
Gathering storm

UK Construction
Market View

Summer 2021



Introduction

Construction materials prices are spiralling and further problems like the haulage crisis are making projects even more risky. With contractors under less pressure to secure new work, there is more inflation on the horizon.

- Following a lockdown-triggered decrease in GDP in the first quarter of 2021, the UK economy entered the long-awaited path to recovery in April, when many of the COVID-19 restrictions were eased. As a result, and driven mainly by consumer spending, GDP increased by 4.8% in Q2 2021, which actually is slightly below the Bank of England expectations of 5%, published in the August Monetary Policy Report. The inflation pressures caused by supply chain and logistics challenges are likely to slow down the pace of the recovery slightly and this has been reflected in the latest HMRC consensus forecast for GDP for 2021, which has dipped by 0.2%. Nevertheless, the outlook remains positive with forecasts for a 6.9% increase in 2021 and 5.6% for 2022. The UK economy is on track to reach pre-COVID activity levels by the end of 2021.
- The PMI indices for all sectors (manufacturing, construction, and services) have been indicating a rapid expansion since March 2021. After peaking at above 60 in early summer, scores dipped in August, with positive sentiment dented by hurdles to delivery and inflationary pressures. Yet all indices remained above 55, with expansion continuing - albeit at a slightly slower pace.



- The positive outlook for businesses has been also reflected in the latest Deloitte CFO survey, with 71% of respondents expecting increased investment – a clear shift away from the focus on cost cutting and in part an outcome of a super-deduction announcement in the March Budget. Almost 50% of those surveyed anticipate growth in capital expenditure compared to pre-pandemic levels, with a third mentioning physical assets and real estate investment.
- As the economy continues to recover, inflationary pressures are growing. Even though the June CPI dropped from 2.5% to 2%, the Bank of England anticipates that inflation will reach 4% by the end of 2021, with a big contribution from increases in both goods and energy prices. This trend is expected to be transient, and the rate of inflation will wane as the balance between supply and demand is restored. However, it will most likely take until the end of 2022 before this happens.
- Pressures regarding the availability of workforce in construction are well recognised and often a source of inflation. Currently, this is already the case with some of the specialist skills in rail, but also with bricklayers. And while the latest ONS data indicates a 44% increase in the number of vacancies, construction in general does not yet seem to be affected, and labour costs remain at the level seen in 2019. But the future remains uncertain and other factors like the shortages in HGV drivers are beginning to make a mark on the availability of materials.
- Output in construction stayed strong in Q2, reaching almost £45 billion in real terms – a growth of 3.3%. There is a lot of activity in the Repair, Maintenance and Improvement (RMI) sector, which recorded volumes that are the highest since 2003. The fact that output performed so well despite subdued levels of employment points to recent gains in productivity. If these gains can be maintained as construction returns to normal, this could be a real boost for pay and profitability without the risk of higher inflation.
- Following a modest recovery in 2020, new orders have recovered strongly and in the second quarter surpassed pre-pandemic peaks. Orders increased by 10.7% in the quarter to reach £18.3 billion. In real terms, these are the best figures since Q3 2017, when the first HS2 orders came in. New work in infrastructure increased by 30% quarter-on-quarter in cash terms, supported by strong investment in roads. Rapid growth was also observed in the commercial sector, with a significant contribution from offices. Overall, the commercial order book reported a 34% quarter-on-quarter change in cash terms, reaching volumes last seen in 2016 before the Brexit referendum. This has been supported by a combination of release of pent-up demand, and the need for upgrades and refurbishment, as evidenced by the Deloitte's Crane Survey. Strong new orders are likely to reduce the pressure on contractors to win projects and will add to existing inflationary drivers.
- The Construction Products Association broadly maintained its forecast and anticipates that the construction sector will achieve a recovery to pre-pandemic levels of activity by the second quarter of 2022. Infrastructure is the only sub-sector expected to recover (and even surpass pre-COVID levels by 17%) in 2021. By 2022 most sub-sectors will have reached pre-pandemic levels, except for public housing and commercial, where growth will be held up by a weak retail sector and by the continuing focus by social housing providers on fire safety programmes.



Forecast

With prices and levels of activity rising hand in hand, how sustainable is the recovery?

