









FCB Meeting 26 August 2021

Resource and Inflation Risk on Current and Future Projects

Agenda

- 1. Overview of current market and Key issues
- 2. Causes of Cost increases
- 3. Future challenges to project costs
- 4. Key Impacted Materials
- 5. Other areas of Material Constraint
- 6. Inflation on key cost drivers
- 7. Labour and the Supply Chain
- 8. Other Issues
 - 1. Form of Contract, risk ownership
- 9. Impact on Current Schemes
 - 1. Eurovia
 - 2. Galliford Try
 - 3. Morgan Sindall
 - 4. Balfour Beatty
- 10. Potential Actions and Risk Mitigation
- 11. Questions

The Headlines



Milkshakes are off the menu at McDonald's as Brexit-fuelled delivery driver shortage bites

McDonald's became the latest restaurant chain in the UK to be hit by supply shortages yesterday with no ...

Nando's shuts 45 restaurants due to chicken shortage

m · 6h

How serious is the shortage of HGV drivers?

Contractors hit by ripples of shipping 'superinflation'





Materials r

Material prices I sign that the set

Building 18d







Balfour having to 'prop' up subcontractors

due to materials inflation



Materials shortage: contracts 'not fit to deal with volatility'

Key Issues and Challenges

- Material availability and Lead in Times
- Material prices and fixing of prices
- SME / Supply chain pricing and stability
- Labour and staff shortages
- HGV Drivers
- Inflation
- Contractual terms

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Causes

To date

- COVID19 forced the closure of countless manufacturing plants, reducing the supply of many commodity and manufactured goods
- · Pent up demand due to delays to projects
- · Increased infrastructure spend
- Spike in consumer spending has caused demand to outstrip supply in many areas
- The volume of world merchandise trade is expected to increase by 8.0% in 2021 after having fallen 5.3% in 2020
- Shipping global trade plunged, forcing firms to idle vessels and cancel journeys.
 When demand picked up again, thousands of containers were stranded in
 European and American ports rather than in Asian ones where they were
 needed. This was compounded by congestion at UK ports due in part to the
 Brexit transition, as well as huge shipments of PPE and the usual Christmas rush.
 - An estimated 5.5% of all Ocean capacity is waiting off port
 - Freight rates from Asia to N Europe are over \$11000 per container 600% higher than last year
 - UK suppliers held back deliveries early 2021 due to expected disruption post Brexit
- Evergreen ship blocking the Suez Canal
- Concerns about a supply shortage of steel prompted speculative buying in China.

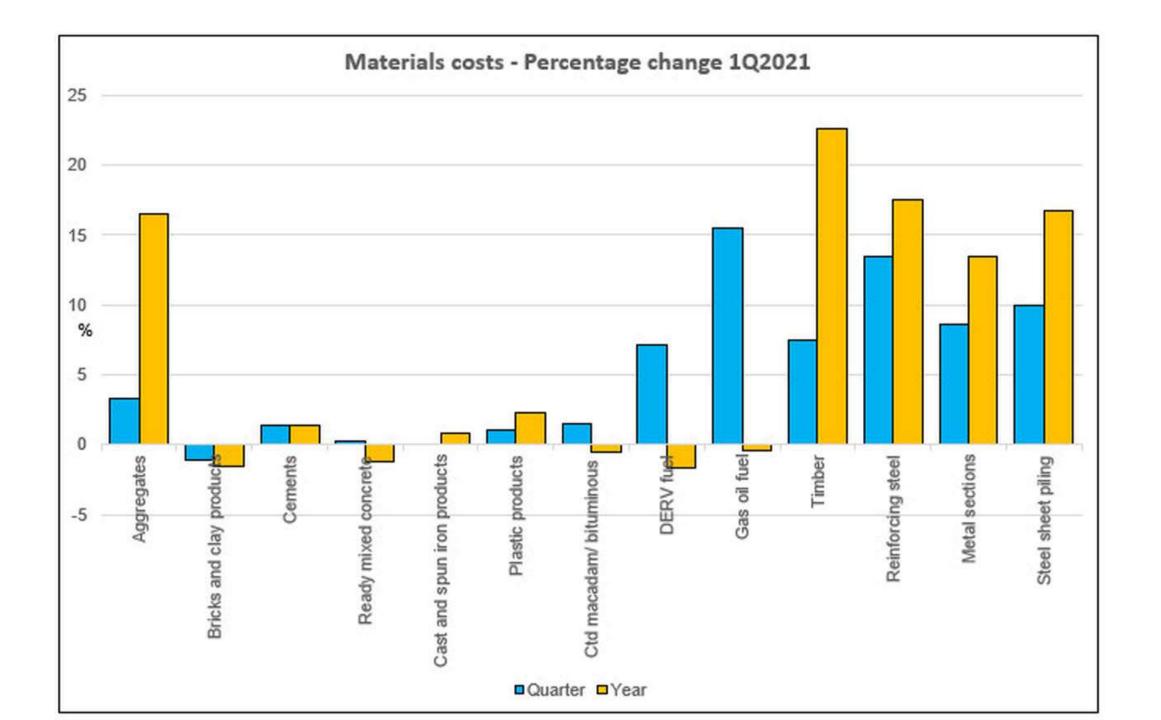
China produce 50% of worlds steel and has become a net importer Iron ore has increased to \$209/T a 230% increase

