



TEMASEK

PIIE-LKYSPP Next STEP Global Conference
Supply Chains in a World of Conflict and Covid

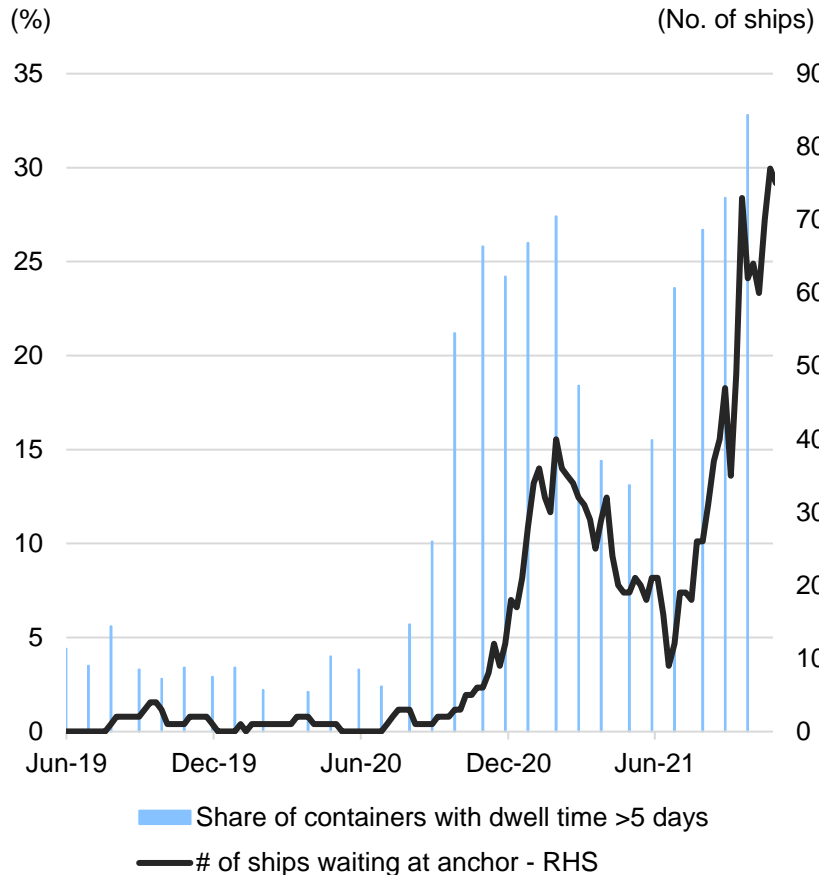
Michael Buchanan, Head of Portfolio Strategy & Risk Group, Temasek

1 November 2021

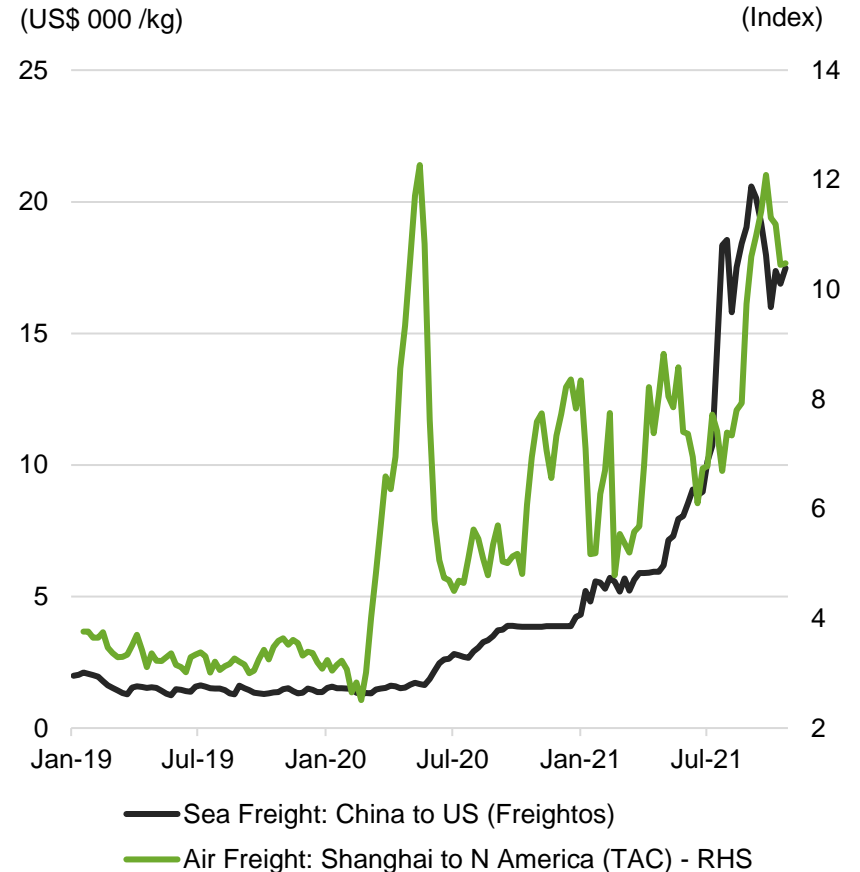
US: Port congestion remain a key bottleneck for supply chains

