

UK MARKET VIEW

MATERIAL PRICE INFLATION
NOT YET A THREAT TO RECOVERY



Q2 2021



Steven Mason
Managing Director, Cost Consultancy



The tide of uncertainty that the construction sector and wider UK economy has experienced from the impact of Brexit and Covid-19 appears to be finally turning, with global supply problems and resilient levels of demand driving dramatic increases in forecast tender prices.

While demand in some sectors remains weak, the overall picture and sentiment for construction and infrastructure projects looks increasingly positive. With a risk averse supply chain that is reluctant to absorb the impact of these rising input costs, we anticipate a larger than expected impact on market prices and have adjusted our forecasts for 2021 upwards to reflect this.



	2021	2022	2023	2024	2025
National	1.5%	2.0%	3.5%	2.5%	2.5%
London	1.5%	2.0%	3.5%	2.5%	2.5%

This table gives our current tender price inflation forecast. The figures should be treated as averages and there will always be variations due to procurement methods, project type and local factors. With contractors likely to exclude risks relating to Covid-19 – such as programme delays and prolongation, material shortages and disputes – these figures do so as well.



Construction output is marginally above where it was in February 2020 with infrastructure almost...

10%

larger and the repair and maintenance sector having grown...

7.7%



Construction material prices were...

7.8%

higher in March than a year earlier



GDP fell...

1.5%

in the first quarter but should bounce back strongly over the rest of the year



New orders rose...

12.2%

in the first quarter, but last year's drop means that pipelines remain depleted

SETTING THE SCENE

As the start of the pandemic showed, conditions can change quickly and, over the past six months, there has been another abrupt turn. From being worried about a lack of demand and falling tender prices, the new concern is about having the necessary materials without overpaying for them. This is not a UK-specific issue; inflation is rising globally, with key construction products, such as steel and timber, having seen particularly large increases. More generally, while demand has rebounded quickly, the main factor behind higher prices is a lack of supply. Manufacturers who shut down plants during the initial lockdown have been less swift to recover, leading to shortages in availability. Added to this are problems around the surge in costs for shipping containers affecting imports around the world, with Brexit also making life slightly harder for the UK. With the UK producing most of its construction materials domestically, its capacity for some materials, such as steel and concrete, is notably weaker than before the global financial crisis. A greater reliance on importing some materials means that the country is often exposed to international issues. Given how quickly material prices have risen, we devote a large part of this report to discussing the reasons behind the increases, covering steel and timber in some detail.

The upturn has led to us revising up our forecasts and we now expect tender prices to grow this year. Sentiment continues to improve, with firms becoming more optimistic about the next 12 months, with the economy steadily reopening. The Bank of England (BoE), as well as other forecasters, have made sizeable changes to their GDP figures, helped by an expansionary Budget, extension of the furlough scheme, and faster than previously anticipated easing of restrictions. Currently, the BoE is at ease with the levels of inflation but, aside from the possibility of a new Covid-19 strain, it may hold the biggest threat to growth, particularly if interest rates are to rise. For construction, higher material prices are also a risk and if sourcing products becomes harder, output could suffer. A trading update from Kingfisher, B&Q's owner, reported stock availability gradually improving, but with challenges likely to

remain for the rest of the year. This suggests that the headwinds to construction will be manageable.

Looking further ahead, we have also revised up our forecasts. Even if firms are unable to pass on their higher material costs this year, as the economy continues to recover, contractors will do so too. We expect tender price inflation to peak in 2023, after which it will ease in line with the economy. The BoE currently expects GDP growth to slow to just 1.1% in 2024. Posing an upside risk to these forecasts is infrastructure spending, both within the UK and abroad. We already know about many of the UK's plans, although with an election due to take place in 2024, more money could become available. Potentially of greater importance is the new US President, Joe Biden's, US\$2 trillion infrastructure bill. Material prices at the moment show what can happen when global demand rises and, if approved, the size of this package may well be enough to bring about similar movements.