China exports 49m tones in 2019 and 13M tonnes in 2020

• Crude oil price increase affecting a number of products

Future / imminent potential causes

- Emissions Trading System a UK Emissions Trading Scheme (UK ETS) replaced the UK's participation in the EU ETS post-Brexit. The costs of this have increased and were not necessarily accounted for by our supply chain
- Red diesel tax change April 2022 for construction, the subsidised
 11.14p per litre duty on red diesel will no longer exist and the standard
 57.95p tax rate will then apply
- Continued increase in demand due to large and increasing number of infrastructure projects impacting blue & white collar labour, plant, transport and material
- Cost of blue collar labour expected to increase when vast number of projects go to ground in August/September.



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Aggregates

- The market in general is seeing a high demand across all quarry products which is anticipated to remain high throughout 2021 and increase further in 2022. Haulage remains a capacity concern both for drivers and for wagons (with some new wagons delayed by up to 6 months by manufacturers).
- Pricing increases are materialising through a combination of COVID (reduction in the number of operational quarries) and a significant increase in infrastructure works increasing demand through quarries, therefore projects such as HS2 are sourcing further afield impacting regional projects.

Concrete

- As with aggregates, the constraints in the concrete supply market (including the constituent materials) are being realised in a lack of haulage drivers and securing the necessary number of trucks required to meet the peak requirements.
- The increase in demand is geographically based however cement remains the most volatile element of the concrete supply with additional increases to those negotiated being driven by carbon tax credits (2% increase).
- Supply Chain unprepared to fix rates

Fuel

- In the UK, the government will remove the red diesel tax rebate from 1st April 2022 which will mean, an approximate additional £0.47 pence on every litre of diesel consumed.
- Crude oil prices have increased steadily due to production limits and demand

Precast Concrete

Landscaping

- The effect of increasing steel and cement prices during the first half of 2021 combined with an increase in demand is significantly attributing to an increase in the cost of precast concrete products.
- Part of the increase is attributable to the cement carbon increases we are seeing suppliers apply UK wide to all supplies.
- Precast kerbs and paving on extended lead times

- Plant stock needs to be reserved early as demand out strips supply – struggle to source stock outside of the UK
- Compost has been on allocation