No immediate fixes for underlying supply-demand imbalances at ports, which remain constrained by their capacity to handle containers after they're unloaded

Share of containers with >5 days dwell time & No. of ships waiting at anchor (Port of LA / Long Beach)



Sea and air freight rates: China to the US

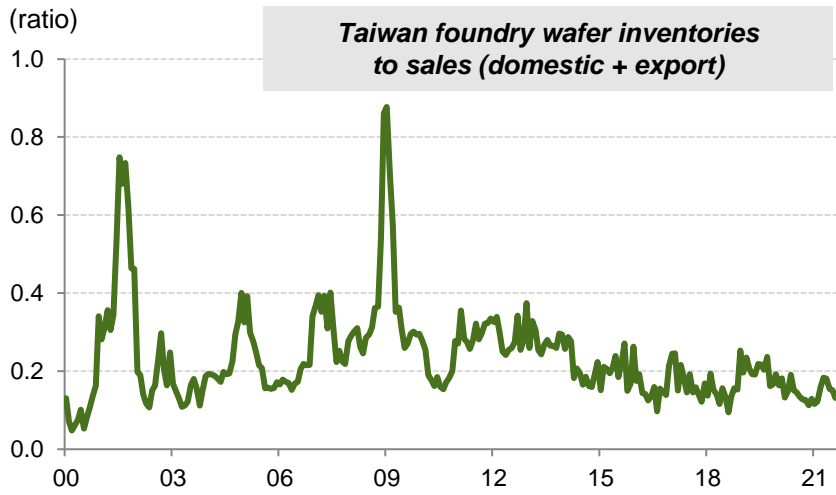


Data for container dwell time up to Sep-21; Ships waiting at anchor up to 30th Oct-21. Sea (Freightos Baltic Index) and air (TAC Index) freight rates up to 22nd Oct 2021.

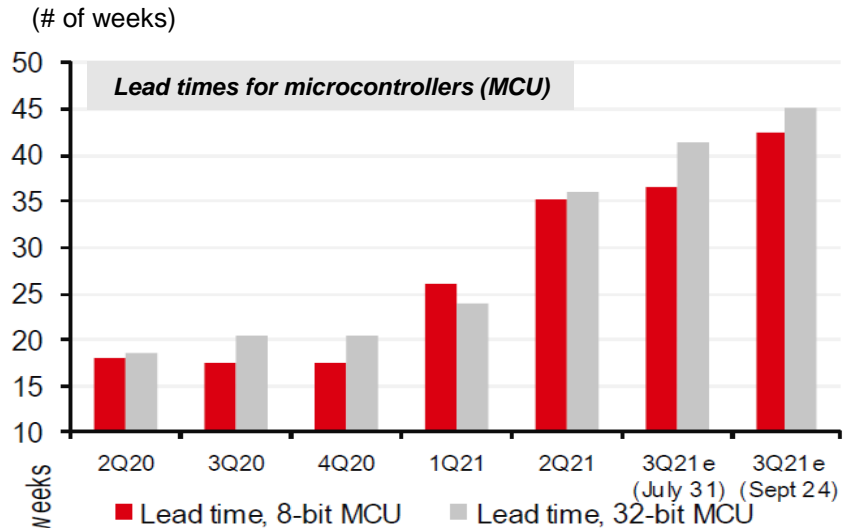
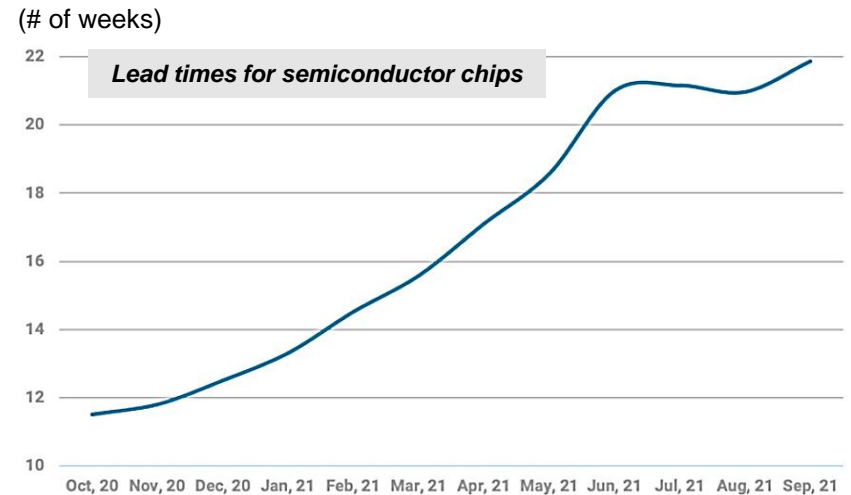
Source: Marine Exchange of Southern California, GS Research, Bloomberg, Temasek Macro Strategy