One distinction that is more relevant than usual is the difference between build cost and tender price inflation. Where higher material prices are forcing up build costs, tender prices are more subdued. Market conditions are improving, and the vaccine roll-out has boosted confidence, but pipelines are not back to previous levels. The rise in new orders in the first quarter will have helped, but only to an extent, as the data still indicates that many projects are on hold and not yet at contract. Being mindful of this distinction is especially important with two-stage tenders. Contractors, having successfully won the first-stage, may try to pass on all the build cost inflation, ignoring the fact that if the project were to be re-tendered, it could come in cheaper. Despite re-tendering being an expensive process, given the difference between build cost and tender price inflation, it could result in saving the client money.

Another procurement method where recent material price moves could be causing problems is fixed price. If there isn't a fluctuation mechanism built into the contract, then prices agreed, even as recently as a couple of months ago, could start to become extremely unprofitable. Smaller sub-contractors of certain packages may face the biggest risks, but this type of contract could also catch out much larger firms. Once we start to factor in the downturn, which may have pushed some contractors to be more competitive than usual with their bids, we can see the potential for rising insolvencies.

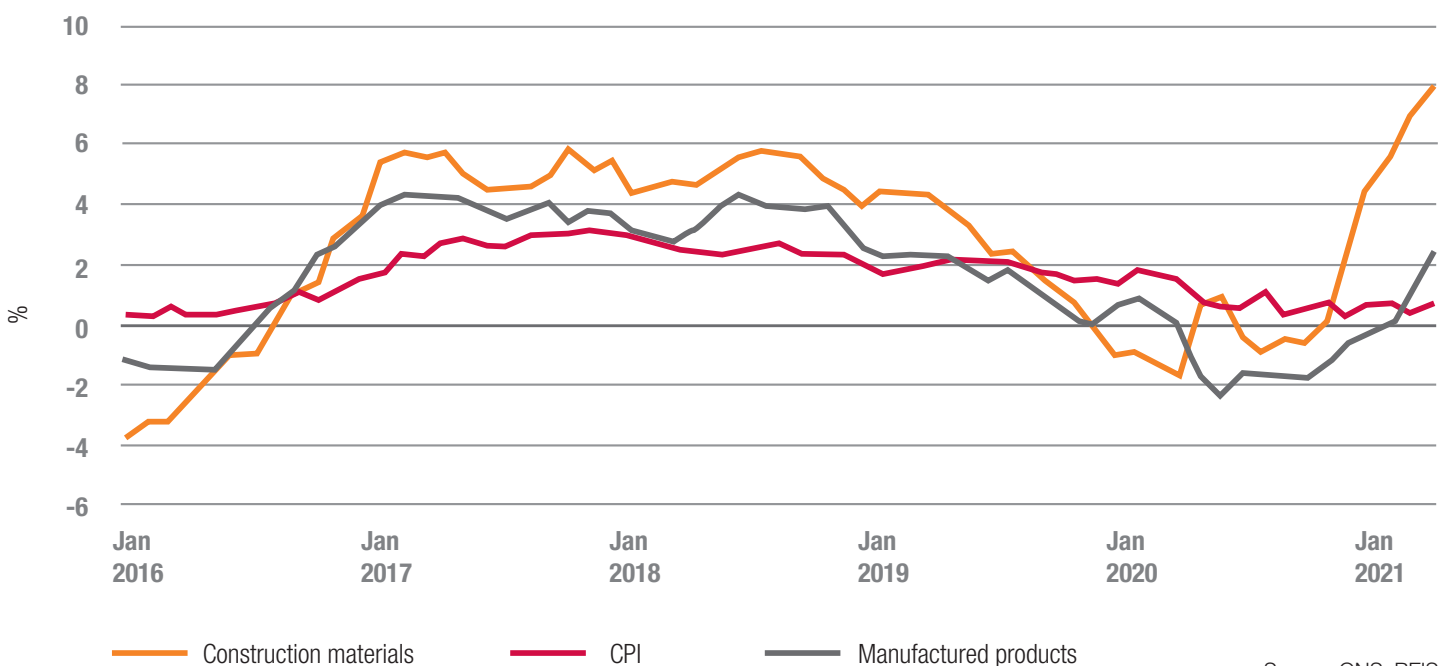
WHY HAVE WE UPGRADED OUR FORECASTS?

