Benefits of internationalisation for acquirers and targets – but unevenly distributed

By Rainer Frey and Stefan Goldbach
Deutsche Bundesbank

JEL codes: D22, D24, F23, G34.

Keywords: Globalisation, firm acquisition, M&A, productivity, sales, innovativeness, know-how, technology, labour costs, employment, wages, firm heterogeneity.

In some countries around the world, the advantages of globalisation have been increasingly called into question recently. In particular, takeovers by foreign firms raise suspicions of technology theft and job cuts at the newly acquired local plant. By looking at Germany, as a large open economy, takeovers of German companies by foreign investors make their productivity and sales increase while the foreign owners tend to step up expenditure on the labour force in Germany in the aftermath of the acquisition. In the case of German firms going international, we find positive productivity and sales effects for relatively small companies investing, and this internationalisation is not to the detriment of the domestic labour force.
What We Do

For a long time, globalisation was largely seen as increasing the welfare of all countries involved. However, more recently, some governments have shifted the focus to potential negative effects and this has also been accompanied by a general reweighing of the pros and cons of foreign direct investment. In this context, issues such as cross-border technology transfer (in the sense of theft), local divestment and labour layoffs, or public risk through new foreign owners are stressed. These considerations might also have played a role in European countries introducing new laws which enable governments to forbid foreign takeovers when they consider public security to be jeopardised (see European Union (2019)). Equally, countries such as the US have also introduced trade restrictions, citing potentially unfair competition. However, limitations imposed on foreign acquirers may lead to countermeasures by foreign governments on domestic investment abroad.

Germany is highly integrated in the world economy through FDI: at the end of 2019 German multinationals’ – consolidated – FDI stocks abroad amounted to €1.4 trillion. Foreign parent companies’ FDI holdings in affiliates located in Germany, at €0.6 trillion, remained well below that level but were still economically important. Thereby, German enterprises invested primarily in the EU; outside the EU, the US, UK and China were main destinations. In turn, foreign investors in Germany stem also largely from EU countries. Besides, US American and Swiss firms are relevant investors (see Figure 1 for a regional breakdown). In light of these high stocks, we investigate the benefits of FDI both for firms that are taken over by foreign investors (“targets”) and for those investing abroad for the first time (“acquirers”– with investments including takeovers and greenfield investment) in our analysis – which in this form is unique in the literature. Thus, we not only address potential implications of takeovers of German firms by foreign companies on the one hand, but also look at potential opportunities for domestic firms from going global on the other hand (see Frey and Goldbach (2021)). Thereby, we are the first – to our knowledge – to discriminate between the manufacturing and the services sector within one setting. Furthermore, we allow for potential differences in firm size. Finally, we investigate the short and long-term effects to understand the dynamics after a firm acquisition. All in all, this heterogeneity allows for different outcomes and the analysis may identify groups of firms that especially profit from internationalisation and those who profit less or are even negatively affected. Already a descriptive comparison of internationally linked enterprises with Germany’s overall economy provides clues regarding the contribution of internationalisation to gross value added, intangible assets and turnover. The growth rate of these three variables tends to be larger for international firms than for purely domestic firms, as Figure 2 shows.

What We Find

For the analysis, we rely primarily on German micro data for FDI that we match with firm balance sheet data, which are available for international but also purely national firms – both provided by the Deutsche Bundesbank. To account for a potential selection bias, we, like many authors, e.g. Guadalupe, Kuzmina and Thomas (2012) and Stiebale and Vencappa (2018), first address the acquisition decision and conduct propensity score matching to estimate the likelihoods of firms being chosen for acquisition afterwards. This allows for the calculation of re-weighting estimators which, in a second step, enter difference-in-differences estimations that we apply to identify the post-acquisition effects.

Firms with certain characteristics are engaged in FDI. Firm size (measured as log of total assets) is a relevant criterion for foreign companies in search of German targets in the manufacturing and the services sector. Foreign investors may acquire German firms to benefit from their infrastructure and reputation. Turning to specific assets, we find that intangible assets are of strong interest to investors in the manufacturing sector. Thus, the intention behind a cross-border firm buy-off may be to increase the innovativeness and thus the competitiveness
of the conglomerate as a whole. In the manufacturing sector, lower labour costs represent a purchasing argument. For German firms going abroad, unsurprisingly, internationalisation is of significant interest especially for larger German companies in the manufacturing and services sectors. Obviously, going international requires a large volume of resources in many fields and, thus, large enterprises are generally better equipped for such an undertaking. In addition, an international branch certainly becomes more beneficial for firms that are especially strong in the field of innovation (intangible assets). The reason is that knowledge-based advantages can also be applied abroad and would allow for scale effects.

