NATIONAL CEO SURVEY
BUSINESS PROPECTS IN 2020

Construction in 2020

March 2020

About Australian Industry Group

The Australian Industry Group (Ai Group) is a peak employer organisation representing traditional, innovative and emerging industry sectors. We are a truly national organisation which has been supporting businesses across Australia for more than 140 years.

Ai Group is genuinely representative of Australian industry. Together with partner organisations, we represent the interests of more than 60,000 businesses employing more than 1 million staff. Our members are small and large businesses in sectors including manufacturing, construction, engineering, transport & logistics, labour hire, mining services, the defence industry, civil airlines and ICT.

Our vision is for *thriving industries and a prosperous community*. We offer our membership strong advocacy and an effective voice at all levels of government underpinned by our respected position of policy leadership and political non-partisanship.

With more than 250 staff and networks of relationships that extend beyond borders (domestic and international) we have the resources and the expertise to meet the changing needs of our membership. We provide the practical information, advice and assistance you need to run your business. Our deep experience of industrial relations and workplace law positions Ai Group as Australia's leading industrial advocate.

We listen and we support our members in facing their challenges by remaining at the cutting edge of policy debate and legislative change. We provide solution-driven advice to address business opportunities and risks.

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KEY FINDINGS

This report forms the third in a series that explains the experiences and expectations of Australia's CEOs in 2020, as recorded in Ai Group's annual Business Prospects Survey (see Appendix). The first report in this year's series, NATIONAL CEO SURVEY, Business Prospects for 2020: *Policy action can overcome caution, slow growth and productivity*, was published by Ai Group in January 2020.

This third report outlines the experiences and expectations reported by CEOs in Australia's construction industries at the end of 2019 prior to the rapid escalation of the coronavirus (COVID-19) pandemic and major virus-related disruptions to business activity.

The industry expectations documented in this report have undoubtably been significantly downgraded since the start of 2020. Nevertheless, this report provides a valuable starting point for assessing the state of the construction industry on the eve of the COVID-19 pandemic and the full spectrum of challenges now facing the industry.

Construction industries included in this report are residential building (houses and apartments), non-residential building (including offices, retail buildings and industrial premises), engineering construction (infrastructure and resources-related projects) and closely related mining services such as specialised services, machinery and equipment for mining construction, extraction, production, exploration, engineering and project management.

Australia's construction businesses experienced a subdued year in 2019. Across the major construction sectors, the real volume of residential building work done was down by a steep 12.8% p.a. in Q4 2019. Declines were recorded in both new house-building and new multi-unit dwellings consistent with the downward trend in approvals which extended well into Q3 2019. Despite a sizable pipeline of Government funded infrastructure work, total engineering construction work also declined in 2019. This was amid a gap in the investment pipeline related to slow progress on planned projects, as well as lags between the design and development of major works and their transition through to construction. Soft economic growth and uncertainty about the outlook (even before the onset of the coronavirus outbreak) also had a negative effect on order books as a result of increased risk aversion and lower spending among clients. Across the commercial building sector conditions remained volatile and patchy. However, overall investment demand was supported by population growth and the low Australian dollar. These positive fundamentals saw commencements move higher in some key building categories including schools, hospitals, warehouses and other industrial premises.

The disappointing year for construction businesses in 2019 was highlighted in Ai Group's annual CEO survey which reported slower conditions across many performance indicators compared with 2018 and 2017. Looking ahead, overall conditions in the construction industry are likely to remain constrained. At the start of 2019, more construction CEO's expected a deterioration in business conditions in 2020 (relative to 2019) - with 38% of CEO's expecting no change in business conditions; 35% expecting a deterioration and; only 28% expecting an improvement. The resulting -8% net balance of businesses expecting a deterioration is the first negative year for construction CEO expectations since 2016.

This points to further weakness in overall construction activity in 2020, reflecting a range of industry headwinds and construction concerns. Although dwelling approvals finished 2019 in positive territory, the improvement has been relatively muted to date in response to interest rate reductions. This suggests on-going softness in house building activity in the months ahead. Infrastructure project delays and heightened risk aversion among investors amid a slow and uncertain economy also appears to have contributed to lower CEO expectations for 2020.

1. CONSTRUCTION BUSINESS CONDITIONS IN 2020

1.1 Australia's construction industries in 2019

The construction industry is a significant contributor to economic activity in Australia. The construction industry operates in both the private and public sectors, across three broad areas of activity:

- engineering construction (major infrastructure, mining and heavy industrial resource-based projects);
- non-residential building (including offices, shops, hotels, industrial premises, hospitals, entertainment facilities) and;
- residential building (houses, flats, home units, townhouses).

The supply chain for construction is large and complex. It includes manufacturing (materials, equipment components), services (engineering, design, surveying, consulting, lease management) and traditional construction trades.

Australia's construction industries in 2019 collectively accounted for:

- 6.9% of Australia's real 'value-added' output (Gross Domestic Product or GDP).[1] This makes the construction industry Australia's fifth largest contributor to GDP in terms of the volume of its output. Only the mining (8.9%), financial and insurance services (8.6%), health (7.6%), and professional services (7.0%) sectors contribute larger shares of direct output to GDP;
- 12.2% of nominal non-farm business sales[2];
- 5.6% of nominal non-farm business profits (gross operating profits of private-sector companies)[3]; and
- 10.5% of nominal non-farm business wages.[4]

Approximately 161,000 businesses were registered in the construction industry as at June 2019 (ABS business counts).[5] These included project-based businesses (major builders and contractors, designers, engineers, project managers); property sector businesses (organisations that develop, commission, own, manage and lease buildings and other infrastructure) and; the traditional construction trades (concreting, bricklaying, structural steel and carpentry services). The industry is overwhelmingly comprised of small businesses with fewer than 20 employees (98.5% of construction businesses). Indeed, almost 60% of construction businesses are sole operators with no employees. The majority (71.2%) of these small businesses operate in the trade services sector of the building industry that includes plumbers, electricians, plasterers and a myriad of other specialist building trades. Medium sized businesses (employing between 20 and 200 employees) make up 1.4% of the total number of businesses, while medium to large businesses (employing 200 or more persons) account for just 0.1% of the total.

1.Australian Bureau of Statistics (ABS), Australian National Accounts, Dec 2019
2 ABS Business Indicators Australia, Dec 2019
3 ibid
4 ibid
5 ABS Counts of Australian Businesses, June 2014 – June 2019

The construction industry is the third largest employing industry in Australia (behind only healthcare and retail trade), with 1.2 million workers (9.1% of all Australian employees) in November 2019 (table 1.1).[6] Notable employment and employee characteristics for the industry include far higher shares of full-time, male, younger, self-employed workers than for most other industries:

- 84.7% of construction workers are full-time, compared with 68.3% across all industries, and 15.3% part-time, compared to 31.7% for all industries (original data as of Nov 2019).[7]
- 88.2% of construction workers are male, compared with 52.9% across all industries (original data, February 2019).[8]
- Average hours worked per week by construction employees was 37.6 hours in November 2019 (4-quarter moving average) compared with 33.0 hours for employees in any industry.[9]

Table 1.1 Key Construction Statistics

Construction Report Card	Level	Change q/q	Change y/y	Share of total
Latest ABS data, seasonally adjusted	$bn	**%**	**%**	**%**
Nom value of res building approvals, $bn year to Feb 2020	63.3	-	-14.0	54.6% of building approvals
Nom value of non-res building approvals, $bn year to Feb 2020	52.6	-	19.7	45.4% of building approvals
Real value of building work done, $bn, year to Dec 2019	120.2	-4.1	-7.1	58.1% of all construction done
Real value of engineering work done, $bn, year to Dec 2019	84.6	-1.5	-8.0	-
Real value of all construction work done, $bn, year to Dec 2019	204.8	-3.0	-7.4	-
Real value-added output, $bn, year to Dec 2019	134.6	-2.3	-3.6	6.9% of total GDP
Number of employed people, ‘000, February 2020, trend	1,184.2	-0.3	3.3	9.1% of employed people

Source: National Accounts; Business Indicators; Labour Force Quarterly Detail; Building Approvals; Construction Work Done.

Total construction activity in 2019 was valued at $204.8 billion, in (inflation-adjusted) volume terms. Engineering construction was the largest sector (41.3% of all construction activity in 2019) followed by residential building (36.3%) and non-residential building (22.4%). See Table 1.2 and Chart 1.1.

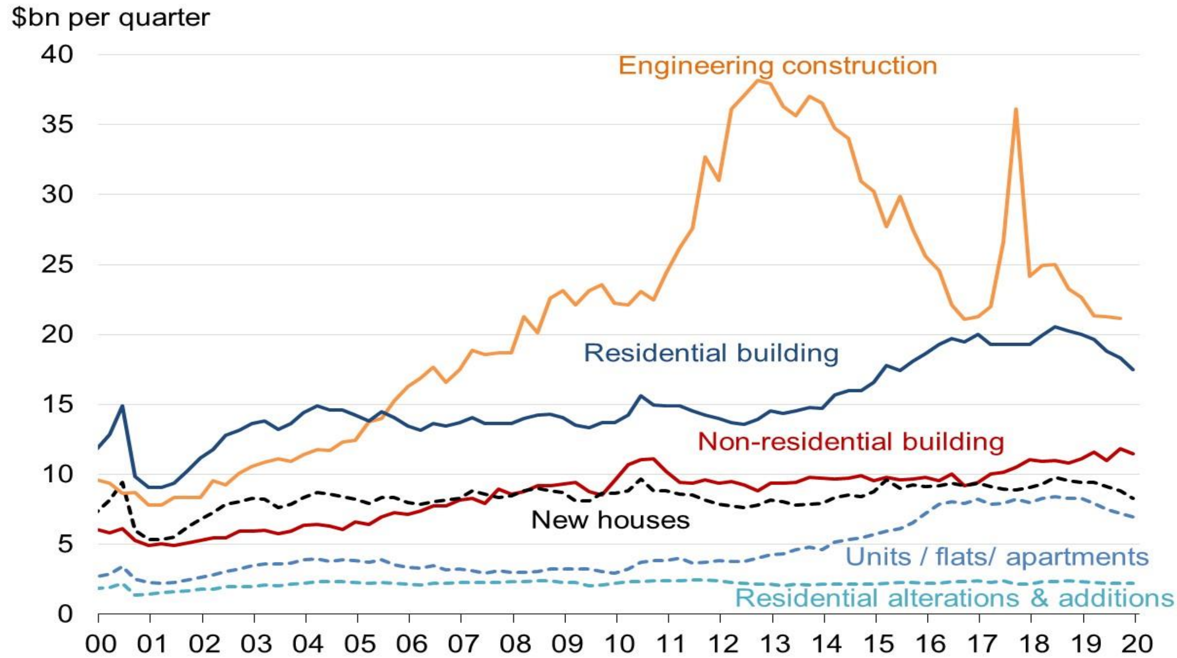
6 ABS, Labour Force, Australia, Detailed Quarterly, Nov 2019
7 ibid
8 ibid
9 ABS, Labour Force Australia, Detailed-Electronic Delivery, Jan 2020