The gathering storm

Availability issues and price hikes affecting construction materials have escalated rapidly over the last few months. Latest data from the Department for Business, Energy & Industrial Strategy (BEIS) highlights inflation of 15% since January 2021 across all product categories. In addition, challenges with logistics have expanded from a shortage of containers to the wider paralysis of UK haulage, which lacks tens of thousands of HGV drivers. Lack of capacity is causing widespread delays to deliveries across the whole economy. This perfect inflationary storm is further supported by a strong new orders intake that has taken away work-winning pressure from contractors, reducing competitiveness in the market. And while many ask, “how long will this last?” what we should also be exploring is, “Where could the next inflation trigger come from?”

The V-shaped recovery has accelerated, and the window of opportunity has shut. Inflationary pressures have continued to grow during the summer and, as such, we are again upgrading our forecast for 2021, while maintaining the 2022 prognosis. Pressures related to the supply of construction materials may well ease in the beginning of next year, but there is plenty in store to keep prices rising – from the uncertainty of labour availability, through to rapidly increasing energy costs, including wholesale gas prices that have risen by over 70% to record levels since February. Clients willing to proceed with their projects in these conditions need to be increasingly vigilant and make sure there is always a negotiation table nearby.

Material prices continue to drive inflation

Industry is currently facing near-record increases in the cost of construction materials. What began as an issue focused on steel and timber has recently spread into other product categories, resulting in an annual inflation of 20% (compared to the long-term trend of 3%). Plywood has seen most inflation, with an increase in price of 80%, and is closely followed by fabricated structural steel at 65%, imported sawn or planed wood at 64% and concrete reinforcing bars at 60%. Inflation for other categories is much lower, but the range of materials displaying an above average 5% annual increase has broadened to include sanitary ware, paint, and plastic doors and windows. Cement and concrete are now up by 4% in the year.

At the same time, some signs of returning sanity can be seen in the price trends for commodities; according to Nasdaq, lumber prices in the US returned to below \$500 per thousand board feet in mid-August, after having peaked at a May 2021 record of \$1,600. Rebar rates reported by the London Metal Exchange have dropped by 15% from their peak and are now close to January 2021 prices, and copper is back below \$9,500 after reaching \$10,700 in late Spring. It is, however, too early to herald the beginning of a ‘return to normal’ and there will likely be a delay before these price corrections reach the market of construction materials.

In the meantime, increases in material prices and availability issues have been the most often quoted reason for project delays, both on-site and in procurement, as contractors are unable to hold their prices. Re-negotiation - and in some cases even re-bidding - is taking place, leading to delays. Difficulties in pricing risk have become a major threat to the viability of projects and a potential spanner in the wheels of recovery. Even once supply can be secured again and prices return to more reasonable levels, other factors that have emerged recently will continue to impact on the pace of recovery.

Logistics challenges are a long-term issue

Costs related to logistics, especially container shipping, have escalated over the last few months too. In our Spring report, we quoted rates doubling compared to the end of 2020. At the time of writing, rates are five

times above pre-COVID levels. This is a consequence of continuing disruption at ports, including a shortage of containers and unloading capacity.

Recent weeks have shown that road distribution in the UK will face similar, if not even bigger difficulties. The UK is currently facing a shortage of approximately 100,000 HGV drivers, with direct implications on all sorts of deliveries, including construction. The anecdotal evidence indicates that even when materials become available, contractors are increasingly forced to arrange their own transport. This in turn results in additional costs, but also puts delivery reliability at risk and increases the odds of delays. Unfortunately, there is no quick solution to this situation, especially with restrictions to accessing the EU workforce in place. In practice, clients may need to be prepared for delays to the original schedule of works. Contractors are also more likely to start pricing this risk, as they potentially face 'idle' days, with equipment and workforce on site to be paid for and no output delivered due to the lack of materials.

Good outlook removing pressures

Despite mounting inflationary pressures, recent new orders data shows plenty of appetite among clients to pursue projects. The levels of activity increased even further in Q2 2021, with an uptick of almost 20% compared with the previous quarter. This is an important development for contractors, who are now under less pressure to secure new work. However, one must remember that part of the new orders will have come from pent-up demand, so it is important that underlying growth is sustained. Latest PMI data at 55.2 suggests that growth is still healthy, albeit at a slowing pace. Nevertheless, contractors can now be more selective in their bidding activities, and price their risks more fully, which is another driver for inflation.

