Research Bulletin 21/7 | What has been happening to prices and why should we be interested?

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Purpose

The purpose of this research paper is to bring the issue of rising inflation to the attention of the Department and its stakeholders. It covers the drivers of inflation, the effect of recent inflationary pressures on consumers, households and businesses and the implications for the NI economy. The issue of inflation is set within the current context of the Covid-19 pandemic and EU exit. We should be interested in what is happening to inflation because of its impact on the work of the Department and wider NI Executive such as City Deals, skills, jobs, energy prices, consumer affairs and government contracts.

Introduction

Inflation refers to an increase in prices of goods and services in an economy. When the price level rises there is a reduction in the purchasing power of money over time. Small amounts of inflation can encourage people to purchase goods now rather than waiting and employers can increase wages more easily, which can boost the economy. However, sustained inflation can have a spiralling effect, cause stockpiling and supply issues, demand for increased wages and reduced business profitability causing further price increases.

Interest rates are intrinsically linked to inflation and tend to rise as inflation rises. This has a dampening effect on inflationary pressure through increasing the cost of borrowing and the reward for saving.

Inflation both globally and within the UK has been relatively low for the last 25 years. However, recently there have been some increases to inflation both locally and for many countries around the world. As major economic markets return to growth as we come out of the global pandemic[i], some inflationary pressure is inevitable. Some prices – most notably oil – fell significantly in 2020 due to a sudden fall in demand. Some of the inflationary increase is simply a stabilisation of these prices.

The UK breached its 2% inflationary target in May 2021 and other major economies have experienced a similar pattern. In the US, the annual inflation rate was 6.2% in October, the highest level in more than 30 years driven by increases in energy and food prices. Eurostat annual inflation for the Euro Area was 4.1% in October.

The disruption to supply chains and changes in demand for goods and services from consumers over the last year has also had an impact on prices. Input costs such as raw materials, food prices, transportation costs and energy costs are all contributing. Pay and house prices have also experienced rises.

Within the UK, Consumer Price Index (CPI) and Retail Price Index (RPI) have risen substantially over recent months – with CPI inflation 4.2% in October which was its highest level in 10 years. August saw the biggest increase in the annual rate of inflation in one month since the Bank of England gained independence to set interest rates. At the November 2021 Monetary Policy Committee (MPC) meeting the Bank said *"it will be necessary over coming months to increase the Bank Rate in order to return CPI inflation sustainably to the 2% target"*.

NI businesses have experienced some of the highest inflationary input and output costs in the UK, compounded by increased costs and supply chain issues caused by the UK's exit from the EU. These increased input costs are being passed on by businesses to customers.

At its latest MPC meeting (November 2021) the Bank expected inflation to rise predominantly due to the impact on utility bills of past strength in wholesale gas prices. CPI inflation is expected to rise to 4.5% in November and remain around that level through the winter, accounted for by further increases in core goods and food price inflation. Wholesale gas prices have risen sharply since August. CPI inflation is now expected to peak at around 5% in April 2022.

The Committee's central expectation continues to be that upward pressure on CPI inflation is expected to dissipate over time, as supply disruption eases, global demand rebalances, and energy prices stop rising. As a result, CPI inflation is projected to fall back materially from the second half of next year.

(1) The picture of inflation in NI, UK and globally

This section of the paper provides an overview on what inflation has been doing in NI, the UK and globally.

Inflation Trends

Inflation both globally and within the UK has been relatively low for the last 25 years. However, recently there have been some increases to inflation both locally and for many countries around the world. To put this into context this follows the global economic shock of the Covid-19 pandemic which affected all economies negatively to varying degrees as demand for goods and services fell due to local lockdowns and restrictions in the movement of people as well as goods and services. However, as major economic markets return to growth some inflationary pressure is inevitable.

It should be noted that some goods saw a decline in price in 2020, therefore the baseline effect can cause increases this year. For example, there was a sharp decrease in the price of oil last year due to a sudden reduction in demand causing an oversupply. In April 2020, prices for petroleum products in the UK fell by 24% as there was a significant fall in demand in the market.

In addition, there have been issues with a shortage of shipping containers causing increased shipping costs. Globally, there have been increased energy prices and rising prices for metals and food.

Comparisons Internationally

It can be difficult to directly compare inflation internationally but we can observe the trends and most countries are experiencing rising inflation.