Table 1.2 Value of Construction Work Done (real volumes)

Real Value (seasonally adjusted)	2017 $bn	2018 $bn	2019 $bn	Q4 2019 % change q/q	Q4 2019 % change y/y
Residential building	77.2	80.8	74.3	-4.6	-12.8
Non-residential building	41.8	43.8	45.9	-3.4	3.3
Total building	119.0	124.6	120.2	-4.4	-7.1
Engineering construction	108.9	95.9	84.6	-1.5	-8.0
For the private sector	73.7	57.5	50.6	-3.1	-13.3
For the public sector	35.2	38.4	34.0	1.0	0.7
Total construction	**227.9**	**220.6**	**204.8**	**-3.0**	**-7.4**
Shares of total (%)					
Residential building	33.9	36.6	36.3		
Non-residential building	18.3	19.9	22.4		
Total building	52.2	56.5	58.7		
Engineering construction	47.8	43.5	41.3		

Source: ABS Construction Work Done, Australia, Preliminary, Dec 2019.

Chart 1.1 Value of construction work done (real volumes), 2008-2019



Source: ABS Construction Work Done, Australia, Preliminary, Dec 2019.

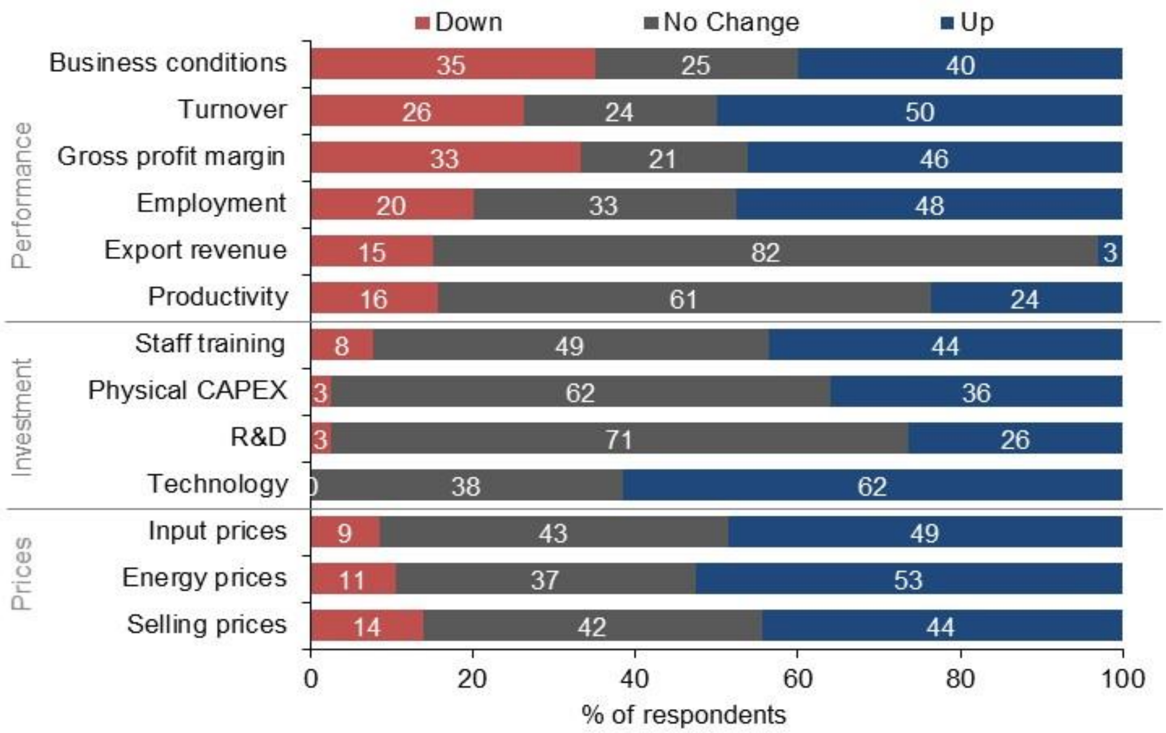
1.2 Business conditions in 2019

Reflecting soft demand conditions and broad-based pressures on workloads, 2019 proved to be a tough year for many construction businesses, with 40% of CEOs reporting improved conditions and 35% reporting deteriorating conditions (+5% net balance). See Chart 1.2. This was the lowest proportion reporting an improvement and the highest proportion reporting a deterioration since 2016. This is consistent with much weaker outcomes across most performance indicators in 2019. Underlining this weakness, just one half of all construction CEOs reported an improvement in turnover in 2019 compared with two-thirds in 2018. Further, less than half of all CEOs (46%) experienced higher profit margins in 2019; a significantly lower proportion than the 69% of CEO's that reported an increase in 2018. Construction CEO's maintained a cautious approach to labour hiring with 53% reporting either a decrease or no change to their level of employment in 2019. However, the net balance of CEO's reporting growth (+28%) was slightly above the previous year (+25%).

Cost pressures in the construction of building projects remained a significant headwind for construction businesses in 2019. Despite appearing to have eased somewhat during the year, costs associated with the delivery of building projects remained relatively high due to elevated energy costs and supplier price rises. This was linked to the relatively low Australian dollar and the strength in commodity prices over the year. Non-rural commodity prices (A$) increased by 3.2% in the year to December 2019 from an already high base. These cost pressures on businesses were reflected in a sizable 53% of CEOs reporting higher energy prices and 49% a lift in other input costs in 2019.

The combination of weaker demand for construction, increased competitive pressures and the need for construction businesses to undertake discounting has led to a moderation in output cost increases. Annual growth in output prices fell back to just 0.6% in the December quarter 2019 (Australian Bureau of Statistics) from a 3.2% rate of increase a year earlier. Across industry sectors, output prices in non-residential building and heavy and civil engineering showed a distinct easing, while house construction prices contracted on an annual basis. Additional industry headwinds stemmed from the slow roll-out of new infrastructure projects and a general lack of new tendering and quoting opportunities across the building and engineering construction markets. Soft economic growth and uncertainty about the outlook also had a dampening influence on client demand and slowed the progress of planned projects. As well, finance for major projects became more difficult to access for the industry's clients.

Chart 1.2 Construction business indicators in 2019: performance, investment and pricing



1.3 Business Performance Indicators in 2019

This year's Construction CEO survey of business prospects included six indicators of business performance in 2019. Businesses generally reported a worse year compared with 2018 and 2017, underlined by a marked easing indicated in general business conditions, turnover, gross profits and profitability:

Across the key business performance indicators:

1. **General business conditions** improved for 40% of businesses, deteriorated for 35% and remained the same for 25% of businesses in 2019, giving a 'net balance' of +5% (that is, the proportion of businesses reporting an improvement less those reporting a deterioration). This represented a net deterioration in conditions compared to 2018 and 2017, which saw stronger rates of improvement (net balance of +34% in 2018 and +60% in 2017).

2. **Business turnover** (nominal sales revenue) improved for 47% of businesses, deteriorated for 30% and remained the same for 24% of businesses in 2019, giving a 'net balance' of +24%. This was the lowest 'net balance' since 2016 (see Chart 1.3). For those experiencing an improvement in turnover, the average size of the increase was 15.2% (unweighted) in 2019. For those experiencing a deterioration in turnover, the average size of the decrease was 12.1% (unweighted) in 2019.

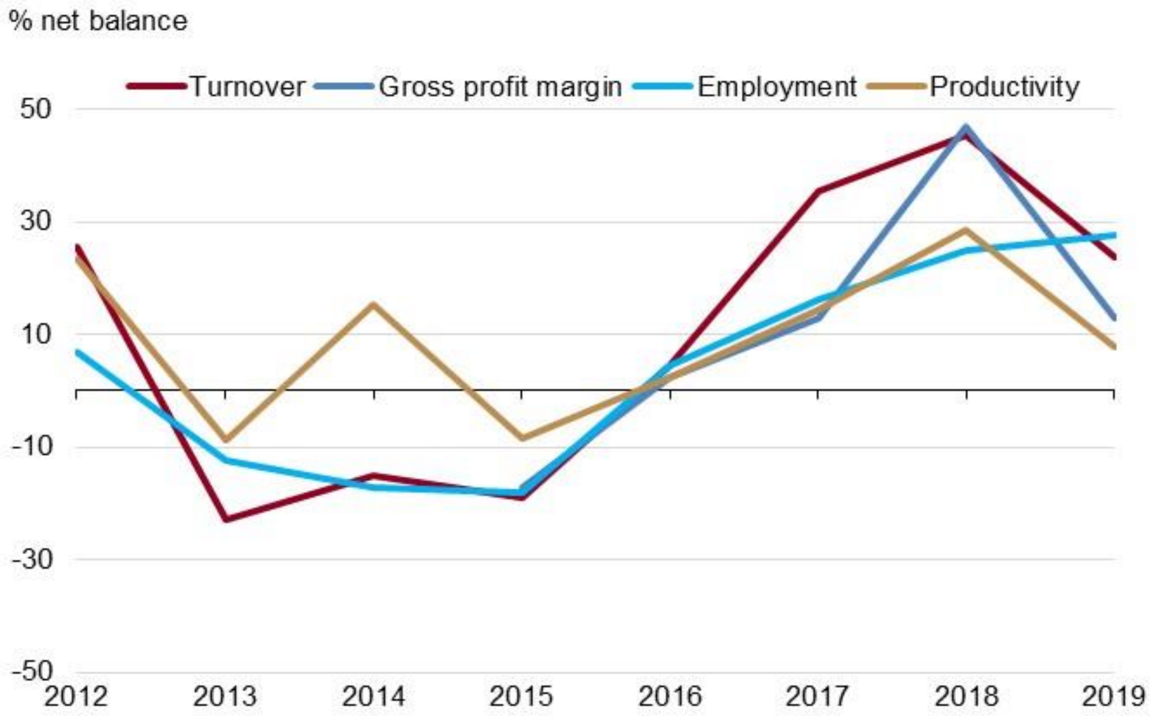
3. **Gross profit margins** improved for 46% of businesses, deteriorated for 33% and remained the same for 21% of businesses in 2019, giving a 'net balance' of +13%. This was the lowest 'net balance' since 2016 (see Chart 1.3). For those experiencing an improvement in profit margins, the average size of the increase was 25% (unweighted) in 2019. For those experiencing a deterioration in profit margins, the average size of the decrease was 29.6% (unweighted) in 2019. This net deterioration appears to have been driven by declines in turnover combined with steep rises in input prices, including energy input prices (see section 1.5 below).

