CIA
CHEMICAL INDUSTRIES ASSOCIATION

MAY 2023

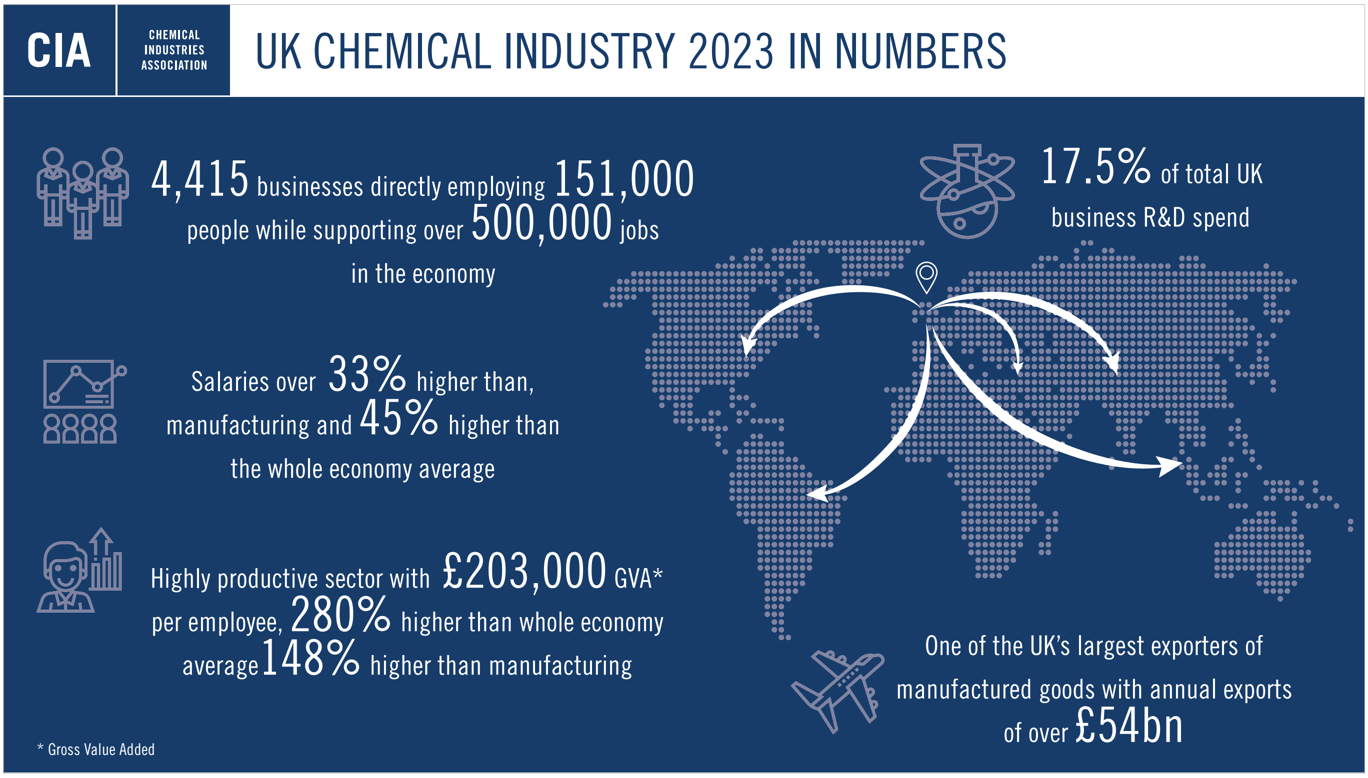
CIA Economic Report
First Quarter 2023

WWW.CIA.ORG.UK

@SEE_CHEM_BUS

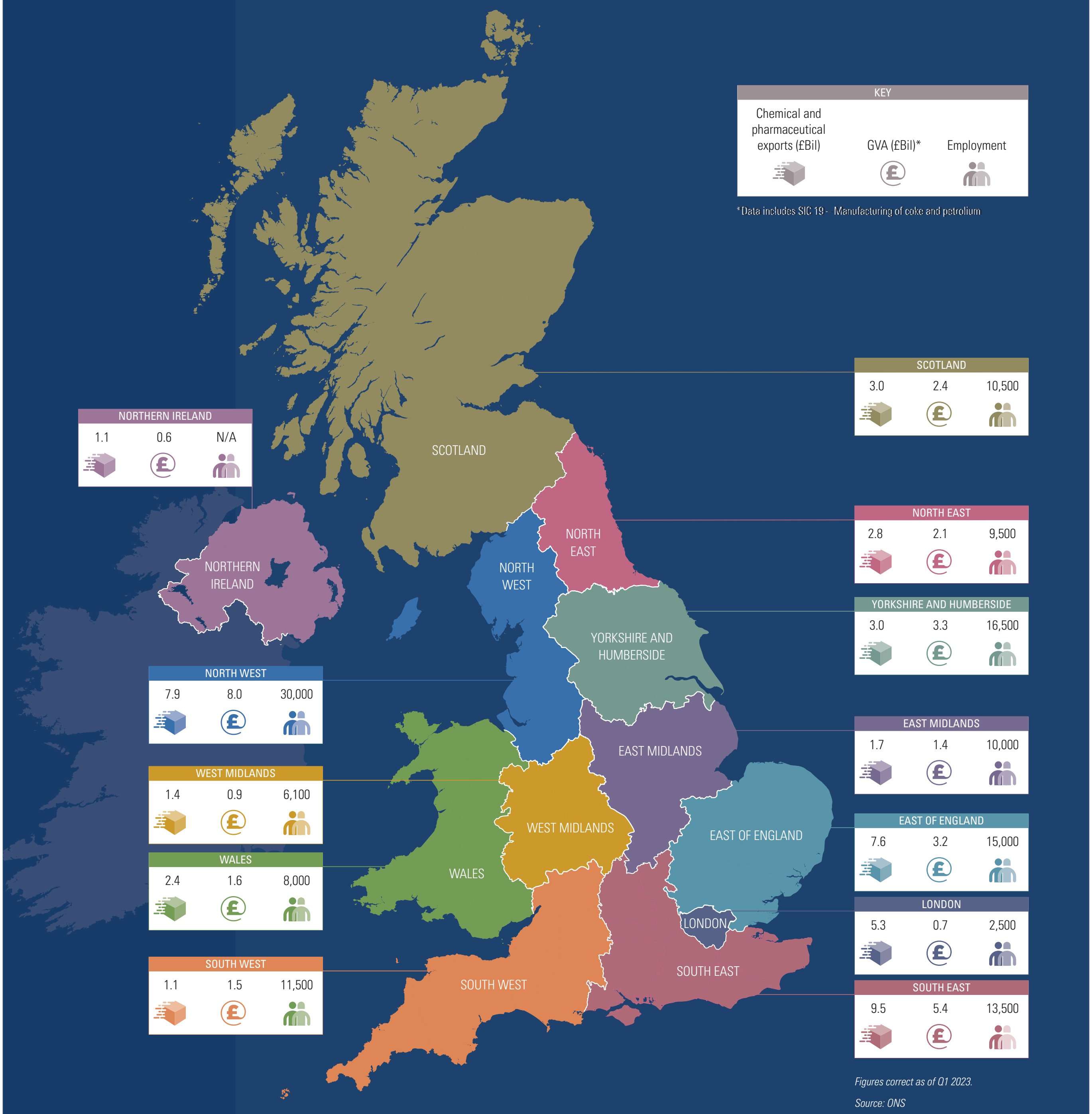
RESPONSIBLE CARE

Current shape of the industry



MADE IN THE UK, SOLD ACROSS THE WORLD

Our Chemical Industry



Figures correct as of Q1 2023.

