
Gathering storm

PT Construction
Market View

Autumn 2021



Introduction

A combination of escalating construction materials prices, increasing energy costs and challenges with transport and logistics makes projects even more risky.

Following an increase of 2.5% in 2019, Portuguese GDP fell by 7.6% in 2020 as a result of the Covid-19 pandemic. This is more significant than the average drop of -6.5% recorded across the euro area and is mainly due to the high reliance of the Portuguese economy on the services sector (which contributes almost 66% to GDP).

- The recovery began in Q2 2021, with the gradual opening of the economy supported by a rollout of vaccinations. Growth was slightly dented by temporary reintroduction of some of the restrictions in June, but even despite this GDP increased by 4.9% in volume, compared with Q1 2021. By the end of September 2021 84% of the Portuguese population has been fully vaccinated and GDP continued growing, driven by a strong domestic demand. According to the European Commission, GDP will increase by 3.9% in 2021 and by further 5.1% in 2022, meaning that the economy will return to pre-pandemic level by mid-2022.
- Unlike many recovering economies, Portugal has not yet seen elevated levels of inflation, with an annual increase of 1.5% recorded in August. However, this



value excludes increases in energy prices, which reached almost 10% on annual basis. Industrial production prices are also on the rise (11% YoY) but inflation is expected to remain below 1% in 2021 and only slightly exceed 1% in 2022. Construction sector has the capacity to absorb some of the price increases but only to a certain extent and if the inflationary trend in materials and energy continues, it is likely to permeate into construction costs.

- Portugal has historically experienced high levels of unemployment, peaking in 2013 at 16.8%. Since then, the situation has been improving and in Q2 2020 unemployment fell to 5.9%. Covid-19 caused a temporary spike to 7.9% but the latest data indicates that the situation is stabilizing, with a reading of 6.6% in July 2021. The levels of employment have been increasing across all sectors, and construction has been employing 8% more operatives in June 2021 than a year before (compared to an average increase of 4% in number of employees in wider economy). Construction salaries have also been recovering slightly ahead of the general economy, with a 5.7% annual increase by the end of June 2021, compared with an average of 5.1% across all sectors.
- Output in Portuguese construction grew by average 2.7% between 2016 and 2019 and a decrease caused by Covid-19 was not as dramatic as in other European countries, with work delivered down by a mere 3.3%. The recovery began in summer 2020, and so far has been irregular and sensitive to introduction of temporary Covid-19 measures. Output in July 2021 was 2% higher than a year before, with Infrastructure having returned to pre-pandemic levels. But a slight underperformance by Buildings results in an overall gap of approximately 1.5% compared to 2019.
- New orders in construction are slowly recovering and the number of new building permits issued in the residential sector in Q2 of 2021 was 14.7% higher than in the same period of 2019, which indicates that orders have returned to pre-pandemic levels. The activity is also dynamic in the renovations sector, which recorded a 6.7% increase in Q2 2021

compared to the same period in 2019. Other sectors may still take some time before the demand returns fully, although both Portuguese National Recovery Plan and Government's commitments contain elements that are relevant to both commercial (€250M for Areas for Business Hosting) and residential sectors (€775M for public housing, €375M for affordable student location). Infrastructure pipeline is also rich, supported with investments into decarbonization and energy transition, including €370M for development of hydrogen facilities, and almost €1BN for sustainable mobility (with projects such as expansion of the Lisbon Metro Network and Porto Metro Network).

- Demand is only now beginning to return to the Portuguese construction market, and although there are big plans in place, they span the timeline until 2026 and sometimes even beyond and can still take some time to materialize as shovel-ready projects. For now, contractors are still in need of securing workload for the mid and long-term, which requires them to be competitive. At the same time, they are faced with multiple inflationary pressures, many of which are volatile and cannot easily be quantified. These are likely to drive risk premiums up. Clients wanting to proceed with projects in the near future need to be prepared to share some of the risks for the sake of getting certainty of delivery.



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 Ministério da Economia highlights inflation of up to 40% since January 2021 in some product categories. 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 rebidding - 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 area 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.

Distribution by sectors

Contrary to the economic crisis resulting from the pandemic caused by Covid19, the residential sector did not suffer as much as initially feared, even increasing its turnover in 2020, with strong growth also for the year 2021, being one of the sectors where this trend is expected to continue in the second half of 2021.

The logistics/industrial sector has been an “appetizing” sector for the real estate investor and pandemic has accelerated the bet on the sector, with the online shopping boom leading to an increase in demand for spaces near urban areas. The logistics sector was already recording, in 2019, a sustained growth trend in the economic moment that the country was going through, with most of the market players developing analysis processes and studies for the reorganization of their logistics infrastructures, namely new logistics platforms, new locations and distribution networks more adjusted to the reality.