Just six months ago, in our Q4 2020 report, we were forecasting that tender prices would drop by 2% in London and 2.5% nationally this year. Yet since then, large changes, first and foremost to material prices, have meant it has been necessary to significantly revise up our expectations. As recently as October, the annual inflation rate of the 'all work construction material price index' was flat. There had been some volatility during the initial lockdown period, with the rate of inflation trending upwards, having appeared deflationary for much of the previous year.

Overall, however, prices have remained unchanged over the past 12 months. Since then, material prices have behaved in a way probably never seen before and, by March, inflation stood at 7.8%. For four successive months, between November and February, the month-on-month increase was over 1%, topping out with a 1.7% increase in February. To put this into context, between 2012, when the material price index started, and 2020, the average annual rate of inflation was 1.4%. Similarly, over this time, consumer price inflation (CPI) averaged 1.7%, with three years where inflation was below 1%. As such, the repeated monthly increases in material prices are higher than what would often occur over the course of a year.

For those involved in repair and maintenance, material price inflation, which reached 9% in March, has been even more severe. Those in this sector, typically smaller builders and homeowners, are facing much longer lead times. While this is an issue that also affects larger companies, their relationships with suppliers provides them with some support. In our next section, we focus on two of the materials driving higher prices: timber and steel. In addition, there are widespread reports of problems for other products, including cement, tiles, and some plastics.

INFLATION



Making the shift in material prices even more remarkable is that other inflation indicators are not nearly as animated. Between March and April, CPI inflation more than doubled, but only up to 1.5%. The latest data release showed that inflation of manufactured products also rose steeply but, at just under 4%, this is still a long way short of construction material price inflation. That these most recent increases are partly a function of base effects only adds to the impression that material prices are operating on a different, much higher, level to inflation of other products.

When it comes to other key variables we use to support our tender price forecasts, there is less justification for upwards revisions. This is most true of new orders. The weaker the pipeline, the more competitive contractors will be with bids and the harder they may find it to pass on higher costs. Based on the latest ONS data on new orders up to Q1 2021, the recovery is moderate but not strong enough to fill order books. Total new orders rose 12.2% quarterly, with private industrial and public housing reporting much larger increases. Nonetheless, quarterly data from Q2 2020 onwards now only includes figures from after the start of the pandemic, which show that all new orders continue to drop. In part, this reduction is due to infrastructure having an unusually large figure in Q1 2020, but for other sectors, there is little sign of recovering previous lost ground. Given the relative paucity of new projects, it is possible that many contractors will not be able to immediately pass on all higher material costs. They now may look to adopt a more cautious approach, but as pipelines build, so will pricing power. This is why we expect tender price growth to accelerate moving forward.

Despite new orders suggesting that doubts remain about what happens next, current market data is more promising. By March, construction output was 2.4% above its February 2020 level, overall meaning that the industry has made a full recovery. There are, however, big differences between sectors. Private repair and maintenance is 16% larger than before the pandemic, hitting a record monthly level in March, showing why material price inflation for this part of the industry is so high. Further to this, infrastructure is almost 10% higher, while housing, which suffered the worst drop off last spring, is now 5.7% above where it previously was.

Yet, for these sectors to be so much higher without a similar jump in all work means that some have fared very badly. Private industrial decline is most noticeable, down 27%, with private commercial dropping almost 10%. As a result, all new work is still lower than 13 months ago.

A further thing to note from current output levels is that while they are broadly above what was seen in February 2020, they remain below the levels shown throughout much of 2019. With total demand not at record highs, the factors pushing up material prices at such record rates are primarily driven by the supply side and international forces.

The final part of the tender price equation is around labour costs. Previously, we felt these held greater risks than material prices and, while these still exist, they haven't yet come to fruition. Our baseline view was that a weak market would mean wages could fall. We were also concerned about what could happen if a rebound subsequently occurred and the size of the labour pool had shrunk. Yet based on data for the first three months of the year, there is little evidence of this, as wages have fallen 0.5% compared to the final quarter of 2020. A large number of vacancies means that there isn't any room for complacency, and it is possible that as the recovery continues to pick-up, labour costs will start to develop.