Source: ONS

Executive summary

I am pleased to present our latest economic report, which has been written by Michela Borra, our Economist.

This report has two sections. The first is a CIA analysis of government data via the Office for National Statistics (ONS). This section assesses the UK chemical industry's performance against that of the wider economy and is followed by a look at what challenges lie ahead. The second section presents the results and further analysis of our own Q1 2023 Business Survey. Unless otherwise specified figures are for the chemical industry excluding pharmaceuticals.

The first quarter of the year was tough on many fronts: the ongoing war in Europe which plunged the region into an energy crisis and hindered international trade between global Eastern and Western economies, the inflationary pressure in the UK did not ease as much as expected resulting in further pressure on household income, China's production rebounded fasted than expected after the zero-covid policy was lifted, and bank failures in the US and EU required government intervention, which coupled with strict monetary policy deteriorated the already struggling financial markets. This quick overview of the main challenges that emerged in the first few months of 2023 shows that the problems faced in 2022 were exacerbated, leading the economy in a state of uncertainty. The drivers of these issues have been impacting industries' demand, trade, and supply chains for almost two years, and as of 2023 also through a tougher labour market where workers demand higher pay and early retirements rate drive skills shortages. In such an intricate global situation, the UK needs to be seen as the place to invest and for that to be the case we need Government action, especially in response to the US Inflation Reduction Act and EU's Green Deal and Net Zero Industry Act.

The latest data published by the ONS provides a look at GDP, production and trade in 2022 and in the first few months of 2023. UK GDP grew 4.1% in 2022 and narrowly avoided a recession in the final quarter as output growth was flat. It was a tough time to be a manufacturer, especially in the chemical industry where gas is used as feedstock as well as energy source. UK chemical production fell 5.5% in 2022 compared to 2021; however the fall in output at the end of the year compared to the start was even more severe. In 2023, GDP grew by 0.4% in January but stayed flat in February, whilst chemical production increased by 3.5% in January and fell 2.5% in February.

The value of UK chemical and pharmaceutical trade rose 2.4% in February 2023 compared to February 2022 and 5.3% from December 2022. The yearly increase is driven by inflation rather than an underlying growth in volumes, whilst the increase in trade from December 2022 reflects better volume changes (as inflation levels were similar). Inflation remains in the double digits however is expected to fall sharply throughout the year as wholesale energy prices continue to soften. Tight labour market conditions are pushing up pay across the economy, resulting in higher costs per worker and decreasing new hires and job offers.

Turning to our survey, it was clear that after a challenging end to 2022, the first quarter of 2023 did not bring substantial relief to chemical businesses as a third of members experienced further contractions in sales. Most respondents experienced a decrease in input and trading costs since the previous quarter, whilst less were the ones that reported a decrease in energy prices. Output prices decreased slower than in the last quarter of 2022.

The consensus is that the second quarter of the year will not differ significantly from the previous one in terms of demand and supply. Nevertheless, sales to all regions, new orders, and production levels are expected to marginally improve as costs further stabilise. Although decreases in raw material and energy costs are a step in the right direction, they are still significantly higher than pre-pandemic and coupled with the expected further increase in labour costs they suggest a tight year for margins.

When ranking challenges, energy costs remain the main concern for businesses, a situation that has been constant over the last 18-months, but labour costs are a really close second. Third are raw material costs, followed by skills shortages. The economy-wide tight labour market conditions are particularly evident in this ranking as the second, fourth, and sixth challenge are linked to the labour market. Issues regarding the workforce are expected to worsen throughout the year, while the ones concerning inputs in production to improve.

Finally, the reactions to the capital allowance scheme introduced with the Spring Budget are not particularly optimistic, as over 70% of respondents are not expecting it to raise investment. Meanwhile, among the topics that were felt missing from the budget are: a response to the US Inflation Reduction Act (IRA) and the European Green Deal, further guidance for decarbonisation and green energy transition, higher level of funding for energy intensive users, and lowering of personal and corporate taxation. Following the Spring Budget and the lack of governmental aid, compared to other international economies, the UK has been ranked fifth by our members as the most competitive place to invest after North America, China, Germany, and other EU countries.

Steve Elliott
Chief Executive
Chemical Industries Association

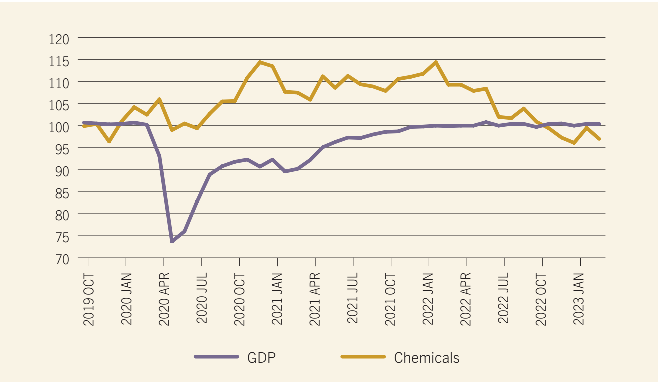
The survey data presented in this report was collected from CIA members between 14 and 31 March 2023. The macroeconomic data, predominantly sourced from the Office for National Statistics was gathered up to the beginning of May 2023.

A tough end to 2022 and a similar start to 2023

GDP and Chemical production

The latest official data published by the Ons on UK GDP, production, and trade covered February 2023. Focusing first on GDP, the UK economy narrowly avoided entering a recession, defined as two consecutive quarters of negative growth, in the final quarter of 2022 as growth was flat. Forecasts were that the recession would enter in the second quarter of 2023, given the measures for the first two months of the year that is unlikely, but it is clear that 2023 will not be a year characterised by economic expansion. UK GDP grew 4.3% in 2022 compared to 2021. In January 2023, it expanded by 0.4% whilst in February it stayed constant as increased economic activity in construction was offset by contractions in production and services. Expectations from the Treasury are that the economy will have contracted further in March and April, but it will bounce back in 2024.

