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The Reorganization of Global Value Chains: What's in it for Latin America and the Caribbean?

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Inter-American Development Bank
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The Reorganization of Global Value Chains: What's in it for Latin America and the Caribbean?

Mauricio Mesquita Moreira, Juan Blyde, Christian Volpe, Marcelo Dolabella, and Ignacio Marra.[*]

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Abstract

As Latin America and the Caribbean bounce back from a sanitary crisis of historic proportions, the search is on for policies that can accelerate recovery while boosting long-term growth. In a scenario of tight fiscal constraints, trade and integration (T&I) policies seem to fit this description. There are particularly high expectations in some policy circles that the benefits of T&I policies will be boosted by an impending reorganization of global value chains. Yet, little is known about the relevance, shape and impacts of this reorganization: Will this lead to reshoring, nearshoring, or some slightly modified version of the status quo? Will this benefit the region? This paper takes a stab at helping to answer these questions. It begins with a critical review of the most frequently cited drivers of the reorganization. This is then followed by an analytical exercise that uses the 2018–2019 US import tariff hike as a quasi-natural experiment. The results seem more consistent with modest trade and investment gains for the region, associated with incremental rather than major adjustments in the global value chains. It concludes by arguing that, whatever the future brings, minimizing trade and investment costs is likely to remain the region's dominant strategy.

Keywords: Value Chains, Trade, Latin America, Nearshoring.

[*] The views and interpretations in this study are strictly those of the authors and should not be attributed to the Inter-American Development Bank, its Board of Directors, or any of its member countries. We thank Kun Li for the gravity results presented in Figure 5. We also thank Ana Maria Ibanez, Fabrizio Opertti, Pablo Garcia, Miguel Brown, Jaime Granados, Fernando Ribeiro, Matt Scherer and Danielle Trachtenberg for their valuable comments.

1. Introduction

As Latin America and the Caribbean (LAC) bounce back from a sanitary crisis of historic proportions, the search is on for public policies that can speed up recovery. As has been argued elsewhere, the challenge is to look for policies that go beyond short-term impacts and improve, rather than compromise, long-term growth in Latin America and the Caribbean). This balance is critically important considering a major slowdown that started well before the current health crisis. [1]

Trade and integration (T&I) policies seem to fit this description. In a scenario of tight fiscal constraints and a limited set of policy options, they offer a well-tested path for recovery and sustainable growth.[2] They have done it before: T&I policies were instrumental in overcoming the stagnation of the 1980s, accelerating annual per-capita income growth by an estimated 0.6 percentage points over the following decades, despite the region's mixed record when it comes to implementation.[3]

They can do it again. There are at least two good, deeply intertwined reasons for believing that this approach will pay off this time. For one, global trade has recovered much faster than in previous crises, resuming growth in November 2020.[4] Second, LAC's integration at home and abroad remains largely unfinished business. Addressing high trade and investment costs could bring significant gains.[5]

While these two reasons alone should be enough to attract governments' attention, there are also high expectations in some policy circles around a third: an extensive reorganization of global value chains (GVCs). Driven by a flight to resilience and timeliness and changes in technology and labor costs—all accelerated by trade frictions and the Covid-19 shock—this reorganization is expected to allow the region to overcome its historically low participation in GVCs.[6]

While the benefits of a speedy global trade recovery and lower trade and investment costs are well understood and documented, the same cannot be said of a reorganization of GVCs. There is considerable uncertainty about its pace, direction, and scope, as well as its likely impacts on LAC. To close this gap and better inform the policy debate, this paper takes a careful look at these issues. In the light of all the recent backlashes against trade and integration, governments are better off by following policies based on sound economic theory and robust empirical evidence.

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[1] Izquierdo et al. (2020) and IMF (2020). After reaching nearly 4% on average between 2000–08, annual GDP growth deaccelerated sharply after the financial crisis in 2009 and came close to a standstill in 2019 before the health crisis.
[2] See Blackman et al. (2020).
[3] Mesquita Moreira and Stein (2019).
[4] On a 12-month basis. See https://www.cpb.nl/en/worldtrademonitor. See also IDB (2021).
[5] See Mesquita Moreira and Stein (2019), Volpe (2010, 2016, 2021) and Serebrisky et al. (2020).
[6] See Blyde (2014) and Blyde and Trachtenberg (2020) for evaluations of LAC's participation in GVCs.

Even though the findings, spread through the papers five sections, are mainly based on past and recent trends, they suggest that expectations should be kept in check. The analysis begins with a brief discussion in section 2 of the often cited (benign and not-so-benign) forces behind the reorganization—labor costs, the digital transformation, and the race for timeliness and resilience. While there seem to be good grounds to expect that these forces will bring changes, there is still too much uncertainty to be conclusive as to the magnitude and direction of their impact.

Section 3 provides an extensive examination of recent trade and foreign direct investment (FDI) trends. The evidence seems more consistent with incremental changes, rather than another unequivocal, full-blown source of growth-- whether driven by reshoring or nearshoring.

Similar conclusions are drawn from the more robust and forward-looking econometric analysis presented in section 4. It uses the 2018–2019 US import tariff hike, which mainly targeted China, as a quasi-natural experiment for taking the pulse of the latent forces behind the reorganization and their impact on LAC's trade and FDI. The premise is that if reshoring or nearshoring trends are likely to define the near future, a shock of this magnitude would both strengthen their forces and better reveal their implications.

The trade results point to significant losses for China, but these do not seem to have -translated into significant short-term gains for LAC—instead, they are more likely to have gone elsewhere in developing Asia. Mexico might be the notable exception, with a back-of-the-envelope calculation pointing to a 5% average increase in the growth of the country's exports to the US. Can Mexico's gains be replicated in the medium to long term in the rest of region, despite the distinct geographical, structural and trade policy differences? Only time can tell, but the fundamentals do not seem favor this outcome.

The FDI results focus on the two main sectors behind the GVC boom—manufacturing and non-financial services—and the relationship between the tariff shock and changes in the geographic distribution of new US foreign affiliates and investments. FDI decisions usually take longer than trading relationships to mature, so the short period of the analysis imposes more constraints on the interpretation of the results. Still, if the changes were imminent, it seems reasonable to expect to see some of its "green shoots". Yet, there is no clear signs of a reorganization that could support expectations of significant short-term gains for LAC: only Brazil and Colombia are shown to have positive, statistically significant gains, even though they are not the region's most obvious targets for nearshoring, considering their geography and labor costs.

Although regional and countrywide gains are hard to find, the results do not close the door on potential long-term niches. A methodology that considers the full difference in tariffs faced by exporters across countries and products—driven not only by the tariff

shock but also by myriads of US preferential trade agreements—shows scattered, sector-specific trade gains throughout the region. These are distributed across a wide range of sectors, from natural resources to capital-intensive and labor-intensive sectors.

As with trade, a more granular analysis of FDI reveals niches of opportunity for a broader set of LAC countries, including Argentina, Chile, Mexico, and Costa Rica. These gains, though, are also shared by several countries in Western and Eastern Europe and in East Asia.

Section 5 wraps up, summarizing the main findings and policy implications. It argues that both the FDI and trade stories seem more consistent with niches of opportunities than with a reorganization of GVCs that will power LAC out of the current crisis and fuel long-term growth. It acknowledges that this might not be the whole story. The econometric analysis is focused on short-term gains—multinational firms usually take a significant of time to (re)organize their supply chains—and there is still considerable uncertainty about the net impact of the drivers of the reorganization and the future of trade policy in developed countries.

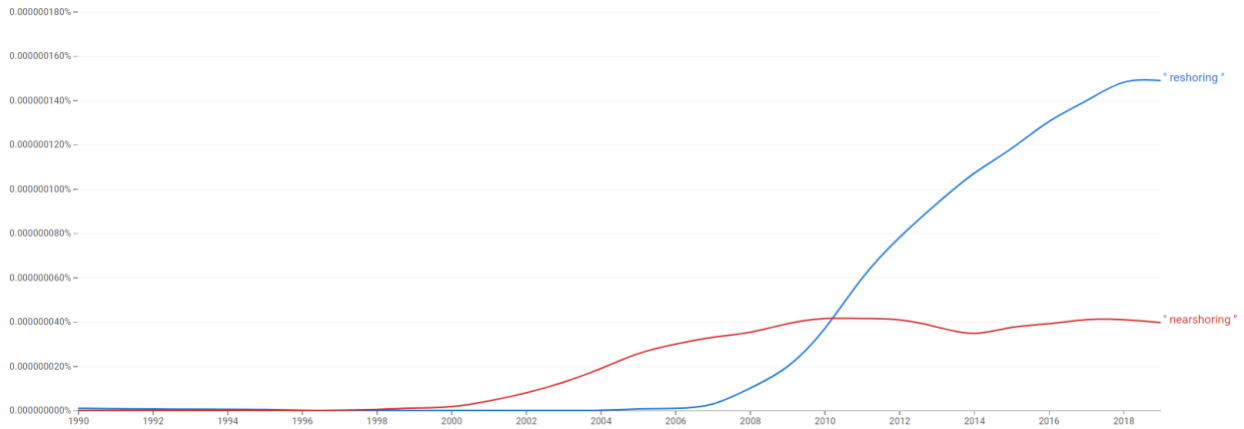
Section 5 concludes by arguing that whatever the future brings, the region should keep its focus in bringing trade and investment costs down and making sure that they do not get in the way of whatever opportunities or challenges the global economy might bring. This is likely to remain the dominant strategy, including in a scenario entailing significant reorganization of GVCs. The depth of the crisis and the extent of the uncertainty surrounding technological, labor, and policy changes only add to the urgency.

This document also makes it clear that faced with a crisis of historic proportions, LAC cannot afford to look down on any trade or investment opportunity, be it in manufacturing, agricultural, mining, or services; primary, intermediate, or final goods; at home, in the US, Europe, Asia, or elsewhere in the world. In short, there is no solid economic argument that favors one specific type of trade or foreign investment at the expense of others.

2. Reorganization: What Are the Drivers?

The policy debate around reorganization emerged in the developed world in the mid-2000s, encompassing everything from offshoring to reshoring and nearshoring. However, it only seems to have gained traction after the 2008 financial crisis and did so more as a challenge than an opportunity for developing countries (figure 1). It has been more about bringing back home—reshoring—rather than closer to home—nearshoring—those manufacturing jobs that had been offshored to emerging countries, particularly to China.[7]

Figure 1. Citations of "Nearshoring" and "Reshoring" in English-Language Books, 1990–2019.



Note: The figure shows the percentage of the words (unigrams) "nearshoring" and "reshoring" in all words contained in Google's sample of books written in English and published in the United States.
Source: Google Books Ngram Viewer.

While infused with a great deal of political economy concerns, the debate draws attention to deeply intertwined economic and technological trends that are key to understand LAC's prospects. The most frequently cited drivers of reshoring are: (i) changes in relative labor costs; (ii) the digitalization and automation of manufacturing; (iii) calls for value chain resilience; and (iv) the growing importance of speed to market.[8] Some of these trends were strengthened by the recent backlashes in the US and Europe and the ensuing trade conflicts and by the Covid-19 shock.

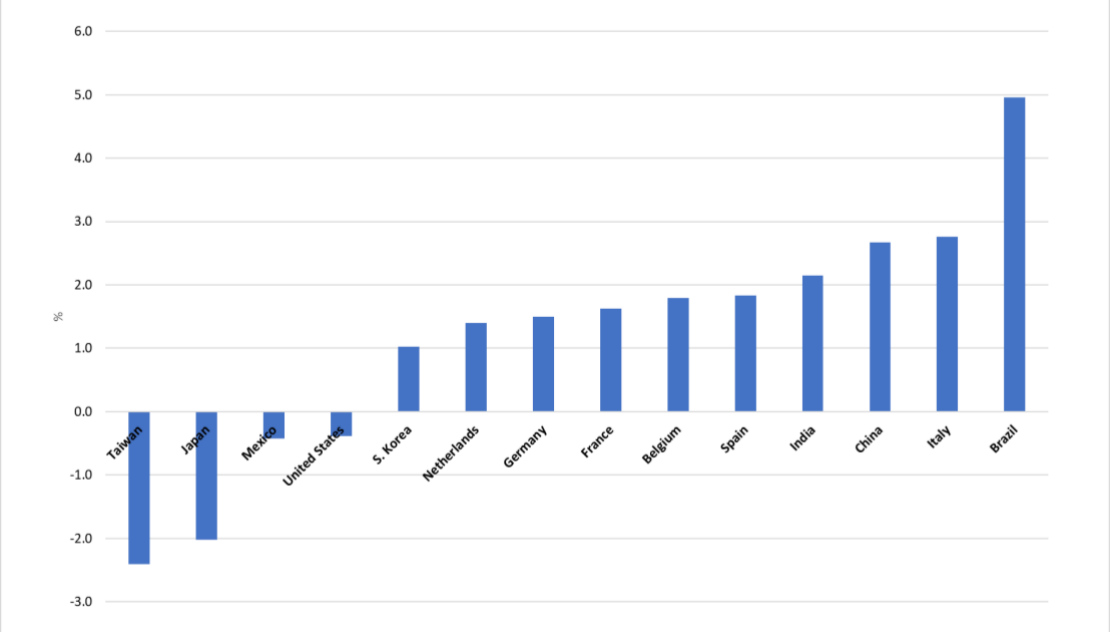
Labor arbitrage

The relative labor cost argument concerns a shrinking wage gap between developed and emerging economies, particularly inspired by the dynamics of China's labor market. Labor costs are notoriously difficult to compare across countries, among other things, because

[7] See, for instance, De Backer et al. (2016).
[8] See, for instance, De Backer et al. (2016), MGI (2019), and WTO (2019).

of exchange rate volatility and productivity measurement issues, but even if these caveats are set aside, the evidence available is far from conclusive. While unit labor costs have risen much faster in China and India than in most developed countries, there seems to be a great deal of heterogeneity among developing countries (figure 2). This is particularly the case for LAC. While Brazil has experienced a similar trend, Mexico has seen its unit labor cost fall significantly against most developed and developing countries in the sample.

Figure 2. Annual Change in Unit Labor Costs, 2001–2008 (%).



Note: Growth in unit labor cost (in US$) is calculated by subtracting productivity growth from labor cost growth.
Source: The Conference Board International Labor Comparisons Program, January 2020.

Even for developing countries with the largest relative increases, the initial gap was far too large to have become irrelevant. For instance, China's and India's hourly compensation costs for manufacturing in 2002 were estimated to be 2.2% and 2.7% of those of the US, respectively. The latest figures available (2013) put these costs at 11.3% and 4.4%. In Brazil and Mexico in 2016, these same figures were 20% and 10%, respectively.[9]

What these figures suggest is that while the opportunities for labor arbitrage have been significantly reduced in some of the largest Asian developing countries, they are unlikely to have reached a point where, *ceteris paribus*, massive reshoring would be justified. They seem more consistent with reorganization toward developing countries, including

[9] https://www.conference-board.org/ilcprogram/index.cfm?id=38269. BCG's (2020) manufacturing costs index, which go beyond labor costs and includes energy and other costs, suggests that the costs gap vis -à-vis the US has virtually disappeared for countries such as China and Brazil, but remains significant for Mexico. The data and methodology used are not available, however.

some in LAC, where wages have yet to converge in any significant way. This incentive, combined with locational advantages (which are discussed below), might also be consistent with a nearshoring trend.

