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Home Country Effects of Multinational Network Restructuring in Times of Deglobalisation: Evidence for European MNEs





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Abstract

The slowdown in globalisation since the late 2000s has been analysed primarily from the viewpoint of trade flows. In this work, we address the issue from the perspective of multinational enterprises (MNEs) by looking at their foreign network restructuring episodes. Our findings document a trend towards contraction in the worldwide affiliate networks of European MNEs for the period 2010-2019. In the second half of this decade, there has been a strong rise in the number of foreign contraction episodes, whereas the number of foreign expansion episodes has fallen substantially. In addition, restructuring episodes have increasingly resulted in a reduced geographic scope of networks (nearshoring) and an orientation of networks towards geopolitically aligned countries (friendshoring). This is true not only for contractions but also for expansions. Regarding the home-country effects of foreign network restructuring, we find no evidence that contracting networks bring jobs back to their home country. Finally, our results reveal that, in expanding networks, home-country employment is on the rise rather than on the fall, thereby confirming findings from earlier literature.

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Since the late 2000s, the face of globalization has changed compared to previous decades. Trade growth has slowed down substantially, merely keeping pace with growth in global production, while growth in foreign direct investment (FDI) has even fallen below that level (UNCTAD, 2020). This slowdown in the expansion of trade and investment flows has been referred to as 'slowbalisation' by Antras (2020). It went hand in hand with a change in perspective on globalisation. While global production was previously praised for the efficiency gains it offers, increasing emphasis is now being placed on the risks associated with supply chain dependence. By the same token, concerns about negative home-country effects of globalisation have given way to hopes of bringing activities and jobs back home.

An MNE perspective on the slowdown in globalisation

Up to now, the slowdown in globalisation has been analysed almost exclusively based on trade flows (see, for example, Alfaro and Chor, 2023, or Gong et al., 2022). However, according to UNCTAD (2013), multinational enterprises (MNEs) are involved in 80 percent of global trade, and, more recently, Miroudot and Rigo (2022) show that MNEs account for almost two-thirds of world exports. Changes in MNE networks are therefore likely to be crucial in shaping trends in globalisation, and it appears as timely to map these changes for recent years and spell out some of their features as well as consequences. Our work fills this gap by investigating the dynamics of MNE networks in the 2010s. We first derive a set of stylized facts on foreign network restructuring of MNEs, and then estimate the home-country effects of such restructuring, focusing specifically on MNEs that reduce the size of their network so as to determine whether activities are brought back to the home country.

A rich dataset on worldwide networks of European MNEs

The analysis is grounded on a micro-level dataset of the worldwide affiliate networks of parents located in Europe that has been developed by Merlevede and Theodorakopoulos (2024) based on raw information taken from the Orbis database provided by Moody's. This network dataset contains more than 4 million affiliate-parent-year observations for 145,000 European MNE parents and 844,000 worldwide affiliates over the years 1995-2020. In addition to the identification of firms that belong to each network, financial and other relevant information is included in the dataset.

Our analysis is focused on the period of stagnating globalisation between 2010 and 2020. Over this decade, the number of MNE networks in the dataset rises gradually from 45,000 to more than 65,000. The bulk of these networks is small – two thirds of MNE parents have one or two affiliates – whereas very large networks are an exception. Moreover, we find evidence of an MNE premium: compared to parents of purely domestic networks, MNE parents are significantly larger in terms of activity and employment, and they are also significantly more productive.

Foreign network restructuring episodes

A look at year-on-year changes in the number of foreign affiliates of the MNE networks in the dataset reveals that a large number of MNE parents adapt the extent of their foreign network more than once over the period under investigation. It is in particular the larger networks that change more frequently. This finding is at odds with the idea of network restructuring as a one-time event. It rather suggests that network restructuring can be a process that takes several years and that large MNE networks continuously optimise a portfolio of affiliates. To account for this, we adopt an 'episode'-approach to foreign network restructuring. A restructuring episode is defined as a period of consecutive years during which the number of foreign affiliates changes each year until the network becomes stable again. Taking the end year of each episode as its time stamp, we find 3000-5000 episodes in each year between 2010 and 2019. In the sample of MNE networks, 60 percent go through at least one restructuring episode. Larger networks restructure more often, and their restructuring episodes are longer on average.

A rising share of contraction episodes in the late 2010s

We identify three types of episodes based on the net change in the number of affiliates over the time span of the episode:

- (i) expansion episodes with an increase in the number of affiliates,
- (ii) reshuffling episodes with a change in the network composition but a stable number of affiliates, and
- (iii) contraction episodes with a decrease in the number of affiliates.

The latter type also comprises dissolving networks, which are those networks that contract and thereby cease to be a network.