Graph 1: Index figure of GDP and Chemical Output, Sept 2019-Feb 2023, Q4 2019 = 100

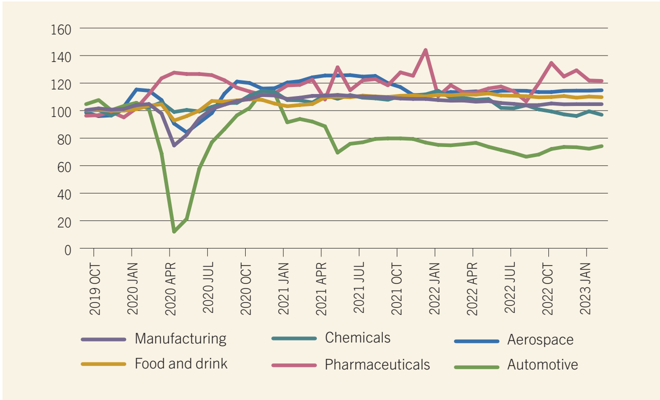


Source: CIA Analysis of ONS data

Turning to the chemical industry, Graph 1 displays the monthly index of UK GDP and chemical production between January 2019 and February 2023. After four years of output growth, in the face of soaring costs and dwindling demand, chemical production fell 4.7% in 2022 compared to 2021. At the beginning of 2023, chemical output grew by 3.5% in January but contracted by 2.5% the following month, remaining above December's value. Since the chemical production level fell steeply throughout 2022, the considerable expansion in January is still below pre-pandemic levels and just slightly higher than production in October 2022. The CIA expects UK chemical production to fluctuate between flat growth and contractions from this point as total output in 2023 will be below 2022 due to the strength displayed in the first half of 2022 and the higher starting level from 2021.

Graph 2 compares the monthly index of production for the chemical industry to the UK's food and drink, pharmaceutical, automotive, and aerospace industries that, along with the chemical industry, are colloquially referred to as the 'Manufacturing five' or 'M5' industries.

Graph 2: Index figure of M5 output, Sept 2019-Feb 2023, Q4 2019 = 100



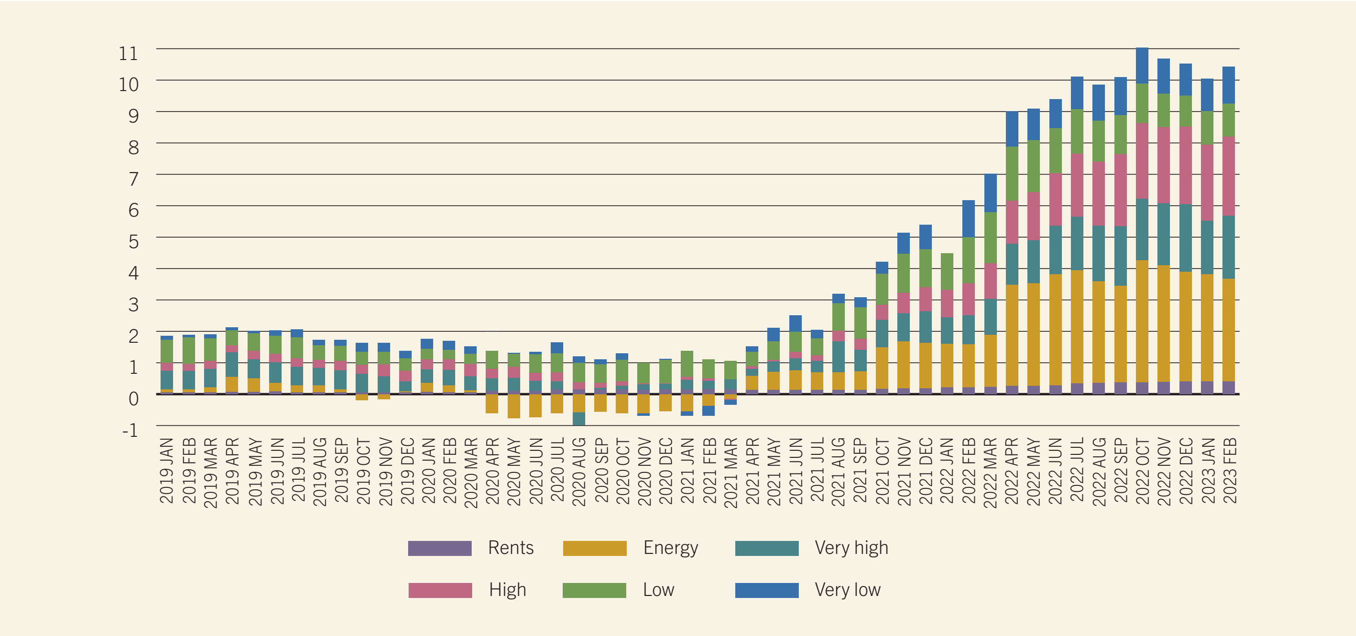
Source: CIA analysis of ONS data

Last year was tough for UK manufacturers, with output from the manufacturing sector falling 3.7% compared to 2021. The food and drink industry was the only constituent of the M5 that increased production in 2022 with output growth of 2.0%, while pharmaceutical, automotive, and aerospace output fell 3.8%, 11.6% and 6.0% respectively. In January 2023, food and chemical production expanded by 0.7% and 3.5% respectively, while pharmaceutical and automotive output contracted by 5.7% and 1.5%, and aerospace remained unchanged. In February, there were contractions for food, chemical and pharmaceutical industries, but they were offset by increases in production of aerospace and automotive products. In the first two months of 2023, manufacturing output remained constant as increases in one industry were offset by decreases in others. As of February 2023, output from the pharmaceutical, food and drink, and aerospace industries is 25.4%, 9.6% and 16.5% above pre-pandemic while chemical and automotive output is 2.3% and 28.5% below.

Consumer Side Inflation

Price increases, both for households and businesses, continue to be one of the greatest economic challenges; however, inflation is moving in the right direction and is expected to fall sharply through the second half of 2023 as wholesale energy prices have been dropping. That said, the headline rate of inflation in the UK, CPI, was 10.1% in the year to March 2023, down from 10.4% in February and at the same value of January 2023. The UK is not alone in its inflationary challenge however, other countries seem to be on a better track. In the Euro Zone, inflation has been decreasing for six months to 6.9%. In the US after the peak of June 2022, it steadily decreased and in March it reached 5%, whilst in China in the year to March 2023 inflation was 0.7%.In response to this inflationary pressure western central banks have steadily increased interest rates over the last 12 months with the current rates in the UK, US and Eurozone being 4.25%, 4.75-5%, and 3.5% respectively.