Everybody's talking inflation

Concerns regarding inflation and its impact on the pace and success of post-COVID recovery have been in the news for a while. Due to the situation with materials prices, the construction sector is now actively discussing this issue, and recent challenges around haulage are likely to only exacerbate the situation. The temporary easing of pressure on contractors has removed some of the competitive pressure on pricing and enabled the supply chain to include bigger risk premiums.

Because there are currently so many cost drivers in place, inflation has been generally acknowledged and consequently the supply chain is far from being shy about making allowances for it. The situation is not likely to improve in the mid-term, with a still unclear situation regarding the availability of labour. Wage inflation is the dog that has not yet barked. While wages have only recently recovered to pre-COVID levels, there are signs of shortages not only in highly specific skills but also among more common trades, such as bricklayers. The extent to which shortages will be fixed when the government's earnings support is removed at the end of September, remains to be seen. Then there is the price of energy, which is forecast to increase – Brent has already recovered to \$70 a barrel.

All this considered together has led us to bring some of the inflation forward and upgrade our 2021 forecast, while easing the 2023 predictions. We also believe that London will see more inflation than originally anticipated, especially with 25% of the recent new orders located in the capital. These predictions of course assume that the pace of recovery will be maintained. Should clients decide that construction is too expensive, then a quite different pattern of pricing might emerge.

Inflationary drivers	Deflationary drivers
<ul style="list-style-type: none"> Continued increases in construction materials costs 	<ul style="list-style-type: none"> Labour wages recovered but have not increased significantly
<ul style="list-style-type: none"> Improvement in order books and eased pressure on winning new work 	<ul style="list-style-type: none"> Sterling still strong against USD
<ul style="list-style-type: none"> Contractors less able to price risk and hence higher risk premiums 	
<ul style="list-style-type: none"> Logistics challenges around container costs and availability of HGV drivers 	
<ul style="list-style-type: none"> The general awareness of highly inflationary circumstances 	

	Regional Building Construction TPI	London Building Construction TPI	National Infrastructure Construction TPI
2021	3% (2%)	3% (1.5%)	4% (3%)
2022	3% (3%)	3.5% (3.5%)	5% (5%)
2023	3% (4%)	3% (4%)	5% (5%)
2024	5% (5%)	5% (5%)	5% (5%)
2025	5% (5%)	5% (5%)	5% (5%)
Total	19% (19%)	19.5% (19%)	24% (23%)



Zoom into: Mitigating the risk of construction materials price volatility

Construction materials prices have been escalating rapidly in recent months, creating challenges for on-going projects and potentially threatening the viability of new schemes. What can clients do to avoid project delays and cancellations?

The discrepancy between supply and demand has been rapidly driving up prices of many construction materials, with basic timber and steel products typically having increased by 60-80% on an annual basis. The situation is similar across the world and has become a source of concern because high prices might hold back the pace of recovery.

Ongoing projects need to tackle price hikes and delays, as lead times for many products have extended and some materials are on allocation. This can result in additional costs for both contractors and clients, especially on time constrained projects, and in extreme cases could lead to contract dispute.

Increased nervousness and high levels of uncertainty are not good for new projects either. Contractors and clients may both be put off by elevated levels of risk, and the increased price of delivery can undermine a business case, leading to project suspension. However, pausing activity until prices return to 'normal' in many cases is not possible. There are interventions, though, that could help limit exposure. They are not a silver bullet, and come with pros and cons, but in the current conditions of heightened uncertainty, they can facilitate decision making.

Procurement options

With procurement, the key consideration is achieving a balance between competition and how attractive the project is to bidding contractors.

Single stage tender competitions are suitable for highly competitive sectors where a quick turnaround is needed but are increasingly less acceptable to bidders. It is advisable to undertake extensive supply chain engagement first to confirm continuing levels of interest.

Two stage tender competitions offer a possibility to delay or bring forward tendering for some work packages and can help avoid price peaks and mitigate some delays. However, they present a particular risk in volatile markets such as today's, with the possibility of a last-minute upward price adjustment at the end of the second stage.

