# The war in Ukraine has intensified supply chain difficulties in industry and building construction

In May 2022, in its economic outlook surveys, INSEE asked companies in the manufacturing industry and building construction about the link between any supply chain difficulties they were having and the war in Ukraine. In both sectors, about 30% of companies said that their production was restricted by supply chain difficulties linked, either directly or indirectly, with the war in Ukraine. Most of these companies reported only an indirect link, reflecting the fact that some of their suppliers source from Ukraine, Russia or Belarus. Companies that are supplied directly from these countries are for the most part in the minority. In addition, supply chain problems linked to the war in Ukraine are probably not the only difficulties these affected companies are experiencing: it is likely that the context of the war is merely exacerbating any difficulties that already existed before the end of February.

In its economic outlook surveys, INSEE regularly questions companies in the manufacturing industry and building construction on factors that limit their production, especially supply chain difficulties. This question was previously posed on a quarterly basis in the manufacturing industry, but in future it will be asked every month, as is already the case for the construction industry. In May 2022, the share of manufacturing industry companies who said that their production was limited as a result of supply chain difficulties remained overall at the same very high level as the previous month, at almost 45% (▶ Figure 1). In the building construction industry, the share of companies concerned slipped back, dropping to 36% after 40% in April, which was still a very much higher level than its long-term average.

In May 2022, a specific question on a possible link between any supply chain difficulties and the war in Ukraine was added to the questionnaire in the surveys in the manufacturing and building construction industries (► Box). Companies may be experiencing supply chain difficulties because they are supplied directly by Ukraine, Russia or Belarus (direct link); or because some of their suppliers are sourced from these countries (indirect link). In both instances, the supply chain difficulties encountered are not necessarily the only ones affecting these companies: in other words, they may also be experiencing other disruptions in their supply chains at the same time, for example as a result of the health situation in China. In this case, the context of the war in Ukraine may simply be exacerbating already existing problems.

In May 2022, the proportion of companies reporting that their production was limited by supply chain difficulties linked (directly or indirectly) to the war in Ukraine was around 30% in both manufacturing and construction (**Figure 2**). In the building construction industry, this proportion represents the vast majority of companies with supply chain problems, while in the manufacturing industry it represents two thirds. Of the companies who said they were affected by the war in Ukraine, most were only affected indirectly. Those claiming that their production was restricted by supply chain problems linked directly to the war in Ukraine –i.e. those who were supplied directly from Ukraine, Russia or Belarus– were very much in the minority: 6% of manufacturing industry companies, 2% of those in building construction.



#### ▶ 1. Share of companies whose production is limited by supply chain difficulties

Note: responses weighted by turnover. Seasonally adjusted data Source: INSEE, business survey

#### French economic outlook

In May 2022, within the manufacturing industry, the proportion of companies affected by supply chain difficulties related to the war in Ukraine varied according to the branches, from around 30% in transport equipment to almost 40% in the manufacture of capital goods (▶ Figure 3). Within transport equipment, the automobile industry appears to be much more exposed to supply chain difficulties linked to the war in Ukraine, with 45% of companies affected, for example due to shortages of cable harnesses produced in Ukraine. The manufacture of capital goods is the branch where, generally speaking, the largest number of companies encounter supply chain difficulties: more than 70% of companies in this sector are exposed to such problems, almost half of them with no particular link to the war in Ukraine. In this sector, companies may also be affected by other disruptions in global supply chains, especially with goods coming from China. Thus for the companies concerned, the context of the war in Ukraine is probably heightening the supply chain difficulties they were already experiencing.

## ► 2. Share of companies reporting supply chain difficulties in May 2022, and degree of possible link to the war in Ukraine – industry and construction in % of responses weighted by turnover



Note: when a company reports that its production is limited as a result of supply chain difficulties but does not answer the question on the link between these difficulties and the war in Ukraine, then we consider that the difficulties are not linked to the war in Ukraine. This scenario concerns only 1% of the companies questioned. Those companies that say that their supply chain difficulties are linked both directly and indirectly to the war in Ukraine are grouped above with those that say their difficulties are directly linked to the war. Data not seasonally adjusted.