Graph 3: Contribution to CPI inflation by energy intensity, Jan 2019-Feb 2023



Source: CIA analysis of ONS

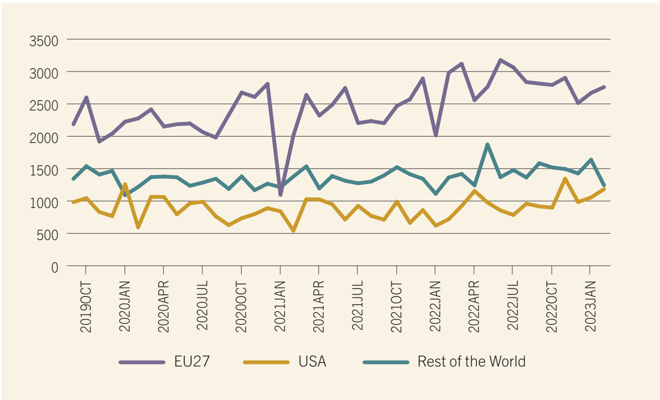
Graph 3 shows contributions to consumer side inflation over the course of the last two years based on different types of goods and their impact on Consumer Price Index (CPI). Goods are divided based on how much energy is required for production and distribution. Examples of very low energy goods are lawyering services, medical services, and books, as their value is intellectual rather than physical and the energy required for their production is limited. On the other hand, high and very high energy intensive goods are foods (especially fruit and vegetables, which tend to be imported), transport, hospitality, and chemical products. Graph 3 shows the direct and indirect impact of high energy prices on inflation. Energy prices directly impact consumers' housing costs and producers' input costs; due to the rise in input costs producers increase retail prices, hence the indirect effect of energy prices. Graph 3 shows that before April 2021, negatively impacted on inflation, and the main drivers of inflation were rents and low energy intensive goods. From May 2021, and especially after March 2022, with the Russian invasion of Ukraine and the energy price crisis, the contribution of energy on CPI went from below 1.0 to over 3.0. The same trend is recognisable also for 'high' and 'very high' energy-intensive goods, whose impact on CPI more than doubled since December 2021.

The easing of energy costs that started in the latter part of 2022 should be experienced by households and companies in the second quarter of 2023, but the indirect impact on inflation will lag by at least two quarters. The CIA's forecasting provider expects energy to have a negative impact on inflation by the beginning of 2024.

Trade

Alongside the publication of official GDP and production data, the ONS published its final estimates for the value of trade in 2022 and the first few months of 2023. Compared to 2021, the value of UK chemical and pharmaceutical exports rose 14.7% to £62.1 billion. The value of imported chemicals and pharmaceuticals saw an even greater 25.2% rise to £78.8 billion. It is important to note that these figures are in value terms not volume. Given that inflation has been in the double digits thought the end of 2022, it is likely that the increase in trade values was driven by prices rather than volumes.

Graph 4: Chemical Exports to EU, RW, and USA, Sept 2019-Feb 2023



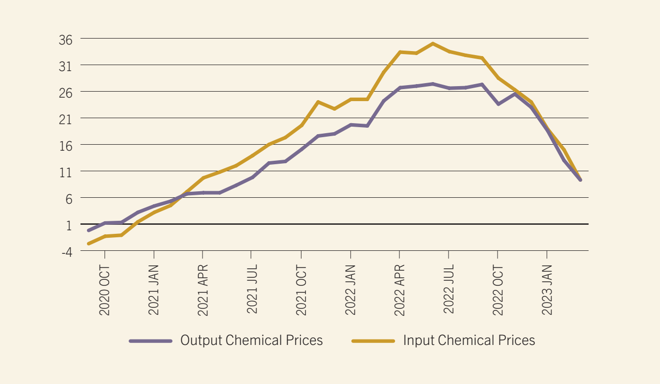
Source: CIA analysis of ONS data

Looking at the trade data in more detail and focusing on 2023, chemical exports rose 5.3% between February 2023 and December 2022, and the trend was driven by trade with the EU. Since inflation was at similar levels in the two periods, it is likely that the increase in value also reflects an increase in volume. After a dip in November and December 2022, UK Chemical exports to the EU (blue line in Graph 4) rose 9.7% by £1.5 billion in February, while exports to the rest of the world fell 12.8% by £1.2 billion (grey line in Graph 4). Exports towards the US (orange line in Graph 4), the biggest single market for the UK chemical industry, followed a similar trend to EU exports as they declined at the end of last year and increased by 20.1% in the first two months of 2023. Exports towards China decreased by 22.3% in February 2023 compared to December 2022. This substantial decrease drove the overall export reduction to the rest of the world. Conversely, the growth in exports to the EU was driven by exports with Germany and Ireland which experienced growth of 48.7% and 12.2% respectively.

Changing from exports to imports, the pattern is similar. The value of imported chemicals to the UK decreased 6.5% from December 2022 to February 2023. This decrease is visible for both the EU and the rest of the world import. The value of chemical imports from the EU decreased by 0.4%, whilst in the rest of the world they fell by 22.3%.

Prices

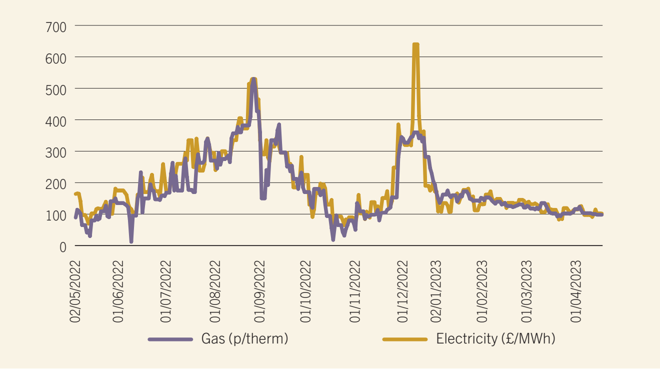
Graph 5: Chemical Input and Output Prices Growth Rates, Sept 2020-Feb 2023



Source: CIA analysis of ONS data

March 2023 symbolises a breakthrough for prices in the manufacturing sectors as, for the first time in almost two years, output prices grew quicker than input prices. Nevertheless, input prices remain significantly above output prices in all manufacturing sectors. March also brought some release within the chemical industry, where input and output prices grew at the same rate of 9.3%. After three months where input and output prices grew at similar rates, in February 2023 input prices grew 2.0% quicker than output prices putting extra strain on chemical producers. Even though the growth rates were the same in March, input prices remain 5.2% higher than output prices and this trend has continued since June 2021. The persistently higher prices of raw materials compared to retail prices of finished products has been putting a toll on margins, even though the gap between the two has been narrowing since November 2022.

Graph 6: Day-ahead UK gas and electricity prices over the last year, May 2022-April 2023



Source: CIA Energy Price Data, Inspired Energy

Graph 6 displays the day-ahead wholesale gas and electricity prices in the UK over the last year. Although remaining significantly higher than the long-run average, recent UK gas and electricity prices have been softer than what was feared as we entered the Winter. This is likely more of a relief to the Chancellor than manufacturing business leaders as it has reduced the cost to government of their energy support schemes. For chemical business leaders, prices at these levels are still hard to palate and continue to challenge margins.