Overall, we can summarise that our change in forecast has been driven almost solely by the increase in material prices. We would have hoped that the rebound in new orders would have been stronger, whereas we expect contractors won't be cutting margins at the same levels as we previously anticipated because the market is nowhere near strong enough for an increase. The fact that all new work is yet to make a full recovery also won't help margins, with the rebound in repair and maintenance only hurting larger contractors through higher material prices. Finally, though the labour market is stronger than we previously expected, it is showing little signs of adding much to inflationary pressures for the time being.

The following table and graph provide a bit more detail to these changes. The estimates for margins, material price growth and labour costs are approximate and are for guide purposes only. We don't expect them to exactly materialise, which is why our forecast is 1.5%. Nonetheless, they show our thinking, as due to material price growth, it has been necessary to upgrade our forecasts from last year.

% change in 2021	Last year's forecast	New forecast
Management, overhead and transaction costs	-1%	0%
Labour cost	-2%	1%
Material cost	-2%	4%

UPDATE TO FORECASTS



RAMPAANT GROWTH IN TWO KEY MATERIALS

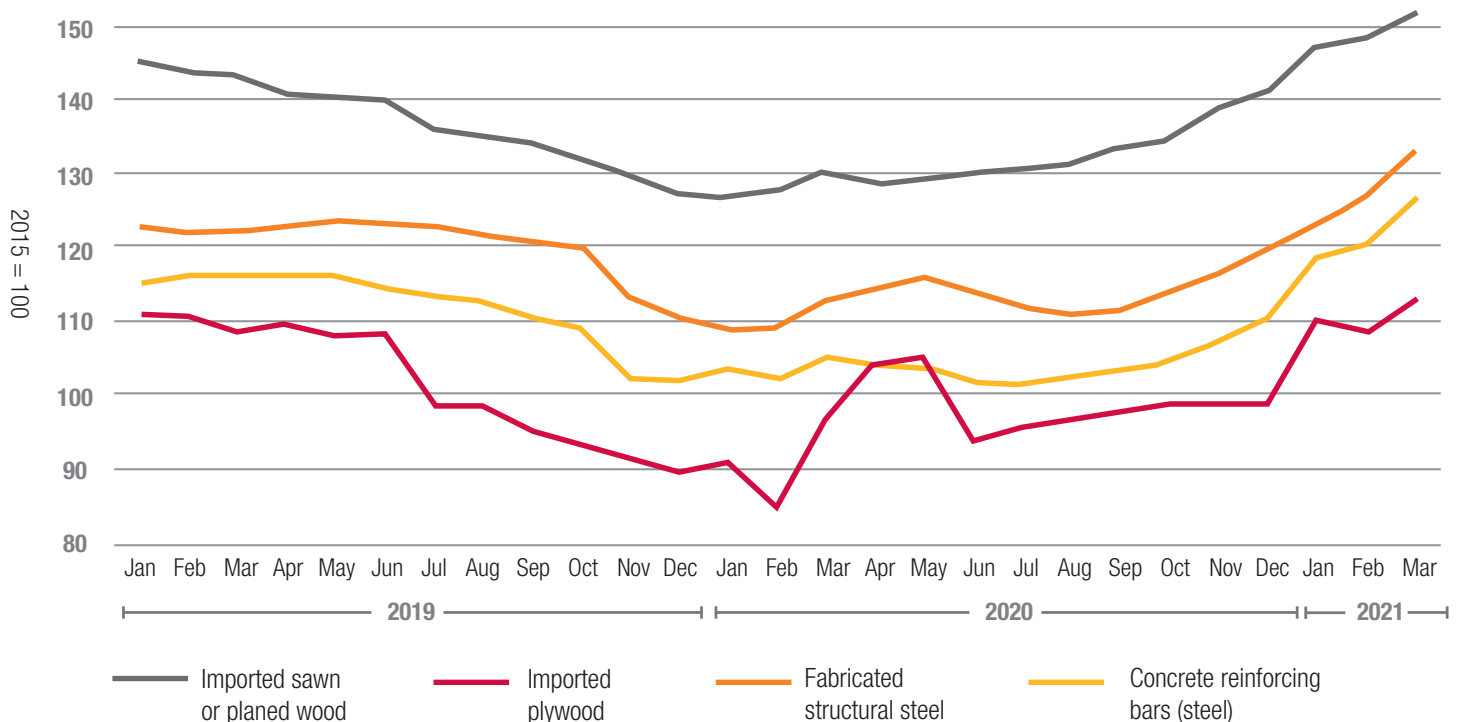
Several underlying factors have arisen because of the pandemic, causing the shift in material prices. On a general level, demand has recovered much quicker than expected while supply, hindered by the temporary closure of manufacturers and Covid-19 restrictions, has not been able to keep up. In addition, the cost of shipping has gone up due to a lack of containers. Exports from China have risen, but with other economies shut, containers have often ended up stuck at ports and not returned, while the Suez Canal blockage only exacerbated this problem.

