

ELMS ECON DIGEST



BITE-SIZED ECONOMICS

A NOT SO
SWEET TAX

AI - GOOD VS EVIL

TAMING
INFLATION

OLD ISN'T GOLD

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A not so sweet tax

BY WISSAM GUENOUNI

Why does the UK have a sugar tax?

A sugar tax is a levy, or in other words, a tax imposed on producers of soft drinks containing added sugar.

The current sugar tax on UK fizzy drinks is 18p per litre, applied to drinks with sugar contents of 5 grams to 8 grams per 100ml. This is to put people off buying fizzy drinks with a high level of sugar. I am here to tell you why.

How Coca Cola responded

An old 1.75 litre bottle of Coca Cola would have cost £1.79 but is now replaced with a 1.5 litre bottle priced at £1.99. Coca Cola decided to not change the beloved recipe and reduce sugar but instead have taken the hit and pay the sugar tax. Because their costs have increased, they now have smaller bottles for higher prices.

WHY WAS IT INTRODUCED?

Government wanted to reduce childhood obesity, 1 in 5 reception students are obese, so this was proposed by public health experts. Obesity is linked to many health problems, such as diabetes, heart disease and so much more, putting pressure on the NHS.

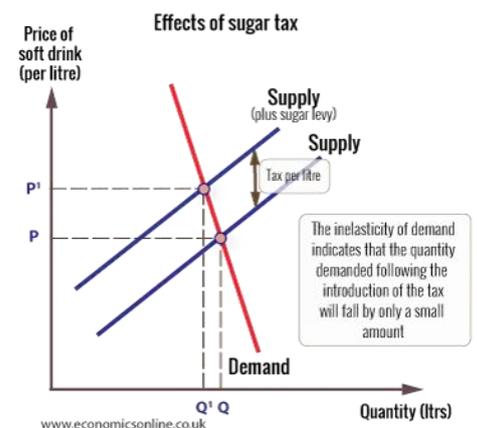
It was found that after the sugar tax was introduced, it was associated with an 8% reduction in obesity levels in year 6 girls, which is equivalent to 5,234 cases of obesity. There is no major change in the levels of obesity after the sugar tax in year 6 boys



The economics of the tax

The sugar tax is a cost to firms and so producing sugary drinks becomes more expensive, so they produce less of it. The graph shows supply falling from S_1 to S_2 for this reason, quantity produced falls from Q to Q_1 . Firms pass on this tax to consumers in the form of higher prices, as you can see P has increased to P_1 so consumers now pay more.

This was also an incentive for suppliers to produce healthier drinks with less sugar



Sinaed Gwata

AI IS TAKING OVER!

Artificial intelligence is the science of making machines that think and act like humans. Scary, isn't it? AI has been around since the 1900s.

However, the biggest strides were not made until the 1950s. It is said that AI will continue to progress by 2030. Examples of AI are in our day-to-day lives, such as Alexa and Siri.



Sinaed Gwata

Good vs Evil

The latest updates to get you through the day

The Evil Side to AI

Sure, convenience and efficiency are nice, AI has robbed many people of their jobs. And on a more serious note, in 1983, an automated system in the Soviet Union thought it detected incoming nuclear missiles from the United States, almost leading to global conflict.

More recent examples of AI catastrophes are, Elon Musk's Tesla cars on autopilot causing accidents on the road. There have been too many fatalities at the hands of artificial intelligence.

The Good to AI

Although the staggering improvements in AI are frightening, AI provides superior quality work that humans are unable to perform. In terms of availability, it is accessible 24/7 and makes unbiased decisions. This ensures convenience to consumers/customers as they are not slowed down by human error. AI improves productivity.



Oil inflation

Tyler Williams-Wright

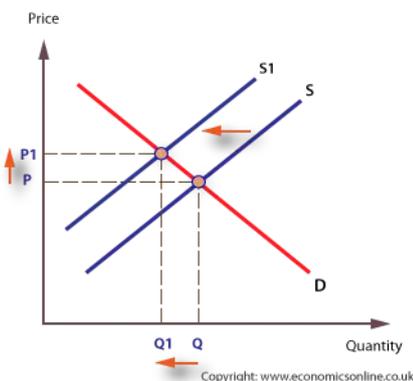


As you know oil is essential globally as it is used to produce goods and services, including our food and drink, we use it daily for vehicles, to heat homes, and to produce electricity.

