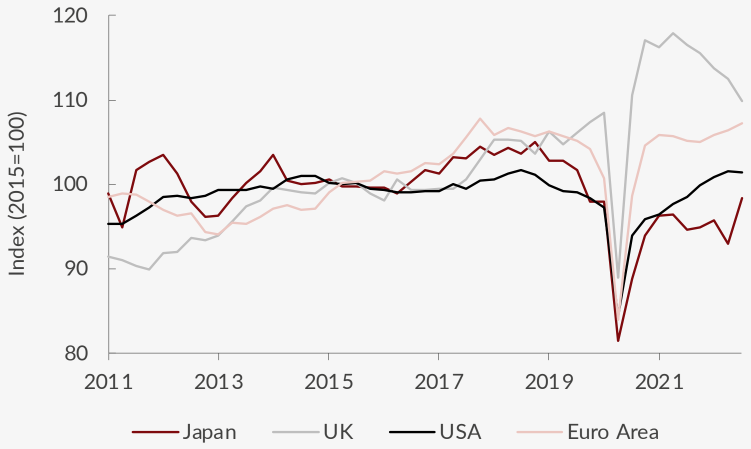
Box B: UK manufacturing post Brexit and Covid-19

By Paul Mortimer-Lee

The trajectory of UK manufacturing output since 2019 has been both dramatic and puzzling. The sector contracted sharply in 2020, partly due to Covid-19, but many commentators attributed the weakness to Brexit, which had been widely expected to reduce manufacturing exports and curtail output. The data suggest strongly that the swings in manufacturing output have resulted from Brexit-related timing distortions. However, comparing trade data for the non-EU with data for the EU countries does not suggest a significant persistent worsening in the trade balance due to Brexit. Instead, it appears that the excess of domestic demand over turgid supply in the United Kingdom is behind a bigger real net trade deficit compared with 2019.

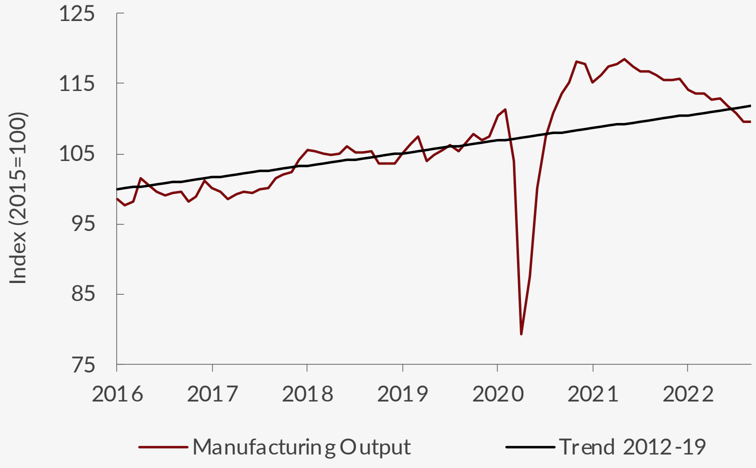
Following the dive in manufacturing output at the onset of Covid-19, and following Brexit, the bounce-back was dramatic, with a surge in manufacturing output in the United Kingdom, mostly in the second half of 2020, far beyond what was observed in the euro area, the United States and Japan (Figure B1). The gains in production were sustained in early 2021 but started to fade later that year, with a full reversal of the earlier gains by the middle of 2022. Over recent quarters, manufacturing has been weak, with declines in output in the United Kingdom, compared with gains elsewhere, though the level of UK output compared with that pre-pandemic is still relatively high (Figure B1). UK manufacturing output has fallen in each of the last five quarters, to register a year-on-year slump of almost seven per cent, taking output back to slightly below its 2012 to 2019 trend (Figure B2).

Figure B1 Manufacturing production



Source: FRED, OECD.

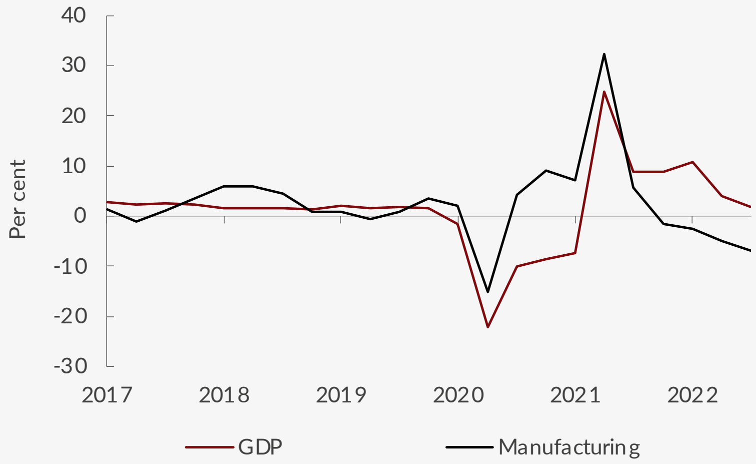
Figure B2 Manufacturing output and trend



Source: FRED, OECD.