Eurostat produces comparable inflation figures for the EU. Annual inflation for the Euro Area was 4.1% in October with this rise driven by increased energy prices. Germany reported an annual increase of 4.6% in CPI for October, driven by energy prices and motor fuels, the highest level in 28 years. While France (3.2%) and Italy (3.2%) are reporting slightly lower rates, both countries are experiencing energy and consumer price inflation.

US CPI was 6.2% in October which was the largest annual increase since November 1990 due to rising energy costs, supply shortages and increased consumption. While the Chairman of the Federal Reserve has repeatedly insisted price pressures will prove *"transitory"*, he said that it was *"very difficult to predict the persistence of supply constraints or their effects on inflation"*.

Canada's CPI rose to 4.7% over the year to October 2021 representing the highest inflation rate since February 2003 with upward pressure stemming from an accumulation of recent price rises, supply chain issues and lower price levels in 2020.

China reported an annual inflation rate for October of 1.5% representing a doubling of the previous month's figure. In Australia CPI was 3.0% in October 2021, with the most significant price increase in transport. Russia's reported annual inflation rate rose to 8.1% in October – the highest inflation rate in almost 6 years.

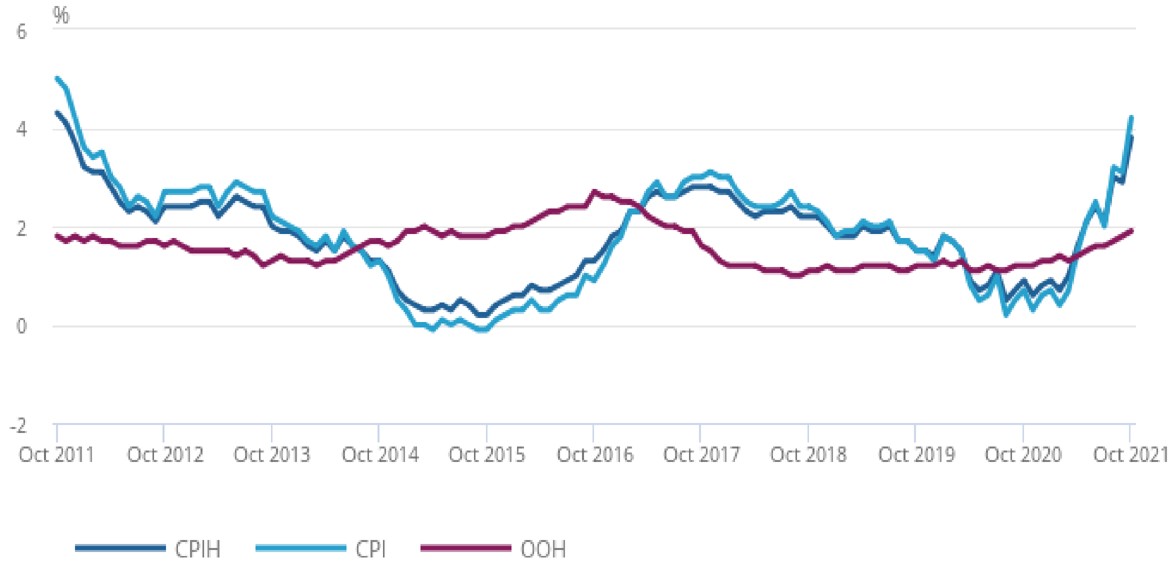
The Republic of Ireland experienced a 5.1% annual increase in prices in October driven by rising prices in transport, housing, water, electricity and gas. This is the highest inflation rate in more than 14 years.

UK Inflation

Within this context, the UK has also experienced rises in its measures of inflation, as shown in the graph below. This inflationary pressure is expected to rise to 5% next year before reducing again. The Consumer Price Index including owner occupiers' housing costs (CPIH) rose by 3.8% in the 12 months to October 2021, up from 2.9% the previous month. For context CPIH was 0.7% in the 12 months to February 2021. The increase of 0.9 percentage points is the largest increase recorded in the CPIH 12-month inflation rate series, which began in January 2006. The largest upward contribution to the October 2021 CPIH 12-month inflation rate came from housing and household services, with further large upward contributions from transport, restaurants and hotels.