Tech trends

While the death of labor arbitrage seems to have been exaggerated, it can still be argued that its appeal is fading fast because of the labor-saving technological changes brought about by the so-called digital transformation—an array of technologies ranging from digital platforms and advanced robotics to artificial intelligence (AI), the internet of things, and additive manufacturing.[10] These changes could undermine developing countries' comparative advantages in goods and tasks that are intensive in low-skilled labor. The digital transformation reduces the share of this type of labor in manufacturing costs and reinforces the complementarity between high-skilled labor and machinery.[11]

The declining labor share of income in developed countries suggests that these trends are undeniable, but the jury is still out on the magnitude and timing of their impact on trade and offshoring.[12] The scattered evidence available is still inconclusive and tends to reflect highly heterogeneous diffusion across value chains and countries.[13] Robotics is a case in point. Most of the incipient evidence available—including case studies for Colombia and Mexico—suggest that robot density is associated with reshoring.[14] However, there is also evidence suggesting that robotization and offshoring can be complementary, with the scale and productivity gains of automation boosting upstream imports of intermediate goods from developing countries.[15]

However, digital transformation is not just about skill-biased technological change. It also offers developing countries opportunities for improving the quality and turnaround time of their products to offset diminishing labor cost advantages. It also allows for significant reductions in trade costs, be they logistic, regulatory, or information costs, particularly through the emergence of new trade modalities such as e-commerce.[16]

Lower trade costs go in the exact opposite direction of a shrinking wage gap, potentially boosting trade and offshoring, particularly for small and medium firms in developing countries and for traditionally nontradable sectors such as services. Digitally transmitted services, for instance, have allowed developing countries—particularly China and India

[10] UNCTAD (2017).
[11] Rodrik (2016, 2018).
[12] See IMF (2017).
[13] Nicolleti et al. (2020) and Dachs et al. (2017).
[14] Kugler et al. (2020) for Colombia and Farber (2020) for Mexico. See also Rodriguez Chatruc and Nievas Offidani (2019), Artuc et al. (2019), and De Backer et al. (2016). Hallward-Driemeier and Nayyar (2019) find positive impacts on FDI to developing counties.
[15] Artuc, Bastos and Rikjers (2019).
[16] Estevadeordal et al. (2020), Goldfarb and Tucker (2019).

but also some LAC countries—to become significant exporters of information and communication technologies (ICTs) and business process outsourcing (BPO). That does not mean that there are no challenges. AI can eliminate many back-office tasks, although developing countries can respond by using the same technology to improve the quality and cost of BPO services or deliver higher-value services.[17]

The race for timeliness

Firms' growing need for timeliness is also often listed among the drivers of reshoring and nearshoring. The motivation is clear: lengthy value chains that require long shipping times, like those involving the US and Asia, can incur significant inventory-holding and depreciation costs. This is particularly true for time-sensitive products—in other words, goods that are more sensitive to shipping times due to their physical characteristics (e.g., perishable goods such as fresh produce and cut flowers), the pace of technological progress (e.g., semiconductors), or the unpredictability and volatility of customer preferences (e.g., holiday toys and fashion apparel).[18]

Despite its prominence in the debate, there is still scarce evidence that these considerations have fueled a significant shift toward reshoring, even in the most likely of industries, such as apparel. Instead, it is a topic that appears in opinion surveys but as a future possibility.[19] There are more grounds for believing that it has had a positive impact on nearshoring, particularly in Mexico and the Caribbean in the 1990s.[20] As argued elsewhere, LAC's proximity to the US market and an export bill filled with transport and time-sensitive goods put it in a privileged position should this trend intensify.[21] This position could become even stronger if the region takes advantage of digitalization to reduce customs processing costs.[22]

The race for resilience

Even before the recent trade and Covid-19 shocks, events such as the 2010 volcanic eruption in Iceland, the 2011 tsunami in Japan and the 2011 floods in Thailand prompted suggestions that firms might have underestimated the risks of relying on lengthy, geographically concentrated, complex value chains. This perception was compounded by the realization that the outside-factory costs of offshoring have been underestimated—particularly those relating to logistics, regulatory matters (e.g., intellectual property), timeliness, and related inventory costs.[23]

[17] MGI (2019).
[18] Hummels and Schaur (2013).
[19] MGI (2018, 2019).
[20] Evans and Harrigan (2005).
[21] Mesquita Moreira et al. (2008).
[22] Volpe Martincus (2016).
[23] De Backer, K. et al. (2016).

The trade conflicts that have emerged since 2016 have shaken the foundations of the rules-based international trade system and added another policy layer to these concerns. As it is well known, one of the main gains of trade agreements is their ability to reduce trade policy uncertainty.[24] Unilateral tariff increases and the arbitrary denouncing of existing agreements called these gains into question, leaving firms particularly vulnerable to sudden increases in their offshoring costs and suppliers uncertain about return on their investments.

As if natural disasters and trade tensions were not enough, the race for resilience has become even more intense with the disruptions brought by Covid-19. The sheer scale of the pandemic has heightened awareness of the risks of highly geographically concentrated value chains. Unlike previous natural disasters, it has also elicited strong protectionist responses, based on public health concerns.[25] While these responses were mostly focused on a particular value chain—medical goods—they were implemented at a time when trade tensions were already high, further undermining confidence in the rules-based trade system.

Previous natural disasters do not seem to have led to a significant reorganization of value chains.[26] Nor was this the case with major financial shocks such as the 1997 and 2008 crises.[27] This time, though, might be different because of a peculiar combination of factors: the global nature of the pandemic, its volatile interaction with ongoing trade tensions, and the simultaneous constraints on supply and demand. For instance, LAC trade data for the first five months of 2020 shows that unlike previous crises, the current trade collapse was to a great extent explained by a drastic drop in the number of export and import firms.[28]

It is too early to tell if the trade tension ingredient in this combustible mix is here to stay, but the added and often unfounded public health motivations and an increasingly complicated political economy of globalization suggest that it will not be going away any time soon. In this scenario of heightened policy risks, firms will have an extra incentive to hedge their offshoring bets, despite the significant efficiency, search, and sunk costs involved. [29]

3. How Far Did the Reorganization Go?

As the discussion so far suggests, while there are good reasons to believe tangible forces are pushing toward a reorganization, there are still many questions about how far, how

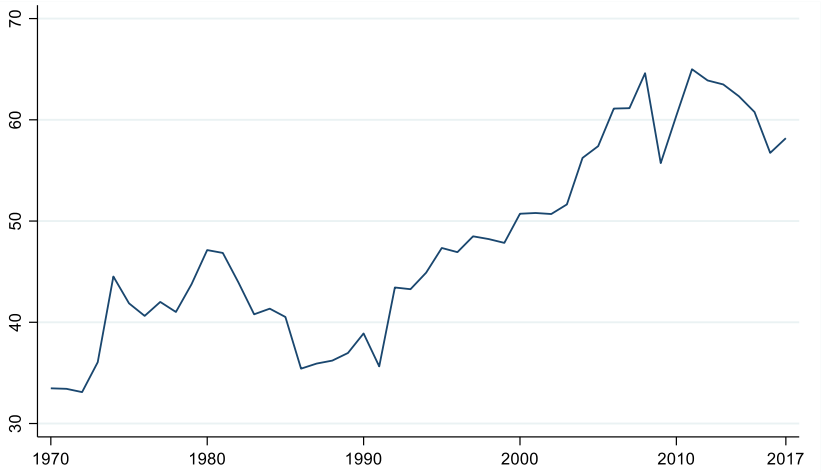
[24] Limão and Maggi (2015).
[25] Baldwin and Evenett (2020).
[26] Miroudot (2020).
[27] Bernard et al. (2009), Behrens et al. (2013).
[28] Carballo and Volpe Martincus (2020).
[29] Grossman and Helpman (2021).

fast, and in which direction this will go. The policy debate has been plagued by spotty, anecdotal data that tentatively cover global, regional, and national trends. As the overview in this section will show, this data falls short of supporting definitive conclusions.

Global trade trends

A lot of attention has been given to the share of trade in global GDP, which, after a meteoric 30-year rise, has come to a sudden stop since the Great Recession (figure 3).[30] Similar trends are also seen on GVC indicators. For instance, Li et al. (2019) find that the share of global GDP of complex GVCs (i.e., those that cross borders at least twice) has stabilized at around 4% since the Great Recession.

Figure 3. World's Trade-to-GDP Ratio.



Note: Simple average of the ratio of merchandise imports plus exports to GDP at current purchase power parity. The sample is a balanced panel of 125 countries with 1 million or more inhabitants.
Source: Own calculation with PWT 9.1 data.

This evidence, though, is far from conclusive. It is still too early to speak of long-term trends driven either by technology, policy, or natural shocks. This is particularly true because: (i) the stall happened after a severe financial crisis, whose consequences are still lingering; (ii) these indicators are still at a level well above those seen in the early 1990s; and (iii) it is unreasonable to expect that these indicators would have grown forever as if the positive policy and technological shocks (e.g., trade liberalization and better logistics and communication) would not eventually face diminishing returns.[31]

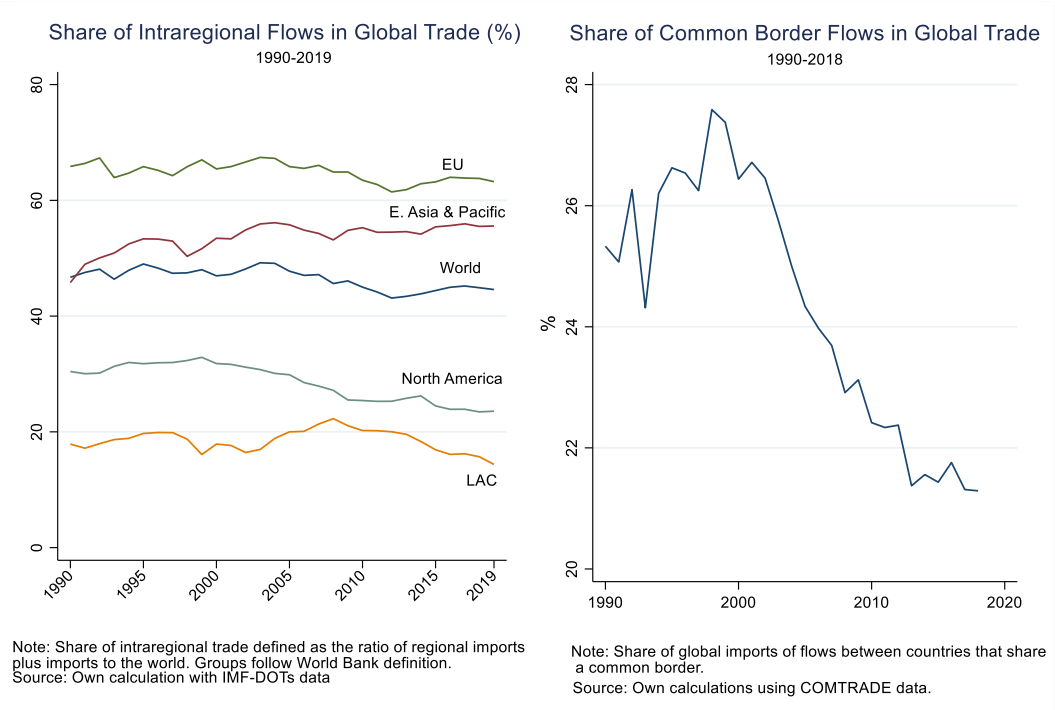
There are also claims that the reorganization of GVCs would cause greater regionalization of global trade and a drop in labor arbitrage.[32] There are good reasons to be skeptical about these claims. GVCs were born regionalized, for reasons that include

[30] See e.g., Irwin (2020).
[31] See Antras (2020).
[32] MGI (2019).

the proliferation of preferential trade agreements (PTAs) and difficulties in enforcing contracts, particularly for specific, differentiated inputs, when the relationship involves distant partners.[33]

It is also hard to find solid evidence that global trade has indeed become more regionalized recently, either measured by trade between countries with common borders or trade within regions (figure 4). At the very best, it can be said that the declining share of regional trade has stabilized recently. This is confirmed by a more rigorous exercise that looks at the impact of distance and contiguity (shared border) on bilateral trade (figure 5). If anything, the negative impact of distance appears to have been declining recently, particularly after the Great Recession, and the positive impact of sharing a common border show just a slight increase, but that is not statistically significant. [34]

Figure 4. Regionalization Trends in Global Trade.



Note: Share of intraregional trade defined as the ratio of regional imports plus imports to the world. Groups follow World Bank definition.
Source: Own calculation with IMF-DOTs data

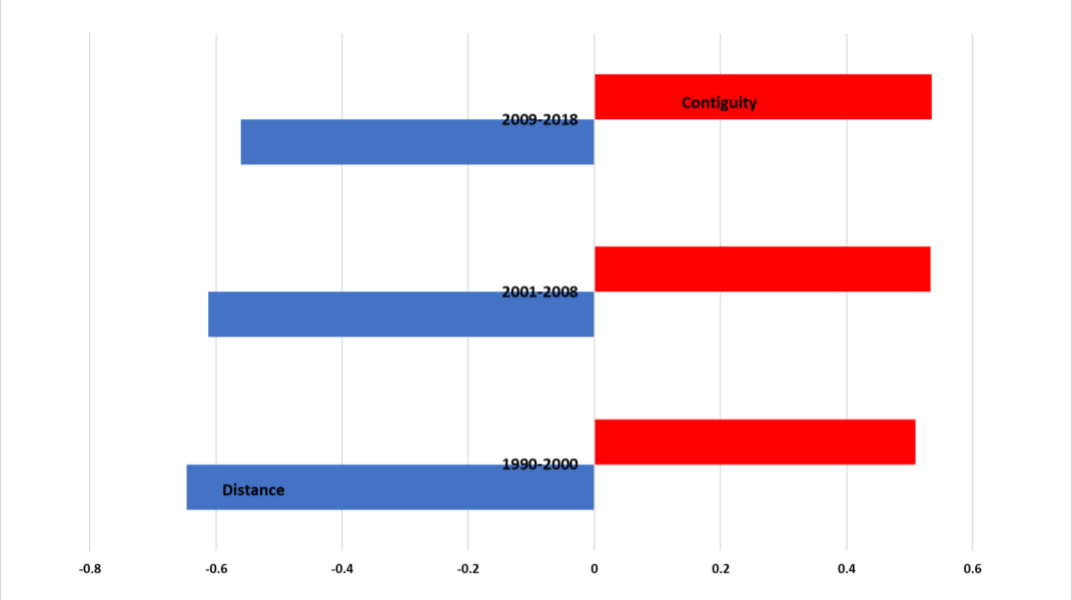
Note: Share of global imports of flows between countries that share a common border.
Source: Own calculations using COMTRADE data.

There is no clear evidence that labor arbitrage is on the wane, either. The share of North–South trade—a reasonable proxy for labor arbitrage trade—seems to be on the rise rather

[33] See Baldwin (2012) and Nunn (2007).
[34] Disdier and Head (2008) show that the negative effect of distance on trade has increased since the post-war period. Conconi et al. (2019) findings suggest that this is driven mainly by the increase of trade in differentiated intermediary goods—a hallmark of the GVCs. These findings suggest that this trend was reversed boosted by ever lower trade costs.

than shrinking, having jumped from 22% in 2002 to 36% in 2018. This trend is robust even to the exclusion of China.[35]

Figure 5. The Impact of Contiguity and Distance on Trade Flows, 1990–2018.



Note: This graph displays the coefficients for distance (blue) and contiguity (red) of a gravity regression involving up to 222 countries for 1990–2000, 2001–2008, and 2009–2018. The Poisson pseudo maximum likelihood specification includes importer-year and exporter-year fixed effects, with pair-clustered standard errors. All coefficients are statistically significant at 1%. The 2001–2008 and 2009–2018 distance coefficients are statistically different at 5%. The differences between the other decades, including contiguity, are not statistically significant. See the technical appendix for details.
Source: Kun Li.

Global FDI trends

FDI data can also lend itself to claims of a reorganization. Using the same metric applied to trade flows, figure 6 shows that FDI inflows as a share of global GDP have been significantly more volatile but seem to have peaked even earlier than trade in the early 2000s. Does that look like the end of globalization? As in the case of trade, the lingering effects of the 2008 financial shock, the diminishing returns of the reforms, and levels that are still historically high do not seem to support the hypothesis of a massive reorganization. Moreover, the declining trend appears to be almost entirely driven by the developed countries, with inflows to developing countries holding their ground—a pattern that does not seem consistent with reshoring.

This evidence, though, does not rule out incremental changes. To assess this possibility,

[35] Own calculations with data from WITS.

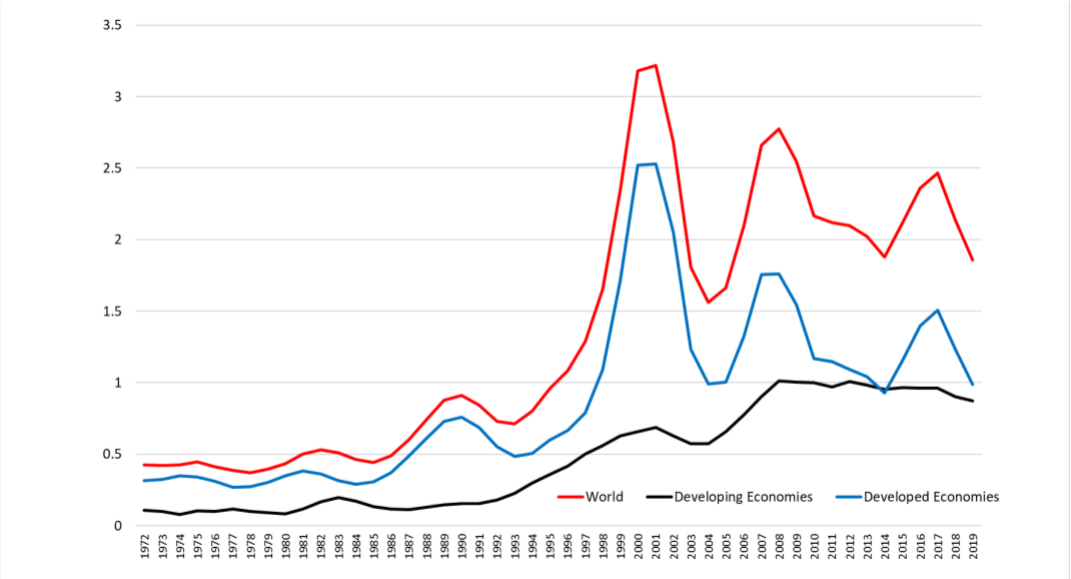
figure 7 takes a closer look at FDI trends in the last two decades, bringing together the firm (openings of foreign affiliates), flow, and regional dimensions into the analysis. The number of foreign affiliate openings seems even more at odds with the death of globalization scenario, with growth reaching a plateau only after 2017, driven mostly by a slowdown in China and the rest of Asia, both as an origin and as a destination.