Semiconductors: Supply-demand dynamics still tight

Chip inventory to sales (or shipment) ratios remain very low – Taiwan and Korea data



Lead times for chips has continued to lengthen



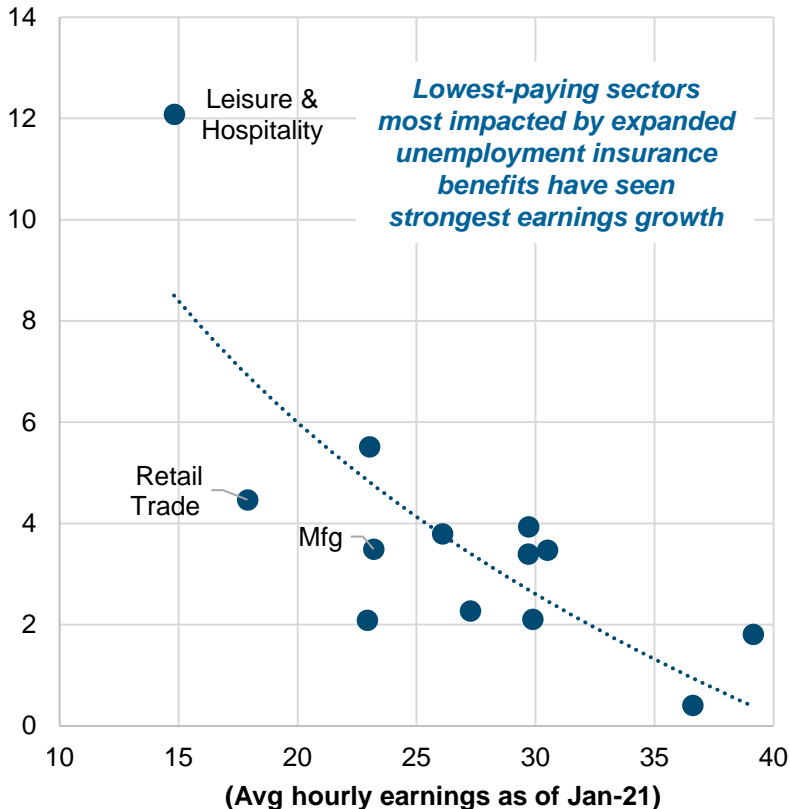
Source: CEIC, LevaData, HSBC, Infineon, Future Electronics, Temasek Macro Strategy team estimates

US: Labour shortages a key supply constraint that should ease from here

Income replacement from expanded unemployment benefits, child care needs and Covid-concerns have been key reasons for non-participation in the labour force, which pressured wage growth especially in low-wage segments. These are fading now.

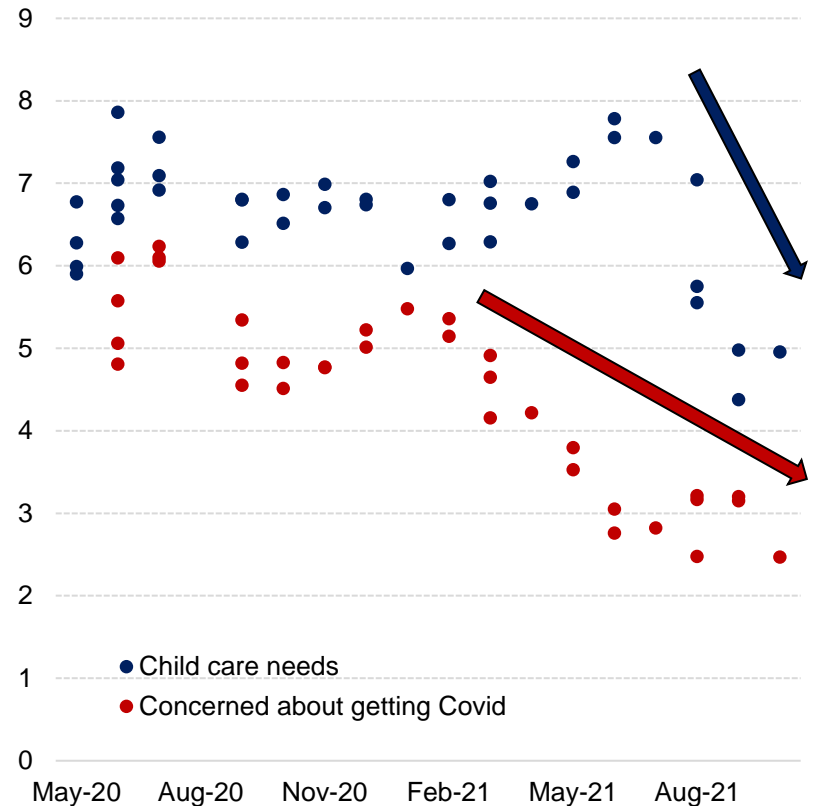
Earnings growth highest in lowest paying sectors¹