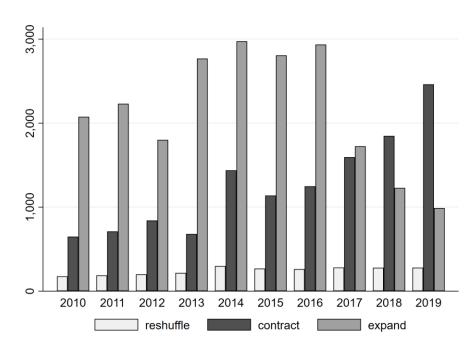


Figure 1. Number of episodes by type over 2010-2019

Figure 1 reports numbers of episodes by type over the period 2010-2019. Between 2010 and 2016, expansions represent the vast majority of foreign restructuring episodes (68% on average against 26% for contractions). From 2017 onwards, the number of expansion episodes decreases substantially, whereas the number of contraction episodes rises strongly. In 2019, the share of contraction episodes is 66% against 26% for expansions. Beyond aggregate trends of slower trade and FDI growth, these results show that contraction has become the dominant form of foreign network restructuring in recent years, and thereby they document a trend towards deglobalisation from the perspective of European MNEs.

Nearshoring and friendshoring

Restructuring also entails changes to the geographic scope of MNE networks. Foreign contraction is likely to lead to a greater weight of the home country within a network. Besides, restructuring may also result in a greater share of affiliates located in countries that are close to the home country. This corresponds to the idea of 'nearshoring'. In addition, networks may be restructuring to locate their affiliates in countries that are allies of their home country to reduce exposure to geopolitical tensions. Such a geopolitically motivated reorientation of MNE networks is in line with so-called 'friendshoring'.

Within-network physical and geopolitical distance

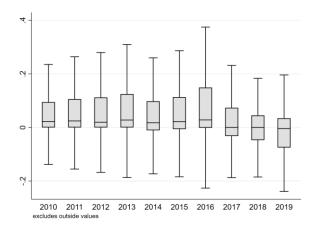
In order to identify trends towards nearshoring and friendshoring, we calculate two additional distance indicators for all networks in the sample:

- (i) the average within-network physical distance to the home country in which the parent is located, and
- (ii) the average within-network geopolitical distance to the home country, where geopolitical distance is measured by differences in voting patterns between countries in the UN General Assembly (Bailey et al., 2017).

We consider reductions in physical and geopolitical distance over the time span of a restructuring episode as respectively nearshoring and friendshoring. The boxplots in Figure 2 show the distribution of changes in physical and geopolitical distance over episodes for all years between 2010 and 2019. From 2016 onwards, the number of episodes with a decrease in physical or geopolitical distance is on the rise.

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Figure 2. Boxplots of the change over an episode in physical and geopolitical distance

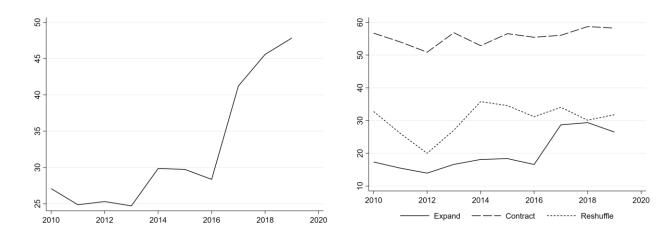


An increasing share of episodes characterised by nearshoring and friendshoring

Nearshoring and friendshoring are not mutually exclusive: 20% of all restructuring episodes are characterised by a decrease in both physical and geopolitical distance. According to Figure 3, the share of episodes associated with either nearshoring or friendshoring or both starts to increase from 2016 onwards from 30% to almost 50% in 2019. There are two major drivers of this aggregate trend. On the one hand, there is a rise in the number of contraction episodes, which are on average more frequently characterised by nearshoring or friendshoring. On the other hand, the share of nearshoring and friendshoring episodes is also increasing among expansion episodes.

SUERF Policy Brief, No 1074 4

Figure 3. Nearshoring and friendshoring episodes as a share in total episodes and as a share of expansion, contraction and reshuffling episodes

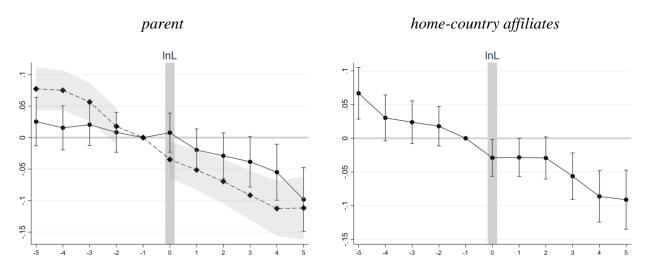


Home country effects of foreign network restructuring

Does foreign network restructuring affect the activity of multinationals in their home country? In times where an increasing share of European MNEs are found to be downsizing their foreign networks, this question should be answered specifically for contraction episodes. For this purpose, we compare employment levels of parents and home-country affiliates of MNEs that contract their foreign network to those of MNE networks that do not restructure, for a period extending from five years before the start of the episode to five years after the end of the episode.