The Asian slowdown as a destination might be the early signs of multinational firms shifting their sourcing patterns outside "factory Asia." However, data on flows suggest otherwise, with China and the rest of Asia maintaining their market share as a destination (and increasing as a source). The picture gets even cloudier because it is important to distinguish between horizontal (same goods produced at the headquarters) or vertical FDI (components for final goods assembled elsewhere). The size, for instance, of the Chinese market is a formidable incentive for multinationals to make horizontal investments to benefit from locational advantages ("onshoring"). LAC did not experience significant changes in its (limited) share of new foreign affiliates, either as a source or as a destination, but there were clear inflow gains after the financial crisis that were partially reversed since 2016.[36]

To dig deeper behind these trends, figure 8 present the results of an econometric exercise that seeks to assess the impact of distance in the opening of new foreign affiliates. Unlike the results for trade flows, there are signs that multinationals worldwide might have become more willing to invest closer to home, a result consistent with a nearshoring trend (panel a). However, there seems to be a great deal of heterogeneity behind the global average (panel b), which seems to be driven mostly by Europe and, to a lesser extent, by the US late in the last decade. A more definitive conclusion would also require a similar exercise considering not just the number of new affiliates, but also the sums invested (bilateral FDI flows); the sort of data that is not available worldwide.

[36] UNCTAD preliminary estimates for 2020, reinforces this trend, with significant gains for Asia and deep losses for LAC. See https://unctad.org/system/files/official-document/diaeiainf2021d1_en.pdf

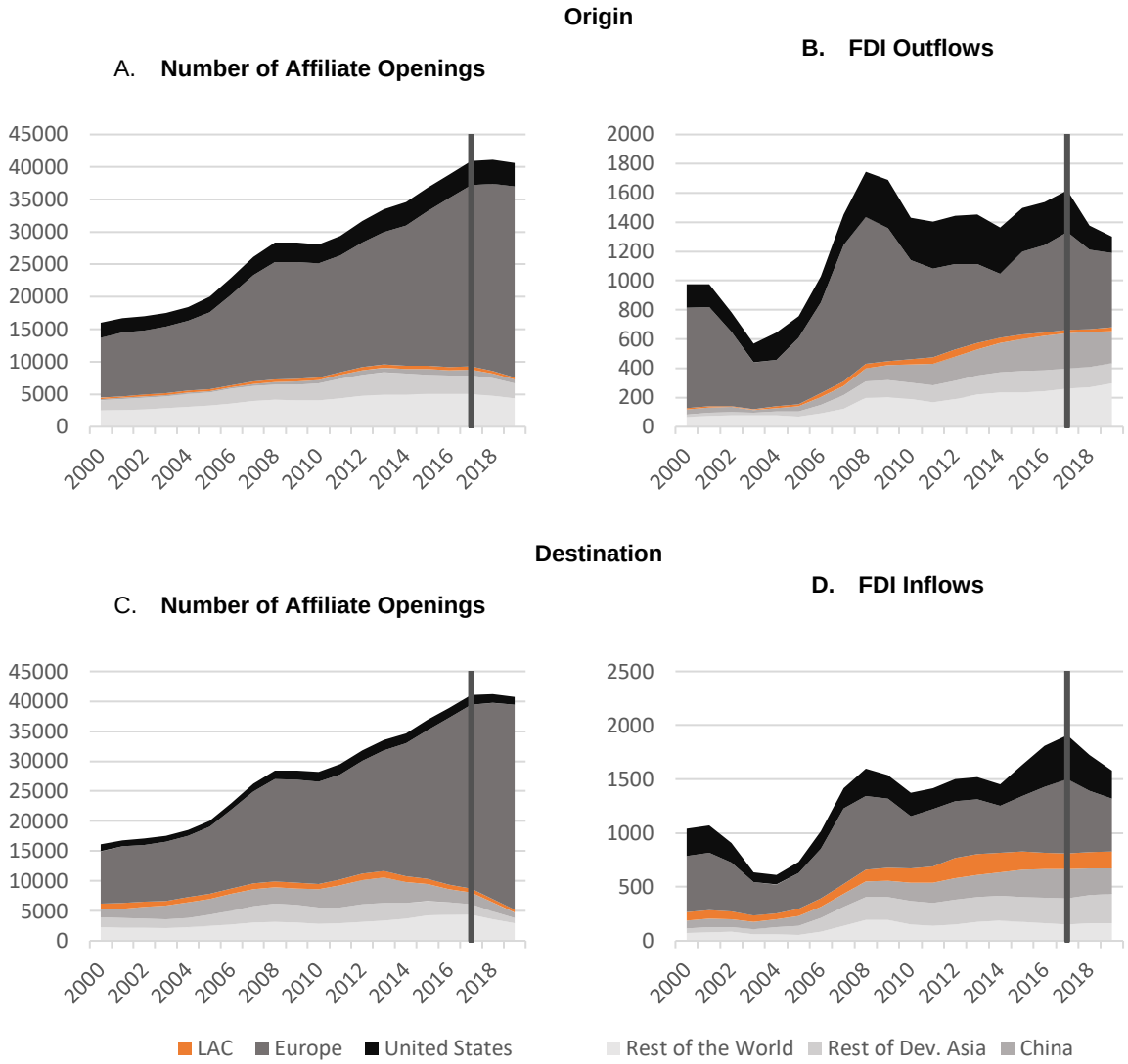
Figure 6. FDI Inflows as a Share of Global GDP: Developed and Developing Countries, 1972–2019 (%).



Notes: Three-year moving average. Groups are defined as in the UNCTAD FDI database.
Source: Authors' calculations using UNCTAD (FDI) and WDI (GDP) data.

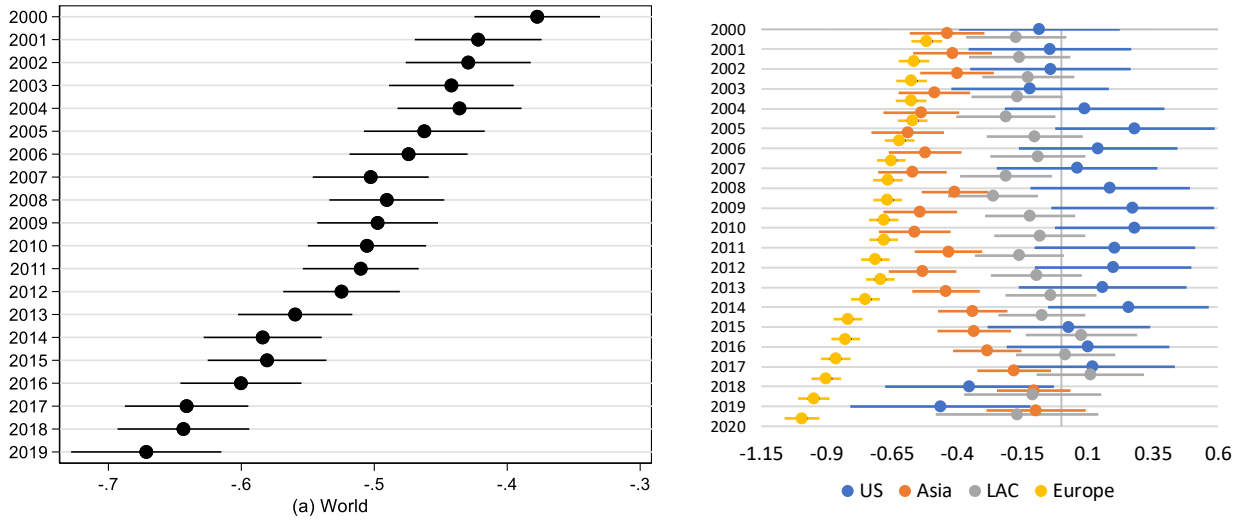
These differences between countries and regions seem to be driven, at least in part, by divergent sectoral trends. Figure 9 shows data for manufacturing and non-financial services—the two-sectors at the heart of the GVC boom. In manufacturing, only Europe and Mexico (2010–2019) show more significant reductions in the median distance. The other countries/regions either show small declines (US and China) or changes in the other direction. In non-financial services, Europe (whole period) and the US (2010–2019) are the only areas whose data is more consistent with a nearshoring trend.

Figure 7. Openings of Multinational Firms' Foreign Affiliates and FDI Flows over Time, 2000–2019.



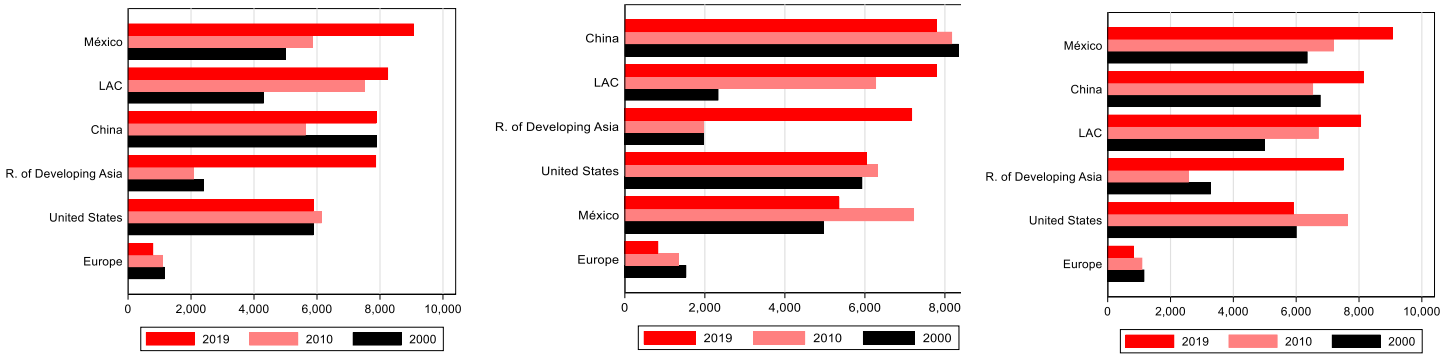
Source: Authors' calculations based on data from the WorldBase and UNCTAD.
Note: The figure presents the evolution of the total number of multinational firms' foreign affiliates opened each year and FDI flows since 2000, both by origin region and destination region, based on a three-year moving average. Note that original UNCTAD data on total inward and outward FDI flows do not match.

Figure 8. The Impact of Distance on the Establishment of Foreign Affiliates of Multinational Firms. World and Selected Regions, 2000–2019.



Source: Authors' calculations based on data from the WorldBase and CEPII.
Note: The figure presents estimated x% confidence intervals of a regression of the (natural logarithm of the) number of affiliates that multinational firms based in a home country open in a destination country in a specific year on (the natural logarithm of) distance along with home country and destination country-year fixed effects. The patterns are identical if we include instead home country-year and destination country-year fixed effects.

Figure 9. Change in the Median Distance between Multinationals' Home and Affiliates' Host Countries by Origin Region. All Sectors, Manufacturing, and Non-Financial Services, 2000–2019.



Source: Authors' calculations based on data from the WorldBase and CEPII.
Note: The figure presents the change in the median distance (in kilometers) between the multinational firms' home countries and the destination countries where they open their foreign affiliates each year based on a three-year moving average, MA(3), both overall and for specific aggregate sectors.

A closer look at the trends in Europe and the US

Europe and the US deserve a closer look because they led the offshoring boom and were among the LAC's top trade partners and investors. They are also LAC's nearest markets and thus the most likely source of nearshoring gains. Arguably, they are also the economies for which the most information is available regarding the reorganization of GVCs.

Europe

Europe seems to have made the most structured and systematic attempts to measure nearshoring trends. Eurostat, in partnership with national statistical institutes, has been carrying out ad hoc surveys to gather firm-level data on the sourcing of business functions in a sample of European countries.[37] There have been three surveys so far—2001–2006, 2009–2011, and 2014–2017—but comparisons between these are limited by sample changes.[38] Despite these limitations, there are some telling empirical regularities:

(i) most firms outsource regionally to their European neighbors, a pattern that goes back at least to the early 2000s;
(ii) there is no evidence of either China or India losing ground as the main sourcing destination outside Europe (23% in the last survey), with LAC remaining a marginal player (under 2%);
(iii) labor arbitrage remains the main motivation for offshoring throughout the period;
(iv) manufacturing remains the main driver for offshoring, but services—both in ICT and business processing—have gained prominence;
(v) the relatively high levels of offshoring in manufacturing shown in the latest survey (according to which most firms in the larger economies outsource internationally) belie an imminent reshoring trend; and
(vi) the direct evidence on reshoring, which is limited to the 2009–2011 survey, suggests it is not present in more than 4% of the firms—one-third of the level for offshoring.

Outside the official helm, the most reliable information comes from the European Manufacturing Survey, a collaboration between European research institutes.[39] The survey's longitudinal information, though, is limited to Germany in 1997–2015. The data seems to confirm the limited reshoring levels suggested by the Eurostat (about 3%) but goes beyond by showing declining reshoring and offshoring trends. The latter, though, is

[37] https://ec.europa.eu/eurostat/statistics-explained/index.php/International_sourcing_and_relocation_of_business_functions.
[38] The 2001–2006, 2009–2011 and 2014–2017 surveys covered 11, 15 and 16 countries, respectively. The first two surveyed firms with more than 100 employees, while the third include all firms with more than 50 employees.
[39] https://www.isi.fraunhofer.de/en/themen/industrielle-wettbewerbsfaehigkeit/fems.html

shown to systemically outstrip the former three-to-one.[40]

The German survey and those available for Austria and Switzerland for 2015 also shed some light on the relative importance of the drivers of the reorganization discussed earlier. For instance, timeliness (or flexibility or delivering times) ranks top of the list of motivations for reshoring, followed by quality issues. Labor costs, including those relating to automation, appear as distant, second-tier considerations.[41] However, there is some evidence in the German survey data of a positive correlation between the use of digital technologies and the probability of reshoring in manufacturing.[42]

Most of the rest of the European evidence available is based on ad hoc surveys with little statistical power or compilations of press releases and media articles focused almost exclusively on reshoring.[43] The latter type of evidence is particularly vulnerable to reporting biases. Given the political sensitiveness of the subject, firms are more eager to announce (and overstate) reshoring than offshoring decisions.[44] Moreover, the exclusive focus on reshoring makes it hard to put these figures into perspective since, as the more rigorous surveys show, reshoring and offshoring decisions tend to coexist. What matters from a policy perspective is the net effect of these trends.

The most recent iterations of these surveys, which include the pandemic shock, also draw attention to how fleeting these results can be. EY (2020), for instance, reports that the number of companies in Europe seeking to reshore or nearshore fell from 83% to 37% between April and October 2020.

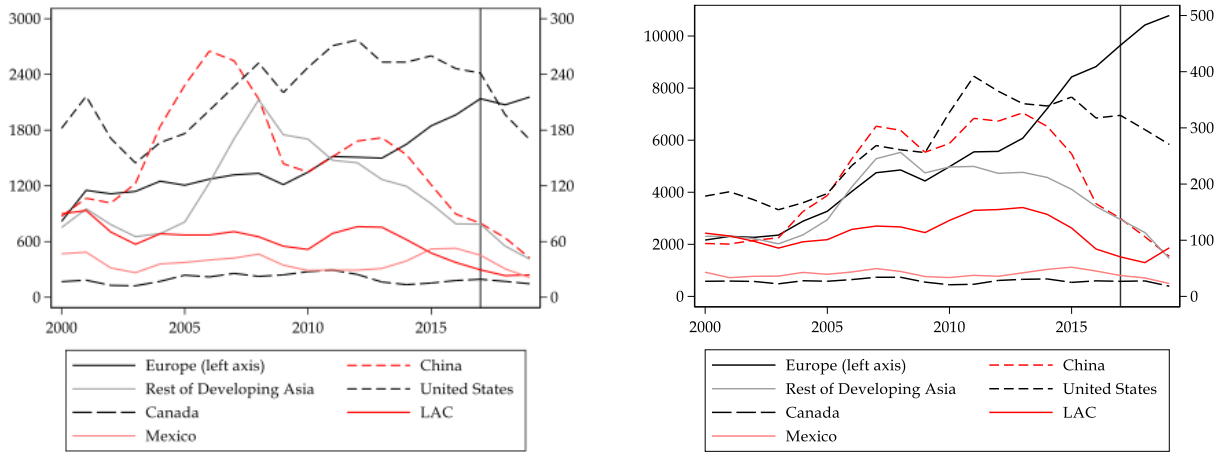
Recent data on FDI does not say much about reshoring but helps to complete this fractured European picture. Figure 10 shows the geographical trends in the number of foreign affiliates opened abroad. The data on both manufacturing and non-financial services suggest a stronger regionalization trend and a steeper fall for China, the rest of developing Asia, and LAC than revealed by the manufacturing surveys. It is consistent with European investors' growing, above-average aversion to distance discussed earlier. The accession of the 13 new countries to the EU since the mid-2000s, the bloc's largest increase to date, is likely to be behind this trend.[45]

The same caveats apply here with regards to the need to establish the horizontal or vertical nature of these new affiliates and their consistency with the magnitude of the bilateral flows. Information on the former is hard to come by and Europe-wide data on the latter does not go beyond 2013. FDI data for the largest European economy, Germany,

[40] See Kinkel et al. (2017).
[41] Dachs et al. (2019).
[42] Kinkel and Jäger (2017)
[43] See Kinkel et al. (2017).
[44] De Backer et al. (2016).
[45] https://ec.europa.eu/neighbourhood-enlargement/policy/from-6-to-27-members_en

helps to partially close the latter gap (figure 11). The data confirms an uptick in Europe but shows some clear contrasts with the firm-level data: a much smoother decline of investments in China and the possible shift towards investments in the rest of developing Asia. Both sets of evidence agree, however, about LAC being on the losing side of these recent changes.