4. **Employment** increased in 48% of businesses, declined in 20% and remained the same for 33% of businesses in 2019, giving a 'net balance' of +28% (see Chart 1.3). This indicates that more businesses increased employee numbers than cut them in 2019. It was also the only indicator to show a more positive reading in 2019 than in 2018. (see Chart 1.3). This is also in line with ABS labour force data that shows that total construction employment increased by 1.7% q/q and 2.7% p.a. to November 2019 (original data). A decline in building construction employment of 11.1% (reflecting the cyclical downturn in housing and apartment building activity over this period) was offset by employment gains in heavy and civil engineering construction (+9.6% p.a.) and construction services (+8.7% p.a.).

5. **Export revenue** increased for just 3% of businesses, declined in 15% and remained the same for 82% of businesses in 2019 (including those businesses that do not export anything and recorded their experience as 'no change'), giving a 'net balance' of -12% (Chart 1.3). This indicated a deterioration in overall exports in 2019 and pointed to the first deterioration in exports in two years and the weakest export performance outcome since 2015. For those experiencing an improvement in export revenue, the average size of the increase was 24.2% (unweighted) in 2019. For those experiencing a deterioration in export revenue, the average size of the decrease was 26.6% (unweighted) in 2019.

6. **Productivity** increased in 24% of businesses, declined in 16% and remained the same for 61% of businesses in 2019, giving a 'net balance' of +8% (Chart 1.3). The majority of businesses have reported no change in productivity in most years of the annual Ai Group CEO survey since 2012. The 2019 net balance reading was the lowest recorded over the past three years and is a likely by product of lower real value construction output in 2019.

Chart 1.3 Construction business indicators in 2019: performance, investment and pricing



1.4 Business Investment Indicators in 2019

On the investment spending side, a key development was the strong lift signalled in investment in new technology. The net balance of construction businesses investing in new technology increased from +36% in 2018 to a survey record high of +62% in 2019. This builds further on the upward trend seen in new technology investment since 2015 and is in line with the increasing scale, specialisation and sophistication of major construction projects. This has led construction businesses to increase their use of information technology and technological innovation in project design and construction. New technologies in construction assist in efficiencies and cost savings by simplifying and shortening construction tasks and facilitating increases in the amount of work that can be carried out off-site. In other areas of business investment, net spending on staff training, physical capital expenditure (CAPEX) or research and development in 2019 was also higher relative to one year earlier.

Across all business investment indicators:

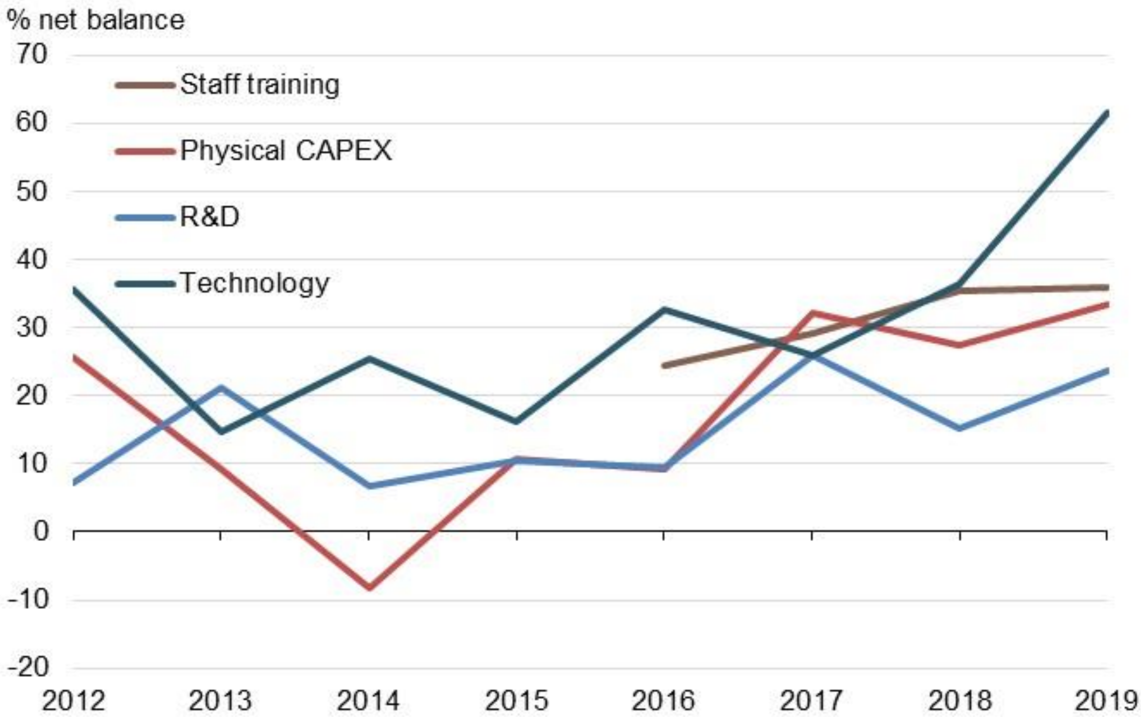
1. **Staff training expenditure** increased in 44% of businesses, declined in 8% and remained the same for 49% of businesses in 2019, giving a 'net balance' of +36% (Chart 1.4). This net balance outcome was up slightly relative to 2018 (+35%) and was the highest result since data was first collected on this indicator in 2016. The vast majority of businesses have reported no change or an increase in their staff training expenditure in all years since 2016, suggesting that staff training is regarded as a fixed and necessary cost item by the majority of construction businesses. This is in line with the frequent citing by construction businesses of labour supply constraints, largely due to difficulties in filling skilled vacancies. Skills formation and training is needed by the industry to assist in alleviating the shortage of skilled labour and to address the long-term imperatives of changes to work organisation, technology advancements, and the needs of clients. For those who increased their spending on staff training, the average size of the increase was 19.3% (unweighted) in 2019. For those cutting their spending on staff training, the average size of the decrease was 30.8% (unweighted) in 2019.

2. **Physical capital expenditure (CAPEX)** on buildings, plant and equipment increased in 36% of businesses, declined in 3% and remained the same for 62% of businesses in 2019, giving a 'net balance' of +33% (vs +27% in 2018). See Chart 1.4. It indicates that the momentum for higher spending in this area continued in 2019. A likely key driver is the solid pipeline of publicly funded infrastructure projects, which has added to demand pressures on capital investments to boost capacity and meet future growth requirements. Over the five years to 2022-23, around nearly $184 billion is planned to be invested by the State and Territory governments on infrastructure (Infrastructure Partnerships Australia). For those businesses increasing their spending on CAPEX, the average size of the increase was 71% (unweighted) in 2019. For those cutting their spending on CAPEX, the average size of the decrease was 32% (unweighted) in 2019.

3. **Research and development (R&D)** expenditure increased in 26% of businesses, declined in 3% and remained the same for 71% of businesses in 2019, giving a 'net balance' of +24% (vs +15% in 2018). See Chart 1.4. The majority of businesses have reported no change in their R&D expenditure (55% to 74%) in all years of the annual Ai Group CEO survey since 2012. This group includes businesses who spend nothing or very little on R&D in each year. For those who increased their spending on R&D, the average size of the increase was 36% (unweighted) in 2019. For those cutting their spending on R&D, the average size of the decrease was 39.8% (unweighted) in 2019.

4. **New technologies** expenditure increased in 62% of businesses, with no businesses reporting a decline and 56% reporting no change in their spending in 2019, giving a 'net balance' of +62% (vs 36% in 2018). See Chart 1.4. For those who increased their spending on technology, the average size of the increase was 26.6% (unweighted) in 2019. For those cutting their spending on technology, the average size of the decrease was 18.7% (unweighted) in 2019.