Reverse two stage tender competitions, where the client directly procures specialist packages as well as the main contract, could be an attractive option in the current market – providing greater transparency over pricing. This could facilitate early procurement of long-lead-in items. But the inability of the client to contract directly with specialists may mean that it is not possible to secure cost certainty prior to the agreement of the second stage bid.

Construction Management, where there is no cost certainty until all packages are procured, is likely to be riskier for clients, but means the timing of procurement can be optimised. This route will benefit most clients with previous experience and access to appropriate resources, and who are capable of agreeing to sub-contract prices quickly to achieve cost certainty.

Negotiation in the current market is likely to result in full pass-through of inflation costs at the outset of a project, and hence is only recommended where there is not enough time for a competitive process.

With any lump-sum procurement, some flexibility can be built into the pricing using provisional sums, prime cost allowances or early procurement.

Provisional sums can be used to delay the procurement of later packages on a project, for example fit-out, and avoid some of the inflationary 'fever' and risk-averse pricing seen in 2021. However, prices will continue to rise, and the contractor and project team will need to remain alert to material availability issues to manage the risk to the programme.

Prime cost allowances can be used to include costs against measured items where it is not desirable to fix the price at the point of tender. This option is beneficial in the case of volatile prices, but the client will be 100% exposed to movements in the price of materials relative to the prime cost benchmark.

Early procurement of bulk materials/production slots. Clients can secure early orders for bulk materials with manufacturers either directly or through the supply chain. The advantages of early procurement are price and programme certainty. The disadvantage is the client's financial and physical commitment to the purchase.

Risk transfer options

Another option for securing a competitive initial price from the market is to vary the terms of the risk transfer in the contract. The changes required in the current market are

significant – increasing the scope for extensions of time with or without cost.

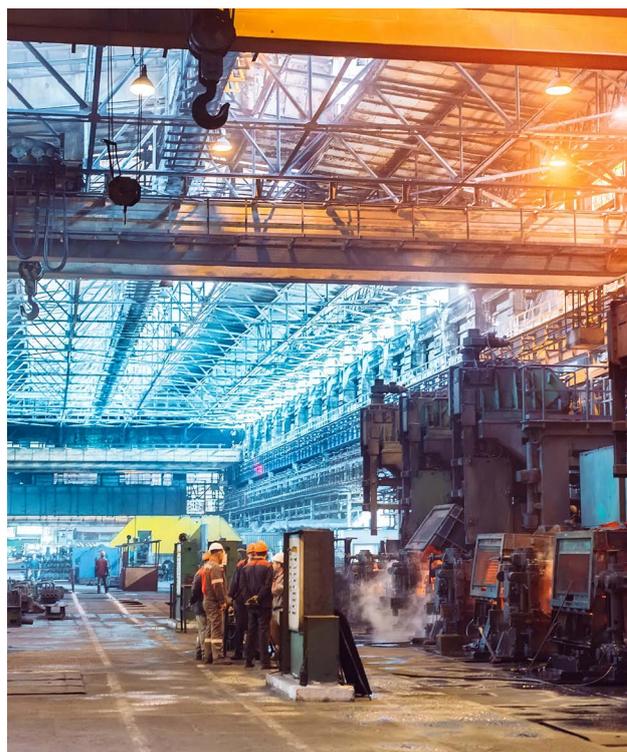
When introducing a change to the balance of risk transfer, the client is taking a calculated risk that the reduced bid price will justify taking the risk and that the full risk will not materialise. The upside of this approach is that the client will only ever pay if the risk occurs.

As a result, a relaxation in the balance of risk transfer should only be considered if bidders are keen to offer a discount in their bids.

Materials availability. With availability of materials being a particular problem at the moment, clients who have some flexibility on completion dates might consider including materials availability as a permitted trigger for a compensation event/extension of time. Awarded on a time-only basis, this step will eliminate one source of contractor risk (i.e. cost of Liquidated and Ascertained Damages) without exposing the client to full inflation risk.

Fluctuating price contracts include the provision for a monthly calculation of inflation based on published indices. Relevant contract clauses are available for JCT and NEC, even though they have not been widely used since the early 1990s. Fluctuations are calculated monthly and added to the valuation. Provisions for fluctuating prices are embedded in the main contract. Clients should take steps to ensure that similar measures are embedded in sub-contracts.

