Prospects for UK construction are finely balanced. 2019 has been very busy, but the orders pipeline has shrunk during the year as Brexit uncertainty has taken its toll. How quickly the resulting gap in workload can be filled depends on the pace at which clients can recommit to investment in 2020. This will also have a critical role in determining short term price levels.
• UK GDP is forecast to grow by 1.3% in 2019; the lowest rate of growth since 2010. Despite a generally gloomy outlook across services, manufacturing and construction, the UK economy continues to display substantial resilience, with the Bank of England anticipating above potential growth if a Brexit deal is agreed.

• Following a relatively stagnant 2018, the construction sector enjoyed a year of accelerated growth. Output in the first three quarters was up by 3.4% compared to 2018, and almost three times faster than the wider economy. A healthy, visible pipeline is essential to maintain such levels of activity.

• The UK construction PMI decreased in December to 44.4 (from 45.3 in November), and the value remained below 50, indicating for the eighth month in a row.

• Contraction and highlighting the impact of the prolonged uncertainty caused by Brexit and wider economic slowdown.

• Recent ONS New Orders data reflects the negative sentiment through a weak work pipeline for 2020/21. Orders have been on a downward trend since 2017 but data from Q2 and Q3 2019 points to the lowest level of demand since 2012, with public and commercial sectors seeing the biggest falls.

• The large Conservative majority should enable the government to act decisively, which is likely to improve investment conditions. However, the construction sector should remain vigilant of the risks still in place, including the nature of a post-Brexit relationship with the EU, the speed of infrastructure investment implementation and possible further delays to programmes such as HS2.
Deteriorating prospects for 2020 have led us to modify our short-term forecast. We have also updated our projection of the longer-term impacts of Brexit. Our adjustments are driven by the need to balance the benefits of increased political certainty against the acceleration towards a hard Brexit in 2020, alongside latest data regarding construction sector performance.

The UK construction sector finds itself currently in a challenging situation, which is shaped by extremes – the record high output on one hand and worryingly low new orders on another. We prepared our forecast with the assumption that the UK will withdraw from the EU on 31st January 2020, with an 11-month transition period. Furthermore, we can anticipate an increase in public investment on the back of pledges to increase investment by £20 billion per annum. As a result, we anticipate that 2020 will see a further reduction in the rate of price inflation as competition between contractors and their supply chains intensifies. However, this lull will be short-lived as investment from a range of public and private sources is channelled into the UK. How quickly this temporary gap will be filled, will depend to a degree on the speed with which the public sector can energise stalled programmes from 2019 and translate electoral promises into shovel-ready projects.
The factors that will combine to determine overall inflation over the forecast period are as follows:

- **Balance of workload:** During 2020, we anticipate that the balance will favour clients and main contractors. We also expect that suppliers will continue to focus on improving their productivity. Workloads are likely to improve from late 2020 onwards. The speed at which they level can be expected to determine the pace of inflationary pressure in the supply chain. This will not only be caused by price increases, but also potentially by a reduction in progress being made on improving industry productivity.

- **Capacity constraints:** Although it may seem unlikely in a market that is hungry for new projects, capacity constraint is a real risk to construction sector rebound. The government’s ambitious infrastructure agenda will create demand volumes that the sector will be challenged to meet using traditional methods. The use of modern construction methods such as offsite will become more widespread. However, limited availability of a workforce with modern skills and the relatively small number of suppliers with offsite manufacturing capability will result in a temporary increase in prices. This will ease only once the rest of the sector has caught up.

- **Demand:** The timing and speed of change in demand conditions always has a big influence on the rate of inflation or deflation. In contrast to 2008, we think that the current slowdown in workload is steady and has a floor. This means that deflationary pressures should be modest. By comparison, the potential for upside across many sectors in the medium-term is significant – particularly in infrastructure and utilities, where many long-term programmes such as AMP7 are about to start, and where HS2 could have a huge impact on local workload.