Have you wondered why everything costs more?

The conflict between Russia and Ukraine has meant that many countries boycotted Russian oil (stopped buying from Russia) meaning supply of oil is less. When something is scarce (doesn't exist in large amounts) it costs more.

The economics of oil and why you pay more



This graph shows that as quantity supplied falls from Q to Q1 the price increases from P to P1. This is because there is less oil available, so the people who are willing to pay the higher price will get it.

We call it inflation

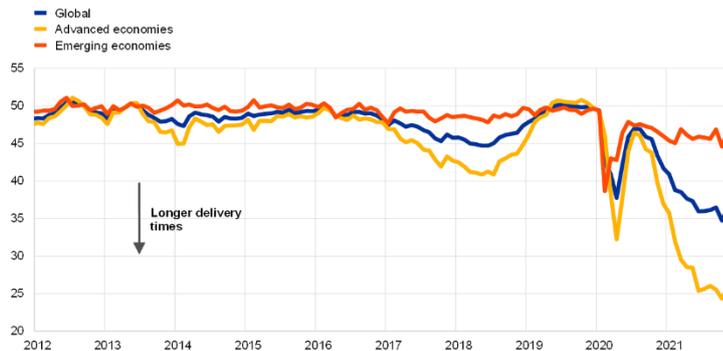
Inflation is the increase of price of a good or service over time. For example, a barrel of oil was \$75 but increased to \$95. Since oil is used in everything, firms pass on the increased costs of oil to consumers so the price of everything has gone up!

Supply Chain Disruptions

By Mario Ionica

Supply chains ensure products are readily available for consumers.

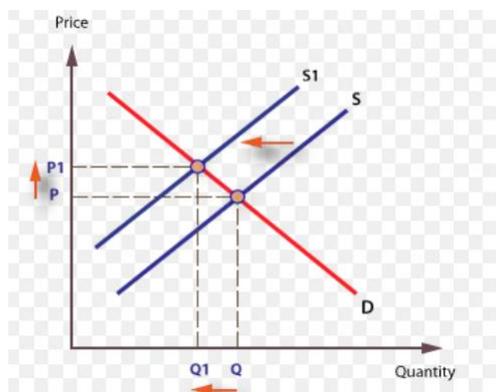
Supply chain disruptions are barriers in the complex process of delivering products to consumers.



What Are Supply Chain Disruptions and why do they matter?

They matter because they cause shortages, less output from firms and therefore price swings illustrated below.

The Broader Impact of The Supply Chain Disruptions



Supply chain disruptions caused price fluctuations, shortages of essentials, and operational challenges for businesses. A supply chain disruption causes supply to fall from S to S1. This fall in supply leads to an increase in price from P1 to P2 because the essential components are rationed to those firms willing to pay the most.

Solutions Source materials locally rather than from abroad. Café Alpaca in Soho, London began to get coffee beans from local producers rather than Asia during the pandemic. Local producers actually matched the brand values better as it was plastic free and compostable as well.

Governments and organisations are reorganising supply chain management. These efforts aim to enhance supply chain resilience and adaptability in the face of future disruptions.

How is this demonstrated by the COVID-19 pandemic?

The COVID-19 pandemic serves as a vivid illustration of supply chain disruptions, with several aspects:

Transportation Challenges: International travel restrictions and reduced cargo capacity caused shipping delays and increased costs.

Labour Shortages: Illness and quarantine measures left industries like agriculture and manufacturing short of workers affecting brands like Nike.

Raw Material Shortages: Disruptions in the production and transport of materials across borders like metals has affected industries, leading to shortages in electronics.

Old isn't gold

by Justin Ryan

What is the ageing population and why is it gradually increasing?

Between 2015 and 2050, the proportion of the world's population over 60 years will nearly *double* from 12% to 22%

What is ageing population and is it a problem?

An aging population is a change in the age structure of population within a country, a rising average age and a growing number of people living beyond the standard working age.