(% increase in avg hourly earnings Jan-Sept 2021)



US Household Pulse Survey: Individuals (18yo+) not working for Covid-related reasons

(Million people)



1. Production and non-supervisory workers

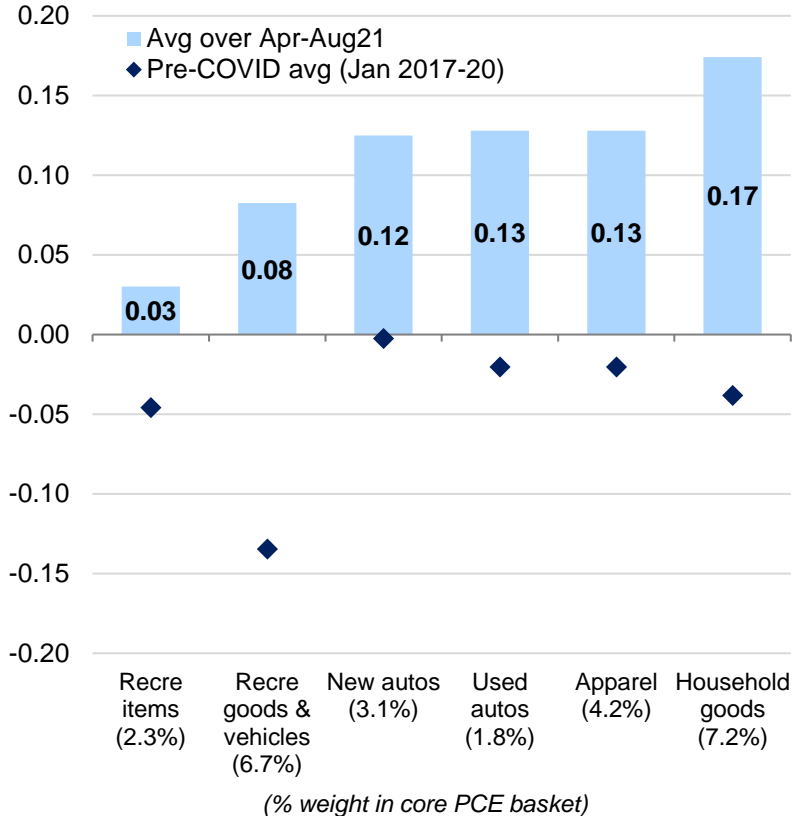
Source: Haver, Temasek Macro Strategy team calculations

US: Inflationary pressures from supply-demand imbalances to persist through mid-22

This effect has been starkest in durable goods, particularly in autos & household items. This should fade as demand subsides with a greater switch back to services spending, especially once supply chain bottlenecks are able to resolve more fully into mid-22.

