Presidential Roundtable Summary: What impact will inflation have on global infrastructure pipelines?

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Rising inflation is putting the delivery of infrastructure pipelines globally at risk by sending the costs of construction and labour spiralling and increasing the cost of finance. This reduces the certainty that projects will go ahead, but that uncertainty can cause further increases in the costs of delivery through withheld investment in capital and talent.

In 2022, the issue of higher inflation is particularly acute, coming off the back of supply chain disruption and material shortages caused by Covid-19 pandemic-related lockdowns, coupled with governments worldwide using infrastructure investment to provide a post-pandemic stimulus.

At an ICE-hosted Presidential Roundtable, attendees from around the world discussed the drivers behind the rise in inflation, the potential impact of higher costs on infrastructure pipelines and what measures different players across the sector could take to manage the risks.

What is driving the rise in inflation?

There are three main drivers behind rising inflation across the infrastructure sector – labour and skills shortages, scarcity of materials and the rising cost of energy.

Looked at globally, the matter is complicated with some causes being geographically specific. There are also a mix of short- and long-term drivers, as well as anticipated issues which have not yet fully manifested in the system but which will likely drive inflation up even further when they do.

In the UK, strong demand for projects, the impact of Brexit, and retirements from an ageing workforce have all contributed to rising costs. A cut in tax-breaks for the self-employed, which has reduced take-home pay, has driven up the rates being demanded. Alongside wider wage inflation, the industry has had to accept those higher rates due to the need for specialist skills in sectors such as rail.

In New Zealand the rising price of housing is being fuelled by a lack of land with the necessary infrastructure, as the country grapples with a huge infrastructure deficit following decades of under-investment. It has also relied on an international workforce, but strict Covid-19 border closures have cut the supply of labour and revealed wider vulnerabilities in the construction sector.

In contrast, Hong Kong has yet to experience inflationary pressures. Most of its materials come from China, where the impact has not yet been felt. However, planners still expect high inflation to affect Hong Kong, driven by a major skills and labour shortage which could see it short of 30,000 workers by 2030.

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Added to those local issues, many projects are feeling the inflationary impact of meeting the higher construction standards required by net zero targets. There may also be a second-round inflationary effect as rising energy costs, exacerbated by Russia's invasion of Ukraine, are yet to fully materialise in the supply chain.

How is inflation impacting the infrastructure sector?

Countries already struggling with high inflation are experiencing growing numbers of insolvencies in the supply chain, as well as project delays and cancellations.

Insolvencies are particularly high among smaller suppliers. While the cost of materials has increased, many suppliers are locked into fixed price contracts signed several years ago, forcing them out of business in this new operating environment.

The need to cancel projects has been a common symptom of inflation in many developing countries. Rising costs have made many projects in their pipelines unviable for investors, particularly where those increases cannot ultimately be passed through to consumers.

The impact of inflation in the construction sector is also being felt by the general public. For instance, in New Zealand's housing sector, the rising cost of construction is driving up prices in the market and making home ownership unaffordable for many people.

What can be done to mitigate inflation?

Working in a high inflation environment is new territory for most people in the developed world. Building up the right economic knowledge and understanding the risks are crucial to navigate it.

Different players in the system, including investors, budget holders and suppliers, face different issues. With suppliers incurring huge price increases, lead contractors could seek to flex on their budgets to mitigate the damage, but may themselves be constrained by funding that is capped.

In short, all stakeholders in a project will need to understand the relevant drivers, be aware of the issues each party faces and then work to manage and allocate the inflation risk collaboratively.

The crisis does offer an opportunity for the sector to innovate and do things differently, including changing the procurement approach, involving the supply chain more and bundling contracts to create more certainty. Long-term procurement approaches, such as Project 13, can accommodate more variability. Lessons can also be learnt from the experience of navigating the Covid-19 pandemic, such as the use of fair payment that helped parts of the supply chain through the crisis.

The impact of inflation could be offset by increases in efficiency and productivity that help deliver projects faster using fewer materials. Approaches such as modern methods of construction (MMC) and Design for Manufacture and Assembly (DfMA) are becoming more mainstream as planners seek to cut costs.

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Prioritisation and taking a higher level, portfolio-based view rather than a project-based approach to planning can also help. Instead of leaning on individual projects to cut costs, project holders might fare better by delivering fewer high-quality projects rather than a full portfolio of projects beset by cost cutting.

Longer-term devolved settlements that give subnational authorities more power over portfolios and the ability to manage programme level efficiencies and project phasing could help achieve this.

More executive level coordination between major projects could help minimise coincidence of peak demand for materials. While there is pressure to buy materials as early as possible, in some instances major national projects are effectively competing for resources and exacerbating inflation.

In the UK, there are now more tools available to help navigate periods of high inflation. The Construction Playbook, for example, sets out best practice but needs to be fully embedded across government to be effective. Accurate indices for the different parts of the sector and long-term forecasting will also be part of the solution.

Questions to take away

- How can the different players work together to better understand the challenges across the sector and mitigate and share the inflationary risk? This is difficult with so many people in charge of contracts and procurement having little or no experience of working in a high inflation environment. However, there are lessons from the Covid-19 pandemic, new tools such as the Construction Playbook and more efficient, innovative practices that can help if they are embedded in the sector.

- What can be done to address labour shortages in the construction sector, including ensuring we are training enough people with the skills required to deliver net zero? Dealing with shortfalls in labour has been delayed many times, particularly in priority areas like retrofitting. Building up capacity in the sector needs sufficient planning and investment if we are to tackle inflation and stay on track for net zero.

- How do we ensure that our response to inflation doesn't undermine the transition to net zero? Meeting net zero requirements may be adding to inflationary pressures, but tackling inflation should not mean reducing our commitment to decarbonisation. Indeed, the pathway to energy security through a massive increase in renewable capacity shows how achieving both goals is complementary as long as we maintain a long-term view.

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