Chart 1.4 Business investment indicators, 2012-2019

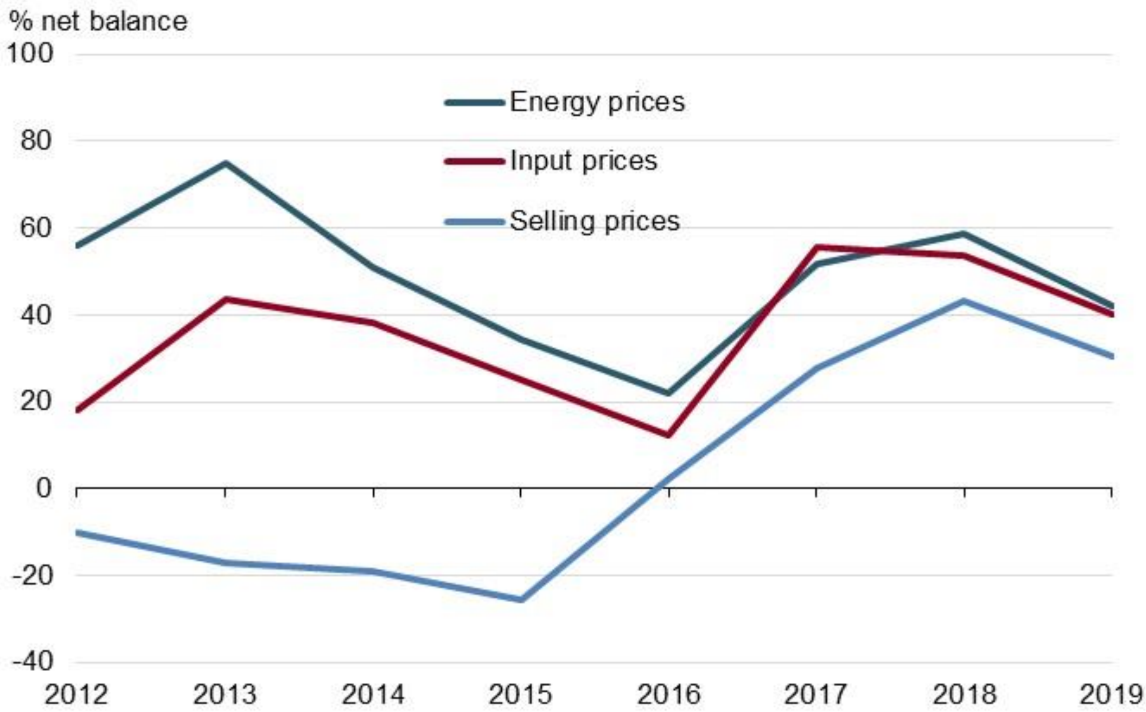


1.5 Business Pricing Indicators in 2019

This year's CEO survey of business prospects included three indicators of business pricing in 2019:

1. **Input prices** increased in 49% of businesses, declined in 9% and remained the same for 43% of businesses in 2019, giving a 'net balance' of +40% (Chart 1.5). For those who reported that their input prices increased, the average size of the increase was 8.2% (unweighted) in 2019. For those with a decrease in input prices, the average size of the decrease was 5.7% (unweighted) in 2019.

Chart 1.5 Business pricing indicators, 2012-2019



2. **Selling prices** increased in 44% of businesses, declined in 14% and remained the same for 42% of businesses in 2019, giving a 'net balance' of +31%. (Chart 1.5). For those who increased their selling prices, the average size of the increase was 4.6% (unweighted) in 2019. For those with a decrease in selling prices, the average size of the decrease was 5.3% (unweighted) in 2019.

3. **Energy prices** increased in 53% of businesses, declined in 11% and remained the same for 37% of businesses in 2019, giving a 'net balance' of +42%. (Chart 1.5). For those who reported that their energy input prices increased, the average size of the increase was 23.8% (unweighted) in 2019. For those with a decrease in input prices, the average size of the decrease was 24.5% (unweighted) in 2019.

2. AUSTRALIAN CONSTRUCTION OUTLOOK IN 2020

Moving into 2020, Ai Group's Australian Performance of Construction Index (Australian PCI®[10]) points to a continued overall decline in construction industry conditions in the first two months of the year. This reflects the persistence of subdued demand and contracting activity levels at the aggregate industry level. The early and significant impacts of the coronavirus (COVID-19) were also noted by construction businesses in February, particularly with respect to the adverse impact on supplies of imported materials from China.There are positive signs that the fall in approvals from 2018's boom-time peaks may be bottoming out for the housing construction sector. However, the broader outlook remains highly uncertain amid on-going falls in apartment approvals, a mixed and volatile non-residential building sector and the slow roll out of major infrastructure projects. The escalation of the COVID-19 epidemic will also be a major disruptor of activity on a wide industry front.

Across the **residential construction** sectors, the total number of new dwelling units approved (houses and apartments) fell to 13,016 units, down by 15.3% m/m and 1.3% p.a. (seasonally adjusted) in January 2020. Within this total, the number of houses approved each month hit a recent trough in Q3 of 2019 and has since been gradually improving, with a rise of 0.5% m/m in January. Respondents to the Ai Group Australian PCI®[11] are reporting that buyer demand appears to be responding to low interest rates, an easing in bank lending restrictions and stronger first home buyer activity. This has flowed through to an improvement in the house building sector with the sector's sub-index registering 55.0 points (trend), in February; its highest rate in close to two years. In contrast, the number of private sector multi-dwelling approvals (mainly apartments) was down by 35.2% m/m and 15.2% p.a. in January with slow investor and foreign buyer demand, over supplied markets and building quality issues continuing to weigh on activity. This is likely to result in further falls in the total value of residential work in the pipeline in 2020. As at Q3 2019, residential work in the pipeline was down 5.6% q/q and 16.5% p.a. (see Table 2.1).

Table 2.1 Nominal value of building activity in the pipeline in Q3 2019

Original, nominal	Value of work yet to be done			Value of work not yet commenced			Value of work in the pipeline		
	$bn	q/q	p.a.	$bn	q/q	p.a.	$bn	q/q	p.a.
Residential	37.5	-6.1	-17.0	11.2	-3.9	-14.6	48.7	-5.6	-16.5
New houses	10.7	2.4	-10.8	2.9	-0.6	-14.7	13.5	2.0	11.7
New apartments	24.1	-8.2	-20.8	7.3	-5.3	-16.9	31.4	-7.5	-19.9
Alterations/additions	2.8	-1.4	-2.8	1.0	-2.3	8.8	3.8	-1.6	0.0
Non-residential	32.3	3.1	5.6	8.6	3.3	14.0	40.9	3.2	7.3
Total	**69.8**	**-2.1**	**-7.9**	**19.8**	**-0.9**	**-4.2**	**89.6**	**-1.8**	**-7.1**

Source: ABS, Building Activity

In terms of **non-residential building construction**, conditions remain mixed across the key industrial

[10] Australian Industry Group, Performance of Construction Index, www.aigroup.com.au/resourcecentre/economics/

[11] ibid

and commercial property categories. On a positive note, the value of non-residential building approvals grew by 5.2% m/m and 23.9% p.a. in January, taking the total to $4.6bn in the month and a record high of $51.5bn over the year (Australian Bureau of Statistics). This annual level includes a record high value for monthly approvals of $6.4bn in August 2019. Approvals to January 2020 showed notable growth for offices (up 9.9% p.a. to $9.3bn), wholesale trade facilities (up 16.8% p.a. to $6.6bn), industrial warehouses (up 38% to $5.3bn), healthcare facilities (up 77% to $4.9bn) and entertainment facilities (up 55% to $4.5bn). State Government spending initiatives are also providing a boost to education and skills infrastructure. Developments in these project categories are likely to provide key support to the non-residential sector in 2020. Work in the pipeline was valued at $40.9 billion in Q4 2019; a rise of 7.3% from Q4 2018 (see Table 2.1).

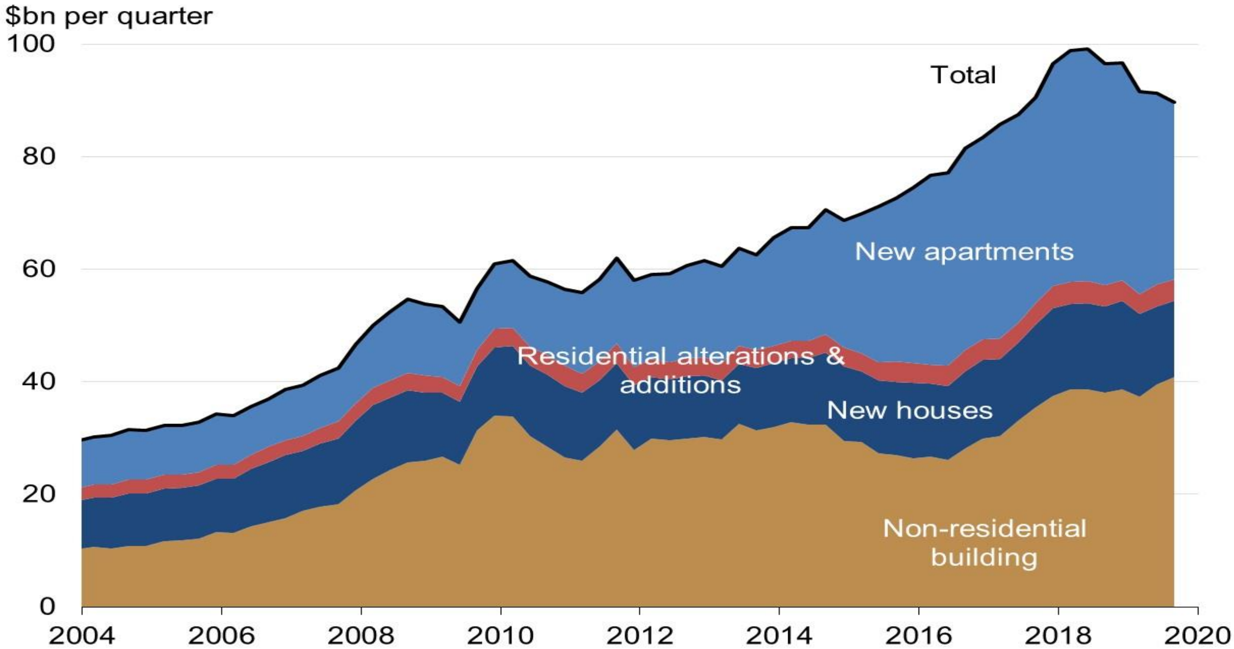
Excluding the resources sector (mining, oil, pipelines and downstream mineral processing), **engineering construction** work to be done by the private sector (that is, work done by the private sector for either private sector or public sector clients) stood at a record $43.6 billion as of Q3 2019. (see Table 2.2). The strength of this pipeline of work outstanding on non-mining infrastructure is being boosted by near-record levels of outstanding work on roads (such as highways, city bypasses etc.) and rail projects (see Chart 2.2), centred but not confined to New South Wales and Victoria. This suggests that there is a significant amount of highway upgrades, city bypasses and "metro" rail systems to be constructed, especially in the capital cities. While governments have added major projects to the investment pipeline and others are under active consideration, respondents to Ai Group's Australian PCI® have noted that stronger conditions are continuing to be constrained by delays in government contracts for large infrastructure projects and a decline in new tender opportunities.