The Consumer Price Index (CPI) rose by 4.2% in the 12 months to October 2021. By way of comparison, CPI rose by 0.4% in the 12 months to February 2021. Figure 1 shows the annual inflation rates[ii] since July 2011.

Figure 1: UK Inflation October 2011 - October 2021



Source: ONS

The Bank of England has a 2% inflation target. The government increases state benefits in line with inflation measured by CPI and many private pensions rise in line with this measure too. The basic state pension usually rises by whichever is highest – CPI, average earnings[iii] or 2.5% - this is called the triple lock.

The Bank project further increases in CPI inflation over the remainder of this year and into 2022. This, in part, reflects the contribution from energy prices and recent increases in wholesale energy prices passed on to consumer prices. Global price pressures have picked up further, reflecting strong demand for goods, rising commodity prices, supply-side constraints and transportation bottlenecks, and these have started to become apparent in consumer price inflation in advanced economies. The Bank of England has now signalled that it will be necessary over the coming months to increase the interest rate in order to return CPI inflation sustainably to the 2% target later in 2022.

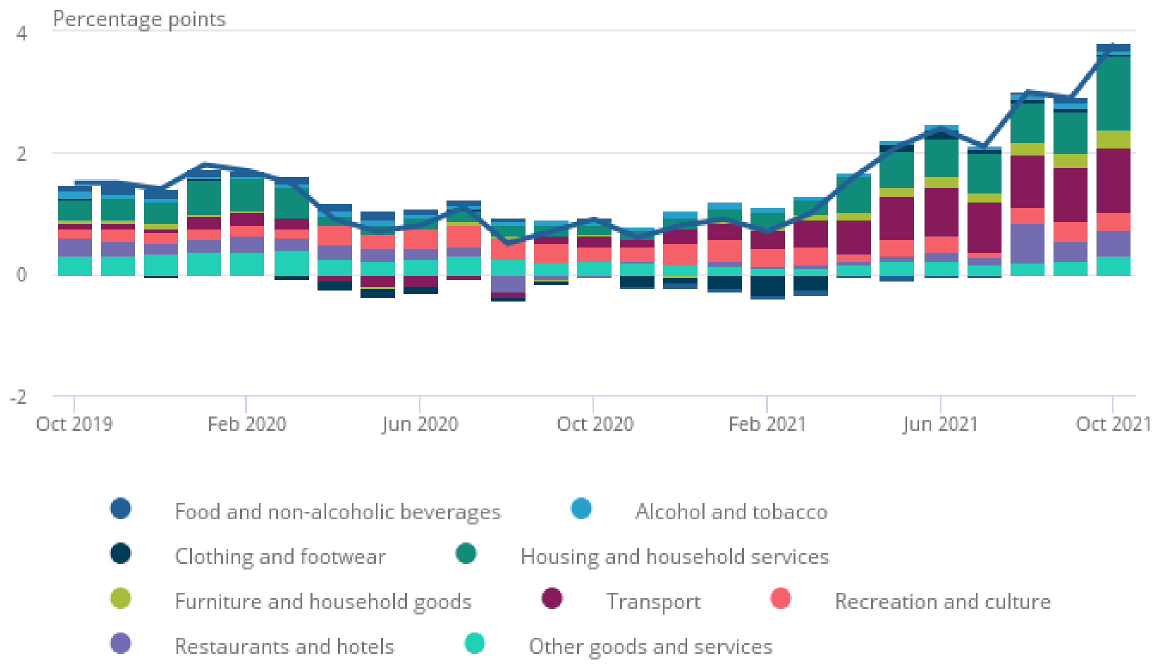
(2) Identify the key drivers of inflation – Lockdown/easing supply bottlenecks; price rises in goods and services; EU Exit cost pressures and Covid savings being spent

This section of the paper looks at the drivers of inflation and presents views from a number of commentators and the Bank of England's Monetary Policy Committee.

Figure 2 shows the extent to which the different categories of goods and services have contributed to the overall Consumer Price Index including owner occupiers' housing costs (CPIH) 12-month inflation rate over the last two years.

The main upward pressure came from electricity, gas and other fuels. The contribution from housing and household services was the largest contribution from this division since November 2011. The contribution from transport has shown more variation than any other group over the last two years. Within transport, the movements have been caused principally by changes in the price of motor fuels. Average petrol prices were 138.6 pence per litre in October 2021, an increase of 22% on a year earlier. This is the highest price since September 2012.