Figure 10. Annual Number of Foreign Affiliates of European Firms Established. Manufacturing and Non-Financial Services. Selected Regions, 2000–2019.



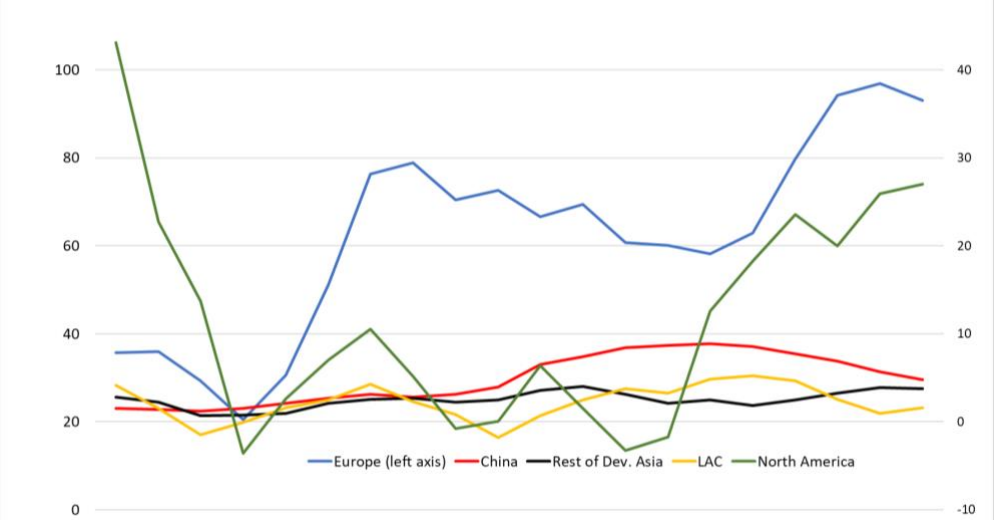
Manufacturing **Non-Financial Services**

Source: Authors' calculations based on data from the WorldBase.
Note: The figure presents the evolution of the total number of foreign affiliates established by multinational firms headquartered in the United States in the different regions in each year based on a three-year moving average—MA(3).

The US

Unlike Europe, there has not been an official US attempt to measure reorganization trends. There has been, though, plenty of management consultancy reports, ad hoc surveys, and media compilations suggesting a "renaissance" of US manufacturing driven by a strong reshoring trend.

Figure 11. Germany's Net FDI Abroad. Selected Regions, 2000–2019. Billions of Euros.



Note: Developing Asia includes China (plus Hong Kong), Indonesia, Malaysia, India, Thailand, the Philippines, Korea, Singapore, and Taiwan. Three-year moving averages.

As early as 2011, BCG speaks of "Made in America, Again," driven by many of the factors discussed earlier: a shrinking wage gap, automation, and logistic costs. The evidence comes from just a couple of anecdotes and a 200-firm survey. Since then, there have been several skeptical reports about the significance of this trend, but recently the enthusiasm seems to have picked up again.[46] A new wave of ad hoc surveys by consulting firms—with firm samples ranging from 150 to 3000—typically show that a high percentage of global firms have either already reorganized their value chains or are willing to do so by moving sourcing out of China and back to the US and rest of North America.[47]

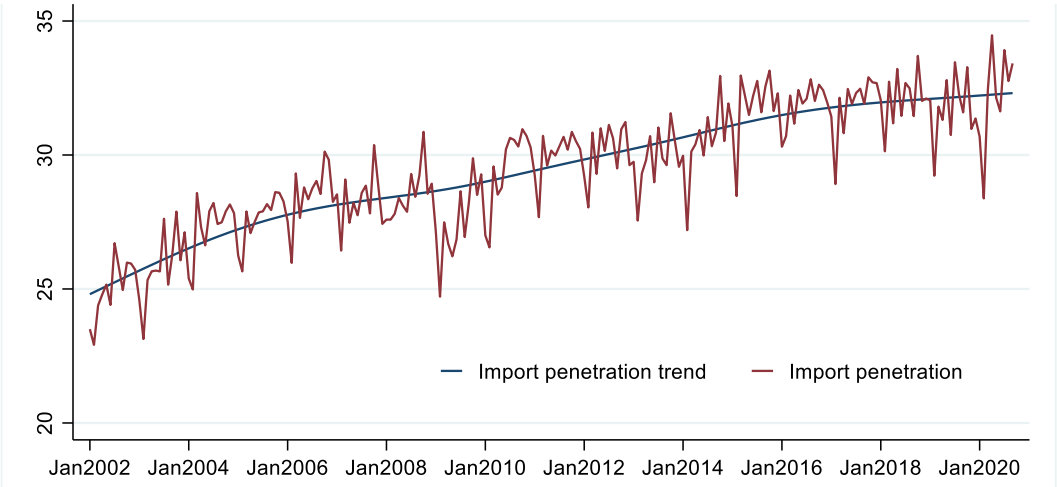
The motivation for these moves tends to echo those seen in the European surveys, particularly timeliness, but there are other factors cited that seem to reflect the recent shift in US trade policies and the Covid-19 shock, such as high tariffs at home and the search for resilience. There are, however, exceptions to this enthusiasm. A recent survey by the American Chamber of Commerce in Shanghai, for instance, found that as many as 79% of the US firms producing in China do not plan to change their investment allocation. Among those that do, the US (4.3%) stands behind Southeast Asia (9.8%), Mexico (6.1%), and India (4.6%) as the reallocation site.[48]

As mentioned earlier, there are good statistical reasons to be skeptical of this sort of ad hoc survey. In the case of the US, there is an aggravating factor. From 2016 until recently, reshoring was an explicit policy goal of the US government, making reporting bias a far

[46] For instance, Nager and Atkinson (2015)
[47] See BOFA (2020), UBS (2020), Thomas (2020), and Foley (2020).
[48] AmCham Shanghai (2020).

greater concern. It is important to look at trade and production data to try to validate some of these results.

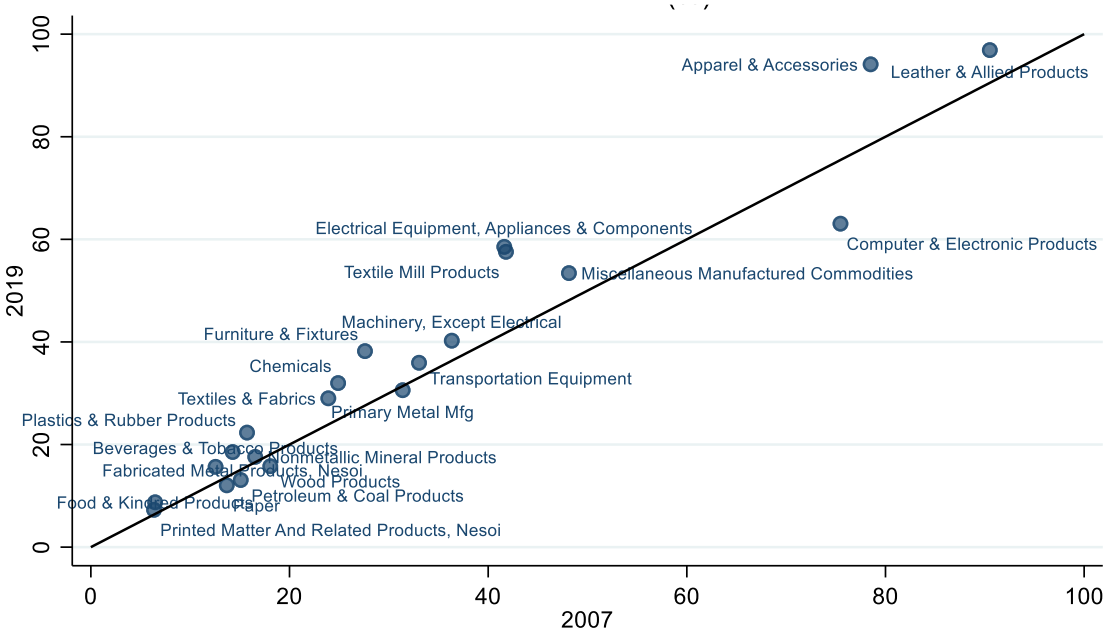
Figure 12. Monthly US Import Penetration Ratio. Manufacturing, January 2002–September 2020 (%)



Note: Import penetration is the ratio of imports to domestic consumption (domestic output + imports - exports). Manufacturing goods defined using the US Census NAICS classification. Hodrick-Prescott filter used to plot the trend. See the technical appendix for details.
Source: Authors' calculations using the US Census Bureau trade data and the 2018 Annual Survey of Manufacturers of the Federal Reserve's G.17 Release on Industrial Production and Capacity Utilization and BLS PPI Databases.

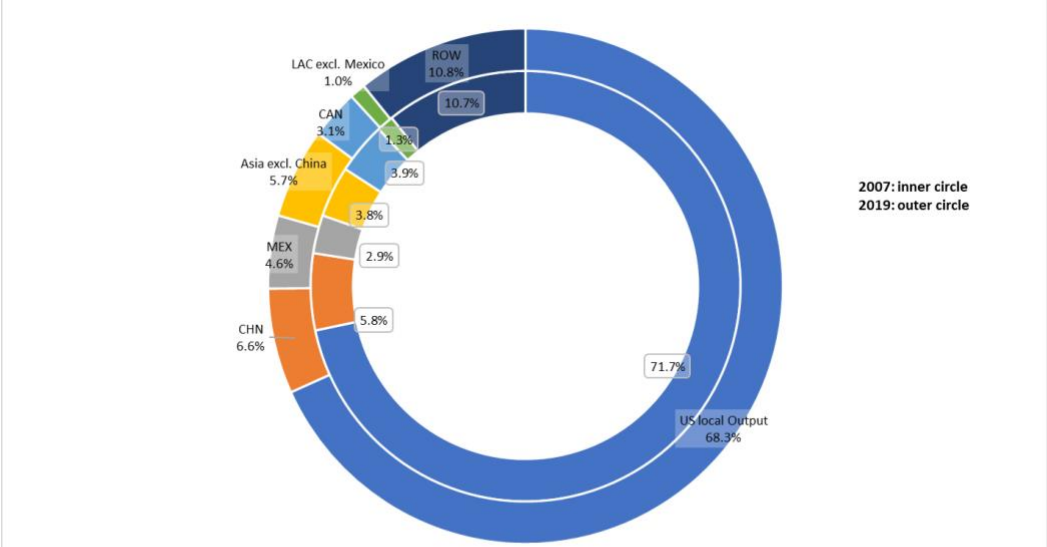
If reshoring had recently gained momentum in the US, the import share of domestic consumption of manufactured goods would have registered a declining trend. As shown in figure 12, the results go in the opposite direction, seemingly unscathed even by the most recent policy and Covid-19 shocks. The aggregate indicator, though, might be hiding changes at the sectoral level. Figure 13 suggests that this might not be the case. Except for computers and electronics, whose level of imports remain one of the highest, all other sectors either experienced increases or marginal changes in their import penetration ratios even when the 2019 levels are compared to that of the 2007, pre-financial crisis levels--widely believed as the "peak of globalization."

Figure 13. U.S Import Penetration Ratio by Manufacturing Sector. 2007 and 2019 (%).



Note: Import penetration is the ratio of imports to domestic consumption (domestic output+imports-exports). Manufacturing goods defined using the US Census NAICS classification. See technical appendix for details.
Source: Own calculations using the US Census Bureau trade data and the 2018 Annual Survey of Manufactures; the Federal Reserve's G.17 Release on Industrial Production and Capacity Utilization and BLS PPI Databases.

Figure 14. Share of Imports and Domestic Output in the U.S. Apparent Consumption of Manufacturing Goods. Selected Origins, 2007 and 2019 (%).



Note: Apparent consumption defined as domestic output + import- exports. Manufacturing goods defined according the US Census NAICS classification. See appendix for details.
Source: Own calculations using the US Census Bureau trade data; the 2018 Annual Survey of Manufactures; the Federal Reserve's G.17 Release on Industrial Production and Capacity Utilization and BLS PPI Databases.

This sort of evidence does not rule out a nearshoring trend, though, with US firms bringing their suppliers closer to home. Figure 14 offers some support to this hypothesis, with “nearshore” suppliers such as Mexico gaining ground, particularly after the 2008 crisis. However, these gains seem to have come at the expense of domestic producers instead of “far-shore” suppliers in Asia, which continued to strengthen their position.

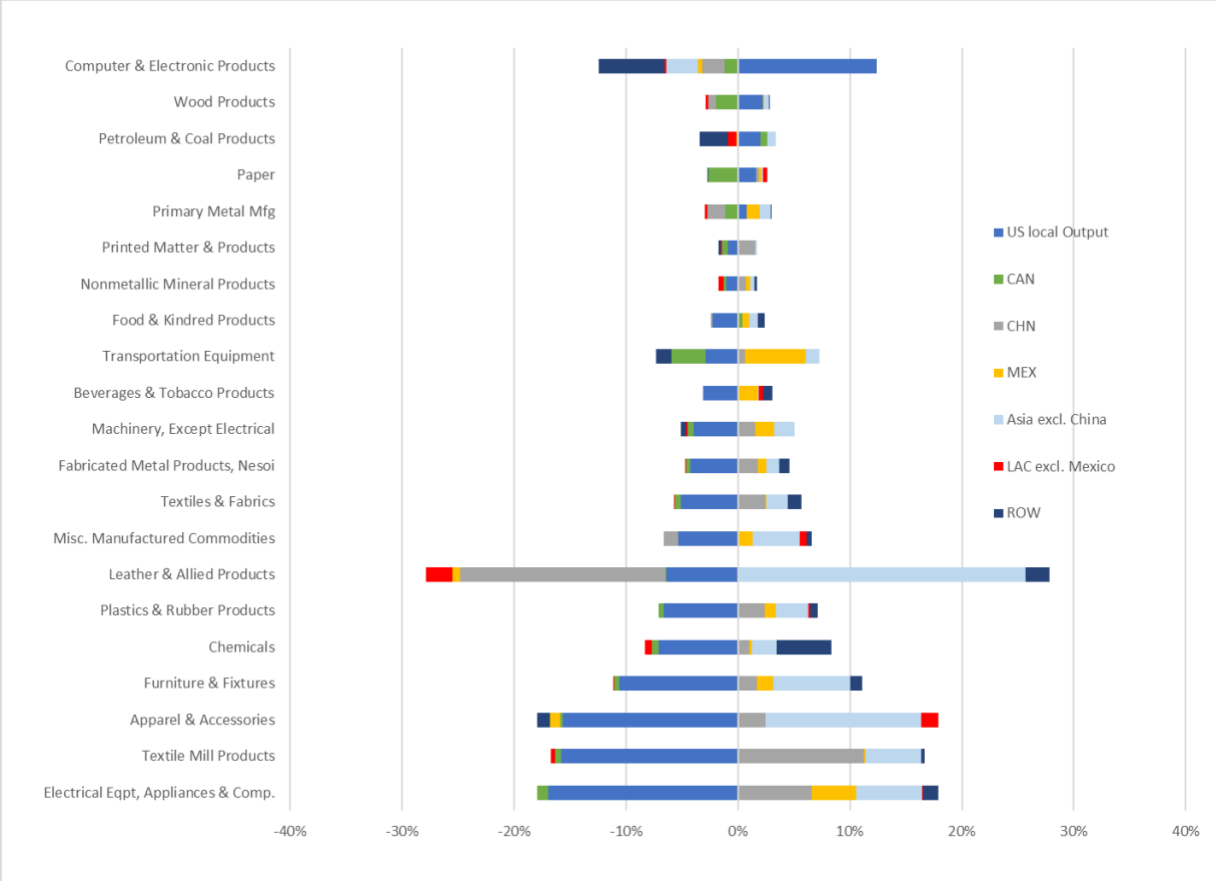
To go deeper into this issue, figure 15 goes one step further and looks at changes in sectoral shares. There are several points worth highlighting:

(i) Mexico’s significant gains were in sectors whose transportation costs and NAFTA preferences were usually high. That is, transportation (e.g., cars) and electric equipment and appliances (e.g., plasma TVs);

(ii) as suggested earlier, these gains seem to have been made mostly at the expense of US firms; and

(iii) outside Mexico, LAC countries made some modest gains in sectors such as apparel, beverage and tobacco and paper. These were not enough, however, to support the claim of a nearshoring trend.