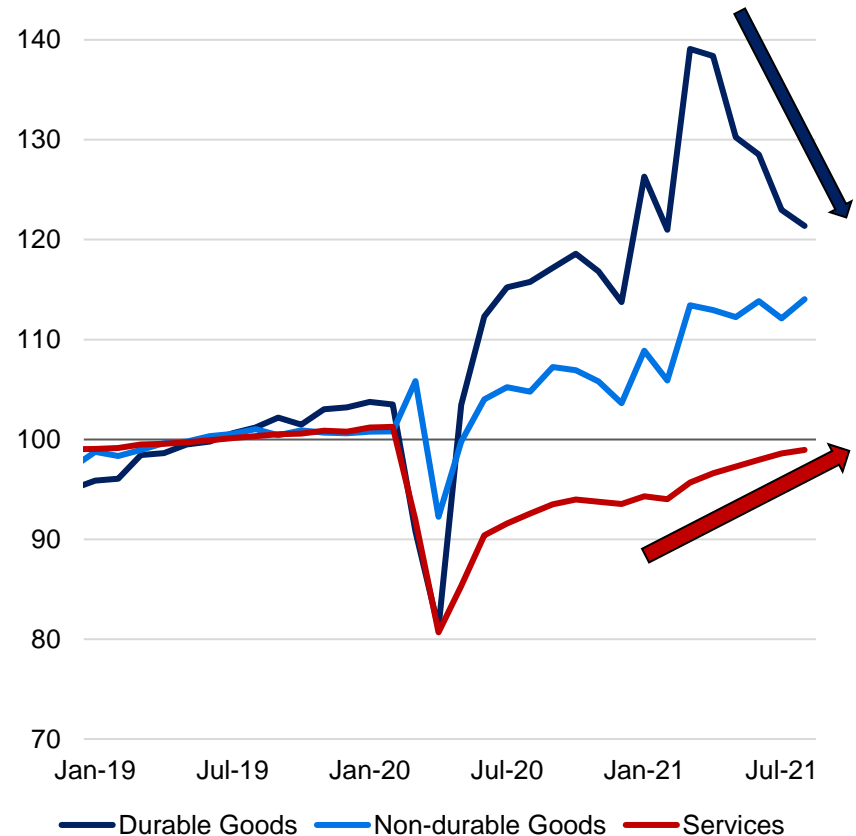
Contri to core PCE from select segments affected by supply-demand imbalances on avg in Apr-Aug '21

(%pt contribution to %yoy core PCE)



Personal Consumption Expenditure by Quantity

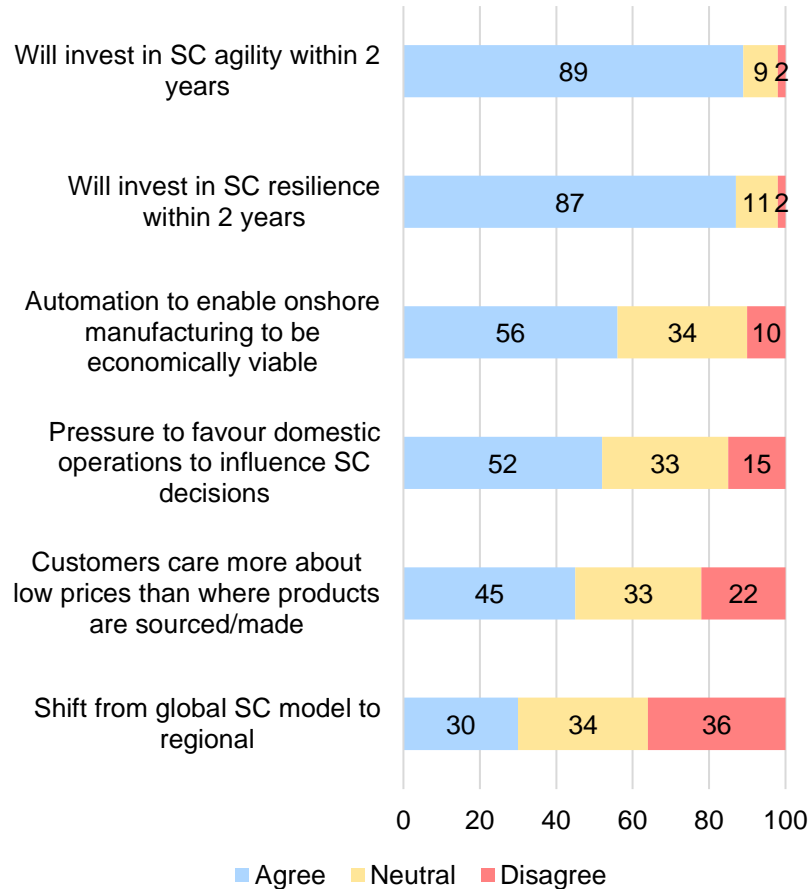
(2019 avg = 100)



