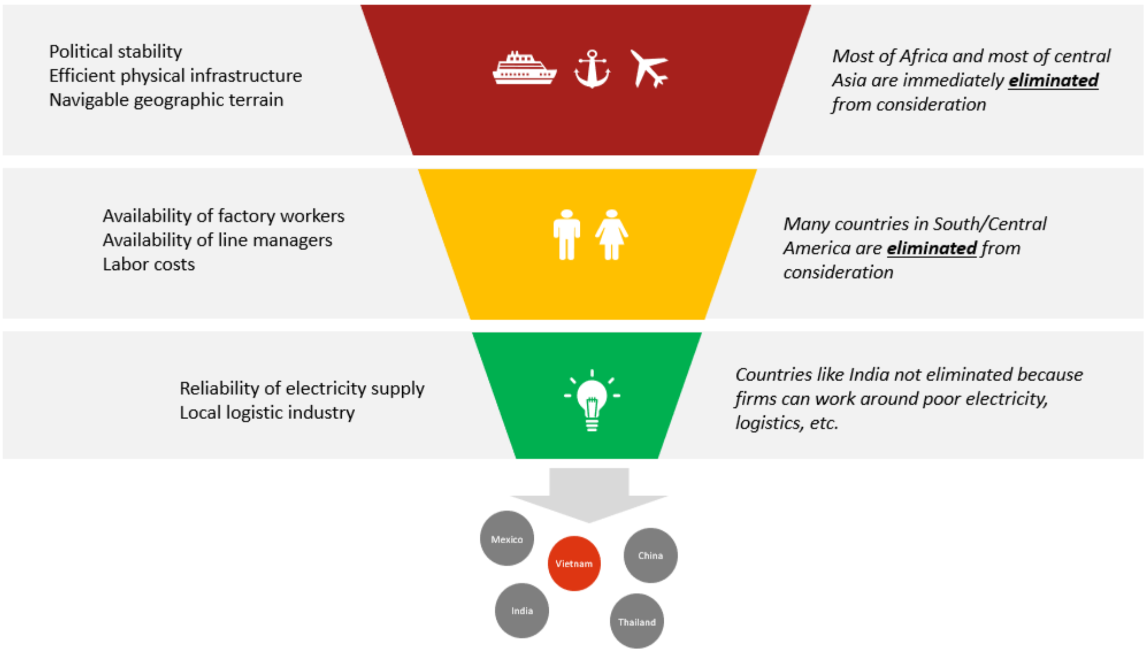
[9] Many multinational firms were apparently not even aware where their second-tier suppliers were located.

continued to locate many of the new factories that produce medium-value products such as auto parts in China instead of Mexico - until recently.

Below are three approaches that multinationals use to help guide their decision making about where to locate new factories. Local policy makers need to be aware of these heuristic approaches, but note there is not one, definitive approach that all companies use in deciding where to locate new FDI factories.

The Funnel Approach

There are nearly 200 countries in the world, and the costs of production inputs such as land and labor in most of those countries are far below the costs of those inputs in developed countries. In order to immediately eliminate many countries from consideration, decision makers can use a "funnel" approach that disqualifies countries based on successively stringent factors.



The first set of disqualifying factors includes criteria such as political instability, very poor physical infrastructure, and/or unnavigable geographic terrain. Most countries do not meet the minimum threshold that multinational managers require to build a new factory in that country and are immediately eliminated from consideration (for example, most of Africa and most of central Asia are immediately eliminated from consideration, except for the processing of extracted minerals).

The next set of criteria applied to this now-reduced pool of candidate countries includes factors such as the availability of factory workers and line managers, as well as labor costs. Many countries in South/Central America are eliminated from consideration at this level of filtration unless the factory will manufacture simple products such as garments.

At the narrowest section of the decision-making funnel, criteria such as the reliability of the country's electricity supply and logistics are used to eliminate potential candidates for the location of a new factory. These criteria are lower down the pecking because multinationals can work around such impediments, if needed. For example, a firm can buy a back-up electricity generator if a country's supply is not reliable, and it can train local workers if they do not possess sufficient skills to work in a factory. However, there is little a company can do if the host country's political stability becomes tenuous.