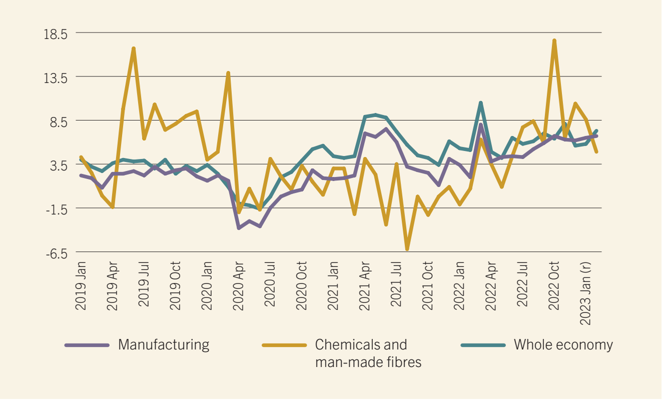
From April 2023, the Energy Bill Relief Scheme has been substituted by the Energy Bill Discount Scheme. The new scheme partially subsidises energy prices as it covers the band between 209p per therm and 407p per therm, anything below or above that price point will be responsibility of the user.

When the UK's Emissions Trading Scheme (ETS) opened in May 2021, the price of a tonne of carbon was around £45 however today prices sit around the £62 mark. The recent peak cost of a barrel of oil was $95 back in November 2022. Prices have since abated and settled around the $77 mark, still significantly higher than the average over the late 2010's.

Labour market

The labour market is beginning to show signs of softening however remains tight by historic standards as the dual impacts of Brexit and Covid reduce the supply of labour across the economy, whilst the cost-of-living crisis pushes demanded pay up. The unemployment rate is at 3.8%, and the number of people on payroll has reached 30 million, which is almost 1 million higher than pre-pandemic. Despite the increase in payroll employees, over 1.1 million job vacancies remain, 76,000 of which are in the manufacturing sector. It is promising to see that the economic inactively rate (which captures those who are aged between 16-64 years old and are not in or actively seeking work) fell 0.4 percentage points in the three months to February, however it is still 0.9 percentage points higher than pre-pandemic. On the one hand, the decrease in inactivity rate is mainly linked to the 16-24 age group as more entered the workforce and employment. On the other hand, retirement rates continue to increase especially early retirements. In terms of vacancies, whilst there has been a drop in March, it seems that the main driver of this decline is a decrease in job offers rather than an increase in new hires. For this reason, the vacancies' fall represents the high levels of uncertainty of employers over the economy and their business prospectives.

Graph 7: Growth rate of total pay in the chemical industry, manufacturing sector, and whole economy, Jan 2019-Feb 2023



These tight labour market conditions are pushing up pay across the economy. Total pay, which includes bonuses and one-off payments, and regular pay, which does not, rose 7.3% and 7.0% in the three months to February compared to the same period in 2022. In real terms (adjusted for CPIH inflation), this constitutes a pay cut of 1.9% and 2.2% respectively. In manufacturing industries, total pay rose 6.7% and regular pay 6.6%. The chemical industry, which tends to have higher growth rates than manufacturing and the whole economy, saw an increase of 4.9% in total pay and6.4% for regular pay. Since CPIH inflation in February was 9.2%, these resulted in real pay cuts of 4.3% and 2.8% respectively. The continuous increases in pay resulted in higher costs per worker for industries, which in turn have decreased the amount of new hires leading to the previously addressed fall in vacancies.

Rounding up the official data

Last year was a tough year to run a manufacturing business, especially in the chemical sector, and it seems that the hard times are not quite over yet, even though 2023 has brought some relief. UK GDP grew 4.1% in 2022 however this was driven by a 5.5% increase in output from the services sector while manufacturing output fell 4.7%. Similar trends were established at the beginning of the year, as decreases in production and services were offset by growth in construction. Gas prices soared following Russia's invasion of Ukraine, driving inflation into the double digits and reducing real incomes. For the chemical industry, which uses gas as feedstock and energy source, this led to input prices in the year to June 2022 increasing by over 35%. Price growth in the chemical industry has begun to decline however, input prices remain significantly higher than output prices.

The increased costs of production as well as falling domestic and European demand, led to a fall in chemical output of 5.5% in 2022.

Despite a fall in UK chemical production, the value of chemical exports rose in 2022; this was driven by the price mentioned above increases rather than an underlying increase in volumes. Nevertheless, looking at 2023, the value of trade increased in February 2023 from December 2022. Due to the similar inflation levels, we can infer that it also represents an increase in the volume of traded goods. The UK's labour market remains tight, pushing up pay across the economy. Total pay which includes bonuses and one-off payments, rose 4.9% in February 2023 compared to a year prior, a real terms (adjusted for inflation) pay cut of 4.3%. Whilst the fall in vacancies reflects uncertainty, caution and the need for cutting costs of employers rather than economic recovery. .

Survey results

About the survey

At the close of each quarter, we survey member companies of the Association to get on-the-ground data about current trading conditions and views on what lies ahead. The information from this is incredibly useful in our work and we are grateful to all who respond.

The CIA's Q1 2023 Business Survey was live between the 20th and 31st of March 2023. The survey received responses from slightly more than 50% of CIA membership. This edition of the survey was split into three sections. The first and second sections contained the standard industry performance and challenges & opportunities questions. The third section focuses on reactions to the Chancellor's Spring Budget, experienced retirement rates, and international competitiveness of the UK. Three questions in the industry performance section asked respondents whether the 19 variables listed below had increased, decreased or stayed the same in the first quarter of 2023 compared to the last quarter of 2022 and what member's expectations were for these variables in the second quarter of 2023 and 12 months' time.

Industry performance variables:

1. Total sales
2. Domestic sales
3. Exports
4. EU exports
5. Rest of the world exports
6. New orders
7. Production levels
8. Capacity utilisation
9. Employee numbers
10. R&D spend
11. Business investment
12. Your level of business optimism
13. Time to deliver
14. Raw material (input) prices
15. Cost of importing
16. Cost of exporting
17. Your energy costs
18. Finished goods (output) prices
19. Your company / site profit margins

When displaying the industry performance data, diffusion indexes are used. These are easy-to-interpret statistical tools that can be read in the same way as S&P Global's Purchasing Managers Indexes (PMIs). Therefore any figure below 50 indicates a contraction, above 50 an expansion while 50 means it remained constant. To compute these indexes, we combined the percentage of respondents that reported experiencing an increase with half of those that reported experiencing no change.

Industry performance

Performance in final quarter

Table 1 (see overleaf) displays the diffusion indexes for the 19 variables mentioned in 'about the survey' and the percentage of respondents that reported experiencing a decrease in the variables. The first column is the diffusion index for the performance in the current quarter, the second column contains the diffusion index for what was expected for the first quarter of 2023 when respondents were asked in the CIA's Q4 2022 Business Survey, the third column contains the diffusion index for the performance in the fourth quarter of 2022, and the final two columns contain the percentage of respondents that experienced a decrease of that variable in the current quarter and in the previous one. This allows comparisons to be made between the performance in the first quarter of 2023 compared to expectations and the prior quarter.