Europe: Supply chain resilience and agility key priorities in the coming years

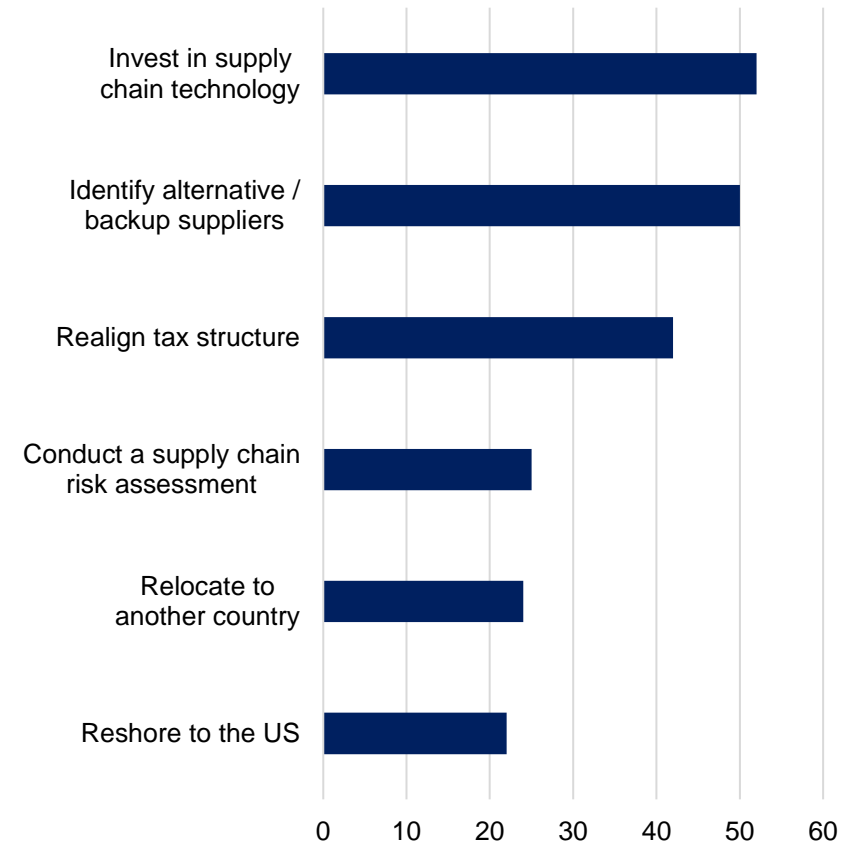
Survey of supply chain (SC) professionals on strategy

(%)



Middle market manufacturer 2021 priorities

(%)