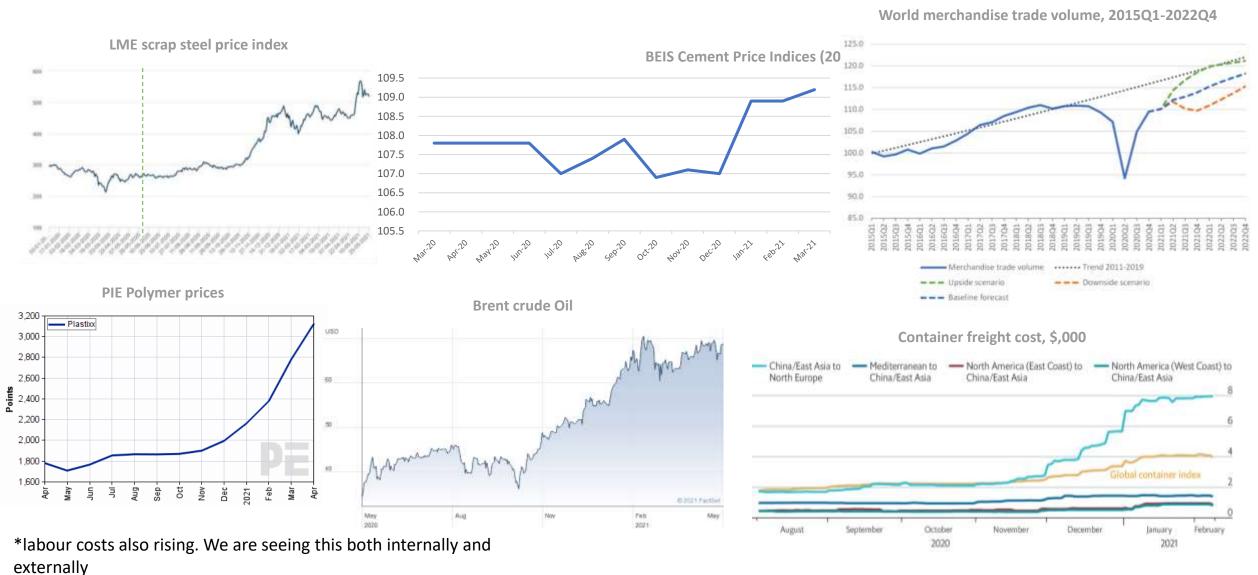
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Other areas of market constraint

Category	Current Issue	Forecast	Anticipated Movement
Copper (impact on cable and electrical equipment)	Shortage of copper has resulted in a 100% increase in price since April 2020	Prices will continue to escalate throughout 2021 although shortages are likely to stabilise.	Prices have increased by 15.7% in year to date
Polyethylene (PE) and Polypropylene (PP) Plastic (impact on drainage materials & ducting)	Shortage of materials causing price escalations and lead-in times extending dependant upon product & manufacturer	Raw material issues are set to continue throughout 2021.	Manufacturers are claiming a 20% increase in the cost of raw materials
Timber (impacting temporary materials as well as fencing products)	Significant reduction of available supply (basic carcassing & fencing products). Current Lead in times vary between 4 to 6 weeks.	Sawmills in Europe will soon enter Summer shut-down period further impacting delays. 80% of the softwood used in UK construction is sourced via European sawmills.	5% increase in softwood cost per m3

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Inflation



Typical Increases / Volatility



PRICE CHANGE NOTIFICATION

Last Updated: 02 Aug 2021

CURRENT & PENDING PRICE CHANGES

OCTOBER

SUPPLIER	PRODUCT	INCREASE PERCENTAGE	EFFECTIVE FROM
Aggregate Industries	Bradstone and Charcon Products	TBC	01/10/2021
Brett Landscaping	All Products	2.5% - 10%	81/10/2021
British Gypsum	All Products	3.9-22%	01/10/2021
Celotex	Insulation Products	10%	01/10/2021
Saint Gobain Pam	PAM Brand Access Covers, Gully Gratings and Surface Boxes 9.0% H Range Access Covers & Gratings 9.0% Water & Sewer Pressure Pipeline Systems 9.0% Valves & Hydrants including Couplings & Adaptors 9.0%	9.00%	01/10/2021
Toolbank (Curlis Holt)	All products	3-26%	01/10/2021
Plasmor	All Products	9.40%	04/10/2021

SEPTEMBER

SUPPLIER	PRODUCT	INCREASE PERCENTAGE	EFFECTIVE FROM
Clark Drain	Composite	5%	01/09/2021
EJ UK	All Products	6-48%	01/09/2021
F P McCann	All Products	2.50%	01/09/2021
Glen Castings	All Products	6.50%	01/09/2021
H+H	All Products	2%	01/09/2021
Haemmerlin	All Products	10-15%	01/09/2021
Knauf Insulation	All Products	12.2-13.8%	01/09/2021
Mapei	All Products	2%	01/09/2021
Mapei	Mapefill GP	12.00%	01/09/2021
Marshalls CPM	Below Ground Products	5.25%	01/09/2021
Marshalls Edenhall	All Products	4.5-8%	01/09/2021
Visqueen	All Products	5.00%	01/09/2021
Wrekin	Steel Products	15-30.8%%	01/09/2021
Recticel	All Products	7.00%	02/09/2021
Bruce Douglas	Warning Tapes	6.50%	17/09/2021
Instarmac	All Products	4.5-32%	22/09/2021