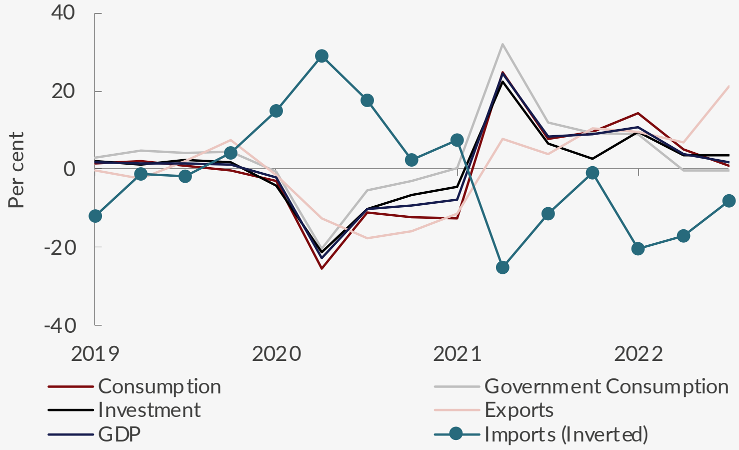
The puzzle is why manufacturing in the United Kingdom was so strong and why it has contracted over the last year and a half or so. Part of the story is that the economy has slowed. Since manufacturing is more volatile than GDP (the standard deviation of its growth rate is about double that of GDP growth), when GDP slows, manufacturing slows by significantly more. This helps to explain manufacturing's strong year-on-year growth in late 2020 and 2021. However, manufacturing has subsequently slowed far more than its past relationship with GDP would have suggested (Figure B3), raising the question as to whether Brexit is involved.

Figure B3 Annual manufacturing and GDP growth rates



Source: ONS.

Figure B4 Annual growth in GDP and its expenditure components

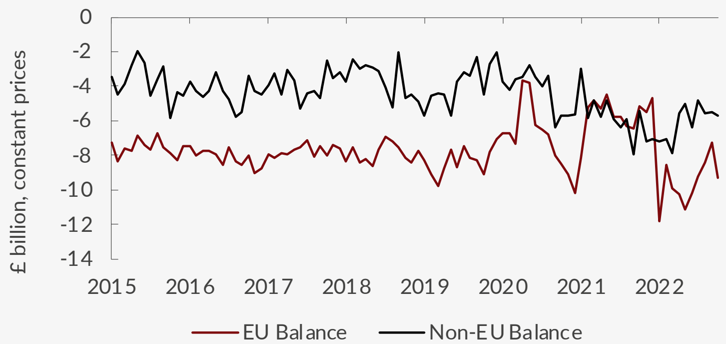


Source: ONS.

Figure B4 illustrates that trade flows are indeed important in explaining why manufacturing experienced a sharp rise in output in 2020 and why weakness set in late in 2021 and in 2022. In the second quarter of 2020, all expenditure components fell sharply. Imports plummeted by 24 per cent, but exports by only half as much. The manufacturing share of imports is, according to input-output tables, about 50 per cent, with the share in exports about ten percentage points lower. Thus, the sharper fall in imports than exports in the second quarter of 2020, together with imports' greater manufacturing intensity, largely explains why UK manufacturing saw a huge boost in output. Brexit was probably behind this, not only because new procedures may have caused issues at the border but also because many firms had built up stocks of imports before Brexit as a precaution against disruptions. This anticipatory stockbuilding brought imports forward into 2019 that otherwise would have entered the United Kingdom in 2020, resulting in much weaker imports than exports in 2020. Greater disruptions to supply chains for imports than exports (China is the United Kingdom's most important source of imports) also played a role, both directly and, indirectly, by limiting the availability of auto imports from Europe.