Table 2.2 Value of engineering construction in the pipeline in Q3 2019

Original, current prices	Value of work yet to be done		
	$bn	q/q	p.a.
Infrastructure - non-mining	43.6	0.6	15.1
Roads, bridges, ports	18.1	-7.8	6.8
Rail	14.7	24.1	35.1
Utilities	9.0	-9.9	9.1
Other	0.9	12.0	17.4
Mining & heavy industry	26.8	-5.3	27.8
Total engineering construction	**70.4**	**-1.7**	**19.6**

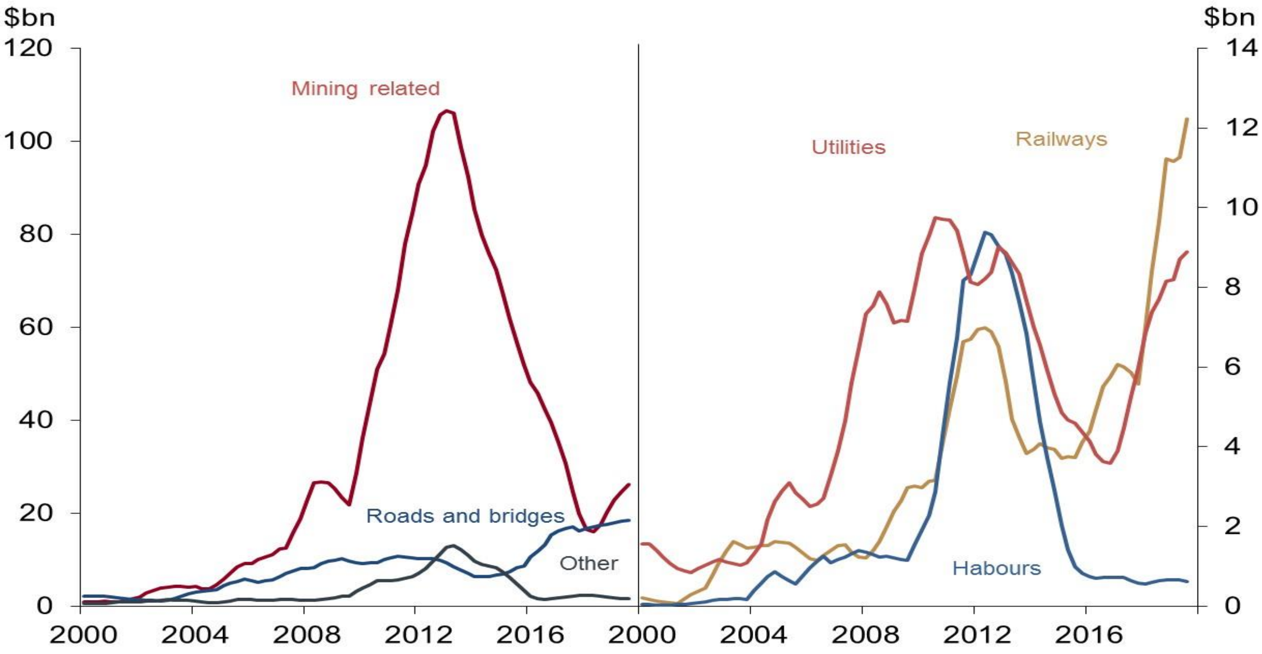
Source: ABS, Engineering Construction Activity, Sep 2019,

Chart 2.1: Nominal value* of building activity in the pipeline in Q3 2019



Source: ABS, Building Activity, Sep 2019

Chart 2.2: Engineering construction work yet to be done by the private sector per year, nominal

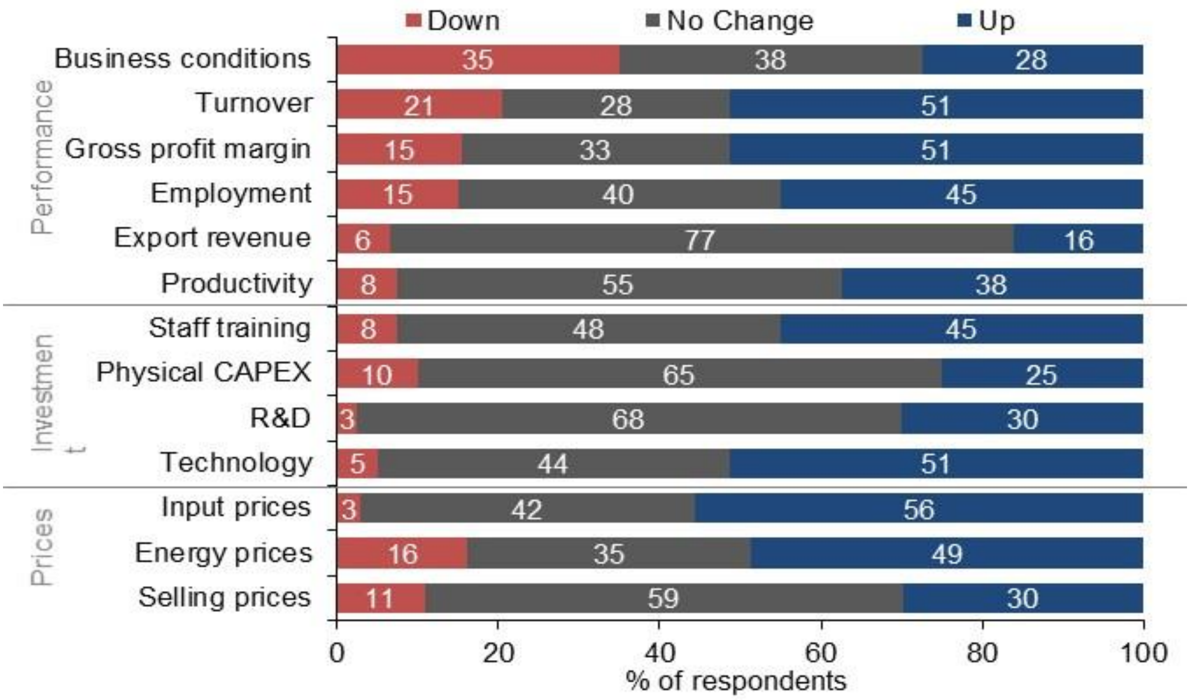


Note: The scale on the left axis is ten times the scale on the right axis. 'Other' includes pipelines, recreation, telecommunications, other heavy industry and other. Source: ABS, Engineering Construction Activity, Sep 2019

2.1 Business expectations in 2020

Aligning with the on-going contraction in overall industry conditions at the start of 2019 (Ai Group Australian PCI®), construction CEO's were negative in their assessment of business conditions in 2020, even before the outbreak of COVID-19. Whilst these expectations have undoubtedly been downgraded over the first quarter of this year, they are a starting point to assessing the full spectrum of challenges facing the industry. In total, 38% of businesses expect no material change in their business conditions in 2020 and 35% expect a deterioration. A relatively low 28% expect conditions to improve in 2020. The resulting net balance of -8% is down from +36% of CEO's who expected improving conditions in 2020 (see Chart 2.3). This is the first negative assessment of business conditions since 2016. On a "net balance" basis, construction CEOs expectations for turnover, profit margins, employment, and productivity are all lower for 2020 than in any year since 2017 (See Chart 2.5). More positively, the proportion of businesses planning to increase their spending on physical CAPEX, R&D and new technologies is higher for 2020 than it was in 2019.

Chart 2.3 Construction business expectations for 2020*



** 'Net balance' is the proportion of all survey respondents that improved minus the proportion that deteriorated. Aggregate results include respondents from all surveyed industries and are weighted by ABS estimates of output from each industry.*

2.2 Business performance expectations in 2020

The negative assessment of business conditions in 2020 is reflected across a range of key performance indicators that show that the outlook is not as strong as expected one year earlier for 2019.

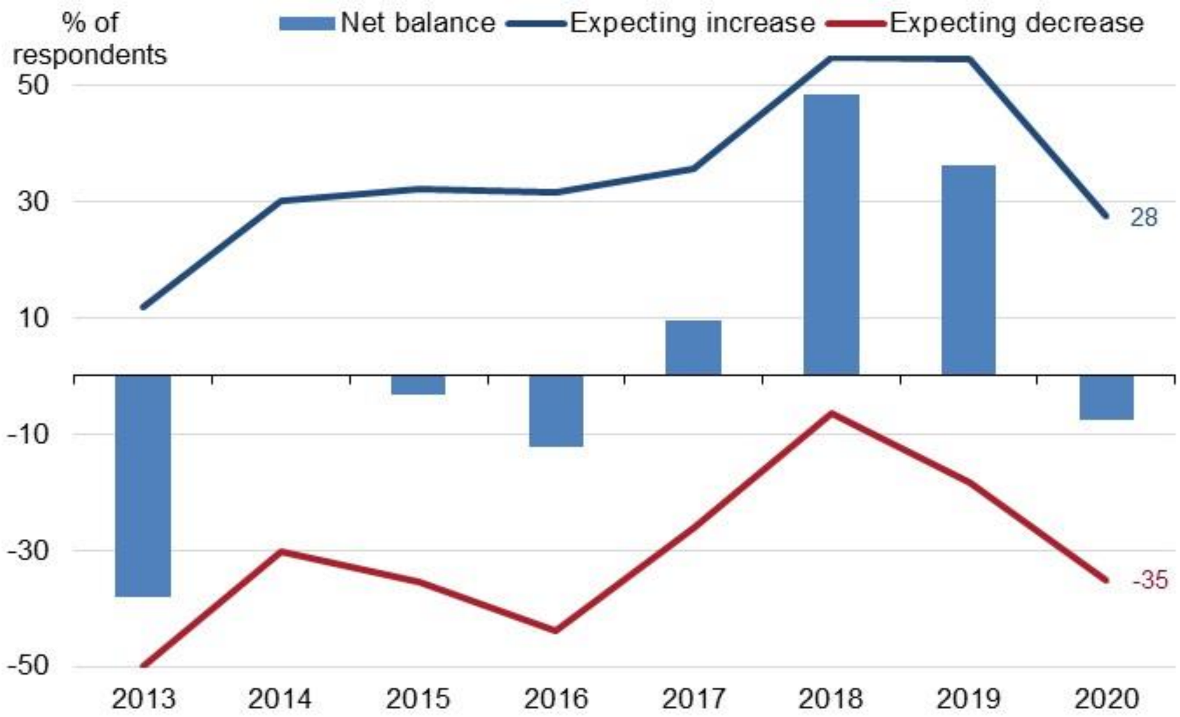
1. **Business turnover** (nominal sales revenue) is expected to improve for 51% of businesses, deteriorate for 21% and remain the same for 28% of businesses in 2020, giving a 'net balance' of +31%. This is the lowest 'net balance' for this indicator since 2016 (Chart 2.3). The proportion of businesses expecting their turnover to decrease in 2020 (21%) is the highest over the past four years.