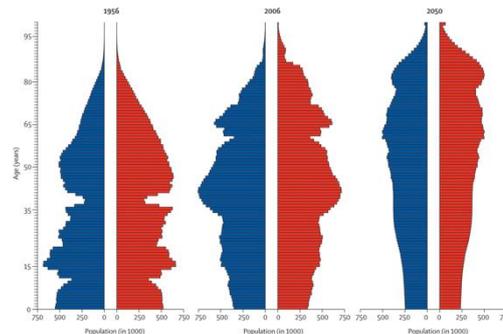
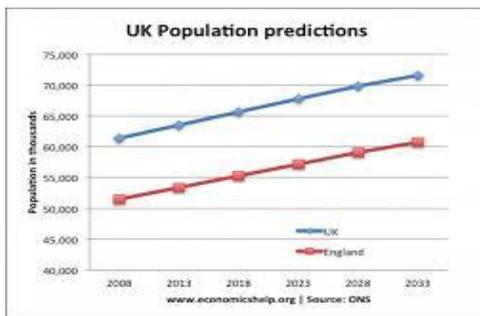
What are some of the problems with an aging population?

An aging population and slower labour force growth affect economies in many ways—the growth of GDP slows, working-aged people pay more to support the elderly, and public budgets strain under the burden of the higher total cost of health and retirement programs for old people.

What's the UK's ageing population saying?

In the next 25 years, people older than 85 will double to 2.6 million. As people age, the risk of developing illnesses and becoming frail increases, leading to greater need for health and social care. This puts pressure on the government budget and taxpayers.

2.6 million people over 50 have unmet social care needs increasing to 15% of people in their 70s, and 21% of people in their 80s.



How will Britain deal with an ageing population?

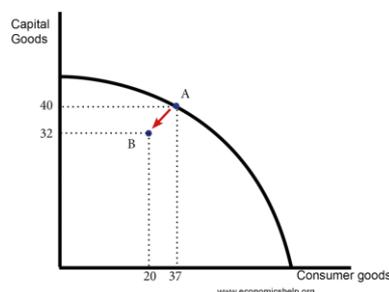
The Pensions Act 2007 legislated to increase State Pension age for both men and women to age 66 between 2024 and 2026, age 67 between 2034 and 2036 and age 68 between 2044 and 2046. This means people are forced to work and produce goods and services for the UK for longer because we don't have enough young people to replace them.

Forcing people to save a proportion of their income has been suggested as a way of solving the UK's pension crisis where pensioners don't have enough money from their state pension because the government doesn't have enough tax revenue from the young population to support the old.

What will happen if the ageing population decreases?

There too are further consequences if the ageing population continues:

- More people retiring means less qualified workers so our economy will lack skills.
- Reduced output of goods and services for UK because the older you get the less productive you might become



Capital goods means things like machinery and equipment

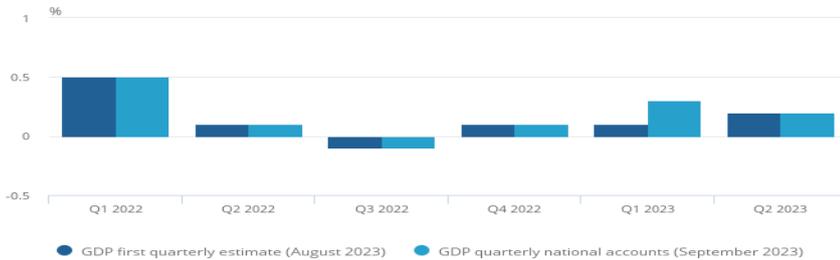
Consumer goods are things we enjoy consuming like cars.

Greater number of older people means producing less from A to B which leads to economic decline

UK economy since Covid-19

Article by Kurt Morcilla

Figure 1: Real GDP is estimated to have increased by 0.2% in Quarter 2 (Apr to June) 2023, unrevised from the first estimate
UK, Quarter 1 (Jan to Mar) 2022 to Quarter 2 (Apr to June) 2023



Source: GDP quarterly national accounts from the Office for National Statistics

Government figures show that the UK's economy has grown by 1.8% since the pandemic started, whereas the previous estimate was a 0.2% contraction.