- **Cyclical sectors:** The housing, commercial and industrial sectors have suffered from the wider slowdown in the economy but are likely to benefit from more favourable investment conditions. Now is a good time to procure projects and some clients may want to take advantage of delays to public projects to secure competitive prices.

- **Currency:** Since the beginning of September 2019, sterling has appreciated by approximately 8% against the US dollar. While the expectation is that the pound will remain strong, it depends very much on the successful negotiation of free trade agreements with the EU.

- **Risk:** In the event of increased demand from 2021 onwards, we expect to see larger risk allowances, especially if the constraints to labour supply are not resolved.

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<th>YEAR</th>
<th>REGIONAL BUILDING CONSTRUCTION TPI</th>
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Increased infrastructure spending: Are you ready?

Following the election of the Conservative majority government, the construction sector needs to start preparing for its role in the delivery of the new government’s promises. Whilst the Conservative’s £100bn long-term programme will increase the pace of delivery of schools, hospitals and other vital infrastructure, it should also create a firm foundation for much needed industry transformation. It is crucial to recognise and respond to the wider challenges that public-sector clients will be setting in the future.

The industry has long been calling for the certainty of a long-term investment plan. The shift to a public-sector led model, underpinned by a fiscal mandate to borrow to invest, could be the answer. Based on recent announcements from Chancellor Sajid Javid, it is likely that Government will want to get a lot more bang for its buck from spending. As a result, investment is likely to focus on:

- Increased social, environmental and economic benefits from infrastructure;
- Improved operational outcomes through better life-cycle performance;
- Adoption of platform-based systems of standard components to enable faster and more cost-efficient infrastructure delivery;
- An active contribution to decarbonisation through net-zero carbon lifecycle performance.

This indicates a programme that is ambitious both in terms of the volume of spend and the outcomes to be delivered. Taking schools for example, the objective is to provide much needed capacity, while ensuring that wider outcomes, like decarbonisation, are achieved. This will not be possible through conventional means.
Assets need to be designed with modern methods of construction and whole lifecycle in mind, so that they can be delivered efficiently. They will use variants of offsite manufacturing, including the platform-based approach being piloted by the Construction Innovation Hub. Digital technologies will have a critical role in streamlining communications and verifying levels of performance.

Key to success will be the coordinated and joint effort of all stakeholders, including policy makers, clients, innovators and implementers. In grasping the National Infrastructure Strategy agenda, however, it is important to recognise that many of the ground rules are already established.

1. The vision and ambitions for the construction sector transformation are clearly articulated by the Construction Sector Deal and by initiatives such as the Infrastructure and Projects Authority’s Transforming Infrastructure Performance (TIP) plan. The job of industry is to get behind the thinking that has already been done – not second guess it.

2. The transformation aims to address industry challenges head-on – low productivity, high costs, extended delivery time, high carbon footprint, and the emerging skills crisis. Rather than develop multiple solutions to the same problems, industry should use the opportunity to work with bodies like the Construction Innovation Hub to embed lasting change.

3. Large scale infrastructure projects cannot be delivered and operated without digital tools and digital mindsets. Everyone in the supply chain, from designers to specialist contractors, need to embrace digitisation, whether through contribution to Digital Twins or exploration of opportunities offered by automation.

4. The Project 13 vision of a shift from transactional to collaborative relationships requires a greater emphasis on coordination and communication. Adoption of smart technology in isolation will not by itself lead to successful project delivery and value realisation. Soft skills are equally important.

The transformation of the construction sector requires everybody to engage, understand their role and their contribution to the delivery of broader outcomes.

**Clients** have a key role. In the public sector, it is essential that planned investment programmes begin on schedule, and in a way that is consistent with Government strategies such as the presumption for offsite construction. As these smart solutions become available to private sector clients, early engagement in lessons learned from pioneering projects will be important for seamless adoption and widespread use.

**Advisors**, including project managers, cost consultants and lawyers can help clients adopt innovation and new ways of working. To be able to do so with confidence, advisors need to stay ahead of the curve and ensure they themselves put into practice the change agenda.