For the assessment of firms’ post-acquisition performance, we take recourse on a weighed difference-in-differences approach. The estimation results for corporate takeovers by foreign investors provide mostly positive coefficients. In manufacturing, small firms in particular exhibit positive effects on productivity, turnover, innovations and labour costs in the short and long term – measured in each case against the control group. Thus, the new owners are much more capable of giving small firms a stimulus to increase their productivity, promote sales due to scale economies and the reliance on a well-established distribution network, and increase employment or/and wages – perhaps along with higher qualifications. For services, firms display positive significant short-term and long-term effects for productivity and turnover. Here, productivity growth is probably more attainable for large firms because in this sector restructuring may be driven more strongly by management and technological transfer.

The estimates for domestic parent companies making their first foreign direct investment turn out similar. In manufacturing, small firms in particular display positive short-term and long-term effects in terms of productivity, turnover and labour costs. Looking at services, the results are similar: small firms achieve positive short-term and long-term effects for turnover and labour costs as a result of the corporate takeover. Only for productivity we find no significant effect. In return, small firms also tend to achieve positive effects in terms of innovations in the long term. However, for the services sector, we have much less observations. Likely, this already indicates a much stronger international position of the German manufacturing sector in comparison to the services sector. Conversely, in the German services sector there is still substantial potential to be exploited by internationalisation.

Thus, we do not find evidence for an outsourcing of activities based in Germany to the rest of the world with an overall harmful impact at home. In contrast, internationalisation has a beneficial effect on the domestic site as well.

What We Learn

Thus, our study provides clear evidence for positive effects of free capital flows in the field of FDI – and this applies to both the host and the target country. International investment makes companies more competitive, which is likely to become especially important in the long term. These positive effects would be weakened or lost in the case of protectionist measures hampering FDI. However, we also showed that the outcome is heterogeneous, in the sense that not all firms profit and that we have to discriminate by sector, firm size and time horizon to identify the winners. Though we do not find a statistically significant group of "absolute" losers from internationalisation in general, there are also some unaffected firms. Hence, these firms may be seen, or may see themselves, as "relative" losers from globalisation. With the same reasoning, companies that remain national and perform relatively more poorly than their international competitors may perceive globalisation as disadvantageous.
Figure 1.

German foreign direct investment (consolidated stock at end-2019)
Total: €1,372 billion

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>42%</td>
</tr>
<tr>
<td>The Americas</td>
<td>34%</td>
</tr>
<tr>
<td>Asia</td>
<td>14%</td>
</tr>
<tr>
<td>Other regions</td>
<td>9%</td>
</tr>
</tbody>
</table>

Foreign direct investment in Germany (consolidated stock at end-2019)
Total: €556 billion

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>59%</td>
</tr>
<tr>
<td>The Americas</td>
<td>20%</td>
</tr>
<tr>
<td>Asia</td>
<td>12%</td>
</tr>
<tr>
<td>Other regions</td>
<td>10%</td>
</tr>
</tbody>
</table>

Figure 2.

Key indicators of enterprises in Germany
\(\text{€ billion, log scale}\)

- **Gross value added**
  - All enterprises in Germany
  - Domestic parent companies
  - Domestic subsidiaries

- **Intangible assets**
- **Turnover**

1 Source: Federal Statistical Office. 2 Consolidated total of primary FDI and secondary FDI held via holding companies (Source: Bundesbank microdatasets: MIDI linked with JANIS). Deutsche Bundesbank
Benefits of internationalisation for acquirers and targets – but unevenly distributed


About the authors

Rainer Frey is senior economist in the Balance of Payments, Exchange Rates and Capital Markets Analysis Division at Deutsche Bundesbank. He studied at Mannheim University and Louvain-la-Neuve University (Belgium). He holds a Ph.D. in economics from Rostock University. His main research interests include international trade, international finance and corporate finance.

Stefan Goldbach is a Senior Economist in the Balance of Payments, Exchange Rates and Capital Markets Analysis Division at Deutsche Bundesbank. He holds a Ph.D. in economics from TU Darmstadt. His main research interests include international trade, international finance and corporate finance.

References