How was the UK's economy affected during Covid-19?

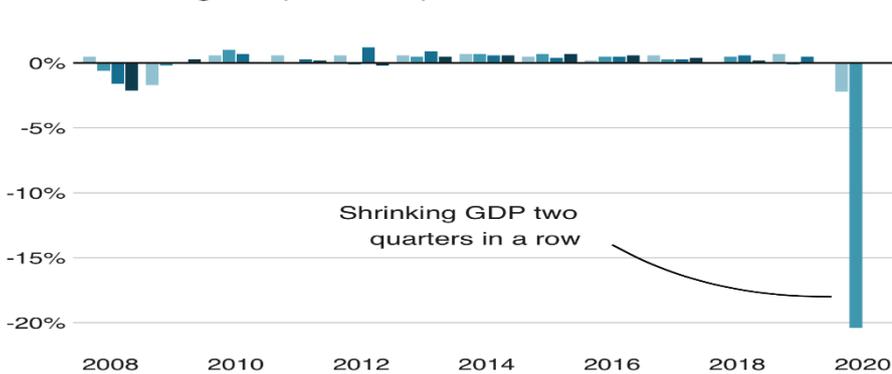
During Covid-19, due to quarantining and lockdowns, national economic activity decreased.

This resulted in a drastic decrease in the UK's GDP

Thus, the UK suffered an economic decline

UK officially in recession

GDP, % change on previous quarter



Source: Office for National Statistics

When an economy is in decline or if the GDP (a measure of what it produces) is negative for more than 2 quarters (6 months), the economy is defined to be in a recession. **The UK during Covid-19 was in a recession.**

New data reveals that the UK's economy has grown at a more rapid pace than originally estimated since the onset of the Covid-19 pandemic.

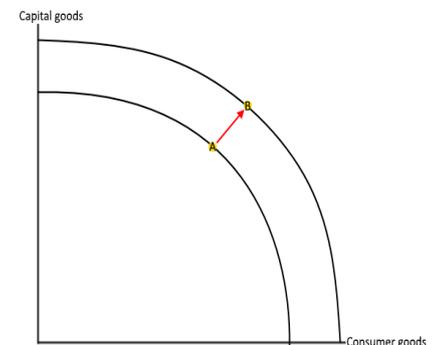
How is an economy measured?

An economy is measured by a country's **GDP (Gross Domestic Product)**

The GDP of a country is the activity of all companies, governments and individuals in a country.

When GDP increases, the economy is growing. When GDP decreases, the economy is declining.

Economic growth can be portrayed as such:



The diagram depicts a shift from point A to point B. This means that the economy is producing more of both consumer goods (things that we buy) and capital goods (machinery or offices that go into the production of other goods).

A big reason for the sudden and sharp growth in the economy after Covid-19 is due to the drastic **increase in demand for goods and services** as people began going out and shopping again compared to during lockdown.

Monday 20th
November
2023

Jasmine
Leona
Year 12

The global impacts

The latest updates

The ongoing trade tensions between the United States and China have become one of the greatest defining economic and geopolitical challenges of the 21st century.

These tensions have cast a long shadow over global trade, economic stability, and diplomatic relations, affecting not only the two economic giants but also reverberating throughout the world as these two countries remain being some of the largest economic powerhouses of the globe.

This is how a US-China trade war affects the UK

Following Brexit, the United Kingdom needs to intensify its relationship with the US, which may put pressure on London to align with US policies against China. Washington may insist that the United Kingdom also limits Chinese access to British financial markets and research infrastructure. Hence, it remains to be seen whether the United Kingdom can take advantage or whether it will be pulled into this trade war.



What are the origins of these trade tensions?

The roots of the US-China trade tensions can be traced back to decades of economic evolution, as both countries have transformed into economic powerhouses. China's meteoric rise as the world's manufacturing hub and the United States' status as the world's largest consumer market played a pivotal role in creating the economic interdependence that characterizes their relationship.

However, issues began to with growing concerns about intellectual property theft, technology transfer, and market access barriers in China, led to the US government's growing dissatisfaction with the trade relationship.