Figure 2: Sector Contributions to Annual Inflation Rate, October 2019 – October 2021



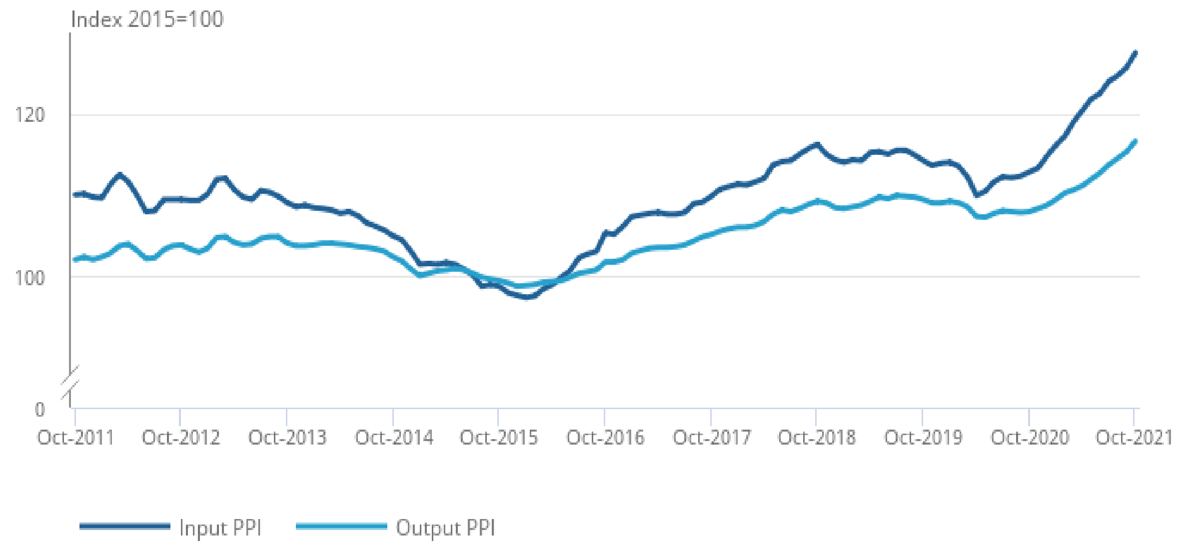
Source: ONS

Input and Output Prices

Figure 3 is the Producer Price Inflation (PPI) Index that shows the headline rates of input and output prices for goods bought and sold by UK manufacturers over the past 10 years. The rate of output price inflation in October 2021 was the highest monthly rate since February 2013. The headline rate of output prices showed positive growth of 8% on the year to October 2021, up from 7% in September. The headline rate of input costs showed positive growth of 13% on the year to October 2021, up from 11.9% in September.

Transport equipment provided the largest upward contribution to the annual rates of output inflation and metals and non-metallic minerals likewise for input inflation.