Source: INSEE, business survey

## ► 3. Share of companies reporting supply chain difficulties in May 2022, and degree of possible link to the war in Ukraine – industrial sub-sectors



Note: when a company reports that its production is limited as a result of supply chain difficulties but does not answer the question on the link between these difficulties and the war in Ukraine, then we consider that the difficulties are not linked to the war in Ukraine. This scenario concerns only 1% of the companies questioned. Those companies that say that their supply chain difficulties are linked both directly and indirectly to the war in Ukraine are grouped above with those that say their difficulties are directly linked to the war. Data not seasonally adjusted.

Source: INSEE, business survey

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In May 2022, within the category "other industries", which notably includes the pharmaceutical industry, chemical products, textiles, also metallurgy and plastics, fewer than 30% of companies reported that they were affected by supply chain difficulties linked to the war in Ukraine. However, this proportion varies substantially according to the branch (► Figure 4): it is much higher in metallurgy, with a significant proportion of companies directly affected by the war (14% of companies in the sector), through Ukrainian, Russian or Belarusian suppliers. Supply chains for the pharmaceutical, chemical, plastics and textile industries, on the other hand, are affected relatively little by the war in Ukraine.

Lastly, the share of companies affected by supply chain difficulties linked to the war in Ukraine is relatively uniform across the building construction industry, whether they carry out structural work or finishing work, or whether they carry out building construction or specialised construction activities.

This analysis is based on results from the economic outlook surveys for May. Preliminary results from the June surveys suggest that there has been no major change. In the manufacturing industry, the proportion of companies affected by supply chain difficulties linked (directly or indirectly) to the war in Ukraine is expected to remain at 28% in June. In construction, it is likely to increase from 29% in May to 30% in June. Companies directly affected by the war in Ukraine are expected to remain very much in the minority.

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#### ▶ 4. Share of companies reporting supply chain difficulties in May 2022, and degree of possible link to the war in Ukraine in % of responses weighted by turnover

Note: when a company reports that its production is limited as a result of supply chain difficulties but does not answer the question on the link between these difficulties and the war in Ukraine, then we consider that the difficulties are not linked to the war in Ukraine. This scenario concerns only 1% of the companies questioned. Those companies that say that their supply chain difficulties are linked both directly and indirectly to the war in Ukraine are grouped above with those that say their difficulties are directly linked to the war. Data not seasonally adjusted.

Source: INSEE, business survey

### French economic outlook

The economic outlook surveys of the manufacturing industry and the building construction industry (building companies with ten or more employees) regularly ask businesses about factors that limit their production (insufficient demand, insufficient equipment or material, lack of workforce, financial constraints, supply chain difficulties, unfavourable climate conditions, etc.). This question appears every month in the building industry survey and has done since October 1998. In the manufacturing industry survey, this question has been asked every quarter since 1991 (in January, April, July and October) and the frequency has been monthly since May 2022.

After asking about factors that currently limit their production, the questionnaires for May and June 2022 ask companies about the link between any supply chain difficulties they may be encountering and the war in Ukraine (**> Figure 5**). If this is the case, the link may be direct or indirect, depending on whether they source directly from Russia, Ukraine or Belarus or whether some of their suppliers source from these countries. Of course, these situations are not exclusive and several responses to the question are possible. •

### ▶ 5. Wording of the question on the link between supply chain difficulties that companies have encountered and the war in Ukraine

### **2.** Are the supply chain difficulties you have encountered linked directly or indirectly to the war in Ukraine? *Several responses possible*

- Yes, directly as you usually source from Russia, Ukraine or Belarus
- Yes, indirectly as some of your suppliers located in other countries (including France) are directly affected
- No, your supply chain difficulties are not linked to the war