November
2023

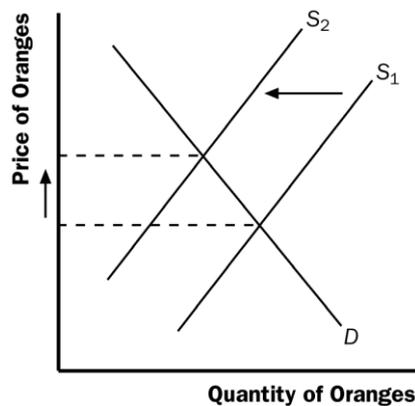
By Adam
Maksen

What Is Brexit

Brexit is an abbreviation of two English words: 'Britain' and 'exit' and refers to the withdrawal from the European Union took place on 1 February 2020, the withdrawal agreement came into force thenceforth, which regulated the orderly withdrawal of the UK from the EU.



How has Brexit affected trade?



Reduced supply from S_1 to S_2 increases the price of oranges to consumers.

For vegetables:

The UK imports over half of the tomatoes, onions, cucumbers, mushrooms, peppers, and lettuce it consumes.

Between 75% and 100% of these products were imported from the EU in 2019.

A reduction in EU imports of tomatoes and onions was observed during the first quarter of 2020.

Extra Paperwork after Brexit has resulted in extra physical inspections of goods and increased costs. This will result in extreme delays for the UK who might not receive produce on time. We buy a lot of produce from Netherlands especially onions which account for \$87 million of Netherlands GDP in 2021.

Supermarket shortages

1. Bananas, the most consumed fruit, are imported from non-EU countries.
2. The EU's share of melons, citrus fruits, grapes, nectarines, and pineapples is evenly distributed between EU and non-EU sources.
3. Apples, berries, and pears are primarily sourced from the UK and the EU.

Major chains **Tesco, Aldi, Lidl, Morrisons and Asda** have imposed limits on the number of certain items customers can buy.

This heavy reliance on imported produce, particularly from the EU, makes the UK vulnerable to potential disruptions in the food supply chain, meaning less fruit and vegetables on our shelves!

Taming inflation

GUILHERME PEREIRA

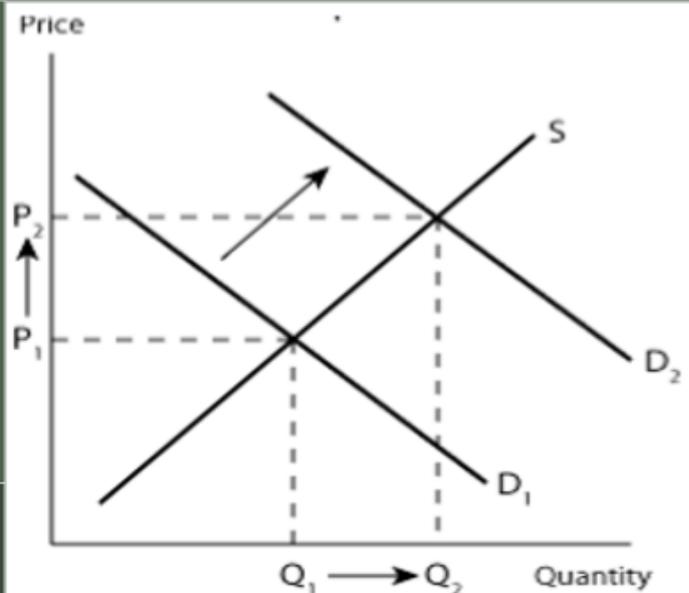
WITH EVERY PASSING DAY THE WORRIES OF INFLATION GROW LARGER AMONG THE PEOPLE IN THE UK. IT IS TYPICALLY THE GOVERNMENTS PURPOSE TO ATTEMPT TO DECREASE THESE PRICES. THIS IS ACHIEVED THROUGH INTEREST RATE. INTEREST RATE IS OFTEN REFERRED TO AS THE COST OF BORROWING. INTEREST RATE HAS INCREASED **14 TIMES FROM 1% TO A WHOPPING 4.5%**