Figure 15. Changes in the Share of Imports and Domestic Output in the US Apparent Consumption of Manufacturing Goods. Selected Origins and Sectors, 2007 and 2019 (Percentage Points).



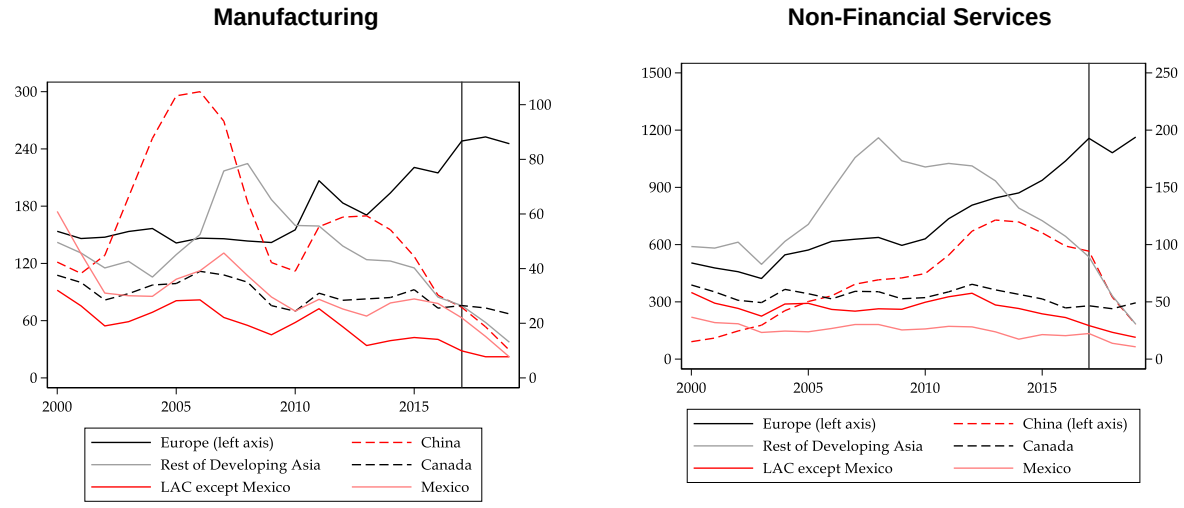
Note: Sectors ordered by gains in domestic output. Apparent consumption is defined as domestic output + imports - exports. Manufacturing goods are defined at two digits according to the US Census NAICS classification. See the technical appendix for details. Source: Authors' calculations using the US Census Bureau trade data and the 2018 Annual Survey of Manufacturers of the Federal Reserve's G.17 Release on Industrial Production and Capacity Utilization and BLS PPI Databases.

What does the FDI data say? Shifting patterns in FDI can signal future changes in the patterns of sourcing. As shown in figure 16, the number of US manufacturing affiliates recently opened abroad suggests that activity in China peaked in the mid-2000s—well before the recent trade conflicts—and fell into a steep decline thereafter. The rest of developing Asia followed a similar trend, but this does not appear to have favored Mexico or the rest of LAC, except for a few sectors in a few countries.[49] Europe is the only region that shows a clear upward trend, probably for onshoring (horizontal) reasons. The patterns in non-financial services are very similar, but openings peaked later in China and

[49] In 2000–2010, the winners were Chile (other non-metallic), Costa Rica (electronics), Brazil (food, other non-metallic, and electronics), Honduras (food), and Peru (chemicals and pharmaceuticals). In 2010–2019, Colombia (other metallic, chemicals, pharmaceuticals, and machinery), Argentina (chemicals, pharmaceuticals, and machinery), Jamaica (machinery), and Panama (apparel) gained an average 0.63 p.p. in the overall distribution of new affiliates. See technical appendix E, table E.1.

earlier in the rest of developing Asia. Again, there were no obvious aggregate gains for LAC.[50]

Figure 16. Annual Number of Established Foreign Affiliates of US Firms. Manufacturing and Non-Financial Services, Selected Regions, 2000–2019.

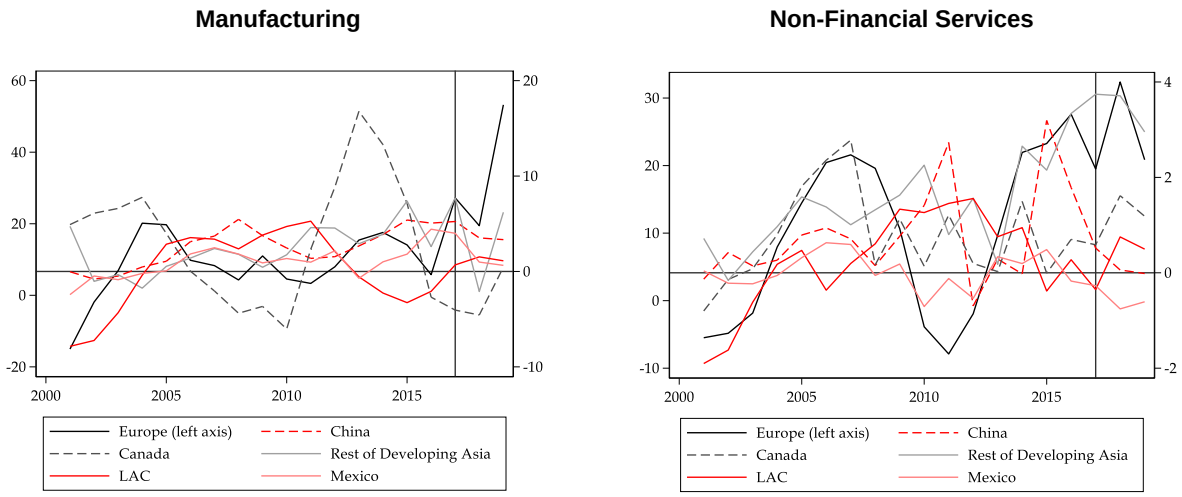


Source: Authors' calculations based on data from the WorldBase.
Note: The figure presents the evolution of the total number of foreign affiliates established by multinational firms headquartered in the US in the different regions each year, based on a three-year moving average.

As was true of Europe, the data on FDI flows paints a somewhat murkier picture (figure 17). In manufacturing, investments in Europe take off only after the onset of the trade conflicts, and those going to both China and the rest of developing Asia look much more stable, without a clear trend. The outlook for LAC is better, although investments in Mexico, the most obvious location for nearshoring, drop after 2016, as if reflecting the uncertainty generated by the NAFTA renegotiation and the reshoring rhetoric.

[50] In 2000–2010, the few exceptions were Trinidad and Tobago (head offices and consultancy), Peru (information services, head offices and consultancy, engineering, computer programming, and transportation services), Brazil (computer programming and head offices and consultancy), Mexico (legal accounting and engineering), Colombia (engineering), and Chile (computer programming). In 2010–2019, Colombia (legal accounting, information services, and computer programming), Chile (computer programming), and Argentina (head offices and consultancy). See technical appendix E, table E.2 for details.

Figure 17. Outward FDI Flows from the US, Manufacturing and Non-Financial Services. Selected Regions, 2000–2019.



Source: Authors' calculations based on data from the US Bureau of Economic Analysis.
Note: The figure presents the evolution of outward FDI flows of manufacturing and non-financial services from the US to different regions based on a three-year moving average. FDI flows are expressed in billions of USD (current).

4. What's in it for LAC?

The descriptive and fragmented evidence reviewed so far does not seem to support the argument that a radical reorganization of GVCs is imminent. It seems to be more consistent with a scenario of incremental changes driven by forces that are either incipient, localized, or ambiguous in their impact, uncertain, or all the above. If anything, the data seems to rule out any vigorous reshoring trends and is far from conclusive on nearshoring. The support for the latter comes mainly from FDI data in Europe, where trade has been traditionally more regionalized, driven by the depth and expanding breadth of its PTAs. The evidence for the US is much weaker.

As for LAC, there are signs of some limited, localized gains in Mexico's trade with the US, but that seems to be more related to traditional offshoring than to an effort to bring suppliers closer to home. This is not surprising. There are conflicting forces behind the reorganization, and it is not clear whether the outcome will favor specific countries or most countries in a region as diverse as LAC.

Nonetheless, it is important to acknowledge the speculative nature of this analysis. It is based mostly on circumstantial evidence. It could also be argued that it focuses on the rearview mirror—not necessarily a good predictor for a future that looks highly uncertain. No attempt has been made to establish causal relationships between the drivers of a potential reorganization and changes in sourcing outcomes.

To address these issues, at least partially, this section shifts the focus from long-term

trends to changes at the margin—that is, recent changes that might be a better predictor of things to come and that can be rigorously associated with some of the drivers of the reorganization. The tariff hikes promoted by the US administration since 2018, mostly against China, offer an opportunity to do just that.

The premise is that if latent forces were pushing for a reorganization, it is likely that they would have been strengthened by tariff increases that reached as high as 25% and by all the trade policy uncertainty associated with these increases. It is an approach that still falls short of providing exhaustive and comprehensive answers, to the extent this is even possible. It does not capture the impact of the Covid-19 shock—there is clearly not enough data yet for a proper assessment—and it also likely to miss the long-term reverberations of the policy shock—the decisions to invest and reallocate usually take a long time to mature. But, given that a complete rupture with the past (particularly with the fundamentals of a market economy) does seem to be on the cards, this approach seems to offer the best methodological option.

What did this shock look like? In 2017, several investigations were launched in the US concerning allegations of unfair trade practices, import injuries, and national security concerns. Trade restrictions began to be implemented in 2018 and mostly took the form of tariff increases, with quotas and tariff quotas being used in a few cases. While initially multilateral in nature and focused on a few products (washing machines, solar panels, aluminum, and steel), the restrictions soon took a bilateral turn, with escalation measures against a broad swath of China's exports.

The China-specific measures were implemented in four different lists: July 2018 (list 1), August 2018 (list 2), September 2018 (list 3), and September 2019 (list 4). Lists 1 and 2 mostly targeted intermediate and capital goods with tariff rates of 25%. Lists 3 and 4 affected a more diverse set of goods, including consumer products, with 10%–25% tariff rates.[51] The next sections look at both the trade and investment dimensions of this tariff shock.

Trade diversions?

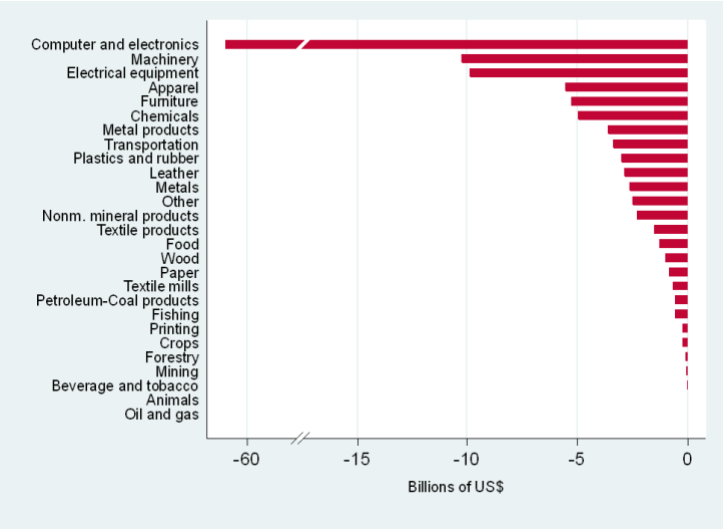
A first look at the US import data before and after the shock suggests that Chinese exports were significantly affected, as expected. For example, the 12-month cumulative imports of the targeted products fell by 28% after the tariff hikes were introduced.[52] As shown in figure 18, the largest drop is observed in the computer and electronics sector, followed

[51] List 4 contained a second part which never came into effect. The multilateral measures involved mostly tariff-rate quotas for solar panels and washing machines (February 2018), 10% for aluminum (March 2018), and 25% for steel (March 2018). For a more detailed description of the changes in trade policy in general and toward China, see Bown and Kolb (2020).

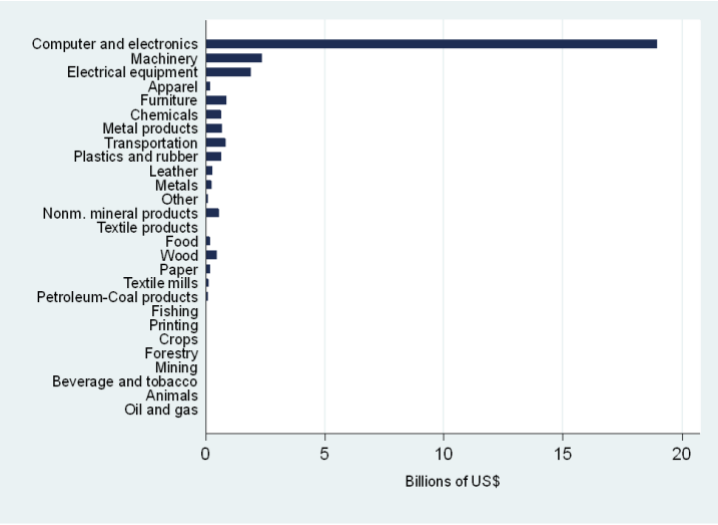
[52] Since the lists were implemented at different times, instead of comparing imports of targeted products between two calendar years, we compare the 12-month change in imports before and after the implementation, except for list 4, which came into force in September 2019. In this case, the comparison is for a 6-month period. Products are defined at the HS 10-digit level.

by machinery, electrical equipment, apparel, and furniture. It is also clear, though, that there were goods that had gains, despite tariff increases, and they often belonged to the same sectors where there were losses—a sign of the strength of Chinese competition and the nuances of the shock. [53]

Figure 18. Change in US Imports from China of Targeted Products. Difference in Cumulative Imports 12 Months Before and After the Tariff Shock.



(a) Goods with import losses



(b) Goods with imports gains

Note: This figure shows the sectors whose HS 10-digit targeted products experienced losses (a) and gains (b) between the 12 months before and after the new tariffs were enacted. The figures for each sector are computed by adding up the absolute changes in the value of imports of its product at the HS 10-digit level.
Source: Authors' calculations with US Census Bureau data.

The burning question prompted by these changes is whether they have benefited other US suppliers. A first naive attempt to answer this question is shown in figure 19. The main simplifying assumption is that any changes in import shares among suppliers are closely related to the tariff shock. The exercise suggests that:

(i) Increases in US imports from LAC and the rest of the world (RoW) were insufficient to compensate for China's losses in several sectors, including computer and electronics, electrical machinery, furniture, and apparel. As suggested earlier (figures 12 to 15) and confirmed recently by more rigorous evidence (Flaaen and Pierce, 2019), it is also unlikely that China's losses benefited domestic producers. Instead, the most likely outcome is that they

[53] To further explain the difference between panel a and b, consider computer and electronics. An electric modem device (HS: 8517620010) is a product in this sector that was targeted by the policy measures and whose imports from China declined. The decline in these imports is recorded in panel a. A routing machine (HS: 8517620020), on the other hand, is also a product in this sector that was targeted by the policy measures, but whose imports increased. Accordingly, the change in imports of this product is recorded in panel b.

turned into welfare losses for American consumers (Amiti et al., 2020, Fajgelbaum et al., 2020).

(ii) Supporting the nearshoring hypothesis, a few LAC countries appear to reap non-trivial gains in some sectors, particularly Mexico, but also Costa Rica in computer and electronics, Nicaragua in apparel, and Brazil in chemicals, to name a few.