2. **Gross profit margins** have a slightly more positive outlook than nominal turnover - they are expected to improve for 51% of businesses, deteriorate for 15% and remain the same for 33% of businesses in 2020, giving a 'net balance' of +36%. This is the lowest 'net balance' for this indicator since at least 2016, when this data series commenced (Chart 2.3). The higher expectation of margin growth compared with turnover growth in 2020 may be related to some easing in energy and other input price rises in 2020 compared with expectations for 2019.

3. **Employment** is expected to increase in 45% of businesses, decrease in 15% and remain the same for 40% of businesses in 2020, giving a 'net balance' of +30%. This 'net balance' score for 2020 is well down from employment expectations for 2019 (net balance of +55%), with more businesses planning to decrease their staff (and fewer plan to cut staff) than was the case one year earlier (Chart 2.3).

4. **Export revenue** is expected to increase in 16% of businesses, decrease in 6% and remain the same for 77% of businesses in 2020 (but including many industries that do not export directly), giving a 'net balance' of +10%. This 'net balance' score for 2020 is down from export expectations for 2019, suggesting that less businesses anticipate export growth than was the case one year earlier (Chart 2.3).

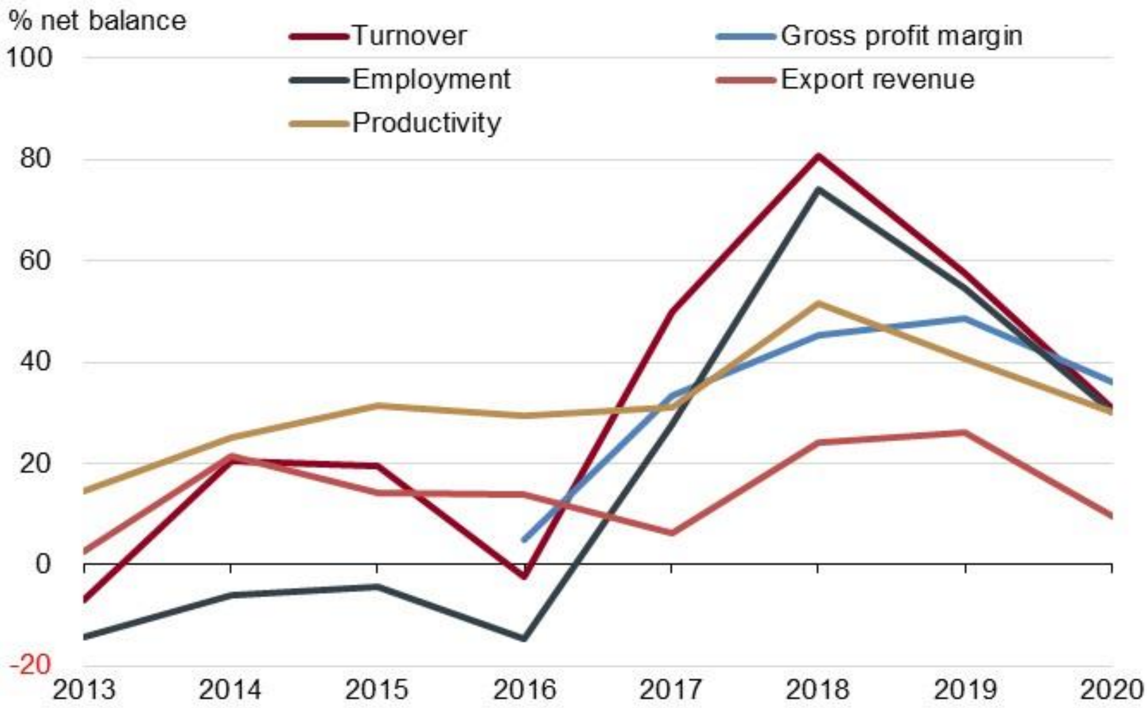
Chart 2.4 Construction change in business indicators*, 2019



** 'Net balance' is the proportion of all survey respondents that improved minus the proportion that deteriorated. Aggregate results include respondents from all surveyed industries and are weighted by ABS estimates of output from each industry.*

5. **Productivity** is expected to improve for 38% of businesses, deteriorate for 8% and remain the same for 55% of businesses in 2020, giving a 'net balance' of +30%. This is the lowest 'net balance' for this indicator since 2017 (Chart 2.3). This indicates that more businesses are finding it difficult to improve their business productivity, which could possibly reflect the lower rate of increase in staff training expected in 2020 relative to expectations over the previous two years. It underscores the need to support skills development of the workforce and productivity improvement more directly and effectively into the future.

Chart 2.5 Expected business performance indicators*, 2013-2020



** 'Net balance' is the proportion of all survey respondents that improved minus the proportion that deteriorated. Aggregate results include respondents from all surveyed industries and are weighted by ABS estimates of output from each industry.*

2.3 Business Investment expectations for 2020

This year's survey results indicate that most construction CEOs plan to maintain or increase their spending on all types of business investment in 2020. The proportions of businesses planning to increase various types of investment are also predominantly higher than those reported from 2016 to 2019.

1. **Staff training expenditure** is expected to increase in 45% of businesses, decrease in 8% and remain the same in 48% of businesses in 2020, giving a 'net balance' of +38%. This is the lowest 'net balance' for this indicator since 2018 (Chart 2.6). This increase in cost cutting appears to be in response to weaker turnover and profitability expectations for 2020, resulting in the likelihood of lower funds being available for training and investment for those businesses.

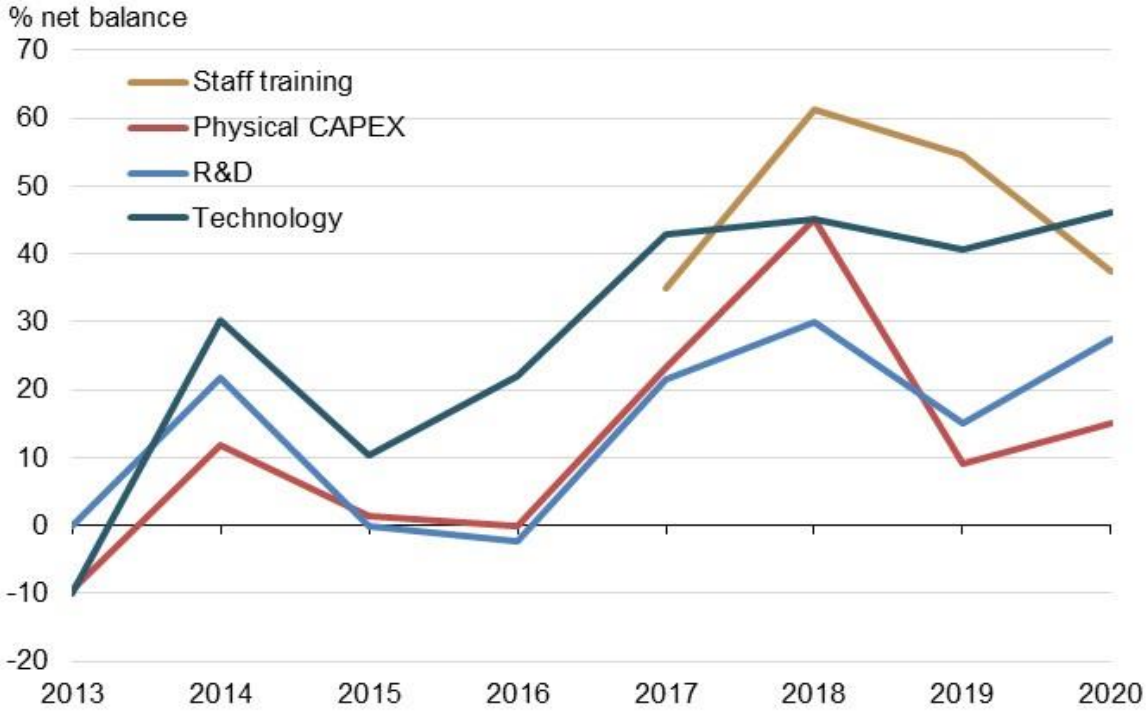
2. **Physical capital expenditure (CAPEX)** on buildings, plant and equipment is expected to increase in 25% of businesses, decrease in 10% and remain the same in 65% of businesses in 2020, giving a 'net balance' of +15%. This is up from a 'net balance' result of +9% in 2019 but is well below expectations for this indicator in 2018 and 2017. (Chart 2.6).

3. **Research and development (R&D)** expenditure is expected to increase in 30% of businesses, decrease in 3% and remain the same in 68% of businesses in 2020 (including businesses that do not currently undertake any R&D), giving a 'net balance' of +28%. This is the second highest 'net balance' for this indicator since 2013 (Chart 2.6). More businesses expect to increase their R&D spending in 2020 than in any year since 2013 other than for 2018. Less businesses expect to cut their R&D spending in 2020 than in any year since 2017. This indicates that the recent trend toward higher R&D by construction businesses is likely to continue into 2020, a likely reflection of the need for structural design enhancements and a focus on organisational/managerial innovation.

4. **New technologies expenditure** is expected to increase in 51% of businesses, decrease in 5% and remain the same in 44% of businesses in 2020, giving a 'net balance' of +46%. This is the

highest ‘net balance’ result since this data series commenced in 2013 (Chart 2.6). More businesses (51% of businesses) expect to increase their spending on new technologies in 2020 than in any year since 2013 other than in 2018 (52%), and fewer businesses (5% of businesses) expect to cut this type of spending in 2020 than in any year since 2013 with the exception of 2017 (5%).