For the UK, Brexit has compounded these problems. At the end of 2020, some firms once again began stockpiling, while the 12.3% drop in imports in the first quarter of 2021 indicates potential difficulties for building back inventories. These problems are more significant for some products than others, with steel and timber standing out as the worst affected.

Steel

The World Steel Association estimates that steel production shrank at a slightly lower rate than demand in 2020. With a smaller drop in supply than demand, it is reasonable to ask why prices began to rapidly rise at the end of last year, going on to accelerate in the first quarter of 2021, when demand outstripped supply. The first reason behind this rise is iron ore. As the main ingredient in steel, the price of the two are intertwined and, in Q1 2021, iron ore's price was 84% higher than 12 months beforehand. Brazil, the world's second-largest iron ore producer, has struggled with output since a dam failure at a mine in early 2019, causing a tightening of the global market. With many mines temporarily closed in 2020 and trade frictions between Australia – which exports large amounts of the good – and China, supply has not matched demand.

PRICE CHANGES IN STEEL AND TIMBER PRODUCTS



The second reason behind rising steel prices, despite the decline in global supply, which is less than demand, is that looking at the bigger picture masks what has happened to individual countries. China, which accounts for over half of the world's production and usage of steel, saw demand rise by over 8% in 2020. With domestic Chinese production unable to keep up, this has resulted in increased imports, even as mills elsewhere around the world shut down. As economies have reopened, it has taken time for these mills to get going again, while accommodative monetary and fiscal policies have spurred on investment.

Oxford Economics estimates that the price of European plate steel in Q2 2021 was almost double the amount a year earlier, but it is now forecasting prices to ease over the rest of the year. This in part assumes that China will try to row back from its investment-driven growth, which was a necessary reaction to Covid-19. Similarly, supply of steel is forecast to continue to recover, helping reverse the existing imbalances. Finally, supply of iron ore should also grow, bringing down the cost of the main input in the production process, although it may be some time before this all feeds into UK steel products. With the UK meeting more than half of its steel demand from imports and producing barely any iron ore, it can't escape these global challenges.

Timber

Globally, the UK is one of the largest importers of wood products and, in 2020, these accounted for around 70% of sawn wood consumption. While most imports come from the EU, in producing relatively little itself, the UK runs the risk of international forces driving prices up, something that has evidentially happened over the past year. Firstly, there has been a large rise in demand for timber across the world, but particularly from the US. For many people the response to working from home has been to either seek out home improvements and expansions or to move house. In the US, new houses typically involve timber frames and it is here where some of the most severe price rises have occurred.

According to one estimate, by early May, the price of lumber futures had risen almost 400% over the past year. However, such an increase is not only down to higher demand, there are also several supply side issues.

As with much manufacturing internationally, the onset of the pandemic saw a shutdown in production, both in Europe and North America. Initial expectations were that the Covid-19 recession would result in weaker demand, meaning that for some mills, reopening was slow. In addition, getting back to full capacity was not straightforward due to operating restrictions and social distancing rules. As such, despite demand rebounding rapidly, the supply side lagged and inventories fell. Even before the pandemic, issues with wildfires and beetle infestations had affected stocks in several countries, most notably Canada, one of the biggest suppliers to the US. This forced US importers, who are willing to pay higher prices, to turn their attention to Europe for timber products. Naturally, this has led to those who would usually export to the UK putting up prices and increasing lead times.

As mentioned, the cost of importing goods has risen substantially due to shipping problems and, once in the UK, builder's merchants are also likely to be putting on an extra mark-up. According to the UK Timber Trade Federation, at the end of 2020 there was no stock unsold and this is an ongoing problem. For price pressures to ease, inventories will first need to be rebuilt. This can only happen if global demand weakens. A surprise 9.5% decline in US housing starting in April could mark this change. However, market changes take time and users of wood within the UK would do well to plan in advance and prepare for still higher prices.