**Integrated teams** need to bring together the expertise of designers, integrators and installers, as well as the insights from the operators. In this way, solutions can be developed that respond to user needs, while making full use of innovative building technologies to increase performance, productivity and value. This requires a further shift in thinking, given the way in which the industry operates and the methods that clients use to procure their teams and their buildings.

**Specialist contractors** could focus more on efficiently manufacturing, installing and integrating standardised components, rather than undertaking bespoke work on a project-by-project basis. This can be achieved using a platform-based approach but, while digitalisation is now well-established, there is still a long way to go before the sector is fully “componentised”. Multiple changes in working practices are needed, one of the biggest being the involvement of specialists in early design stages to consider product-based solutions.

**Communication skills** will be essential to facilitate the necessary cooperation in multidisciplinary teams aiming to adopt new ways of working. As we move towards the delivery of new programmes, all stakeholders need to commit to continuing the discussion and progressively move to “a little less conversation, and much more action”.

A fresh start for fire safety

The aftermath of the Grenfell tragedy has revealed the scale of omissions and inconsistencies in fire safety practice in Higher Risk Residential Buildings (HRRBs). Dame Judith Hackitt’s recommendations will soon be enacted by legislation announced in the Queen’s Speech in December 2019 and are likely to apply to all residential buildings over 18m in height. A priority for the entire sector must be to ensure that new regulations are successfully implemented and future safety performance is guaranteed.

The new safety rules will apply to all stakeholders and will require both upskilling and a change to industry culture. Inconsistent adoption of any new practices will pose a risk to the successful delivery of projects. The inability of a team to demonstrate competences, fully detail safety measures or document changes could, for example, result in delayed approvals at the new gateways introduced by legislation. If implemented poorly, the new procedures are likely to create unnecessary burdens for the project team.

Whilst the legislation is being debated, it is time to show a proactive attitude, beginning with preparations to facilitate implementation. Based on current practice, there are four aspects of culture that everyone in the supply chain should be thinking about as part of their fire-safety and project delivery planning.

**Information culture:** Information will be key, and the new framework emphasises the importance of high-quality information collected on a regular basis to demonstrate compliance, quality and safety. Traditionally, the housing sector has not been very data-savvy. It will need to review its approach to managing data from the top to the bottom of the supply chain, focusing especially on developing efficient procedures that ensure quality and completeness of information.
**Digital culture:** Digital technologies, including but not limited to BIM, are an important enabler playing a significant role in managing the safety-critical information flow. These tools can also facilitate greater efficiency in communication, scheduling, quality verification and decision-making. Ensuring a basic level of digital capability across the supply chain will be a prerequisite for improving information flow and coordinating activity.

**Leadership culture:** The proposed changes are far-reaching but, at least in the initial stages, will affect only the high-rise housing sector. Rather than being business-as-usual for the whole industry, it will require a sector-only approach. Duty holders - client, principal designer and principal contractor - will all play a key role in creating a project-specific safety culture, leading by example. Even on the basis that the supply chain is fully prepared, strong leadership will still play a key role in ensuring that projects are delivered effectively as well as safely.

**Integrated team culture:** Under the proposals, fire safety will be a thread running across all project stages. Maintaining that thread will require close cooperation between all stakeholders. Conversations that previously took place in the later stages of a project will need to be brought forward. Specialist contractors, for example, will be required to provide more input into design development and construction planning. It is necessary that each stakeholder creates conditions favouring open and transparent communication and the exchange of information. These will be critical for ensuring the effectiveness of the delivery of the new regime.

These four aspects of culture are crucial to high performance across the industry, and their role should not be underestimated in the successful implementation of Building a Safer Future. The time to act is now; in advance of the implementation of legislation. Each stakeholder group needs to self-diagnose, identify the gaps and risks and develop their mitigation strategies through upskilling, new hires and improvements to current working practice.
Arcadis

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