Chart 2.6 Expected construction business investment indicators*, 2013-2020



** ‘Net balance’ is the proportion of all survey respondents that improved minus the proportion that deteriorated. Aggregate results include respondents from all surveyed industries and are weighted by ABS estimates of output from each industry.*

2.4 Business pricing expectations in 2020

The majority of construction CEOs expect prices to rise for their inputs in 2020. However, the ability of businesses to recover costs through price rises will be restricted due to a softening in business conditions and strong competition for available work. Some 70% of construction businesses do not plan to increase their selling prices in 2020. This will place continued pressures on the profit margins of businesses in the industry.

According to the indicators of business pricing expectations in 2020:

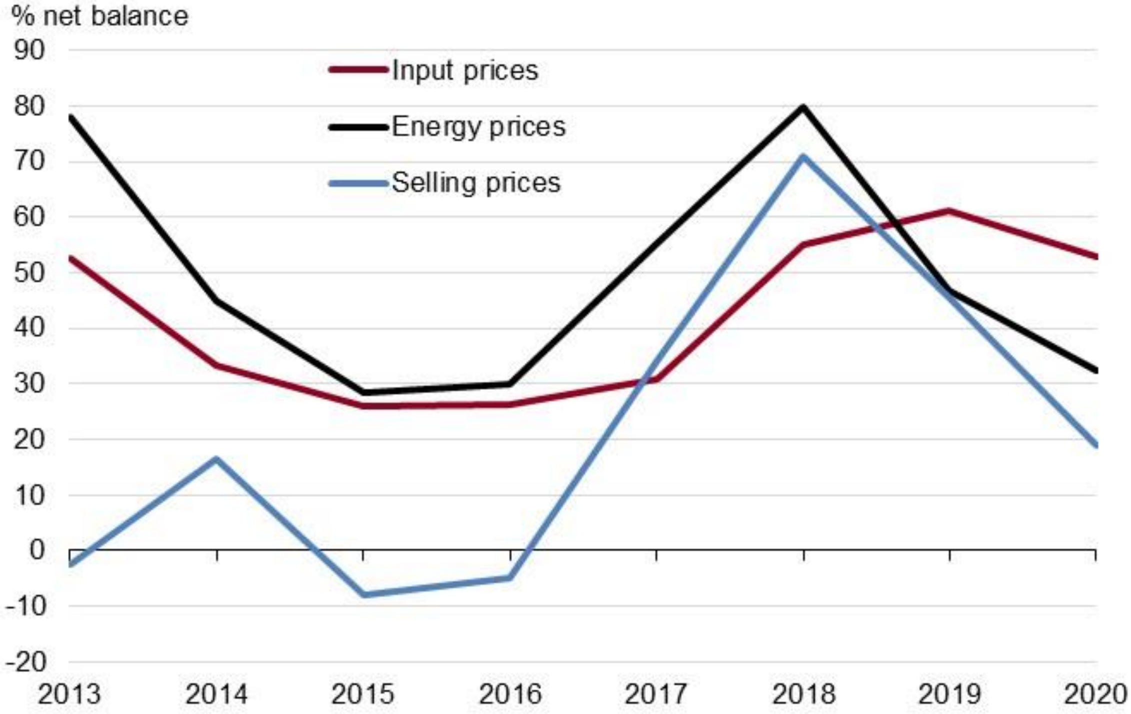
1. **Input prices** are expected to increase for 56% of businesses, decrease for 3% and remain the same in 42% of businesses in 2020, giving a ‘net balance’ of +55% (Chart 2.7).This is a lower ‘net balance’ score than in 2019 but remains relatively elevated, with the majority of businesses clearly expecting further price increases for their inputs in 2020.

2. **Energy prices** are expected to increase further in 2020 for 49% of businesses, decrease for 16% and remain the same in 35% of businesses in 2020, giving a ‘net balance’ of +32% (Chart 2.7).This is a lower ‘net balance’ score than in 2017- 2019 but remains relatively elevated compared with previous years.

3. **Selling prices** are expected to be raised by 30% of businesses, decrease for 11% and remain the same in 59% of businesses in 2020, giving a ‘net balance’ of +19%. (Chart 2.7). This is a lower ‘net balance’ score than in 2017-2019, highlighting the increasing cost recovery pricing

constraints expected by construction businesses.

Chart 2.7 Expected construction business pricing indicators*, 2013-2020



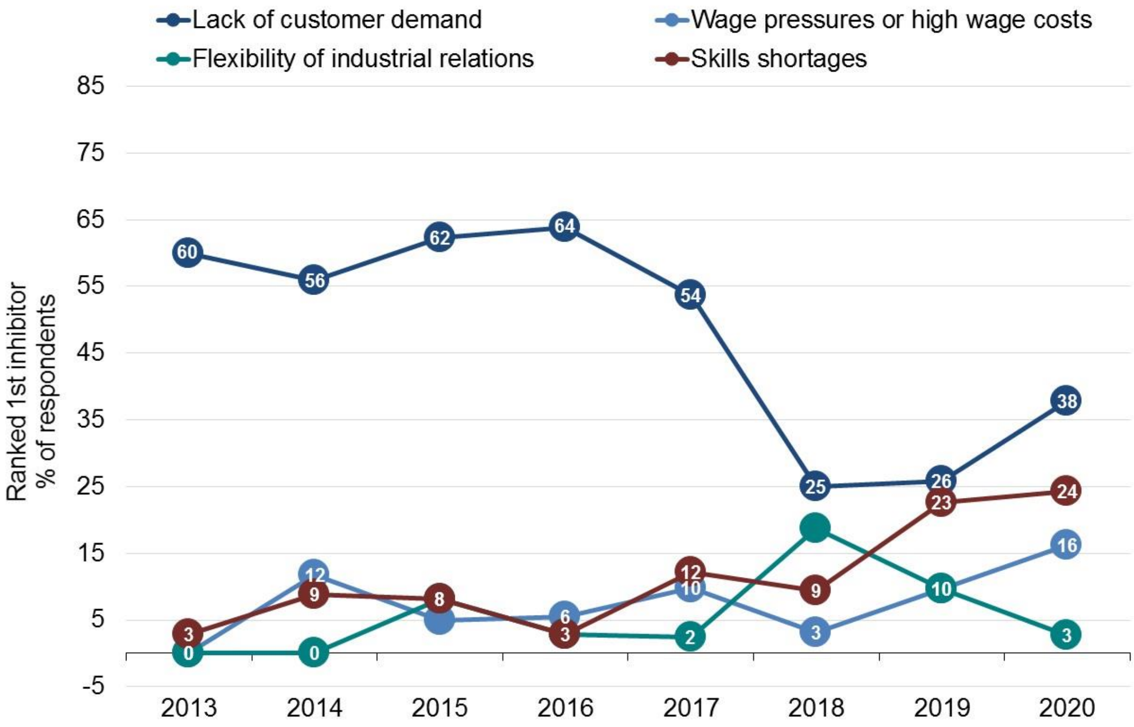
** 'Net balance' is the proportion of all survey respondents that improved minus the proportion that deteriorated. Aggregate results include respondents from all surveyed industries and are weighted by ABS estimates of output from each industry.*

3. Business Inhibitors, Plans and Strategies in 2020

3.1 Inhibitors to growth in 2020

When asked which factors would provide the biggest challenge to business in 2020 (prior to the COVID-19 outbreak), ‘lack of customer demand’ was identified by over a third of construction CEO’s (38%) as posing the most significant constraint on their business growth, up from 26% in the previous year (see Chart 3.1). However, the proportion has fallen from over half of respondents in 2017 (54%) and close to two-thirds in 2016 (64%).

Chart 3.1 Expected inhibitors to business growth*, 2015-2019



**Percentage of respondents who ranked each factor first in each year, out of a list of possible inhibitors.*

The construction sector is one of the top five industries contributing to new employment in Australia. The sector added 27,000 new jobs in the year to November 2019, thereby maintaining the need for specific skills in shortage. The strong pipeline of transport infrastructure and utilities projects will compound the difficulties of construction businesses in meeting the skill needs central to the requirements of major constructors. Reflecting these circumstances, the second most pressing concern for construction CEOs is skill shortages with 24% of businesses nominating this as their top concern heading into 2020 (Chart 3.1).This is up from 22% of CEOs identifying skill shortages as an expected impediment for 2019 and is well above the proportion in 2016 of 3%.

Wage pressures or high wage costs increased to 16% of construction CEO’s noting it as a primary inhibitor to business growth in 2020 (Chart 3.1). Wages in approved EBAs in the construction industry rose by an average of 3.9% in Q3 2019 which was above the average of 2.7% for all industries, according to the Department of Education, Employment and Workplace Relations’ Federal Enterprise Bargaining Trends report. The prevalence of skill shortages across the industry and the strong competition among contractors for the same pool of skilled labour, particularly in the major project work areas, is contributing to these upward pressures on wages.

Other constraining factors for business in 2020 included competition from imports (8% of CEOs), Government regulation (5%), exchange rate volatility (5%) and flexibility of industrial relations (2%).