Table 1

	Q1 Actual	Q1 Expected	Q4 Actual	Percentage that experience a decrease in Q1 2023	Percentage that experience a decrease in Q4 2022
Total sales	44.6	64.0	32.6	33.9%	55.8%
Domestic sales	41.1	59.3	31.0	25.0%	50.0%
Exports	44.6	60.5	31.4	30.4%	53.5%
EU exports	40.2	57.0	29.1	32.1%	53.5%
Rest of the world exports	43.8	60.7	33.3	32.1%	50.0%
New orders	40.2	67.4	33.7	35.7%	48.8%
Production levels	43.8	64.0	34.9	35.7%	53.5%
Capacity utilisation	45.5	64.0	31.7	33.9%	56.1%
Employee numbers	45.5	55.8	53.5	25.0%	18.6%
R&D spend	50.0	50.0	50.0	12.5%	9.5%
Business investment	47.3	55.8	50.0	25.0%	16.3%
Your level of business optimism	41.1	52.3	61.6	39.3%	23.3%
Time to deliver	45.5	51.2	66.3	14.3%	20.9%
Raw material (input) prices	47.3	57.1	67.4	39.3%	18.6%
Cost of importing	52.7	58.1	65.1	16.1%	11.6%
Cost of exporting	49.1	59.3	60.7	16.1%	11.9%
Your energy costs	44.6	47.7	29.1	41.1%	51.2%
Finished goods (output) prices	49.1	52.4	45.3	28.6%	16.3%
Your company / site profit margins	40.2	52.3	39.5	39.3%	39.5%

Source: CIA Q2 Business Survey

Key take away

- It was a tougher than expected beginning to the year but the fall in sales experienced at the end of 2022 decelerated in 2023.

Sales to all regions, domestic, EU, and the rest of the world fell quicker than what was expected and what was experienced in the third quarter of the year. With weakening demand displayed by the fall in new orders and in the face of significant costs to operate, a number of CIA members shut down production to undertake any maintenance required on site or to temporarily reduce costs. These optional shut downs weighed heavily on the production and capacity utilisation data recorded in this survey.

It was positive to see that despite the fall in sales, orders, and production, employee numbers, R&D spending, and business investment largely remained unchanged, with employee numbers actually seeing a small rise. This is understandable however as these three variables are often referred to as the 'slower moving variables' as they tend to have the least volatility quarter-on-quarter due to plans being made on a multi year basis.

The fact that costs are continuing to rise is unlikely to shock anyone who took part in the survey. However, it was promising to see that the size of the rises were lower than what was expected and experienced in the third quarter. Moreover, it was positive to see that for the second consecutive quarter that growth in output prices was larger than input, however the difference was marginal and not enough to start recovering margins. Further energy price rises were reported by 47% of respondents, down from 80% in the previous quarter, while 42% and 33% of respondents reported an increase in the cost of importing and exporting respectively. Delivery times marginally improved and with all this data in mind, chemical business leader's optimism fell in the final quarter of 2022.

Expectations for the first quarter

Table 2 displays the diffusion indexes for what is expected for each of the 19 variables in the second quarter of 2023 and the percentage of respondents that expect to see an increase.

Table 2

	Q2 Expectations	Percentage of respondents that expect an increase
Total sales	57.1	33.9%
Domestic sales	50.0	14.3%
Exports	51.8	23.2%
EU exports	52.7	26.8%
Rest of the world exports	51.8	19.6%
New orders	58.9	30.4%
Production levels	53.6	30.4%
Capacity utilisation	53.6	32.1%
Employee numbers	47.3	17.9%
R&D spend	50.0	7.1%
Business investment	50.0	16.1%
Your level of business optimism	50.9	21.4%
Time to deliver	47.3	1.8%
Raw material (input) prices	42.9	21.4%
Cost of importing	48.2	14.3%
Cost of exporting	48.2	12.5%
Your energy costs	41.1	21.4%
Finished goods (output) prices	42.9	17.9%
Your company / site profit margins	51.8	23.2%

Source: CIA Q2 Business Survey

Key take away

- CIA members do not expect the second quarter of 2023 to differ significantly from the first one, other than sales marginally increasing. The increase in sales highlights the toughness of Q1 and Q4 2022 on businesses rather than real optimism.

Compared to the low levels in the first quarter of 2023, sales to all regions are expected to grow in the second quarter of 2023, as 33.9% of members expect to see them increase. Exports are expected to perform better than domestic sales with EU exports slightly outperforming trade with the rest of the world. The increased sales are understandably accompanied by fuller order books, improving production and capacity utilisation.

Focusing on the slower moving variables, a slight contraction is expected in employee numbers while business investment and R&D expenditure remain largely unchanged. It is promising to see at a time of increased costs of labour and capital that the chemical industry is continuing to invest in the UK. The expected decrease in employment is linked to the high cost per capita of workers and the early retirement rates, which impact the whole economy – mentioned in the economic overview.

The CIA started collecting cost data from members through the Business Survey in the second quarter of 2021 and in every subsequent quarter since then, members have reported sharp rises in costs. The latest data gathered shows that costs are expected to further stabilise in the second quarter of 2023. Although this is positive in one sense, it is important to remember the size of price increases experienced over the last two years. Output prices are expected to decrease as only 18% of members expect to see them rise. The cost of trade is expected to continue falling however the time to deliver remains largely unchanged.

With the increased sales and cost stabilisation in mind, there is a modest increase in chemical business leader's optimism and in the expectation over margins.

Expectations for twelve months' time

The data in Table 3 is derived from members' expectations over the next 12 months, and due to the nature of the survey this data should be used as a gauge of the sentiment of the industry rather than rigid forecasts. Like Table 2, this data contains an index that aims to describe if the variables will increase or decrease and the percentage of respondents that estimate an increase in the next 12

Table 3

	12-month Expectation	Percentage of respondents that expect an increase
Total sales	79.5	69.6%
Domestic sales	65.2	44.6%
Exports	73.2	57.1%
EU exports	67.9	48.2%
Rest of the world exports	72.3	53.6%
New orders	76.8	64.3%
Production levels	75.9	66.1%
Capacity utilisation	73.2	62.5%
Employee numbers	49.1	21.4%
R&D spend	56.3	16.1%
Business investment	55.4	26.8%
Your level of business optimism	64.3	46.4%
Time to deliver	43.8	1.8%
Raw material (input) prices	40.2	21.4%
Cost of importing	50.0	12.5%
Cost of exporting	49.1	12.5%
Your energy costs	40.2	19.6%
Finished goods (output) prices	44.6	21.4%
Your company / site profit margins	56.3	35.7%

Source: CIA Q2 Business Survey

Key take away

- CIA members are optimistic that in a year's time production and sales will be in a better position, costs will have largely stabilised and margins improved.

This data is quite positive; almost 70% of respondents expect an increase in new orders and sales, translating to increased production and capacity utilisation. Modest decreases are expected for employee numbers due to the same drivers of the expected decrease in Q2, while 27% of respondents expects to increase their business investment levels. However, it is important to acknowledge that these predictions are compared to the first quarter of 2023 which – as we have seen previously in the report – was a challenging period. Therefore, there is a base effect that contributes to the magnitude of the diffusion indexes.

Moving onto costs, energy and raw material costs are expected to broadly stabilise while the prices of finished goods are expected to decrease marginally. The cost of trade continues to slowly decrease with further decreases in the time to deliver.