Fortuitously, Vietnam easily passes all of the above filtering criteria. This is one reason why Vietnam appears on most multinationals' "short lists" of countries to consider when locating a new factory.

Regionalization

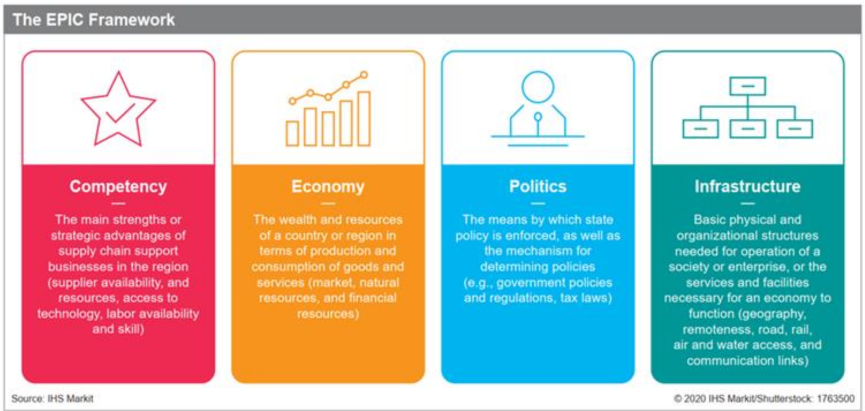
Multinational firms may establish an FDI factory in a country to produce products that are sold into that country's domestic market, or to make goods for export. However, there is a growing "regionalization" trend in which companies locate an FDI factory in a specific country with the intention of selling its finished products to consumers in the region rather than the global market. For example, factories in Eastern Europe typically produce products that are sold to consumers in Europe, while factories were established in Mexico/Central America in order to make products for consumers in the US and Canada, and many factories in South East Asia sell products to consumers in the rest of Asia, as well as to consumers in the US and EU.

The Asian consumer market has the most attractive growth prospects in the world, especially with China transitioning from an investment-driven to a consumption-driven economy. For that reason, this regionalization trend also makes Vietnam an attractive destination for FDI investment.

FDI Rankings & The EPIC Framework

There are a variety of "*FDI Rankings*" published by management consulting firm Kearney, *US News & World Report*, *Global Finance* magazine, and others that rate the relative desirability of countries as destinations for FDI. The various ratings schemes assign different weightings to the factors determining how attractive a country is, resulting in individual countries having significantly higher or lower rankings on different "FDI Ranking" lists.

The EPIC, "Global Supply Chain Readiness Index" is the result of a collaboration between IHS Markit, which publishes Vietnam's Purchasing Managers' Index (PMI), and the University of Tennessee's Global Supply Chain Institute (GSCI), plus The Council of Supply Chain Management Professionals (CSCMP). The framework was developed to help the managers of global supply chains assess the strengths, weaknesses, opportunities, and threats of the different regions/countries in the world by evaluating individual factors related to: Economy (E), Politics (P) Infrastructure (I) and Competence (C).



The first three categories of criteria in the EPIC framework are self-explanatory; Competency factors include elements such as the availability of labor and the ability of local suppliers to fulfill multinationals' needs. The EPIC framework is summarized in the diagram above, and a more detailed description of the EPIC criteria appears in the appendix of this report (a much more detailed description of the EPIC framework can be found here).