HOW WILL AN INCREASING FOCUS ON NET-ZERO CARBON AFFECT TENDER PRICES?

Sustainability is becoming an increasingly important part of new schemes. Whether public sector projects working towards the new Construction Playbook, commercial offices and expectant tenants, or housebuilders, driven by investor concerns, all parts of the industry are under pressure to improve. In particular for commercial offices, there is the possibility that emissions in operating existing buildings will be too high for tenant's requirements and that this will spur investment in new ones. However, as clients' needs, wants and willingness to pay for more sustainable buildings increases, so will tender prices. Below we provide a few reasons as to how these could be inflationary.

The clearest way in which reducing emissions may result in higher prices is if it involves newer, potentially more expensive materials. Some materials, such as steel and concrete, are notorious for the amount of carbon emitted during their production processes. Steel, for example, accounts for around 8% of all worldwide emissions and, while there are less carbon-intensive methods to make it, these are considerably more expensive. One estimate of newer technology is that by eliminating fossil fuels from all stages

of the process, costs increase 30%. For the time being, such technology is still prohibitively expensive for construction use, but it does provide an extreme example of potential inflationary pressures. It shows just how important it is to keep clients informed about decisions made in the design process, so they are aware of the benefits associated with some increased costs.

One of the biggest risks, both to tender prices and to delivering the net-zero agenda, is around the workforce. The Construction Industry Training Board estimates that, by 2028, the industry will need to create 350,000 new roles. Accounting for around 16% of the existing workforce, achieving such growth is likely to be a tough ask. The industry is already hoping that large infrastructure schemes and increased government spending will push it forward over the next decade, however, this will require additional workers. At the same time, having left the EU, doubts remain about the medium-term impact on the construction workforce. In our Q1 2020 report, we showed that the proportion of EU workers in the industry had shrunk from 9.4% in 2017 to just below 6% last year, accounting for almost 100,000 jobs. It is therefore easy to imagine a situation where there is not enough labour for the amount of work, with inflationary wage pressures following. Similarly, a lack of labour will make it impossible to meet net-zero targets.

A third way in which tender prices will rise is through contractor overheads. Making sure projects are as sustainable as possible, while reducing emissions, is a complex task and managing this takes larger teams. Undoubtedly this presents an opportunity for contractors, who can offer such services, to work with clients and improve the quality of their projects, however, this involves a cost. With such functions being relatively new, this is likely to present itself in an inflationary fashion. Eventually, as with health and safety before it, sustainability will become the norm on all projects, but we are not quite there yet.

The impact of climate change will also be increasingly felt on materials. We have already discussed at length recent rises in steel and timber, two products that are particularly influenced by the construction industry's drive to become more sustainable. In particular, demand for timber has increased due to its more climate-friendly characteristics. Moving forward timber's desirability as an alternative to more carbon-intensive products, such as steel and concrete, is only likely to increase, and if supply can't keep up, then prices will rise. The polluting aspect of steel is also a threat to its supply. Tangshan, one of China's leading steel producing cities, is currently facing output restrictions due to high emission levels. While China has ambitious plans to cut emissions – pledging for these to peak in 2030 to reach carbon neutrality by 2060 – reducing steel output will only push up prices. Supply is also at risk from biodiversity related problems. Changing weather has made conditions more habitable for the type of beetles that have been damaging forests in Canada, while wildfires are also more likely to occur. Linking these problems, as well as others, such as the dam failures in Brazil, directly to climate change is not possible, but the probability of such natural disasters occurring continues to rise. This poses small, albeit significant risks, to all manner of goods and underlines the importance of having a strong, diverse supply chain.

Mace

155 Moorgate
London EC2M 6XB
+44 (0)20 3522 3000
www.macegroup.com

Contacts

Steven Mason	+44 (0)20 3522 3595	steven.mason@macegroup.com
Mark Williams	+44 (0)20 3522 4597	mark.williams@macegroup.com
James Donald	+44 (0)20 3824 3185	james.donald@macegroup.com