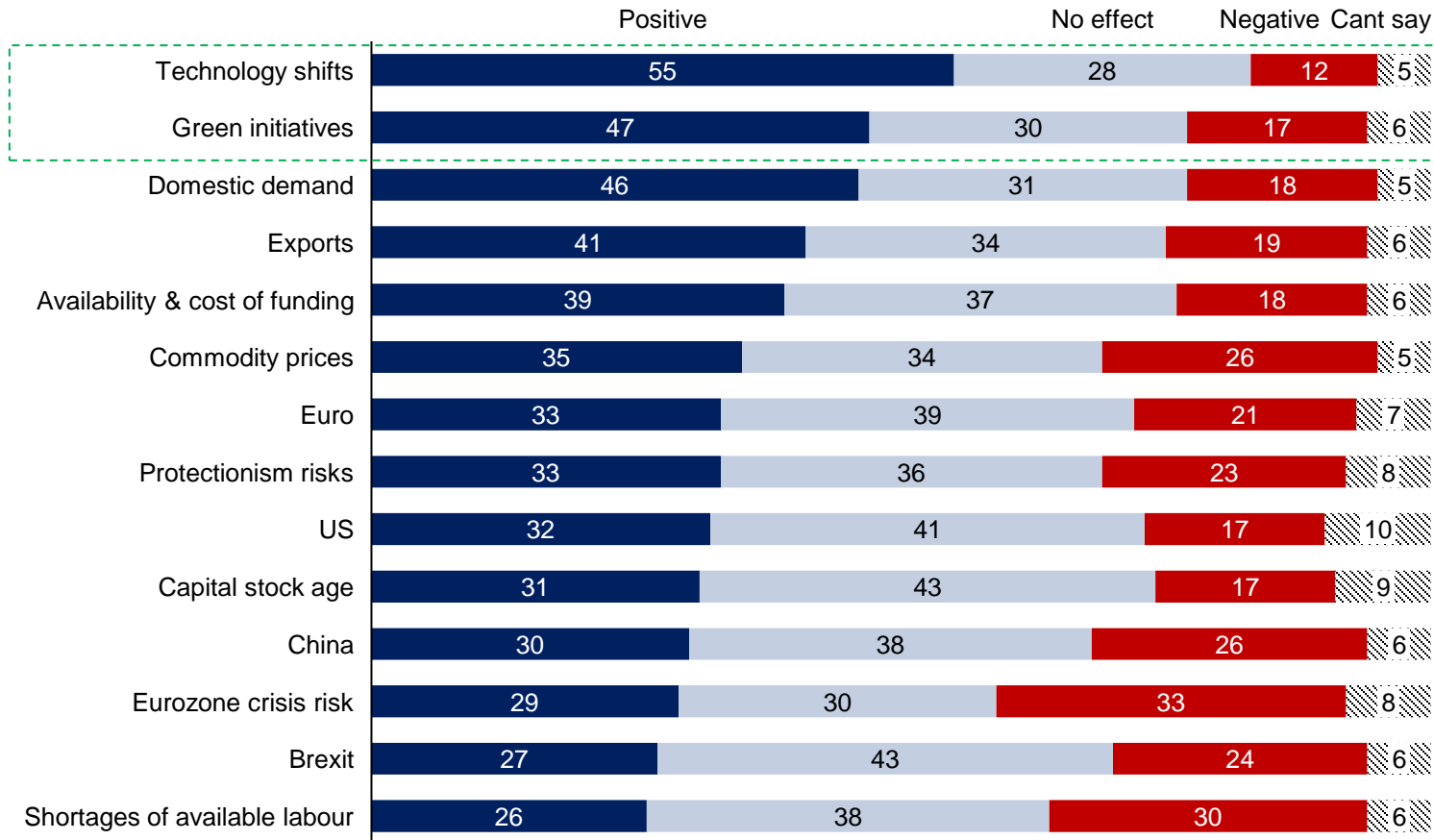


Source: Gartner Suture of Supply Chains, BDO, Barclays

Europe: Green capex to accelerate materially

Factors affecting companies' investment strategy

(%)



Shifts in tech & green initiatives are top 2 key drivers in firms' investments

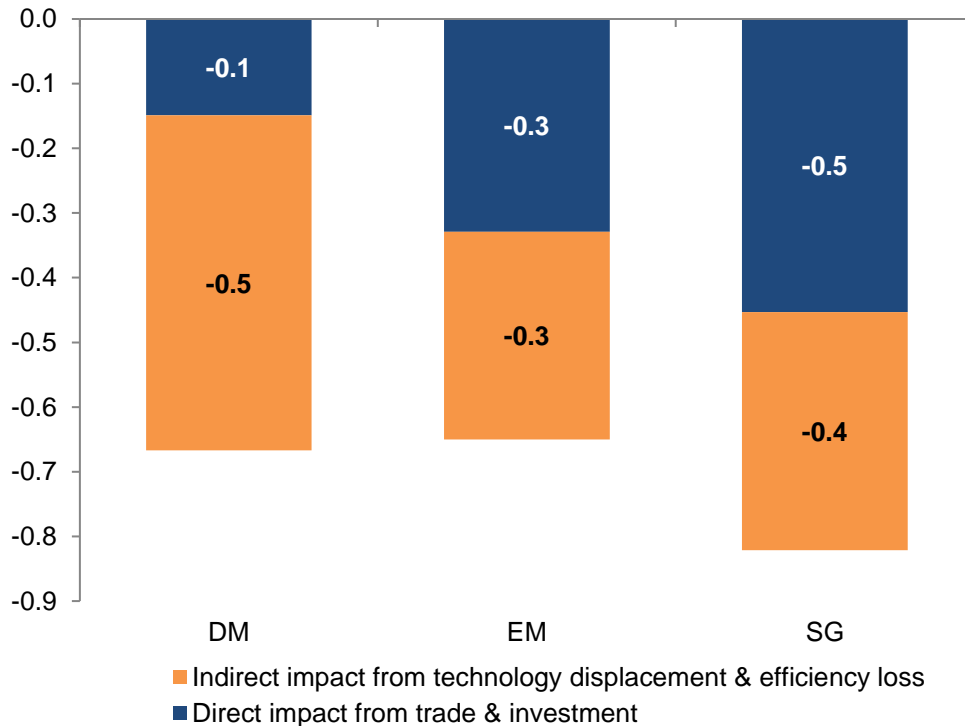
Appendix

Severe escalation in geopolitical tensions could see hit to growth

A severe escalation in geopolitical tensions could see a plausible scenario with lower global growth, higher inflation, and lower margins. A challenging scenario for global equities, not just in EMs, although small open economies like Singapore most at risk.

Hit to potential growth rate

(% pa)