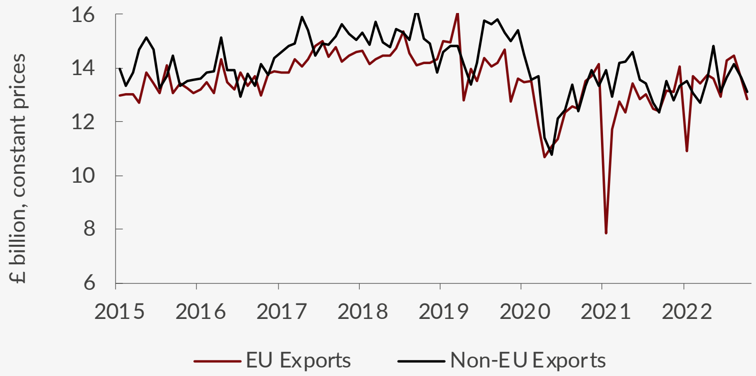
The great weakness in imports in early 2020 was mirrored in a bounce-back later in the year. By the second quarter of 2021, imports were up 25 per cent year-on-year, as against a rise in exports of only 7.7 per cent. Net trade therefore weighed on GDP and on manufacturing production, resulting in the falls in output we see in Figures B1 and B2. How much of the more recent weakness is due to the short-run effects of Brexit in distorting the timing of trade flows and how much is due to damage that will persist over time? At this stage, it is too early to tell, but a guide to the possible long-run effects of Brexit can be gleaned from looking at trade flows with the European Union and those with non-EU countries (Figures B5, B6, and B7).

Figure B5 Goods trade balances



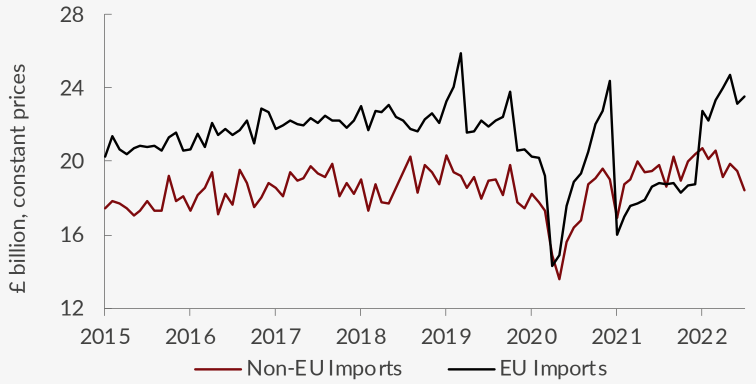
Source: ONS.

Figure B6 Goods exports



Source: ONS.

Figure B7 Goods imports



Source: ONS.

The balance of real net goods trade (excluding precious stones) with both EU and non-EU countries has deteriorated significantly since 2021, with the pattern against the European Union being far more erratic than against non-EU countries, reflecting Brexit distortions. The deterioration has largely been due to higher imports, but weak exports have also been an issue, especially with non-EU countries. The strength of imports ahead of Brexit on 31 January 2020, and the subsequent bounce-back, has been mentioned above. There were distortions ahead of and after the UK-EU Trade and Cooperation Agreement came into effect on 1 January 2021, Trade with the European Union on both sides of the account dropped precipitously after the agreement came into effect. Exports staged a stronger bounce-back later in 2021. Recently, imports from the European Union have been noticeably stronger than from outside the European Union, suggesting no strong Brexit effect, which would have delivered weak EU imports and stronger non-EU imports. Compared with the last six months of 2019, imports from the European Union are higher by 4.3 per cent in the last six months, as against a rise of 3.9 per cent in imports from non-EU countries. This close similarity is not suggestive of a significant Brexit effect dampening imports from the EU

It is noteworthy that exports in the latest six months to non-EU countries are down by 11.3 per cent compared with last six months of 2019, whereas the decline for exports to the European Union is only 2.3 per cent. If Brexit were having a seriously damaging effect on UK export volumes to the European Union, the decline in exports to the European Union would be expected to be greater than the decline in exports to non-EU countries; the data show the reverse.

Given that the United Kingdom is the only major country whose GDP is still below its level at the end of 2019, higher imports and lower exports to destinations inside and outside the European Union are suggestive of serious issues on the UK supply side, a picture that is reinforced by the presence of significant upward pressure on domestic prices, including wages. The United Kingdom's problems of slow growth and a secular decline in manufacturing output and employment as a share of the economy extend long before Brexit. However, the shorter-run swings in UK manufacturing output since 2020 owe a great deal to import swings associated with Brexit, but also with Covid-19. The jury is still out on the longer-term impact of Brexit on manufacturing trade and output, but thus far the evidence for a large negative effect is lacking because compared with last six months of 2019, data for the latest six months show larger deteriorations in the real net trade balance with non-EU countries than with those in the European Union. However, the trade figures with the EU have been very erratic since late 2019, so any conclusions are tentative.