It is difficult to predict how long construction materials price increases and associated shortages will persist. The situation is not likely to stabilise before Q1 2022 and some sectors, such as infrastructure, are likely to continue to be exposed to materials-related risks in the longer-term. Implementing the above steps will not make clients and contractors immune to cost hikes, but enhanced transparency and a more equitable sharing of these risks, when they occur, will help manage price increases and mitigate the consequences.





Spotlight on: Carbon pricing and its impacts to construction

One of the biggest challenges in meeting net zero targets will be decarbonising hard to abate sectors such as steel or cement.

Carbon taxes related to the emissions trading scheme (ETS) will play a crucial role in reducing consumption and incentivising new technologies. Here, we describe how ETS operates, how it is likely to evolve over time, and what the impacts of both UK and EU ETS schemes are on the construction sector.

What is ETS and how relevant is it to construction?

ETS has been designed to encourage decarbonisation of the largest CO₂ emitters, such as power generators and carbon intense industries – this includes production of steel, cement and aluminium. The scheme includes two parts; a cap on allowed emissions and a carbon tax paid through the purchase of carbon credits that are auctioned and then traded on the open market. The UK initiated its auctions in May 2021 and the price currently oscillates around £50/tonne CO₂.

How does this impact construction? The answer is through an additional cost, which depends on the CO₂ emissions generated in the production process. We provide a few examples in the table below but, looking at developments in both UK and EU ETS, these numbers are only likely to increase.

Material	Cost of carbon at carbon tax rate £50/CO ₂ tonne	Cost of material including carbon tax	% carbon tax in total price
Rebar	£92.5	£1092	8%
Aluminium	£300	£2200	14%
Cement	£31	£140	22%



What is next for ETS?

The amount of carbon credits available in the market will be gradually reducing, through the following:

- Market stability reserve: A mechanism put in place to avoid oversupply of carbon credits and limit too low pricing. It is on track to limit the surplus to 400Mt by 2023. For the UK, the reserve was established at 30Mt, which is 20% of the annual market.
- Emission cap reduction: The UK ETS has a rapid 5% per annum reduction in the emissions cap until 2024, which will be followed by an adjustment to deliver UK net zero ambitions by 2050.
- Emission benchmarks are established for each industry and the remaining free allocation will be slashed from 30% in 2020 to 0% in 2030.

All these interventions will result in a smaller supply of carbon credits and will stimulate further carbon price hikes. Multiple forecasts are available, and the cost ranges presented therein are £60-£90 for 2030, and £65-£170 by 2040 per tonne CO₂ emitted. These increases may seem shocking, but we must remember that the price of CO₂ has already doubled over the last 12 months, and further increases are very likely.

In addition, costs related to carbon are likely to be further increased by the introduction of the so-called Carbon Border Adjustment Mechanism (CBAM). Its objective is to protect EU manufacturers who pay the ETS from being undercut by imports from firms that do not. A CBAM will apply a carbon price to materials and goods imported into the EU, based on the cost of allowances current in the EU. Credit will be given for carbon taxes levied elsewhere. The scheme will be phased out from 2023 and will apply to aluminium, cement, fertilizer, iron and steel industries. As a result, we can expect an increase in prices of steel imported from the EU.

What does this mean for clients?

Clients have very little control over their exposure to carbon pricing. The price of credits will be set by the market, and the amount of emissions will be determined by the manufacturer's process. Looking further ahead, the impact that carbon pricing will have on construction costs will depend both on the pace of reducing CO₂ emissions and the pace of the expansion of the scheme.

Emissions reduction can be achieved either by transitioning to innovative processes and products or implementing carbon capture and storage. But we must acknowledge the enormous size of the decarbonisation challenge, which will require new processes and products to be developed. The change will not happen overnight. There is a lot of work to do, and clients have their role to play in the process.

The first step is to understand the carbon content of products so that low-carbon alternatives can be considered. What initially seems unfeasible, may turn out to be suitable after a modification to the design or to the delivery programme. Clients also have a role in creating the market for low-carbon products, and the faster they make the switch, the sooner economies of scale will be achieved. Otherwise, net-zero will remain a costly and niche option...almost as costly as carbon.

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