Results normalised relative to the year before the start of the contraction episode are reported in Figure 4. The episode corresponds to time 0 marked by a vertical shaded area. For parents, the results are separated between contracting networks that do not dissolve (dots for point estimates and vertical lines with caps for confidence intervals) and those that do (diamonds for point estimates and light grey shaded areas for confidence intervals).

Figure 4. Parent and home-country affiliates employment pre and post contraction episodes



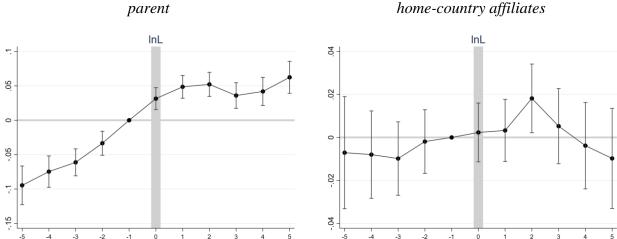
No sign of contracting networks bringing jobs back to their home country

The results provide no evidence of an increase in home-country employment before or after a contraction episode, neither for parents nor for their home-country affiliates. There is rather a downward trend in home-country employment of contracting networks. However, this trend is significant only for parents of dissolving networks. For home-country affiliates of contracting networks that do not dissolve, we find a significant negative impact on employment three or more years after the episode. Clearly, these results do not lend support to hopes of bringing back activity and jobs to the home country.

Rising home-country employment of expanding networks

We have also looked at employment levels of parents and home-country affiliates of expanding MNE networks in comparison with MNE networks that do not restructure. The results in Figure 5 show that the employment levels of parents in expanding networks increase significantly before and after the restructuring episode. There is, however, no impact on the employment of home-country affiliates of these expanding networks. These results are in line with prior findings for earlier periods in the literature: MNEs expanding their activity abroad tend to increase home-country activity rather than reduce it (Desai et al., 2009; Yamashita and Fukao, 2010; Kovak et al., 2021).

Figure 5. Parent and home-country affiliates employment pre and post expansion episodes



Our working paper (Merlevede and Michel, 2024) contains results for the impact of restructuring episodes on additional home-country performance indicators such as value added, total assets and productivity as well as for the impact on the number of domestic affiliates.

Finally, we also show that the home-country effects of network restructuring are not different in cases of nearshoring, i.e. when the geographic scope is reduced, or friendshoring, i.e. when the geopolitical orientation is changed.

References

Alfaro, L. and D. Chor (2023): "Global Supply Chains: The Looming 'Great Reallocation'" Working Paper 31661, National Bureau of Economic Research.

Antras, P. (2020): "De-Globalisation? Global Value Chains in the Post-COVID-19 Age", Working Paper 28115, National Bureau of Economic Research.

Bailey, M. A., A. Strezhnev, and E. Voeten (2017): "Estimating Dynamic State Preferences from United Nations Voting Data", Journal of Conflict Resolution, 61, 430–456.

Desai, M. A., C. F. Foley, and J. R. Hines (2009): "Domestic Effects of the Foreign Activities of US Multinationals", American Economic Journal: Economic Policy, 1, 181–203.

Gong, H., R. Hassink, C. Foster, M. Hess, and H. Garretsen (2022): "Globalisation in reverse?

Reconfiguring the geographies of value chains and production networks", Cambridge Journal of Regions, Economy and Society, 15, 165–181

Kovak, B. K., L. Oldenski, and N. Sly (2021): "The Labor Market Effects of Offshoring by U.S. Multinational Firms", The Review of Economics and Statistics, 103, 381–396.

Merlevede, B. and B. Michel (2024): "Home Country Effects of Multinational Network Restructuring in Times of Deglobalisation: Evidence for European MNEs", Working Paper 465, National Bank of Belgium

Merlevede, B. and A. Theodorakopoulos (2024): "The Margins of Ownership Structures – Insights from 145,000 Networks over 25 years", mimeo, Faculty of Economics and Business Administration, Ghent University, Belgium.

Miroudot, S. and D. Rigo (2022): "Multinational Production and Investment Provisions in Preferential Trade Agreements", Journal of Economic Geography, 22, 1275–1308.

UNCTAD (2013): Global Value Chains: Investment and Trade for Development, World Investment Report.

UNCTAD (2020): International production: a decade of transformation ahead, Chapter IV in World Investment Report.

Yamashita, N. and K. Fukao (2010): "Expansion abroad and jobs at home: Evidence from Japanese multinational enterprises", Japan and the World Economy, 22, 88–97.

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