In 2020, with the impact of the pandemic, these processes were accelerated and some of them materialized to respond to a more demanding distribution chain and adapting to a change in consumption habits. These factors contributed to an absorption level of more than 270,000 m², with the tailored suits projects being developed by the logistics operators, as well as the relocation and expansion of some logistics operations, highlighting the food retail sector and all the Last Mile distribution operations.

After the disruption caused by the pandemic, the technology sector will regain the investment pulse by around 20% in the first half of 2021, as it rolls out the fiber network with a view to increasing the number of 5G areas in the country. The Sines 4.0 project is another example, it is the largest foreign investment since Autoeuropa, the Anglo-American capital start-up campus will invest up to 3.5 billion euros in a mega data centre in Sines, with a capacity of up to 450 Megawatts (MW), which “will create up to 1,200 direct highly qualified jobs and may generate 8,000 new indirect jobs by 2025.

In the office sector, heavily affected by the pandemic, normality is returning. Companies are adapting to the new situation and the number of operations is expected to increase by 2022. The working model has changed, and this is forcing many companies to reconfigure their offices or look for a new location more adapted to current needs. In 2021 some have already returned to the new normal, but many will return to normal in 2022, which will cause the market to have moderate growth that will be stabilized by supply and demand.

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. 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. 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 \$80 a barrel. Taken together, this has led us to bring forward some of the inflation and upgrade our forecast for 2021, while easing our forecast for 2023.

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">Euro still strong against USD
<ul style="list-style-type: none">Logistics challenges around container costs	<ul style="list-style-type: none">Lay-off until the end of 2021
<ul style="list-style-type: none">The general awareness of highly inflationary circumstances	



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 the prices of many construction materials, with basic timber and steel products typically having increased by 30-50% on annual basis. The situation is similar across the world and has become a source of concern as 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 the new projects either. Contractors and clients may both be put off by the elevated levels of risk and increased price of delivery can undermine a business case, leading to project suspension. However, pausing the activity until prices return to 'normal' in many cases is not possible. There are interventions, though, that could help limit the exposure. They are not a silver bullet, and come with pros and cons, but in the current conditions of heightened uncertainty, they can facilitate the decision making.

Procurement options

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

Single stage tender competitions are suitable for highly competitive sectors with quick turnaround 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 of 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 will enable the optimisation of the timing of procurement. This route will benefit most the clients with previous experience and access to appropriate resources, and 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 – e.g., 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 case of volatile prices but, the client will be 100% exposed to movements of the price of the material 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 (cost of LADs) 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 material prices increases and associated shortages will persist. The situation is not likely to stabilise before Q1 2022 and some sectors, like infrastructure, are likely to continue to be exposed to materials-related risks into the longer-term. Implementing the above-described 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 the net zero targets will be decarbonisation of 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. Below we describe how ETS operates, how it is likely to evolve over time, and what its impacts are to 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 prices of CO₂ have been increasingly significantly and reached €59 per tonne at the beginning of September. How does this impact construction? Through an additional cost, which depends on the CO₂ emissions generated in the production process. We provide few examples in the table below and looking at the developments in both Spain and EU ETS, these numbers are only likely to increase.

Material	Cost of carbon at carbon tax rate €56/CO ₂ tonne	Cost of material including carbon tax	% carbon tax in total price
Rebar	109 €	1.165 €	9%
Aluminium	354 €	2.211 €	16%
Cement	37 €	118 €	31%

* Source: <https://ember-climate.org/data/carbon-price-viewer/>



What is next for ETS?

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

- Market Market stability reserve – a mechanism put in place to avoid oversupply of carbon credits and its too low price is on track to limit the surplus to 400Mt by 2023.
- Emission cap reduction: the EU ETS emissions cap is decreasing by 2.2% per year, but new proposals could increase this to 4.2%.
- 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 smaller supply of carbon credits and will stimulate further carbon price hikes. Multiple forecasts are available, and the cost ranges presented therein are €65-€90 for 2030 and €70-€190 by 2040 per tonne CO₂ emitted. These increases may seem shocking, but one must remember that the prices of CO₂ already increased by 70% since January'21, and further increases are very likely.

In addition, costs related to carbon are likely to be further increased by the introduction of so-called Carbon Border Adjustment Mechanism. Its objective is to create a fairer playing field for the EU businesses which need to compete with companies from territories where carbon pricing is not present. 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, an increase in prices of steel imported to the EU can be expected.

What does this mean for clients?

Clients have very little control over their exposure to carbon pricing. The price of the 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 the 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 the 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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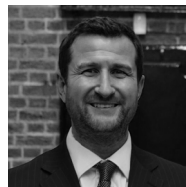
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