3.2 Planning and Strategy

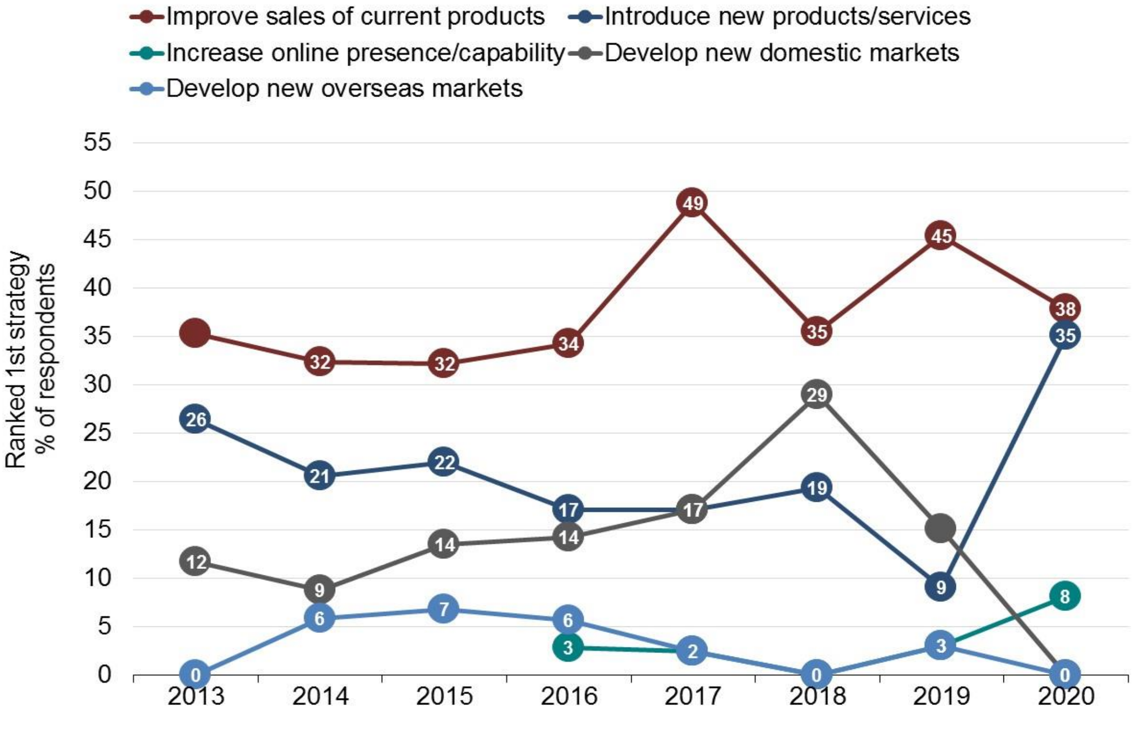
In response to the need for adjusting business strategies to address priority issues (aside from COVID-19) and find new ways to allow increased growth potential to be achieved, 53% of construction CEO's said they had revised their "business model, plan or strategy" for 2020. This was up from 42% in 2019. Just 8% of CEOs said they had no strategy for the year ahead, in line with the proportion in 2019 and 2018, but well below the 17% proportion in 2017.

Construction CEO's plan to strongly focus on improving sales of their current products and services. This was seen as a primary strategy in 2020 for 38% of respondents, and although down from 46% in the previous year, it remained high and generally in line with the intentions of CEO's between 2013 and 2018 (Chart 3.2). This future priority of CEO's aligns with the marketing and business development plans of a relatively high 8% of CEO's who rank increasing their on-line presence as their top business strategy. This was the highest proportion of respondents nominating this as their primary strategy since 2013. In 2020, 5% of CEO's also plan to increase their advertising/marketing.

The CEO survey also highlights a strong shift in planning in 2020 towards introducing new products to the market. This is the foremost plan for 35% of constructors in 2020, and well above the 9% of CEO's who ranked this as their priority strategy in 2019 (Chart 3.2). It is also the highest proportion over the eight years to 2020.

Downsizing or reducing operational costs is a priority for more businesses in 2020 than it has been in the past three years (13%). This reflects the general softening in business conditions expected in 2020 that has led to more emphasis on containing costs as more CEO's anticipate higher levels of competition locally in securing new contracts.

Chart 3.2 Top strategies for business growth*, 2013-2020



*****_Percentage of respondents who ranked each factor first in each year, out of a list of possible inhibitors._

APPENDIX: NATIONAL CEO SURVEY BUSINESS PROSPECTS IN 2020

Responses were received from the CEOs of 252 private-sector businesses across Australia in October and November 2019. Together, these businesses employed 109,000 people (436 people in each business on average) and had an aggregate annual turnover of around $83 billion in 2019.

All Australian states and all major non-farm private-sector industries are represented in this year's CEO survey. The manufacturing sector contributed the highest proportion of respondents (62%). Manufacturing's share of this sample is higher than its share of national production (5.6%). Victoria was somewhat over-represented in the sample, relative to other states.

The data presented in the summary section of this report were weighted by industry (based on ABS estimates of their value-added contribution to GDP in 2018-19) in order to adjust for these characteristics of the sample.

The services sectors represented in this year's sample include: IT, communications and media services; transport, post and storage services; wholesale trade; retail trade; finance and insurance; real estate and property services; professional services; administrative services; health and welfare services; education; hospitality (food and accommodation services); arts and recreation services; and personal services.

CEO Survey participants: Business Prospects 2020	Manufacturing	Services	Construction & mining services	Total
Number of survey respondents	155	57	40	252
% of survey respondents	61.5	22.6	15.9	100
Value-added output, % of GDP, 2018-19 **	5.6	53.8	7.7	67.1
Industry weighting (%)	8.3	80.2	11.5	100.0

*** Industries do not sum to 100% of GDP due to the exclusion of utilities (2.5% of GDP), public administration and safety services (5.2%), agriculture (2.2%), mining other than mining services (8.1% of GDP), ownership of dwellings (8.3% of GDP, taxes less subsidies on products (6.6% of GDP) and other additional statistical items that are included in GDP.*

3. In which industry does your business mainly operate? *Please tick one box only, for your main activity*

☐ Mining and/or mining services (e.g. exploration, mining engineering or mining processing)

☐ Manufacturing (e.g. making food, beverages, chemicals, equipment, building materials, metals, textiles, furniture)

☐ Construction (e.g. engineering, infrastructure, commercial, residential construction or contracting)

☐ Services (e.g. retail, wholesale, transport, professions, real estate, IT, media, health, education, cafes, hotels)

☐ Other industry (please specify): ______________________________

4. What was your approximate annual turnover in 2019? $ ______________

5. How many fulltime equivalent (FTE) people did you employ in 2019? ________ FTE people

6. By what percentage did the following factors change in your business in 2019, compared to 2018?

Please complete one box only for each of:	Down *(write in %)*	No change *(tick if applicable)*	Up *(write in %)*
Annual turnover	________ %	☐	________ %
Gross profit margin	________ %	☐	________ %
Number of employees	________ %	☐	________ %
Spending on staff training & development	________ %	☐	________ %
Spending on physical capital (e.g. buildings)	________ %	☐	________ %
Spending on research & development	________ %	☐	________ %
Spending on new technology	________ %	☐	________ %
Export income	________ %	☐	________ %
Input prices	________ %	☐	________ %
Energy prices (inputs)	________ %	☐	________ %
Selling prices	________ %	☐	________ %
Labour productivity (output per hour worked)	________ %	☐	________ %
General business conditions in your sector	☐ Worse	☐ No change	☐ Better

7. Did you change any parts of your business model, plan or strategies in 2019 due to business conditions?

☐ Yes ☐ No ☐ we don’t have a formal business model, plan or strategy

If yes, what did you change in 2019? ______________________________

8. If exporting, what was the total value of exports for your business in 2019? $ ____________

9. Approximately what percentage of all your inputs (by value) were imported in 2019? _____%

10. If your business was EXPORTING in 2019 or planning to export in 2020, at what AUD/USD exchange rate do your exports become uncompetitive with products from other countries? ________US cents

11. If your business was competing with IMPORTS in the Australian market in 2019 or expecting to compete against imports in 2020, at what AUD/USD exchange rate do your products become uncompetitive with imported products from other countries? ________US cents

12. Does your business expect any difficulty in finding and/or retaining skilled labour in 2020?

☐ Yes ☐ No ☐ Don’t know / Not applicable to my business

If yes, in which occupations do you expect difficulties in 2020? *Please list all occupations that apply*

____

13. Do you expect the following factors to change in your business in 2020, compared to 2019?			
Please tick one box only for each of:	Down	No change	Up
Annual turnover	☐	☐	☐
Gross profit margin	☐	☐	☐
Number of employees	☐	☐	☐
Spending on staff training & development	☐	☐	☐
Spending on physical capital (e.g. buildings)	☐	☐	☐
Spending on research & development	☐	☐	☐
Spending on new technology	☐	☐	☐
Export income	☐	☐	☐
Input prices	☐	☐	☐
Energy prices (inputs)	☐	☐	☐
Selling prices	☐	☐	☐
Labour productivity (output per hour worked)	☐	☐	☐
General business conditions in your sector	☐	☐	☐

14. What factors do you expect will inhibit your business growth in 2020? *Please rank all factors that will inhibit your business, starting with 1 as your most important inhibiting factor*	
Lack of customer demand _______	Government regulatory burden _______
High and/or variable exchange rate _______	Competition from imports / internet sellers _______
Flexibility of industrial relations _______	Wage pressures or high wage costs _______
Skills shortages _______	Other (please specify): ____________________________

15. What type of infrastructure provision would improve your business efficiency in 2020? *Please rank all types of infrastructure that would improve your business, starting with 1 as your most important*	
Freight transport (roads, rail, ports, airports) _______	Electricity networks or supplies _______
Employee transport (roads, public transport) _______	Gas networks or supplies _______
Broadband and telecoms _______	Waste and recycling services _______
Water networks and supplies	Other (please specify): ________________ _______

16. What key growth strategies do you plan to implement in your business during 2020? *Please rank all relevant strategies, starting with 1 as your most important strategy*	
Introduce new products/services _______	Downsize / reduce operational costs _______
Improve sales of current products/services _______	Increase online presence / capability _______
Develop new domestic markets _______	Increase advertising / marketing _______
Develop new overseas markets	Other (please specify):___________________ _______

17. What are your highest priorities for your business investment spending in 2020? *Please rank all types of investment that you are considering for 2020, starting with 1 as your most important area of investment*	
Staff training and development __________	Research and development ____________
Physical capital (e.g. buildings) __________	Information and communication technologies (ICT) __________
Equipment (e.g. new machinery) __________	Other (please specify): ____________

18. What factors will influence your business investment spending decisions in 2020? *Please rank all factors that influence your investment decisions, starting with 1 as your most important factor*	
Cost of funding (e.g. borrowing costs) _______	Expected payback period _______
Access to funding (e.g. lending criteria)	Expected business expansion or innovation _______
Expected rate of return (e.g. 'hurdle' rates) _______	Expected business cost reduction _______
Other (please specify): ____ _______	

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