Figure 3: PPI Inflation October 2011 - October 2021

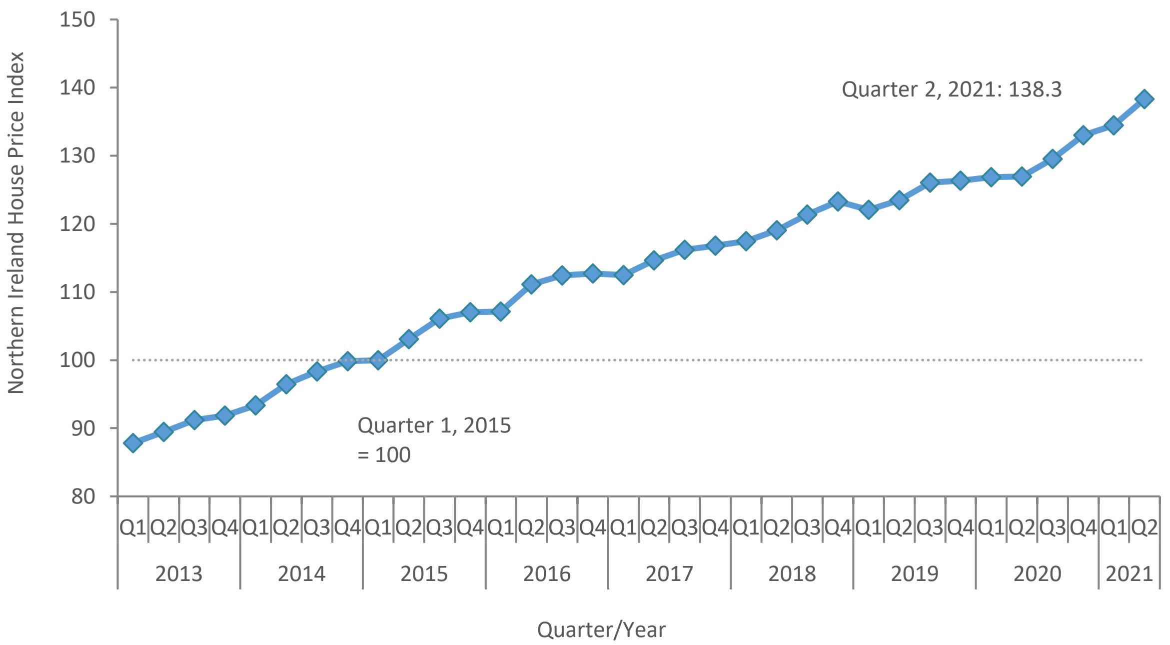


Source: ONS

House Prices

UK average house prices have also increased rising by 11.8% over the year to September 2021, with the average house price now at a record high of £270,000. This was likely driven by people reassessing their living situation in light of increased home working, seeking to move to larger properties and properties in more desirable areas and the supply of housing.

Figure 4: Northern Ireland House Price Index 2013 Q1 – 2021 Q2



Source: NISRA

Figure 4 shows Northern Ireland has also experienced increases in house prices with an increase of 10.7% over the year between Q2 2020 and Q2 2021. The NI House Price Index is 38% higher than in first quarter of 2015 with the average price now £159,000.

Pay

The Annual Survey of Hours and Earnings (ASHE) published by NISRA in October 2021 shows that NI median gross weekly earnings for full-time employees in April 2021 were £575, an increase of 8.8% from £529 in 2020. This is the largest annual increase in weekly earnings on record, however it follows the largest annual decrease on record (-1.1% in the year to April 2020). Real weekly earnings increased by 7.0%. This is the largest increase in real earnings on record, following a decrease of 2.0% last year. In the UK, weekly earnings were £611, an increase of 4.3% from 2020. Real UK weekly earnings increased by 2.6% over the year. Of the 12 UK regions, NI experienced the largest increase in weekly earnings, and has improved from second lowest to sixth lowest, with London (£767) highest and the North East (£539) lowest.

Ulster Bank NI Purchasing Managers Index

The Ulster Bank's recent PMI reports show that NI businesses have experienced some of the highest rates of inflation in the 12 UK regions in recent months. *"According to Ulster Bank's Northern Ireland PMI, private sector firms reported their fastest rise in input costs in the survey's 19 year history. And firms are passing these costs onto their customers by raising their prices at record rates too"*. Output prices have generally risen due to the passing on of raised input prices. Meanwhile, the UK construction PMI survey reported its sharpest rise in input cost inflation in a generation.

The rate of input cost inflation has remained marked and was faster than the UK average with the passing on of higher input prices to customers. It was also noted that *"where inflation of input costs was signalled, panellists linked this to pay increases for some staff and higher raw material costs"*.

For over a year now inflationary pressure has been mentioned in each Ulster Bank PMI monthly report. The underlying causes have been highlighted such as:

- *"Higher prices for raw materials and transportation were noted, while increased staff costs were also mentioned."* October 2020
- *"Rising raw material prices, increased shipping costs and higher staff pay were all mentioned as factors pushing up input costs."* November 2020
- *"Higher shipping costs were widely mentioned, with the price of containers up sharply. There were also reports of higher transport costs as a result of the new Brexit arrangements. Some panellists cited higher raw material prices."* January 2021

- *"Higher shipping costs were widely mentioned, while raw material prices were also up. There were also some reports of higher costs related to Brexit."* February 2021
- *"Nearly two-thirds of respondents saw their input costs increase during the month, with Northern Ireland posting the sharpest rate of inflation of the 12 UK regions. Higher prices for raw materials, increased shipping costs and rises in charges for energy and fuel all contributed to greater input costs."* April 2021
- *"Both input costs and output prices increased at the sharpest rates on record in October as a range of factors led to inflationary pressure. In particular, firms reported higher charges for energy, freight and fuel, ongoing material price rises and increasing wage expenses."* November 2021

The recent rise in inflation is largely due to two factors. First, there have been well publicised increases in energy prices. Last year saw big falls in the oil price which fed through to cuts in electricity & gas bills alongside petrol and diesel. The robust global economic recovery has just seen this trend go into reverse.