With all this data in mind, over 40% of respondents to the CIA's Business Survey expect to be in a better position in 12 months' time than they are now, and 35.7% expect an increase in profits.

Challenges and Opportunities

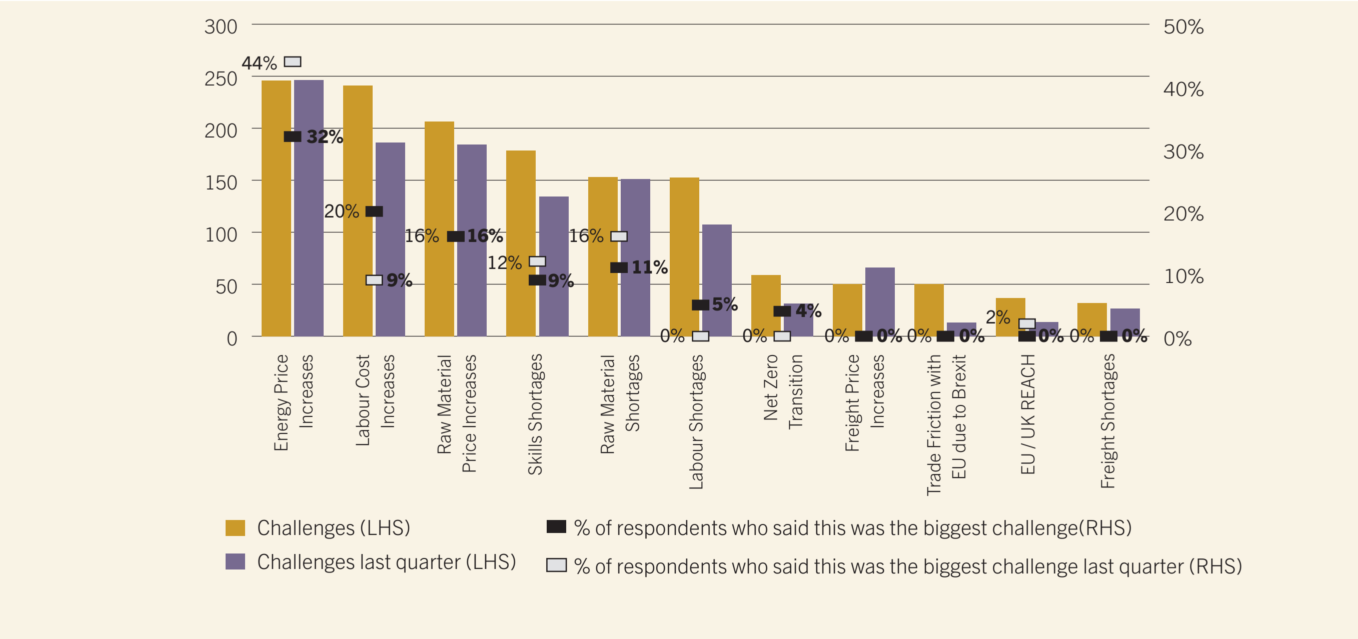
The second section of the CIA's Q4 Business Survey focused in more detail on the challenges members faced, followed by a look at the opportunities that members identified. The first question in this section asked respondents to rank 12 challenges faced by the industry from greatest to smallest with '1' signalling the greatest issue and '12' the smallest.

This question has been asked in the last seven CIA Business Surveys, and up until the previous edition, the top three challenges have remained constant as 'Energy prices', 'Raw material prices' and 'Raw material shortages' although there has been some jostling for position between second and third. However, in last year's survey the challenges surrounding 'Labour costs' have jumped up the standing to the second biggest challenge. In the latest survey 'Labour costs' have ranked even higher by the respondents and it is just slightly lower in magnitude than 'Energy prices'. Furthermore, the percentage that ranked 'Energy prices' as the biggest challenge decreased from 44% to 32%, whilst the one for 'Labour cost' increased from 9% to 20%. 'Skills shortages' also overtook 'Raw material shortages' as the fourth main challenge, leaving 'Raw material shortages' as the fifth. Behind the top five challenges, 'Labour shortages' ranked sixth. Three out of the top six challenges are closely linked with the labour market and its consequences on retention, recruitment, and reward, suggesting that whilst supply chains are easing the job market is toughening.

The 'smallest' challenges still pose a serious threat to the industry in the mid-to-long term. They, however, are not being felt as acutely as the soaring input costs and labour frictions. It is therefore important that these challenges, including REACH, the net zero transition, and trade friction with the EU, are not underestimated. This point was reiterated by CIA members when they were presented with the data. The CIA will continue work in these areas opposite government and other stakeholders, especially in relation to the Net Zero Transition and the perceived lack of support from the government.

The next question asked respondents whether the 12 challenges from the previous question were improving, worsening, or remaining unchanged. Table 4 displays the diffusion indexes of the answers with figures above 50 indicating an improvement, below 50 worsening, and 50 equals no change, and the percentage of respondents that expects a worsening in the near-by future.

Graph 8: Biggest challenges – smaller the blue bar, bigger the challenge



Source: CIA Q2 Business Survey

Table 4: Diffusion indexes

	Index	Percentage of respondents that expect worsenings
Energy Price increases	55.4	21.4%
Labour Cost Increases	6.3	80.4%
Raw Material Price Increases	56.3	25.0%
Skills Shortage	22.3	46.4%
Raw Material Shortages	66.1	5.4%
Labour Shortages	32.1	26.8%
Net Zero Transition	34.8	23.2%
Freight Price Increases	51.8	17.9%
Trade Friction with EU due to Brexit	34.8	8.9%
EU / UK REACH	33.9	16.1%
Freight Shortages	54.5	1.8%

Source: CIA Q2 Business Survey

Over 80% of respondents reported that the challenge surrounding labour costs is going to worsen. Energy and raw material prices and raw material shortages are felt as improving throughout the year, whilst the other variables related to the workforce, skills and labour shortages are expected to become more demanding. It is promising to see a general optimism regarding supply chains in terms of energy and raw materials, but these improvements might be offset by a worsening of the labour force, both in terms of costs and availability. Understandably, longer-term remain predominantly unchanged, with Net Zero transition being the most worrying for respondents.

Moving onto opportunities, when asked what the biggest near-term opportunity was for respondents' companies / sites, understandably the responses were largely business specific however followed a few themes:

1) Improve energy efficiency
2) New products / projects
3) Increasing capacity / production
4) Growth in end markets

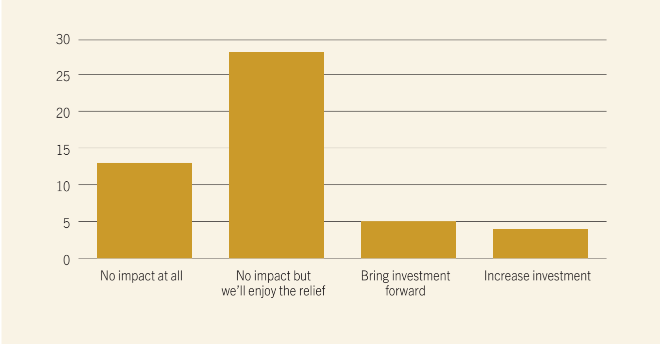
Given the state of the energy market it is understandable that members see energy efficiency as an area of opportunity. It was positive to see that some members felt that there were opportunities to increase output or bringing new products to market.