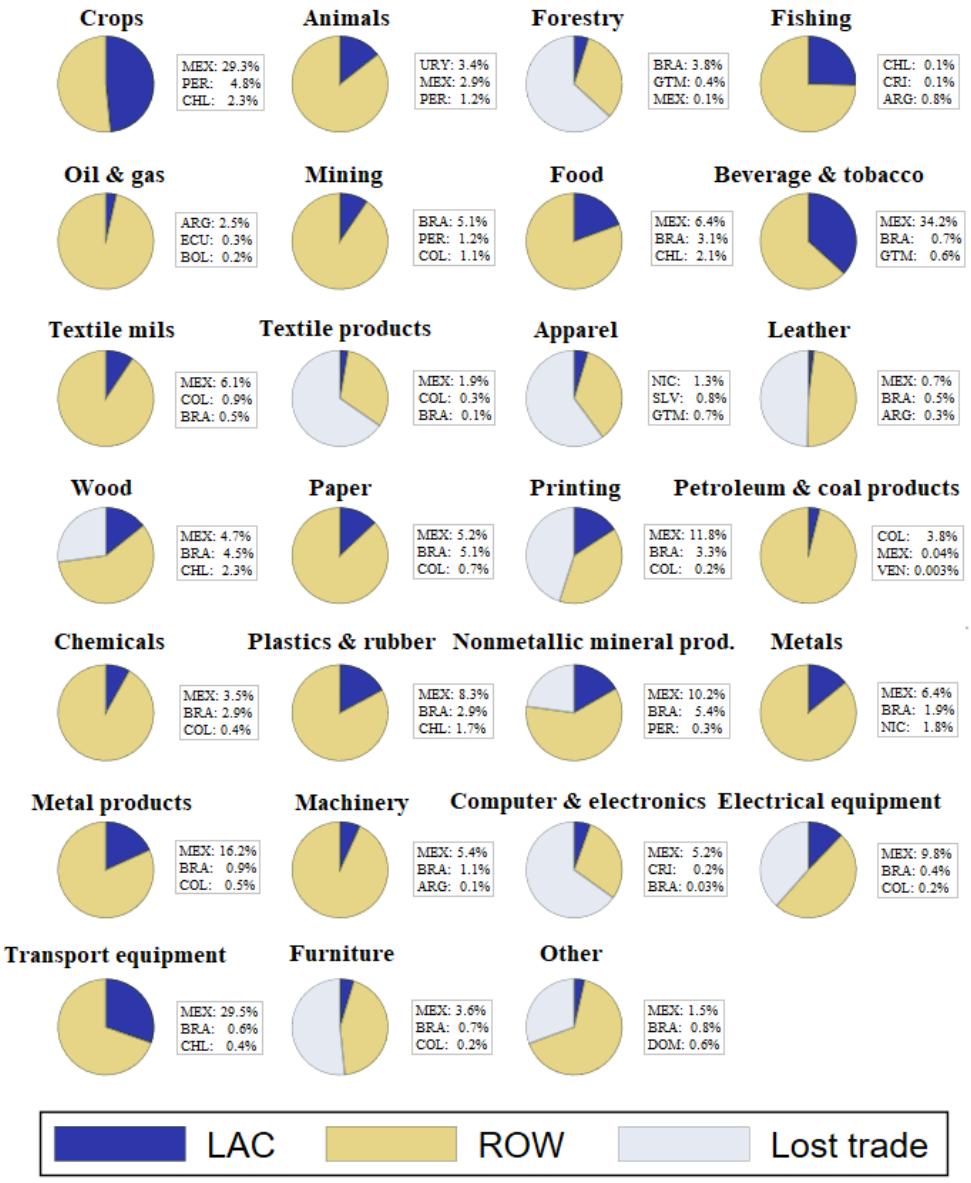
To go beyond naive assumptions and disentangle the impact of the tariff shock from other potential confounding factors—such as exchange rates, sectoral trends, preferences, or other trade costs—two methodological approaches are used. First, an event study: an analysis of whether there was a statistically significant response on the part of LAC exports to the US tariff hikes on Chinese exports since 2018. It provides a useful view of the average pre- and post-shock trends in the region's exports but is short in details on how different sectors and countries reacted to changes in tariffs, which would be particularly useful information in a highly heterogeneous region. This gap is filled by a second quantitative exercise, which uses standard econometric techniques to estimate the so-called "cross-price elasticity of substitution" between Chinese and LAC exports to the US. Put simply, it reveals how much more, say, Mexico is expected to export once the price of Chinese products is increased by tariffs.

An event study

The event study uses the comparison of the trends in targeted and non-targeted Chinese exports before and after the event (the tariff shock) to establish the magnitude and statistical significance of its impact. The estimation is based on monthly data for the 12 months before and after the event. It looks first at the impact on China's exports and then at the potential trade diversions to LAC and other countries.[54]

[54] As shown in technical appendix A, the event study separates targeted versus non-targeted products using a dummy variable.

Figure 19. Trade Diversion of US Imports from China. Proportional Export Gains from Other Partners in Targeted Goods.



Note: The figure shows the distribution of the gains in the RoW from the trade diversion of targeted Chinese goods between the 12 months before and after new tariffs were enacted, except for list 4, which uses a 6-month timeframe. As in Nicita (2019), whenever losses in China's imports are smaller than the gains elsewhere, imports from the RoW are rescaled to match China's losses. The rescaling factor is proportional to the observed increases in the imports from each country. Lost trade is the share of China's losses that do have counterpart gains elsewhere. The figures listed in the boxes are the shares of the gains of selected LAC countries (those with the largest gains).
Source: Authors' calculations with US Census Bureau data.

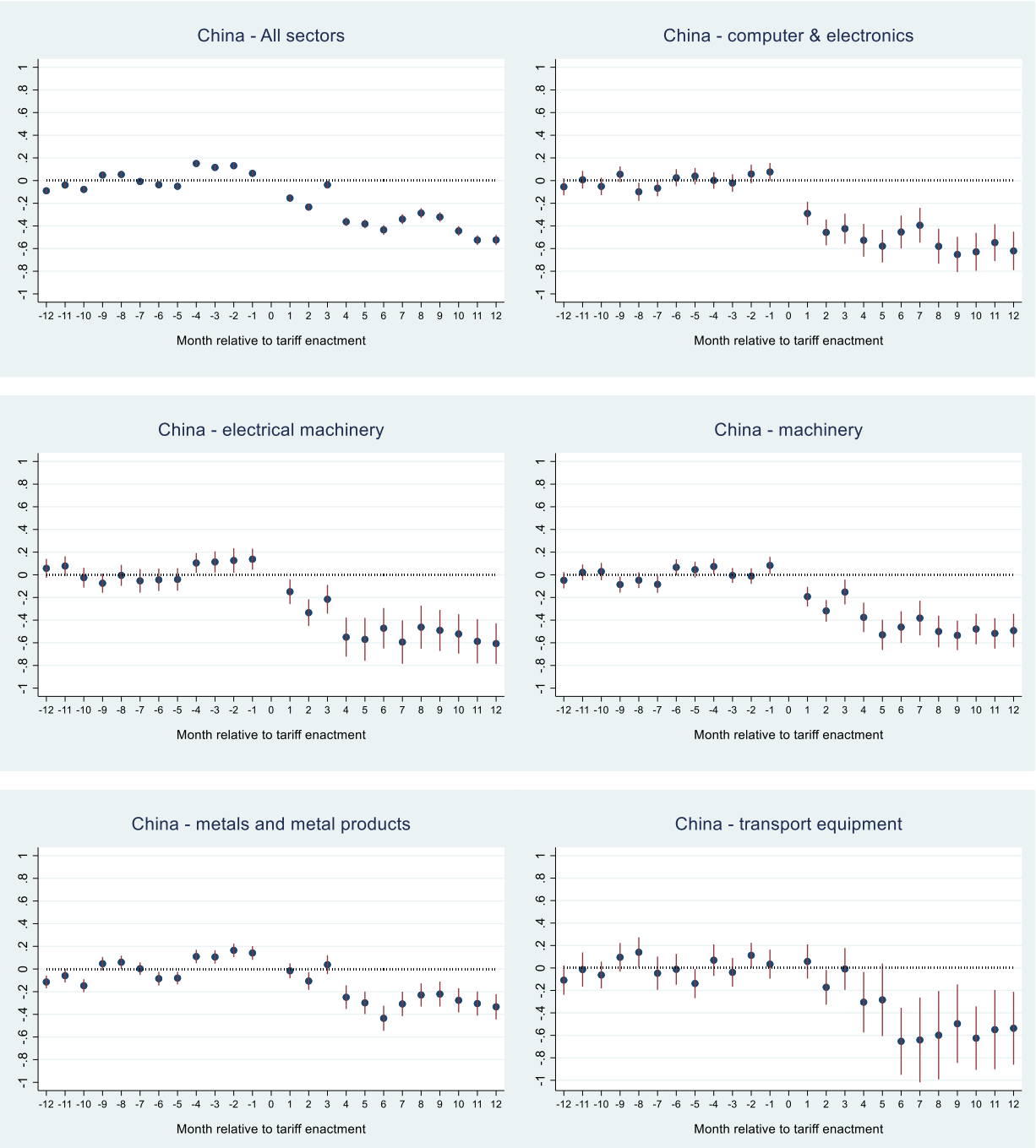
Figure 20 shows the results of the first part of the study. Because of seasonality, differences between the two trends across the whole period are more relevant than the monthly estimates. The results show that up until the shock ("month zero"), there were no statistically significant differences between the two groups of products (that is, differences were close to zero). However, this changes dramatically after the shock, with Chinese exports of the targeted products falling significantly relative to non-targeted products—an average of 40% after 6 months. These effects were also highly significant at the sector level, with within-sector differences between targeted and non-targeted products ranging from 30% to 60%.

Although these findings leave no doubt about the cost of the shock to Chinese exports, they do not say much about trade diversion, particularly for LAC. This issue is addressed by the set of results shown in figure 21. Unfortunately, these do not confirm the somewhat auspicious results suggested by the naive analysis made above. The main beneficiaries seem to be not in LAC but elsewhere in Asia and North America.

Exports of the targeted goods (i.e., those in which China faced a higher-than-MFN tariff) by countries such as Vietnam, Korea, Taiwan, and Canada show substantial gains vis-à-vis the other goods in the aftermath of the shock, presenting a significantly distinct trend. That is not generally the case for LAC: the regional estimate suggests a slightly positive effect, but this seems to be driven mostly by Mexico, which is the only LAC country whose targeted-good exports show a consistent and distinctively positive trend. Even in this case, the difference is not as pronounced as in some of the other Asian countries, particularly Vietnam.

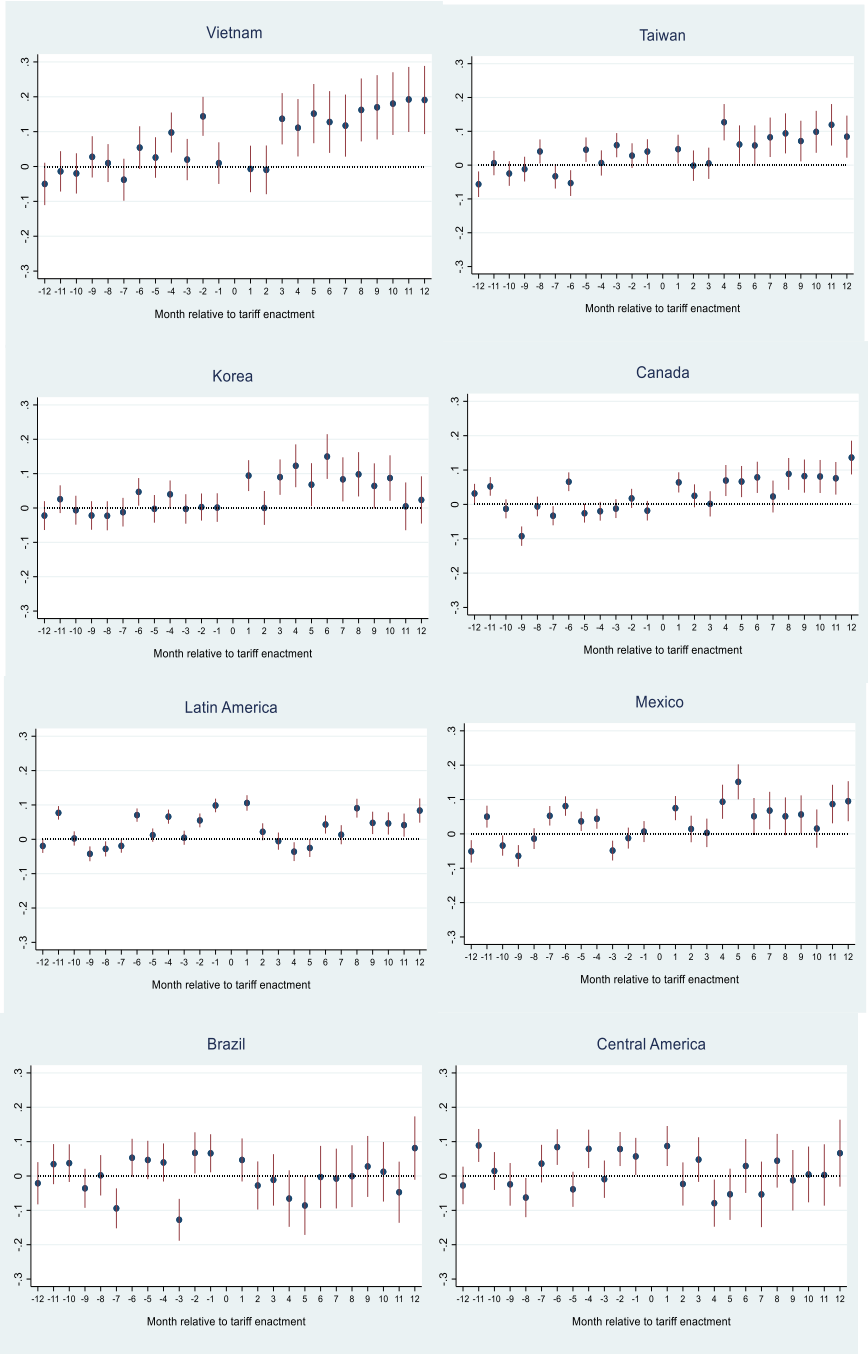
Is this the whole picture? Probably not. In a region as diverse as LAC, with significant differences between countries and sectors, this sort of methodology is likely to overlook potential niches of opportunities. These niches are more likely to be identified by a methodology that goes beyond a bird's-eye view of the shock and digs deeper into the heterogeneities of countries' export responses.

Figure 20. Differences in the Trends between Targeted and Non-Targeted Chinese Exports to the US. Overall and selected sectors. Up to 12 Months Before and After the Tariff Shock (in logs).



Note: This figure shows the change in the value of targeted versus non-targeted Chinese exports (in logs) up to 12 months before and after the tariff shock (month 0). The tariffs were raised between July 2018 and September 2019, affecting an ever-increasing list of products. The dots are monthly point estimates. The vertical lines are 5% confidence intervals. Whenever the confidence intervals include the zero value, there is no statistically significant difference in the performance of targeted and non-targeted exports. See the technical appendix for details of the estimation.
Source: Authors' calculations.

Figure 21. Trade Diversion on Targeted versus Non-Targeted Chinese Exports to the US. Canada and Selected Asian and LAC Countries. Up to 12 Months Before and After Tariff Shock (in logs).



Note: This figure shows the change in the value of targeted versus non-targeted exports (in logs) up to 12 months before and after the tariff shock (month 0). The targeted goods are those in which Chinese exporters faced higher-than-MFN tariffs. These tariffs were raised between July 2018 and September 2019. The dots are monthly point estimates. The vertical lines are 5% confidence intervals. Whenever the confidence intervals include the zero value, there is no statistically significant difference in the performance of the targeted and non-targeted exports. See the technical appendix for details of the estimation.
Source: Authors' calculations.

Searching for niches

Searching for niches requires the full difference in tariffs faced by exporters across countries and products to be taken into account. This difference is driven not only by the recent changes in US trade policy but also by a myriad of US PTAs. This is done with an econometric exercise that seeks to relate changes in the countries' exports to the US with changes in their margins of preference vis-à-vis China. Margins of preference (MOPs) are defined here as the difference between the tariffs faced by China and other countries when exporting to the US. [55]

Using specific information about the margins at the country and product level, it is possible to identify with more detail and accuracy if any trade diversions occurred after the tariff shock and the magnitude and main beneficiaries of these. This might reveal LAC's latent opportunities in a scenario where China becomes less competitive, because of either more permanent changes in its access to developed countries' markets or the country's comparative advantages. The analysis uses US monthly import and tariff data from January 2017 to December 2019, including nearly all LAC countries and the most relevant US trade partners.[56]

Before moving onto the results, it is worth looking at what happened to the main variables of interest: US imports and MOPs. Figure 22 shows that while the negative impact of tariffs on Chinese exports established in the event study is visible even in the raw, aggregated data, the same cannot be said of trade diversion. The only obvious changes in trend (LAC excluding Mexico and RoW) suggest a negative impact rather than a positive one. The data on MOPs, in turn, show that these were relatively modest before the shock and increased significantly thereafter (figure 23). LAC countries such as Mexico and those in Central America and the Caribbean benefited the most, reaching average preferences beyond 20 percentage points.

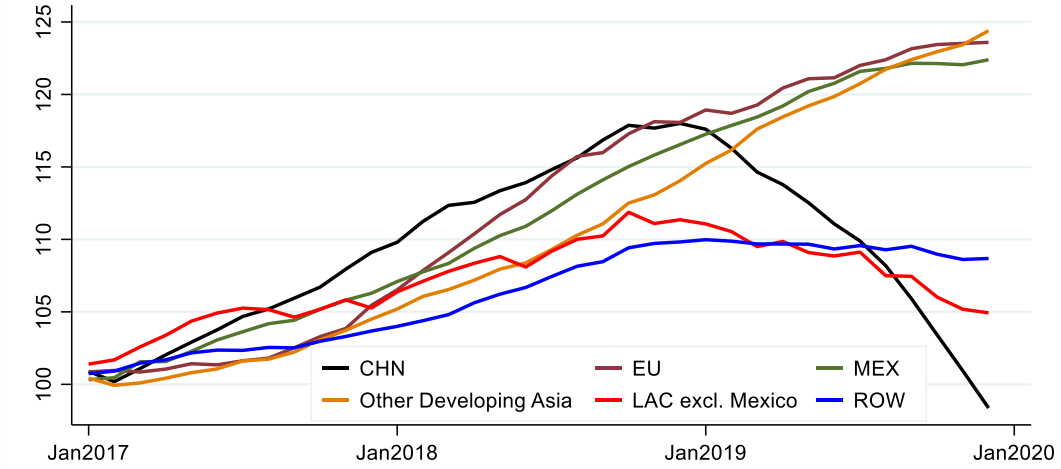
[55] More formally, changes in the margin of preference ΔMOP_{ktj}^{CHN} between partner *j* and China is:

$$\Delta MOP_{ktj}^{CHN} = ln\frac{\left(1 + tar_{k,t}^{CHN} - tar_{k,t}^{j}\right)}{\left(1 + tar_{k,t-12}^{CHN} - tar_{k,t-12}^{j}\right)}$$

where $tar_{k,t}^{j}$ represents the (statutory or effective) tariff of product *k* in month *t* imposed on imports from partner *j*, while $tar_{k,t}^{CHN}$ is the same variable with respect to China. See the technical appendix B for details.