The second source of inflationary pressure is the disruption to global supply chains from the pandemic. The switching on and off of the economy has played havoc with supply chains.

With global consumers unable to spend money in areas such as services they have splurged on consumer goods. There has been a surge in demand and an inability for supply chains to meet it. That has led to shortages in a range of global commodities or key items such as semiconductors and timber. There is also a shortage of shipping containers with the price of shipping goods from China to the US trebling. The US economic boom is driving a housing boom which is consuming a huge amount of building materials. In the construction industry, supply chain disruption may impact on housebuilding. Limited housing stock and strong demand means continued upward pressure on prices.

Bank of England's Monetary Policy Committee

The Bank of England's Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target. At its meeting on 2 November 2021, the Committee judged that the existing stance of monetary policy remained appropriate. The MPC voted by a majority of 7-2 to maintain Bank Rate at 0.1%.

Both global and UK GDP increased in 2021 Q3, although at a slower pace than projected in the August Report. Growth is somewhat restrained by disruption in supply chains. While bottlenecks will continue to restrain growth somewhat in the near term, global and UK GDP are nonetheless expected to recover further from the effects of Covid-19. UK GDP is projected to get back to its 2019 Q4 level in 2022 Q1.

CPI inflation rose to just under 4% in October, mainly due to the impact on utility bills of wholesale gas prices which have risen sharply since August 2021. Inflation is expected to rise to 4.5% in November and remain around that level through the winter, due to further increases in core goods and food price inflation. CPI inflation is expected to peak at around 5% in April 2022.

The upward pressure on CPI inflation is expected to dissipate over time, as supply disruption eases, global demand rebalances, and energy prices stop rising. As a result, CPI inflation is projected to fall back materially from the second half of next year. Conditioned on the market-implied path for the Bank Rate and the MPC's current forecasting convention for future energy prices, CPI inflation is projected to be a little above the 2% target in two years' time.

The Labour Force Survey unemployment rate fell to 4.0% in the three months to September, while HMRC payroll data has continued to rise strongly. Just over a million jobs are likely to have been furloughed immediately before the Coronavirus Job Retention Scheme closed at the end of September. Nonetheless, there has continued to be few signs of increases in redundancies and the stock of vacancies has increased further, as have indicators of recruitment difficulties. Overall, the Committee judges that UK inflation expectations remain well anchored in the UK at present.

EY Economic Eye [iv]

In Spring 2021 EY reported that the path of inflation had been remarkably benign for over half a decade, to the point where low inflation was almost taken for granted by many. However, the conditions for price inflation have materialised due to wholesale gas and oil price increases, commodity prices rising, supply chain disruption and consumer spending. Table 1 provides a summary of the factors driving and holding back inflation.

Table 1: Factors driving and holding back inflation:

Factors driving up inflation	Factors holding back inflation
Energy price increases – electricity, oil and gas	Fear of job loss and economic fragility limiting salary negotiations
Demand and supply imbalances in key areas such as housing and holidays	Global competition
Increased business costs to deal with Covid-19 guidelines and restrictions	Lower cost of entry to an increasingly broad range of sectors and markets
Many firms need to repair damaged balance sheets, faced with a strong demand profile and a fixed supply	Sectors facing structural change (business travel, high street retail) will keep prices down as firms battle over a smaller pool of demand
Upward wage pressure from sectors such as frontline public services that have faced a challenging period	Income squeezes still to come when government support eases, keeping affordability an issue amongst consumers
Constrained migration flows adding to key skills shortages	Excess stock in certain sectors leading to discounting
Flow of public money to support firms and individuals	Technological advances accelerated due to pandemic
Rising house prices	Uncertain confidence levels may lead to more cautionary saving and less spending
Increased paperwork costs relating to EU exit	Companies focused on cost reduction
Pent up demand	

More recently in the Winter EY Economic Eye they suggest that there is no longer a consensus about price increases being transitory and, consequently, the expected timelines for interest rate hikes have been brought forward in most major economies. They note that while the pandemic has been the primary driver of inflation, energy price increases and the significant disruptions in supply chains following the outbreak of the pandemic have also impacted prices. However, not all price increases in global markets can be attributed to Covid-19. Antiquated infrastructure and labour shortages have also played a role in many of the world's largest markets, resulting in longer delivery times and higher costs.