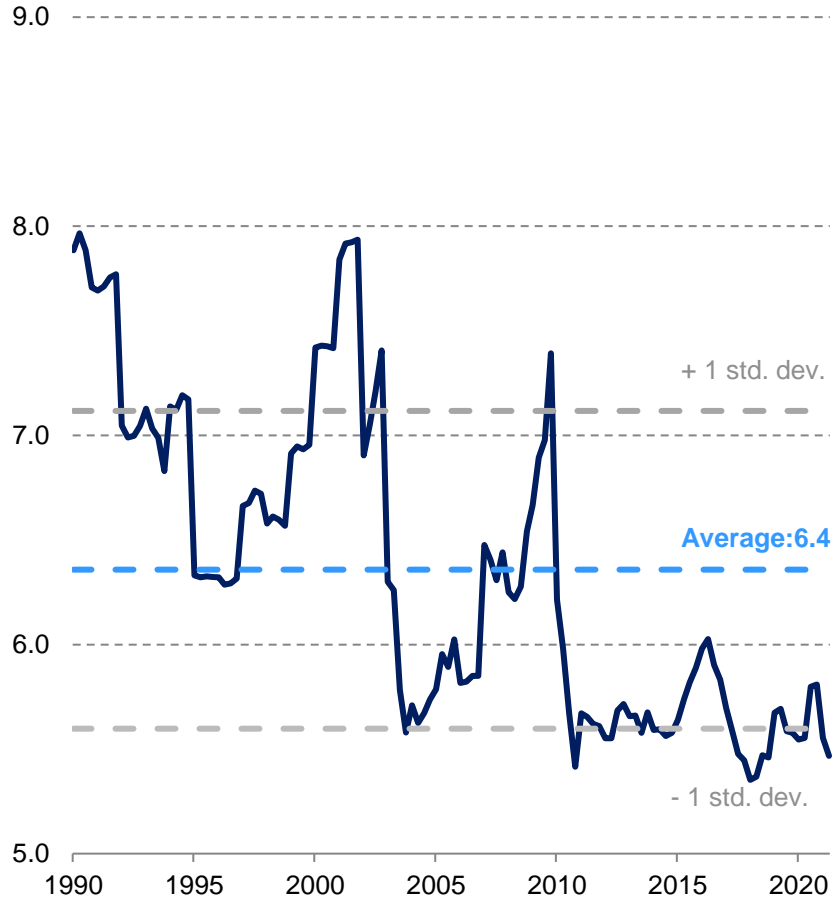
- Direct impact from trade and investment**
 - De-integration of trade in goods and services
 - De-integration of cross-border capital flows

- Indirect impact from technology displacement & efficiency loss**
 - Reduced innovation resulting from lack of global cooperation and access
 - Labour displacement as a result of automation, as onshoring process requires productivity enhancements to stay globally competitive with low-wage production in emerging markets

Europe: No growth capex in the past 2 years

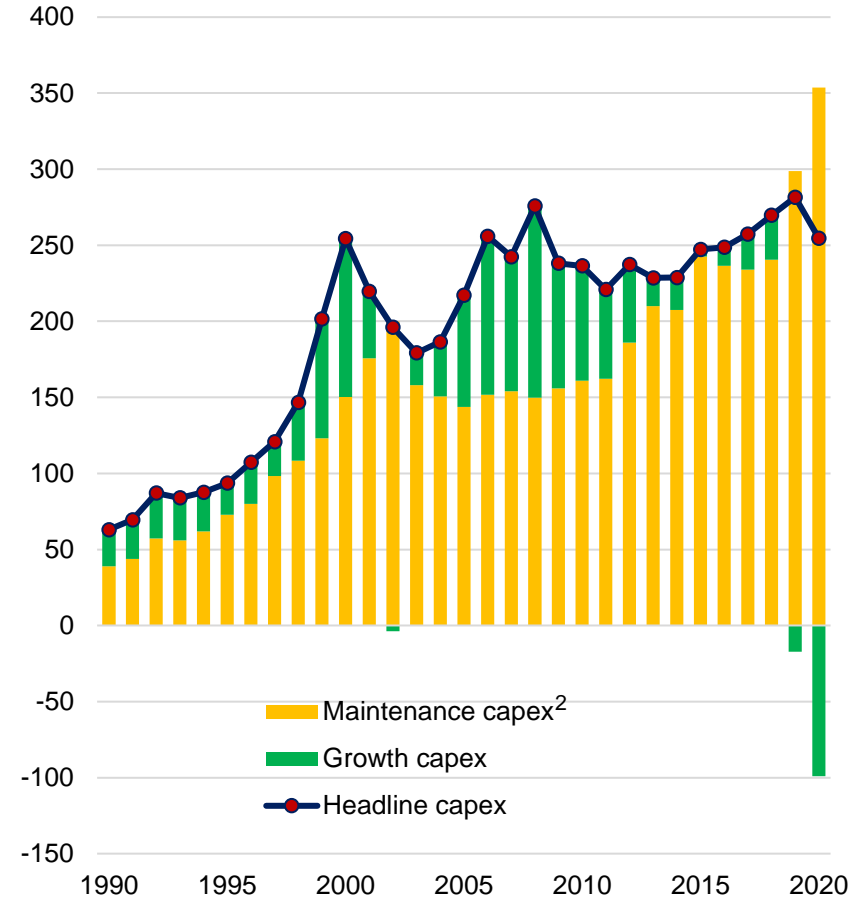
Europe capex/sales close to long-term trough

(Capex/sales, %)



Eurozone capex breakdown¹

(EUR bn)



1. Underlying index: Datastream EMU Index

2. Proxied by depreciation

Source: Datastream