Vietnam currently ranks #25 out of the 60 countries evaluated in the EPIC scheme, ahead of Indonesia, Philippines, and Thailand, but below Malaysia, as can be seen in the table above. This modest EPIC ranking is partly attributable to several factors, including: 1) this scheme de-emphasizes the importance of low wages in a country, and 2) it puts a high emphasis on the size and attractiveness of the domestic market. Both of these issues were discussed earlier in this report. Specifically:

EPIC country assessments		
Rank	Country	EPIC Index
1	United States	3.39
2	United Kingdom	3.33
3	Germany	3.31
4	Canada	3.30
5	Netherlands	3.12
6	France	3.09
7	Japan	3.08
8	Australia	3.01
9	Sweden	2.97
10	India	2.97
11	Finland	2.94
12	Korea, Rep.	2.93
13	China	2.93
14	Belgium	2.88
15	Poland	2.87
16	Switzerland	2.85
17	Israel	2.81
18	Singapore	2.80
19	Malaysia	2.76
20	Czech Republic	2.73
21	Spain	2.72
22	Austria	2.68
23	United Arab Emirates	2.68
24	Hong Kong	2.65
25	Vietnam	2.65
26	Brazil	2.64

EPIC country assessments		
Rank	Country	EPIC Index
27	South Africa	2.64
28	Denmark	2.64
29	Indonesia	2.58
30	Mexico	2.56
31	Italy	2.56
32	Turkey	2.55
33	New Zealand	2.54
34	Norway	2.53
35	Ireland	2.51
36	Thailand	2.51
37	Russian Federation	2.48
38	Saudi Arabia	2.37
39	Hungary	2.37
40	Chile	2.32
41	Portugal	2.29
42	Argentina	2.29
43	Ukraine	2.21
44	Romania	2.19
45	Philippines	2.16
46	Qatar	2.16
47	Panama	2.15
48	Egypt, Arab Rep.	2.14
49	Kenya	2.10
50	Peru	2.10
51	Pakistan	2.08
52	Nigeria	2.07

1) Multinationals put less emphasis on cheap wages as the complexity of the products they manufacture increases, and as they transition to assessing supply chains using the **Total Cost Model** approach. Since Vietnam's main appeal continues to be low wages, the country needs other lures to attract FDI companies to locate their factories here.

2) Multinationals may invest in a specific country in order to produce products that are sold in the domestic and/or regional markets, which is the reason for the inclusion of the "Economy" set of criteria in the EPIC framework.

Further to that last point, in this report we are primarily concerned with the topic of how Vietnam can attract FDI-funded factories that make products which are exported rather than sold in Vietnam. That said, in 1994-96, Vietnam benefited from a wave of FDI by consumer product companies including Coca-Cola, P&G, Unilever, and Colgate Palmolive, which set up production facilities and/or JVs to make goods sold in the domestic market.

Vietnam's FDI Inflows Will Accelerate Despite De-Globalization

The contribution of international trade to global GDP has been falling since the global financial crisis. This "De-Globalization" is set to accelerate in the coming years, driven by the US-China trade war, the COVID pandemic, and by other factors including a push by populist politicians to repatriate the production of products back to the country in which those products are sold to consumers.

The UN and WTO expect COVID to prompt a circa 30% decline in global FDI flows, but Vietnam's FDI inflows are only down 8% this year, and the value of planned FDI projects is up 20% yoy in 5M20. Furthermore, we believe that the ability of US/European companies to repatriate manufacturing activity is limited, and that Vietnam is still an extremely attractive destination for FDI, which helps explain why we expect Vietnam's FDI inflows to accelerate and <u>not decline</u> in coming years.

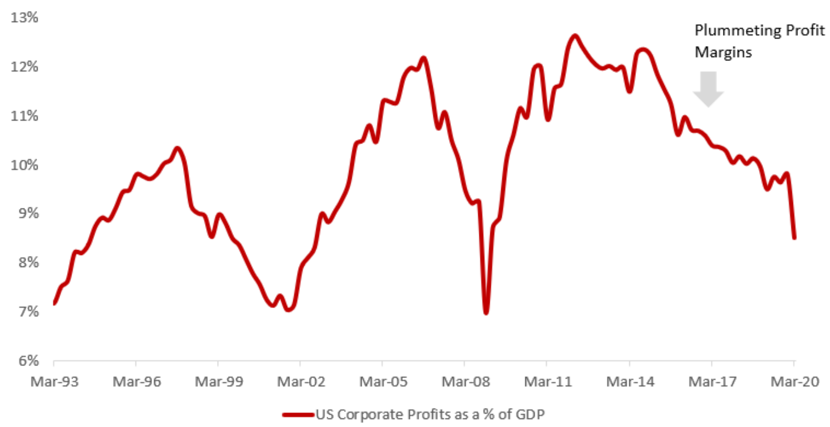
Make American (or Europe) Great Again Won't Slow Vietnam's FDI Inflows