Reactions to the Spring Budget

On the 15th of March 2023, the Chancellor presented his Budget, setting out plans for the Government's taxation and spending over the next financial period. Ahead of the Budget, the CIA submitted a Budget Representation to the Treasury on behalf of the UK chemical and pharmaceutical industry. The contents of the CIA's submission were guided by the results gathered in the previous survey.

The initiative with the biggest impact on industries from the Budget was the three-year Capital Allowance Scheme. In the Q1 2023 Business Survey, we asked respondents what impact they foresee this scheme having on the level of business investment.

Graph 9: Capital Allowance Scheme impact on Business Investment



Source: CIA Q2 Business Survey

From Graph 9, it is evident that the consensus over the impact of the scheme is negative, as 73% of respondents do not believe that it will have a significant impact on investment levels.

In an open-ended question, we asked members what they would have liked to see in the Spring Budget. Roughly a third of respondents would have liked more financial aid and establishing a clearer framework for the Net Zero Transition and decarbonisation. Members were particularly vocal about the competitive threat posed by the USA's Inflation Reduction Act (IRA) and the EU's Green Deal and Net Zero Industry Act. With our main international competitors creating a propaedeutic environment for transitioning to a greener economy, we might be left behind due to a lack of structure and funding. If the government does not support industries through this process, multinational companies might choose to move production centres abroad as other markets become cheaper and align better with the new environmental requirements thus hindering UK internal production and international trade opportunities.

Almost 10% of respondents would have enjoyed further subsidisation of energy costs and the establishment of a longer-term plan. Reductions in personal and corporate taxation were also mentioned by 7% of respondents. The UK has long been calling for reforms and improvements to business taxes, such as the apprenticeship levy, R&D tax reliefs, and business rates. Sustainability, Net Zero, and international trade are all important areas for the chemical industry. The CIA will continue to highlight the advantages that an initiative similar to the IRA and the Green Deal would bring to the industry and, consequently, the country.

Early Retirements

Another key challenge for the British economy is early retirement. Since the pandemic, more skilled and experienced workers have been leaving the workforce before the age of 64. With the aim of limiting this trend, the Chancellor in his Budget announced some initiatives to incentivise experienced workers to return to work or delay their retirement.

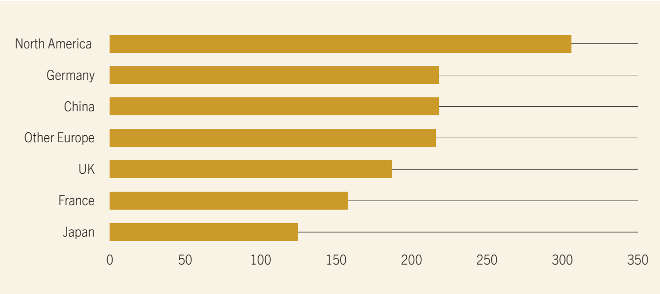
In the survey, we asked our members if they foresee these initiatives having an impact on their workers' retirements. Over 90% of respondents agreed that this initiative will have no impact on delaying retirements nor at bringing back retired workers.

Furthermore, we asked them if they had experienced a change in the number of retirees in the last year. Whilst the majority responded that they had not noticed any particular trend, 22% reported experiencing double or more than double retirements in the last year. This percentage is worrying, especially as it is the symptom of economy-wide trends and the Chancellor initiatives are not perceived to have the desired effect in tackling this issue.

International Competitiveness

The final topical question focused on the international competitiveness of the UK compared to other key chemical producers. We asked respondents to rank the following geographical areas based on their preferred place of investment to assess how attractive the UK is for chemical industries: UK, North America, Germany, China, France, Japan, and Other EU.

Graph 10: Preferred place of investment



Source: CIA Q2 Business Survey

Final thoughts on the survey

After eight quarters of growth, respondents to the CIA's Q1 Business Survey reported their third successive fall in sales, exports, new orders and production. The final quarter of 2022 was tougher than expected, with a number of respondents opting to shut down production over Christmas to undertake maintenance and avoid significant operating costs. Whilst the first quarter of 2023 is better, and no respondent has reported self-imposed shut downs, sales and production have not picked up as a third of respondents reported a further decrease from Q4's levels. Despite the weak sales and production, respondents kept employee numbers, R&D spend, and business investment in line with pre-existing plans. Input costs have eased, as 39% of respondents reported, while the cost of trade has been relatively stable, with more companies experiencing a decrease than in the previous quarter. Nevertheless, the easing of supply chains was met by a decrease in output prices which drove down margins as 39% of respondents reported a decrease compared to Q4 2022.

Looking ahead to the second quarter of 2023, respondents are optimistic however this may reflect just how tough the first quarter was. Sales, new orders and production are expected to increase, while employee numbers are expected to decrease, and investment and R&D spendings to remain unchanged. Costs are expected to continue stabilising, albeit at a level significantly higher than the long run average. Respondents expect input prices to decrease, thanks to a more favourable global economic situation, but the same trend is also expected from output prices as high inflation squeezed direct demand. Nevertheless, there is positivity over company profit margins as 23% expect an increase and the diffusion index is above 50.

When asked about challenges, energy costs remain the largest, but the gap with the second challenge, labour costs, is very small. Raw material price increases and skills shortages ranked third and fourth, followed by raw material shortages and labour shortages. The percentage of members that ranked energy costs as their main concern decreased from Q4 2022, whilst it increased the one of those that ranked labour costs as first. In terms of future predictions, respondents expect a worsening of the labour market, reflected mainly in labour costs and skills shortages, as opposed to improvements in the supply chains, especially in terms of energy prices and raw material prices and shortages.

The respondents are doubtful about the impact of the capital allowance scheme on business investment. They would have liked the Spring Budget to focus more on IRA-like schemes to promote sustainability, the Net Zero Transition and further funding for energy-intensive users. The Chancellor's incentives to bring retirees back into the workforce and prevent further early retirements are expected to be ineffective by over 90% of respondents. Finally, we asked to rank the UK compared to other geographical areas in terms of competitiveness and preferred place of investment. North America ranked first, followed by Germany and China, then other EU countries and fifth came the UK. This ranking is a symptom of the lack of a scheme to match the IRA, Brexit and Covid repercussions, as well as overall higher costs for industries.

CONTACTS

Michela Borra
Economist
Chemical Industries Association, UK
Tel. +44(0) 20 7963 6761 Mob. +44 (0)7908 897013
Email: BorraM@cia.org.uk

Simon Marsh
Director of Communications
Chemical Industries Association, UK
Tel. +44 (0) 20 7963 6725 Mob. +44 (0)7951 389197
Email: MarshS@cia.org.uk