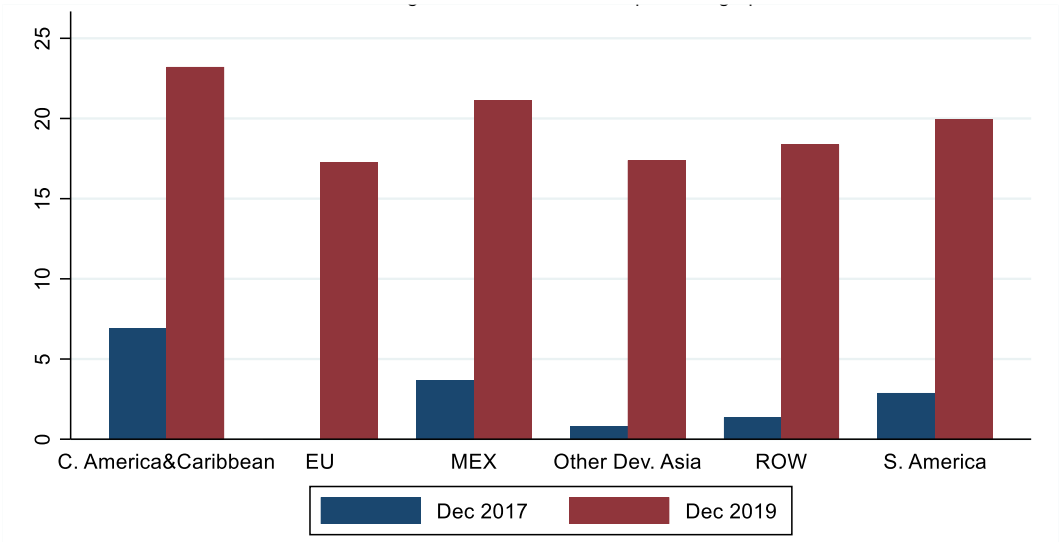
[56] See the technical appendix B for details. Data from 2016 was also used to calculate growth rates for 2017. The sample included countries with the largest number of varieties/products exported to the US, along with all Latin American and Caribbean countries except Cuba. Altogether, 140 countries were included in the analysis, totaling 99.2% of the value imported and 97.7% of the varieties imported between 2016 and 2019.

Figure 22. US Monthly Goods Exports.
Selected Regions, 12-Month Moving Average, 2016=100, 2017–2019.



Note: Other Asia includes Bangladesh, Cambodia, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Sri Lanka, Thailand, Taiwan, and Vietnam.
Source: Authors' calculations with disaggregated monthly import data obtained from the US Census Bureau at the Harmonized Tariff Schedule (HTS) 10-digit level.

Figure 23. Margins of Preference to the US Market. Difference Relative to China.
Selected Regions, Effective Tariff, Percentage Points.



Note: This graph shows the difference between the (effective) tariffs faced by selected regions' firms and Chinese firms when exporting to the US. Effective tariffs are calculated by dividing the amount paid in duties by the value of imports.
Source: Authors' calculations using US Census Bureau disaggregated monthly import data at the Harmonized Tariff Schedule (HTS) 10-digit level. A monthly tariff dataset was constructed by combining annual tariff rates by tariff program and the monthly changes to the HTS (HTS revisions) mostly imposed by recent US trade policy events (Section 301 tariff on China and the EU, Section 201 tariff on Aluminum, Iron, and Steel). See the technical appendix for details.

After netting out possible confounding factors, what does the econometric exercise say about the relationship between these two variables? To make sure the estimates are not capturing measurement errors, the MOP variable is defined based on three alternative tariff definitions: effective, statutory applied, and statutory nominal tariffs. The first is calculated as tariff revenue divided by the value of imports. The statutory applied and nominal tariffs are the official ad-valorem rates, except for a small number of goods with specific tariffs, tariff quotas, and exemptions, where either the effective tariff is used (applied) or assigned a zero tariff (nominal).[57] While the effective tariff captures the rates faced by exporters more accurately, they can only be calculated for goods that were already being simultaneously imported from China and the other partners. The statutory tariffs, in turn, are available for nearly all the goods, which increases the size of the sample and allows for the impact on export diversification to be calculated.

Whatever the advantages of each definition, if there had been a significant trade diversion benefiting either LAC or any other partner, it would seem reasonable to assume that the results would have been robust to the MOP used. This is clearly not the case. As figure 24 shows, in LAC and elsewhere, the direction and statistical significance of the impact is not robust to MOP definitions. Mexico comes close to being the only exception, with a positive impact in two out of the three definitions, although only one of them is statistically significant.[58] To have a sense of the economic significance of this impact, a back-of-the-envelope calculation using these estimates and ignoring economywide effects points to a 5% average increase in the growth of Mexico's exports to the US in the period of analysis.[59]

This lack of a robust overall impact seems to be roughly in line with the event study, but as in that case, this region/country approach might leave niches undetected at the sectoral level. That much is clear in an exercise that adopts a more disaggregated approach, whose results are presented in table 1. Consistent with the region's heterogeneity and the lumpy nature of China's comparative advantages, there is evidence of scattered country- and sector-specific gains that are distributed across a wide range of goods—from natural resources to capital- and labor-intensive goods.[60] In quite a few countries, though, these gains were partially or totally offset by negative and statistically

[57] The applied tariff is based on the official ad-valorem schedule, except when (i) non-ad-valorem tariffs and tariff quotas are applied; and (ii) there are company- and partner-specific exemptions within the HTS10 code. In those cases, the effective tariff rate is used. The nominal option uses only the nominal ad-valorem rates. Whenever they are not available, a zero or the minimum ad-valorem rate is imputed. See the technical appendix for details.

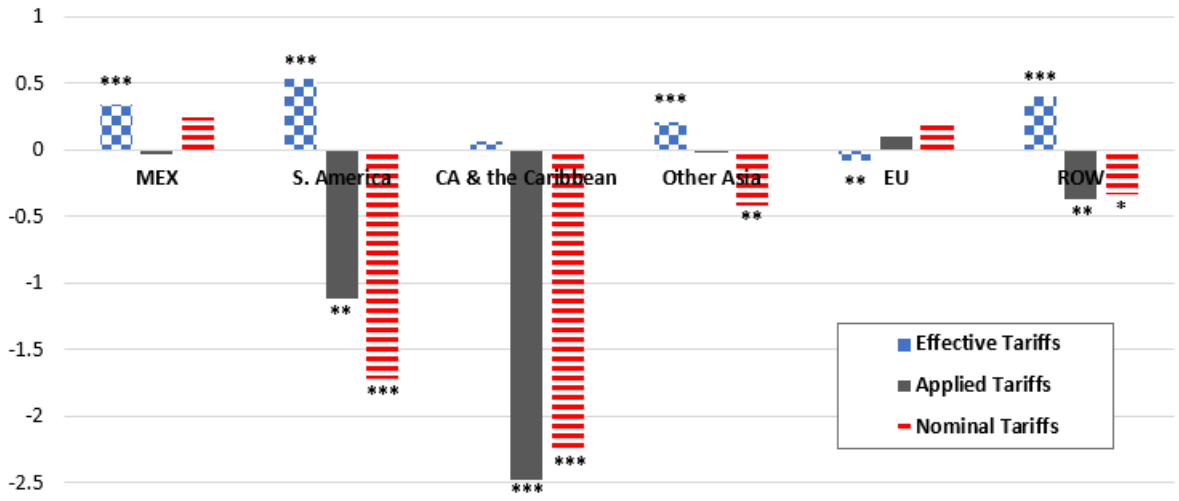
[58] Alternative specifications giving more weight to goods that are traded more heavily or exploring heterogeneities across different categories of good (e.g., end use, broad sectors, transportation intensity, and timeliness) yielded similar, statistically insignificant results. See the technical appendix for details. Meinen et al. (2019), adopting a different empirical strategy, also fail to find robust signs of trade diversion from the tariff shock. Flaaen et al. (2019), in turn, find evidence of trade diversion for washing machines but benefiting other Asian countries such as Vietnam and Thailand.

[59] Estimates based on the effective tariffs. The coefficients of the MOP variable in the statistically significant specifications are multiplied by the average 15% (log) MOP increase between 2017 and 2019.

[60] Schott (2006).

significant impacts in some sectors, suggesting some sort of complementarity with Chinese exports.

Figure 24. Impact on Export Growth to the US of Changes in the Margins of Preference Relative to China's. Selected Regions, 2017–2019 (%).



Note: This figure shows the percentage change in the growth of the regions'/countries' exports to the US resulting from a 1% increase in their margins of preference (MOP) relative to China's. The results for the effective tariffs are based on the coefficient of the MOP variable (ΔMOP_{ktj}^{CHN}) interacted with a region/country dummy estimated in the following regression: $\Delta \ln (M_{kjt}^{US}) = \beta \Delta MOP_{ktj}^{CHN} + \theta_{jt} + \theta_{jk} + \mu_{kjt}$, where $\Delta \ln (M_{kjt}^{US})$ represents the 12-month difference in monthly US consumption imports of product A in month *t* and partner *j*. For the nominal and applied tariff estimates, the dependent variable is the 12- month difference in the inverse hyperbolic sine of monthly US consumption imports. Country-time and country-product fixed effects were included, estimated using sample included imports from 140 US partners at the 10-digit HTS level for 2017–2019, except for oil and gas and scrap, special, and used goods. See text and footnote 27 for definitions of the MOPs. *, **, and *** stand for 10%, 5%, and 1% levels of statistical significance. See technical appendix B for details.
Source: Authors' calculations with US Census Bureau data.

A simple counterfactual exercise, which assumes away economywide effects and within-sector differences, suggests that whenever the impact was positive, the magnitude was often economically relevant.[61] This was the case, for instance, for countries such as Mexico, Colombia, Honduras, Nicaragua, and Chile. In Mexico, gains in furniture, beverages and tobacco and, particularly, in transportation equipment amounted to 5.3% of the country's 2017 exports to the US (US$ 15.4 billion). In Colombia, petroleum and coal products accounted for most of the gains, which reached 16% of the country's 2017 US-bound exports (US$ 1.2 billion). In Honduras, agricultural products were the main beneficiary of more modest gains (2.5%of its 2017 US exports or US$ 114 million).

[61] The exercise simulates what US imports from country *j* would have been if the China-related MOP (effective tariff) had not changed. First, the average impact on the 12-month MOP growth rate was multiplied by the MOP coefficient from the trade-weighted specification. Second, the actual growth rate was divided by the average impact, resulting in a growth rate for imports had the MOP not changed. This counterfactual growth rate was calculated considering the month in which sector k was most affected by the change in MOP. Lastly, the counterfactual growth rates were applied to imports in 2017. The difference between observed imports and counterfactual figures in 2019 represented the trade gain due to the change in MOP. Figures might be sensitive to the specification chosen.

Agricultural products also led to the more robust gains of Nicaragua (4.8%of its 2017 US exports or US$ 160 million), while gains in Chile were more diversified, with chemicals, plastic and rubber leading the way to an overall gain of 2% (US$ 214 million).

What are we to make of these trade results? Except perhaps for Mexico, they seem to dampen expectations of significant short-term nearshoring gains, which would certainly be welcomed amid this severe health-induced crisis. This is not exactly surprising. As discussed elsewhere, the similarity between the composition of exports from most LAC countries and China to the US has been relatively low and has declined since the early 1990s.[62] This reflects these countries' dwindling role as suppliers of manufacturing goods driven by competition from China and other Asian economies and their strong demand for commodities from LAC. Long-term structural weaknesses (e.g., education, infrastructure, and institutions) and gross macroeconomic mismanagement also played a role.

The tariff shock certainly offered some protection against one of the drivers of this deindustrialization, competition from China, but had no impact on the others. In this scenario, positive short-term effects were highly improbable, particularly amid so much uncertainty over how long the shock would last.

Does that mean that there will not be any other opportunities? Not necessarily. Firms take time to (re)organize their value chains, and the econometric results do not close the door to potential long-term niches. Indeed, this is what the scattered positive short-term responses to the tariff shock suggest, although it is clearly far too early to draw definitive conclusions. There are too many unknowns regarding what direction US trade policy will take and what impact the other drivers of the reorganization will have. What's more, the full effects of the pandemic—another major shock—have yet to be factored in, and despite their poor historic record, governments could still play a more active role in addressing the regions' structural weaknesses.

[62] Mesquita Moreira (2007).

Table 1. Impact on Export Growth to the US of Changes in the Margins of Preference Relative to China's. Selected LAC Countries and Sectors. 2017–2019 (%).

Sector	ARG	BOL	BRA	BLZ	CHL	COL	CRI	DOM	ECU	GTM	GUY	HND	JAM	MEX	NIC	PAN	PER	PRY	SUR	SLV	TTO	URY	VEN
Resource-intensive																							
Agricultural prod	-3.5	3.2	2.0***		1.7	0.1	0.4	0.2	0.7	-1.2		1.7***	2.0	-0.1	3.3***		0.2	8.1***		-1.7			
Livestock prod				0.8**																			
Fish & oth marine prod	-0.3				1.6		-1.0		1.3**		-2.6**	-5.9*			-0.3	-0.8	0.8		9.3**		-0.6		4.6*
Minerals & ores			2.1		-2.0**	1.5								-0.8*			13.5*						
Food & kindred prod	0.1	2.6	0.9	-0.9	1.0	0.2	-1.1	0.2	-1.3	-0.8	2.3**	-0.1	1.9	0.4	-0.8	2.1***	0.4	9.5***		1.0*	3.6	-1.3	
Petroleum & coal prod			-0.1			4.4***																	-9.1***
Wood prod		4.6	0.5		1.2				1.6		-0.1	-3.2***						4.8				-2.0	
Nonmetallic mineral			1.9			1.0	-4.8*	1.1		-0.7										5.7***			
Paper			0.4		2.0**	-1.9	0.1			-4.7***		0.7**								1.1			
Primary metal mfg	-1.3		-1.8			1.6	-8.1**	-0.2	0.1	-4.2***				0.1			-1.9***			-18.4***			-1.8
Labor-Intensive																							
Beverages & tobacco	-1.1							-8.3*		-0.9		-0.2	-7.3***	0.4**	-3.6***						-2.7		
Textiles & fabrics								0.2		-8.2***						-4.4***				1.0		-3.1	
Textile mill prod							-0.7													-0.3			
Apparel & accessories						2.0***		-1.0		-3.2*		0.6		0.4	-3.5**	2.8	0.2			0.9			
Leather products	-0.8		1.2					1.4										9.2***				-13.4***	
Furniture & fixtures		2.4		-7.3										1.0***									
Misc manufactured cmdty		29.4**	3.0*			2.5*	-0.5	2.4*						-0.0		8.2***	-0.3					5.2	
Capital Intensive																							
Chemicals	-3.3	1.0	1.3		3.5**	1.4	1.5	0.3	-9.6	-2.5		1.7	3.5*	0.1		6.0***	-0.0	10.6***		-1.2	-4.7***	-4.3	11.2***
Plastics & rubber prod	-0.9		0.6		2.1**	1.3**	-2.5**	-0.0		-0.1		-3.9*		0.3		28.1***	0.8			0.5			
Fabricated metal prod	-4.6		0.1			2.1	-2.2**	1.7***		0.3				0.2						2.7*			
Machinery, except electr	-0.8		-0.3		0.6	-0.1	-1.1							0.1		-10.2***			8.9***		1.4		
Computer & electronic							-3.9***	-0.7***					2.7**	0.1		-2.7				0.2			
Electrical eqpt & comp			0.9**			1.7	-0.0	0.5**	1.2***					0.0		0.5*							
Transportation eqpt	-1.7		-2.0			-1.0	0.6					-1.5***		0.9***	1.0**	-3.9**		-2.2***	11.1*	-1.2***			

Note: This figure shows the estimated percentage change in the growth of 3-digit NAICS exports from selected LAC countries to the US resulting from a 1% change in their MOPs relative to China's. These are based on the following country-level regressions: $\Delta ln(M_{kt}^{US}) = \beta \Delta \ln(MOP_{kt}^{CHN}) + \theta_k + \theta_t + \mu_{kt}$, where $\Delta ln(M_{kt}^{US})$ represents the 12-month difference in monthly US consumption imports of product *k* in month *t*; $\Delta \ln(MOP_{kt}^{CHN})$ is the margin of preference relative to China, θ_k and θ_t are, respectively product and time fixed effects. Effective tariffs and trade weights (at the base year) were used. Observations are the 10-digit HTS level for 2017–2019. The results presented are only for sectors (i) with more than 30 observations and (ii) that represented at least 1% of total US imports from country *j* or at least 1% of total exports from country *j* to the world in 2017. The same model was re-estimated using the applied and nominal tariffs. Blue cells display cases when coefficients have the same sign and are also statistically significant (at least 10%) in all (dark blue) or at least two specifications (light blue). *, **, and *** stand for 10%, 5%, and 1% levels of statistical significance. See the technical appendix for details.
Source: Authors' calculations with US Census Bureau data.

