In the European Union (EU), metal and electronics manufacturing account for a considerable part of the total manufacturing industry. In 2010, 12.6 million workers in the EU27 were employed in metal and electronics manufacturing. This was 46 per cent of the 27.5 million then employed in manufacturing. In the ten countries where we have comparable WageIndicator data, 8.3 million workers were in the industry, amounting to two-thirds (66 per cent) of the EU27 manufacturing total in 2010. If we also include Denmark, France, and Italy, the number of workers in the industry increased by another 3 million to 11,409,000, accounting for 90 per cent of the EU total for this industry grouping. In 2010, in Germany alone over 3.7 million workers, or 10.5 per cent of the German employed population, were involved. This was the second highest share across the ten countries behind the Czech share of 12.7 per cent (authors’ calculations based on Eurostat data).

Over the period 2008–2010, the already negative employment trends worsened for the countries we studied. In the earlier 2003–2008 period, the number of employed persons in the ten countries fell by nearly 5 per cent and in the 13 countries by 9 per cent. During this period, the largest decreases showed in France, at 40 per cent, and in the United Kingdom, at 21 per cent. With a decrease of less than 5 per cent, Germany performed at about the European average. However, over the shorter period 2008 to 2010 an overall fall in employment of 9 per cent was recorded. The 12 countries for which comparable data were available all showed decreases during this time. They were relatively small in the large economies and large in smaller economies like Hungary, the Czech Republic, the Netherlands, and Finland. All seven sub-sectors distinguished also showed decreasing employment figures over this timeframe with the large sub-sectors in particular to the fore. For example, the manufacture of fabricated metal products, except machinery and equipment (NACE 25), saw employment decreasing by 11 per cent in the 12 countries, whilst a slightly bigger decrease of 12 per cent was recorded by the manufacture of computer, electronic, and optical products (NACE 26),
with the manufacture of motor vehicles, trailers, and semi-trailers (car manufacturing, NACE 29) seeing employment decline by 10 per cent.

Electronics and car manufacturers are well established as major economic and social forces. Both industries were at the forefront of internationalization, starting production facilities abroad relatively early. Westinghouse, Siemens, and Philips Electronics began this process in the early 1920s for electrical equipment (Blanken 1992), whereas the Ford Motor Company had invested in its Manchester, UK, assembly plant in 1911 and was followed somewhat later by General Motors (Dunning 1958/1998; Sloan 1964/1990). Moreover, as indicated, US-based semiconductor manufacturers in the 1960s were among the very first to offshore assembly activities and to invest in low-wage countries. In the last four decades, the leading multinational enterprises (MNEs) in both electronics and car manufacturing have continued the process and established extensive and often complex subcontracting chains across countries. The employers’ associations in electronics and car manufacturing (automotive industry) remain highly active lobbyists at the European level.

On the other hand, both electronics and car manufacturing are heavily crisis-prone industries and, as already noted, their claims have recently lost credibility in view of a number of plant closures and mass dismissals. In car manufacturing particularly, questionable investment decisions have repeatedly added to already high levels of volatility in sales, profits, and investment. For example, even when energy shortages became quite evident in the 2000s, the American ‘Big Three’ car makers, General Motors (GM), Ford and Chrysler, shifted resources away from midsize and small (compact) cars and focused on sport utility vehicles (SUVs) and pickup trucks with low fuel economy because these vehicles were seen as highly profitable in the short run. Continuous poor management forced Chrysler and GM to file for bankruptcy in 2009, from which they were only saved by massive loans from the US and European governments. Ford, by contrast, recovered and restored its profitability by 2009, followed by GM and Chrysler at a slower pace. The ‘automotive industry crisis’ though was not limited to the US producers. Most European car producers hit trouble later than their American competitors, announcing substantial job cuts in 2009–2010, but also recovered later. According to the European Restructuring Monitor Quarterly, in seven consecutive quarters ‘motor vehicles’ figured among the top three industries regarding the number of job losses announced in the EU27. It was not until the last quarter of 2010 that they escaped from this position due to a recovery in EU passenger car production (8 per cent in 2010 – ACEA 2011; ERM Quarterly 2009, 2010).

3.1 FDI in metal and electronics manufacturing

The MNE database contains 139 MNEs with their main interests in the metal and electronics manufacturing industry, with 370 subsidiaries in total.