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PREVIOUS PRICE CHANGES

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Marthure	Al Fronts	8.975	PHOTOSIT
Montals To	Al Pintolio Statutes Paper Partici-	620%	# Northway

Labour and the Supply Chain

Labour

- Between May and July 38k construction vacancies a 20 Year high
- Shortage of skilled labour is contributing to reduce construction output
- Availability reduced due to Brexit and Covid EU workers returned home (Est 1.3m) due pandemic and not returned. Also new IR35 tax rules means financially not as attractive
- Pay rates increased for skilled labour carpenter was £23/ hr and now £32/hr
- Unskilled labour rate not increasing to date but likely to change due to shortages
- ONS data average earnings up 14% over last 12 months

Labour and the Supply Chain

Labour (cont)

- Overall unemployment at 4.7% (pre pandemic level)
- Struggling to fill roles with reputations for low pay / poor conditions i.e. construction, manufacturing and food production

Staff

- Churn rate , flexible working / location
- Filling vacancies EU staff
- HS2 job security for 3-5 years

HGV and delivery drivers

- Road haulage association estimates a shortage of 100k drivers out of a pre pandemic total of 600k
- 20 30k of EU drivers have left
- Backlog in HGV driver tests 25k less passing their test in 2020
- Brexit additional bureaucracy to enter and leave (EU workers paid by the mile)
- IR35 reduced income
- Ageing work force average age 55
- Shortages have meant wages are increasing due to increased competition for services and costs are being passed on
- Max drivers hours relaxed increase from 9 11 hrs twice a week
- Issues
 - Road safety
 - New starters (young and inexperienced) on site

Labour and the Supply Chain

HGV and delivery drivers

- Road Haulage Association Proposed actions
 - Prioritisation of driving tests for lorry drivers
 - "Return to HGV driving" scheme
 - Promote the job and sector
 - Apprenticeships and improved funding
 - Training loan scheme

Labour and the Supply Chain

Supply Chain and SME's

- Four in Five of SME's have increased their prices
 - Due to volume of work, skill shortages and material prices
- Locked in to long term fixed price Contracts
 - Cash flow and profitability issues
- Distressed supply chain
 - Propped up by Tier 1 Contractors
 - Cover price increase and assist with cash flow
 - Support due to impact on programme
 - Alternative replace them "financial suicide" Leo Quinn

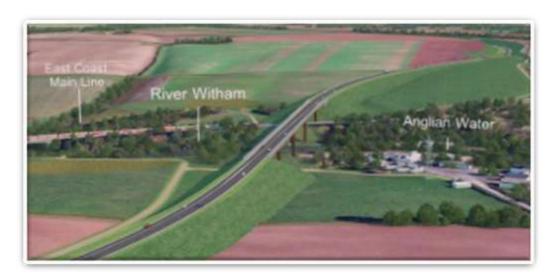
The Contract

- Current contracts do no not generally account for current material price and delivery volatility
- NEC4 Secondary X1 provides provision for dealing with Volatility
- NEC4 Secondary X2 further implications due to Law change
- Consider a "Covid Clause"
- CLC strongly urge consider including these options in Contracts
- CLC call for a "Collaborative Approach" and sharing of risk and look at up front ordering

Contractors Current Experiences

Impact on Schemes





- Steel prices and procurement
- Other products varies regularly
- Quarried materials type B
- Staff not so much retention

- COVID continues to bring challenges
- We all proved what can be achieved at the worst point
- COVID compliance now part of our planning, bidding and delivery processes
- Using good news stories from projects to educate

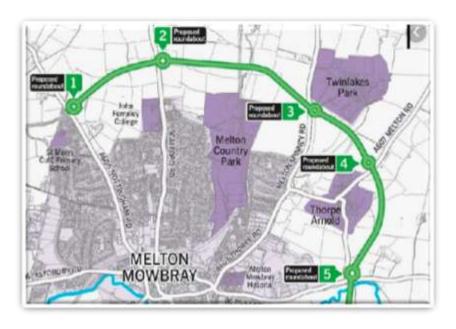


Impact on Schemes – Looking Ahead



- Sharing our issues with other clients to ensure risk is understood
- Reviewing designs to minimise likelihood of use of such materials
- Monitoring market prices closely with regular updates shared





- Lessons learnt reviews both commercially and operationally looking a last two years
- Robust and honest view to key supply chain partners and clients to support each other



A world of expertise, applied locally



Material Challenges

Natural Stone Paving from Portugal and Italy delayed by

- 1. COVID controls at ports for road freight 7 days for one vehicle from Italy although smaller vehicles made the journey in 4 days
- 2. Enhanced customs checks at ports due to Brexit
- 3. Logistics problems with closure of Suez Canal Increases in cost in relation to the same prices for containers increased tenfold in some cases.