The FDI story

So far, this analysis of the shock has focused on trade. Can anything be said about the impact on FDI? This would be particularly relevant for gauging long-term sourcing trends. In a shock of this nature, affiliates of multinational firms in China that serve the US have plenty of options. They can decide to stay put and either absorb costs or shift them to consumers. They can move their affiliates to US territory (reshoring for US firms or onshoring for the rest) or shift them to other distant locations in Asia, with the best opportunities for labor arbitrage. Or they can move them to the vicinity of the US (nearshoring), driven by advantages of timeliness, lower transportation costs, resilience, and preferential market access.

Although there is not enough data to reveal the full distribution of the options taken so far, there is sufficient to run a similar econometric exercise to the one applied to trade to shed some light on the relevance of the reorganization. The focus of the exercise is on US multinational firms and the relationship between changes in the geographic distribution of their new establishments and investments and changes in US tariffs between 2018 and 2019.

It looks at the main sectors behind the GVC boom: manufacturing and non-financial services. While the tariff shock is likely to have a direct impact on the former, the latter is likely to be the subject of second-order effects. There is some solid evidence that investment by manufacturing affiliates usually brings similar action by their service suppliers in a bid to maintain a successful relationship.[63] The period of analysis is likely to be too short to capture all the effects, but long enough to capture at least some of the first green shoots of the reorganization.

Figure 25 presents the more aggregated, country-level results. Whether using the establishment or investment metric, the picture that emerges so far does not seem to support the argument that a significant reorganization is taking place, particularly one biased toward nearshoring. Consistent with trends seen in the descriptive data mentioned earlier (figure 16), Europe seems to be the region that benefited the most, reinforcing its already dominant position in manufacturing and non-financial services.[64] Does that count as nearshoring? Except for countries like Romania (a hefty 5,600 miles from the US), where there seem to be opportunities for labor arbitrage, other beneficiaries such as Germany are implausible alternatives to “factory Asia” and are more likely the target of

[63] See, for example, Nefussi and Schwellnus (2010).
[64] As of 2019, Europe accounted for 53% of the US FDI stock in manufacturing on a historical cost basis, representing a 6-percentage-point gain since 2016. In non-financial services, this share is even higher (60% in 2019) and remained stable since 2016 (BEA https://www.bea.gov/international/di1fdibal)

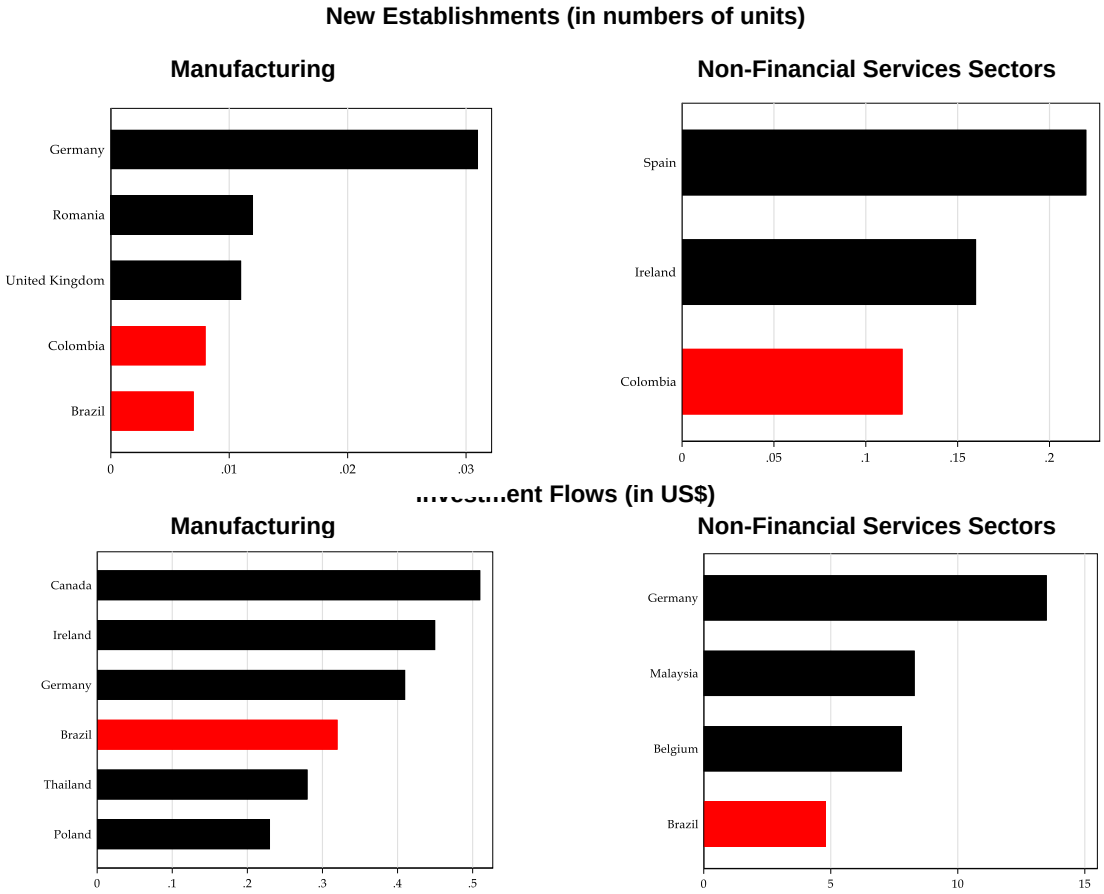
onshoring investments. Gains in countries such as Thailand and Malaysia also raise doubts about a nearshoring trend.

To be sure, there is also evidence of positive impacts in the vicinity of the US, which would make the most of the benefits of nearshoring. However, in manufacturing, these impacts only seem to favor Canada—a high-wage country like those in Western Europe, and thus more likely to be associated with onshoring—and two LAC countries, Brazil and Colombia, whose geographical locations and relative labor costs mean they are not the most obvious candidates in the region for nearshoring.

As in the trade exercise, this might not be the whole story for LAC since country-level analysis might be hiding niches of opportunities. Table 2 presents the results of a more disaggregated analysis. It only shows the country-sector pairs in LAC and elsewhere where the impact from the tariff shock was positive and statistically significant. This more granular analysis adds Argentina, Chile, Mexico, and Costa Rica to the group of LAC beneficiaries: like Brazil and Colombia, these countries had some highly specific sectoral gains, including non-financial services. More labor-intensive goods such as textiles and apparel, which are more closely associated with labor arbitrage, are notorious for their absence. It is also interesting to note that the gains in each of these sectors were also shared by several countries in Western and Eastern Europe and in East Asia, which reinforces the misgivings over the strength of the nearshoring trend.

Overall, the FDI story appears fairly similar to that of trade. Up to now, there is no clear evidence of a major reorganization, particularly one led by nearshoring. LAC's short-term gains have been few and far between and are more consistent with niches of opportunities than with a leading force that will power the region out of the current crisis and fuel long-term growth. The same caveats of the trade story are valid here: it is still early to draw definite conclusions, but a great deal of caution in building expectations is well advised.

Figure 25. The Impact of the US Tariff Shock on the Establishment of and Investment in US Foreign Affiliates. Manufacturing and Non-Financial Services, 2017–2019.



Source: Authors' calculations based on data from the WorldBase, United States' BEA, USITC, and WITS.
Note: This figure reports the countries that had a positive and statistically significant impact (at 10%) on the number of new affiliates and investments of US MNC firms, mainly as a result of higher US tariffs on Chinese exports since 2017. The estimates for manufacturing are based on the following specification:

$$HS\left(Y_{ijt}^{USA}\right) = \alpha_i \tau_{jt}^{USA,China} + \beta \tau_{jt}^{USA,i} + \theta \tau_{jt}^{i,USA} + \delta_{ij} + \rho_t + \phi_{ij}.t + \varepsilon_{ijt} \quad (1)$$

where *i* denotes country, *j* stands for sector, and *t* corresponds to year. *HS(Y)* is the inverse hyperbolic sine of the number of established affiliates/FDI flows (in US$) from the US in country *i* in sector *j* in year *t*; $\tau_{jt}^{USA,China}$ is the average tariff applied by the US on China in sector *j* in year *t*—the figure reports the countries with positive and significant (10%) estimated coefficients of this variable, α_i—; $\tau_{jt}^{USA,i}$ is the average tariff applied by the US on country *i* in sector *j* in year *t;* $\tau_{jt}^{i,USA}$ is the average tariff applied by country *i* on the US in sector *j* in year *t;* δ_{ij} is a set of country-sector fixed effects; ρ_t is a set of year fixed effects; $\phi_{ij}.t$ is a set of country-sector time (linear) trends; and ε is the error term. The equation is estimated using data for 2010–2019.
The estimates for non-financial services are based on the following specification:

$$HS\left(Y_{ijt}^{USA}\right) = \psi_i I_{i,>2017}^{j} + \delta_{ij} + \rho_t + \phi_{ij}.t + \varepsilon_{ijt}\mu_{ijt} \quad (2)$$

where *i* denotes country, *j* stands for sector, and *t* corresponds to year. *HS(Y)* is the inverse hyperbolic sine of the number of established affiliates/FDI flows (in US$) from the US in country *i* in sector *j* in year *t;* $I_{i,>2017}$ is a binary indicator that takes the value of one for country *i* after 2017 and zero otherwise—the figure reports countries for which the estimated coefficient on this variable, ψ_i, is positive and significant at 10%*;* δ_{ij} is a set of country-sector fixed effects; ρ_t is a set of year fixed effects; $\phi_{ij}.t$ is a set of country-sector time (linear) trends; and μ is the error term. The equation is estimated using data for 2010–2019. See technical appendix E for details.

Table 2. The Impact of the US Tariff Shock on the Establishment of and Investment in US Foreign Affiliates. Manufacturing and Non-Financial Services, 2017–2019.

Sectors and Subsectors	Countries that Register Statistically Significant Increases			China Lost?
	LAC Countries	European Countries	Other Countries	
Opening of US Foreign Affiliates				
Manufacturing	Colombia, Brazil	Germany, United Kingdom, Romania	-	Yes
Food	Brazil	Canada, United Kingdom	-	No
Chemicals	-	Germany, Spain	Canada	Yes
Computers and Electronics	Brazil	France, United Kingdom	Canada	Yes
Machinery	Brazil, Colombia	Romania, Netherlands, Hungary	Singapore	Yes
Textiles	-	Germany, United Kingdom	-	Yes
Metals and Metal Products	-	Netherlands	-	Yes
Electric Products	Mexico	Czech Republic	-	Yes
Motor Vehicles and Parts	-	Germany, Romania, Czech Republic	-	No
Non-Financial Services	Colombia	Spain, Ireland		Yes
Information Technologies	Colombia	Romania	Canada, Singapore	Yes
Professional Services	-	Germany, Spain, Ireland	Canada	No
Other Non-Financial Services	-	Spain, Germany	-	Yes
FDI Flows				
Manufacturing	Brazil	Ireland, Germany, Poland	Canada, Thailand	No
Food	Mexico	Spain, United Kingdom	Canada, Thailand	No
Chemicals	Chile	Ireland, Czech Republic	Canada	Yes
Computers and Electronics	Costa Rica	Spain, Netherlands, Italy	Thailand	No
Machinery	Brazil	Germany, Poland	Japan	Yes
Metals and Metal Products	Mexico	Germany, United Kingdom	Japan	Yes
Electric Products	Mexico	Netherlands, Spain	-	No
Motor Vehicles and Parts	Argentina, Mexico	-	Japan, Malaysia	No
Non-Financial Services	Brazil	Germany, Belgium	Malaysia	Yes
Information Technologies	Brazil	Germany, Spain	-	No
Professional Services	Argentina	Ireland, Belgium, Germany	Thailand	Yes

Source: Authors' calculations based on data from WorldBase, United States' BEA, USITC, and WITS.
Note: This table reports the countries and sectors (2 digits) that had a positive and statistically significant impact (at 10%) on the number of new affiliates and investments of US MNC firms as a result of mainly higher US tariffs on Chinese exports since 2017. See figure 25 notes and technical appendix E for details of the estimation.

5. Taking Stock

After all is said and done, is it reasonable to expect that a reorganization of GVCs will bring large short-term gains for the region? Might it bring long-term gains? The short and honest answer to the first question is most likely no, perhaps with the notable exception of Mexico. The second question, yes, maybe, but it is too early to tell—but in the most realistic scenario, it will probably be a story of niches rather than a full-blown source of growth.

Getting these expectations right is particularly important in the light of the backlashes against trade and integration of the last decade, fueled in great part by promises that were not grounded in sound economic theory and robust empirical evidence. [65] If trade and integration are to be preserved and prosper, it is important to get the facts straight.

There are good reasons to be skeptical of large short-term gains. The trouble begins with the frequently cited drivers behind the reorganization: changes in labor costs, the digital transformation, and the race for timeliness and resilience, for which trade frictions and the Covid-19 shock are seen as a catalyst. While there seem to be good grounds to expect that these forces will bring changes, there is still too much uncertainty to be conclusive as to the magnitude and direction of their impact. They are also closely intertwined and their net impact on LAC will depend on how this interaction evolves and affects their relative importance.

The proclaimed death of labor arbitrage, for instance, would hurt the region's prospects for exporting labor-intensive goods. It turns out that the wage gap vis-à-vis the developed world is still sizable for most LAC countries and, to complicate things, for most of developing Asia. The digital transformation may also undercut low-wage comparative advantages but could also bring trade costs down, opening up opportunities for small and medium firms, particularly in services. Timeliness and resilience may favor the region's exporters in the hemispheric market, particularly if digitalization is used to bring trade costs down, but it is not clear if these forces are strong enough to offset the pull of labor arbitrage. They may also jeopardize other important but distant markets (Asia, for instance). To cap it all, there is also considerable uncertainty about the catalysts: are protectionist policies here to stay, strengthened by the Covid-19 shock and geopolitical tensions, or will the rules-based trade system regain its footing?

Short of a crystal ball, it all seems to come down to empirical questions around how far the reorganization has moved so far, in which direction, and what impact this has so far had on LAC. An extensive examination of global trade and FDI trends, with a particular focus on two of LAC's largest markets, the US and Europe, has helped answer the first

[65] Mesquita Moreira and Stein (2019).

questions. The main takeaway seems to be that, so far, there is no evidence to support the argument that a radical reorganization of GVCs is underway. Up to now, the data seems to rule out any vigorous reshoring or nearshoring trends. To be sure, the FDI data provides some support for a nearshoring trend in Europe, but that hardly seems to be a break with the past. It most likely reflects the EU's eastward expansion and the opportunities this has created for labor arbitrage—an old friend of offshoring.

There is also no clear evidence that these incremental changes have benefited LAC, except for localized gains in Mexico's trade with the US. Ironically enough, some of these gains, seem to be more related to traditional offshoring than to an effort to bring suppliers closer to home.

Since the examination of global trends in this study focused mainly on the rearview mirror and is based on circumstantial evidence, a more robust analytical effort was made to better understand what is at stake for LAC. This effort shifted the focus from long-term trends to changes on the margins, which may be a better predictor of things to come. It uses the past US administration's tariff hike, mainly against China, as a quasi-natural experiment. The premise was that if latent forces are pushing for a reorganization and they are set to favor LAC, they are likely to have been strengthened and revealed by the tariff shock.

The results do not significantly change the more speculative conclusions of the global trends review. Both the trade and FDI estimates do not point to significant gains for LAC—again, with the possible exception of Mexico. The results are very much in line with the region's comparative advantages, the nature of the shock, and the ambiguity and uncertainty of the drivers for the reorganization. Nonetheless, the results do not rule out niches of opportunities in a wide variety of sectors and countries.

Is there a chance these results will change in the future? They might. Plenty of uncertainty remains, but large short-term nearshoring gains seems to be only consistent with radical changes of the world trade order. Short of this undesirable and unlikely scenario, trade tensions are more likely to remain limited to regulatory disputes involving China-led value chains, a perspective more in line with incremental changes and incremental gains.

Whatever the future brings, for all practical purposes, the dominant trade policy for LAC continues to be the pursuit of an unfinished trade agenda, whose implementation was made even more urgent by the confusing trends and the uncertainty surrounding the global trade environment. A swift conclusion of such agenda can make sure high trade and investment costs do not get in the way of whatever opportunity or challenges that the global economy might bring. Faced with a crisis of historic proportions, LAC certainly cannot afford to discriminate against any trade or investment opportunity, be it in

manufacturing, agricultural, mining, or services; primary, intermediate, or final goods; at home, in the US, Europe, Asia, or elsewhere in the world. There is just too much at stake.

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