US companies cannot absorb a large-scale re-location of manufacturing from China to the US without significantly increasing the cost of producing their products. The US manufacturing sector has been hollowed out, as evidenced by the fact that the contribution of manufacturing to US GDP has fallen to its lowest level in over 70 years. There are not enough skilled workers to support a major increase of employment in the sector – partly because of the substandard US secondary education system – and US companies skimped on capex over the last ten years in favor of share buybacks.

In Europe, poor demographics and overly rigid labor laws constrain the ability to significantly increase the production of manufactured products (the conditions for manufacturers are better in Eastern Europe than in Western Europe, but the demographics in both are very poor). [10]

Automation, and/or the so-called Fourth Industrial Revolution (4IR) is sometimes seen as a panacea for these problems. However, as Kearney pointed out in a recent report, [11] the capex entailed in automating mundane manufacturing tasks, plus the cost of hiring operators of the specialized machinery are so high that "*even after automation, the cost of domestic production is still higher than that of Mexican- or Asian- based operations*". [12]

Profit Margins Pressure Means More FDI for Vietnam



Finally, the chart to the right illustrates the fact that US corporate margins have been shrinking in recent years, so US companies won't take actions that will increase their costs, despite the recent "Make America Great Again" rhetoric encouraging companies to repatriate manufacturing back to the US.

Furthermore, the procurement departments of multinationals are one of the first places that firms look to cut costs when their profit margins are under pressure. Those departments have already been under pressure since 2016 to cut costs by measures such as increased centralized purchasing. We expect the same senior managers that issued dictums to "centralize purchasing activity in order to cut costs", to give the order to move production to places like Vietnam to further cut costs and reduce dependence on China" in the near future.

[10] Demographics are very important to support a country's manufacturing sector, evidenced by the fact that Germany's FDI outflows *surged* after re-unification, despite the fact the wages in East Germany were much lower than in West Germany. Poor demographics in both East and West Germany prompted the relocation of German factories to Eastern Europe and China at that time.

[11] https://www.kearney.com/operations-performance-transformation/us-reshoring-index

[12] According to an *Economist* Magazine article about automating garment production, the productivity of the operator of a "Sewbot", a specialized sewing robot, is 17 times that of a manual garment worker – but the salary of that operator is about 18 times that of a garment worker, making it uneconomical to automate garment production, especially when the capital cost of the factory automation equipment is included!

Vietnam Is Still <u>The</u> Preferred FDI Location

The senior managers of multinational firms probably realize that it is not realistic to repatriate the production of most of their products to the US/EU. However, companies and political leaders alike will likely compromise by repatriating a token amount of production back home, while simultaneously re-locating a meaningful amount of production out of China to countries like Vietnam.

For the reasons discussed before, Vietnam is the most obvious country for multinationals to re-locate their factories to for a variety of reasons, including the facts that factory wages in Vietnam are less than half those in China, while the quality of Vietnamese workers is comparable to those in China according to JETRO, Samsung, and others. Furthermore, Vietnam's geographic proximity to the existing supply chains in China is another key advantage because the majority of China's manufacturing capacity will remain in place.

In addition to those factors, it is worth noting that Vietnam's well-documented adept handling of the COVID-19 outbreak will be a considerable draw in attracting companies. A recent article in *The Economist* magazine pointed out that "companies will keep in mind how countries responded to COVID-19" in deciding where to locate their FDI factories going forward. [13] The article went on to warn that the "Mexican government's haphazard approach to the pandemic generated huge uncertainty for car companies and raised questions about their reliance on the country as a supplier".

Disclaimer

[13] https://www.economist.com/briefing/2020/05/14/covid-19s-blow-to-world-trade-is-a-heavy-one

Appendix – EPIC Framework Details