(3) Potential implications for NI economy

This section of the paper considers the potential implications of inflation on the NI economy.

Households and consumers

Higher inflation traditionally means higher interest rates and that is a problem for both households and perhaps more significantly, governments who have borrowed huge sums and are running multi-decade high deficits. A combination of high deficits and high interest rates would be very damaging for the global economy. However, the aggregate response of households remains uncertain. Although the labour market has held up well, the furlough scheme has ended and others may be in fear of losing their jobs which could lead to increased precautionary savings.

From a NI perspective, Government spending represents a greater proportion of GDP than the UK average. In previous recessions this would have cushioned the local economy from some of the more severe impacts but this time it could experience an exaggeration of the UK impact i.e. a more severe contraction but faster recovery. Posting strong economic growth numbers could have a positive impact on household and business confidence, which in turn could help sustain consumer spending and business investment. Whilst many economies are rebounding quickly as restrictions are lifted, the ability to sustain growth beyond the initial boost is critical to longer term wealth creation and, importantly, restoring the public finances.

NI is heavily dependent on consumer spending for its overall growth. Recovery is projected to be slower for 2021 and 2022 than the UK as a whole – a reflection of the sectoral composition of the local economy. EU exit has also impacted overall NI growth. A degree of import substitution may boost domestic sales, but complications surrounding imports from GB and potential price increases will adversely impact both the export and consumer sectors.

Inequality concerns

Interest rate rises would be the normal response to rising inflation but are not guaranteed. There would need to be similar price increases across countries to trigger a move and there is a belief that policymakers would tolerate higher prices for longer if they perceive them to be a one-off rise rather than a new trend. The US Federal Reserve has suggested a period of faster price growth would 'catch-up' the prolonged period of slower price growth. Very high levels of government debt are also weighing on the minds of central banks which means that the path of interest rates may decouple from prices for a short time. Inflation may be viewed as 'affordable' in a fast-growing economy, but even short periods of price rises bring inequality risks as there will be people for whom prices rise faster than incomes, especially if the increases are in essentials such as food and fuel. Before Covid-19 in the UK, those on the lowest incomes spent 37% of their incomes on food, housing and fuel compared to just 20% of spending on these categories by the wealthiest cohorts, according to the Family Expenditure Survey. Household savings during the pandemic have not been evenly distributed. UUEPC research has shown that those in lower income groups have been more impacted by the pandemic than high earners, indicating that the additional savings have been accumulated by the more affluent. Northern Ireland is ranked 7th out of the 12 UK regions in median household income after housing costs.

Wage inflation / technological advances

The response of wage levels to elevated prices is critical to the future path of prices. The conventional wisdom has been that in a weak labour market and in an increasingly global economy, there will be very little upward pressure on wages during the recovery. The different experiences across sectors perhaps suggest that this will not uniformly be the case. The data on wages is somewhat compromised as the typical measure of median wages cannot be used to infer pay inflation if the composition of the sector is changing over time. For many workers, the past 20 months will have been a very challenging one and one of the busiest they have ever experienced. Many will be pushing for above-inflation pay rises which could lead to a ramping up of costs. The potential brake on this is the impact of technology, with many firms reporting that digital progress has been accelerated by as much as a decade. This could lead to an increased substitution of labour by technology which, in turn, would act as a headwind on overall wage inflation. Overall wage inflation may be relatively muted but significant spikes in the cost of critical skills and functions are likely.

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[i] This paper was prepared before the Omicron variant was identified.

[ii] The graph also shows owner occupiers' housing costs (OOH) which is an element of CPIH.

[iii] In September 2021 the UK Government announced legislation to set aside for one year the use of average earnings growth figures for State Pensions up-rating following unprecedented fluctuations to earnings caused by the Covid-19 pandemic.

[iv] This paper covers two editions EY's *Economic Eye* from Spring (April) and Winter (December) 2021. Table 1 in this paper refers for the most part to EY's Spring report.