Over 2 week lead time for **Ready Mix** in Lincolnshire and elsewhere driven by lack of delivery drivers. Have to buy from elsewhere at increased cost. Slots also delayed or missed at 'same day' notice.





Material Challenges

Over 2 week lead time for **Asphalt** and the number of loads rationed, due to HS2 and driver availability.

Steel and Concrete prices have driven up the cost of delivering structural works. Example Piling costs have increased considerably and led to subcontractors being unwilling to carry out works at contract rates

Cleveland Bridge in administration





Other Supply Resource Challenges

Equipment hire – 3 days or more to carry out basic repairs (tyre change for example) plus extended lead times on deliveries for equipment of all types

HGV drivers – unable to source contract hauliers and absence due to isolation has left us short of low loader drivers.

Skilled people – skills shortage is causing an issue. Haemorrhage to HS2 as an example. Pushed rates up and is overstretching people.

COVID inefficiency was estimated as costing us in the region of £1k per person per month in worst cases. Now back to a reasonable level of 'normal'



M27 Project

We are suffering from a shortage of drivers to supply blacktop

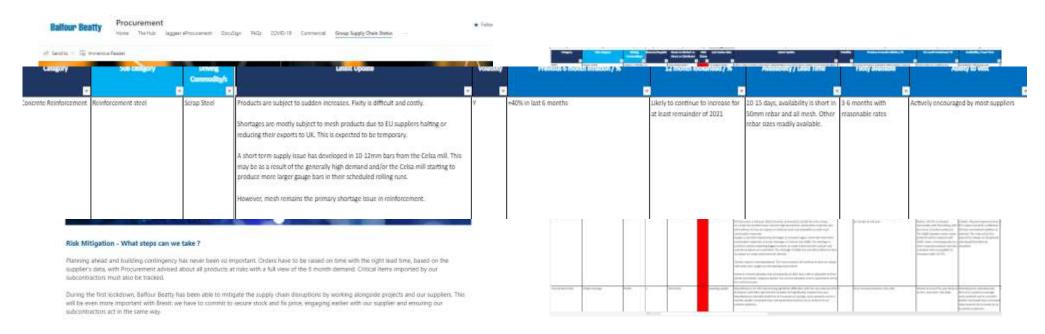
- Shifts are planned with the 2 weeks notice to Highways England
- Lack of drivers is meaning a shortfall in quantities per shift
- Impact is delay to the works, compounded by the 2 week booking process

Impact On Balfour Beatty

- Material Quotes unable to hold prices
 - Steel, sheet piles, Rebar and VRS
- Subcontractors
 - Only prepared to hold price for labour and plant element of their price
- Lead in Times
 - Up to 16 weeks for some steel products
- Subcontractors
 - Declining opportunities busy and being more selective

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Impact On Balfour Beatty Risk mitigation and forward Planning



Potential Actions and Risk Mitigation



Potential Client 'Fixes'

Understand and appreciate the commercial position Cost and time risk allowances, programme challenges,

Procure and get in to contract earlier than normal Advanced orders for some material and assurance of work

Reduce the amount of change on a contract

Collaborate

Client, contractor, designer, subcontractor all on the same side



Potential Actions and Risk Mitigation

- Volatility Schedules to identify key trades and materials for each project
- Procurement Strategies to be developed to mitigate risk where possible
 - Include supply chain
- Early Procurement stockpiling, vesting, early commitment/collaboration
- Review Contract and use of Secondary clauses
- Review risk register specific items, risk ownership and external factors
- Review programme for critical materials + time risk allowance
- Review financial security of supply chain
 - Contractual arrangements with supply chain
 - Risk share
- Prevent programme slippage stage 1 and construction start date
- Review project budget risk and inflation

Questions