DECREASE IN INTEREST RATE

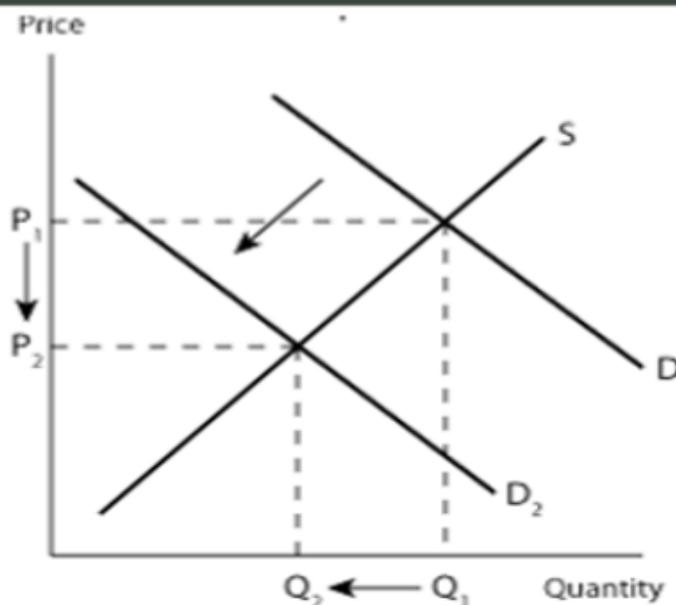
Encourages borrowing and spending.

Demand curve shifts outwards.

Price increases.



PRICE INCREASES ↗



INCREASE IN INTEREST RATE

Discourages borrowing and spending.

Demand curve shifts inward.

Price decreases.

PRICE DECREASES ↘

The Israel-Hamas Conflict: A Ripple Effect on Oil Prices and the Global Economy

November 2023 by Jaden Lindsay

Oil prices have jumped on concerns that the situation in Israel and Gaza could disrupt output from the Middle East.

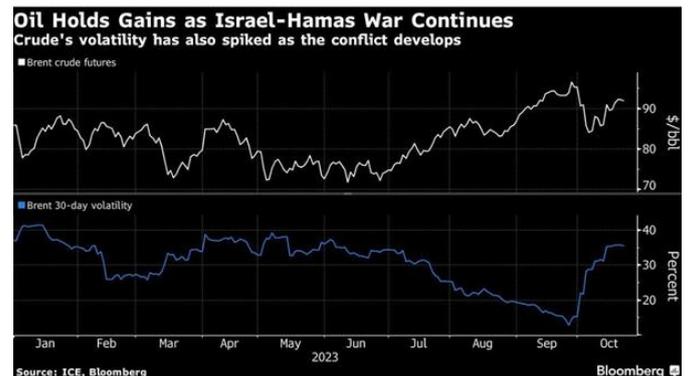
Brent crude, the international benchmark, climbed by \$2.25 a barrel to \$86.83, while US prices also rose.

Oil Prices and the Israel-Hamas conflict

Many countries get their oil from the Middle East, which is where Israel. When there's fighting in this region, it can disrupt the production and transportation of oil.

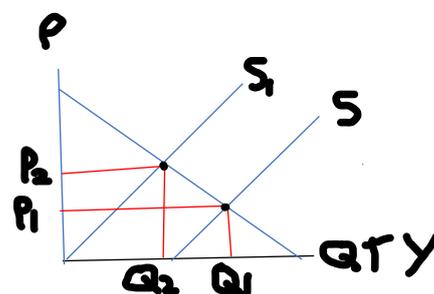
Israel and Palestinian territories are not oil producers but the Middle Eastern region accounts for almost a third of global supply.

Energy analyst Saul Kavonic told the BBC that global oil prices have risen "due to the prospect of a wider conflagration that could spread to nearby major oil-producing nations such as Iran and Saudi Arabia".



How does this affect the global economy?

High oil prices can slow down the global economy. When consumers and businesses must spend more on oil, they have to cut back on consumption and production. The economy thrives on consumption and production.



As we can see from the demand and supply diagram above, the price of oil increases from P_1 to P_2 as quantity of oil decreases from Q_1 to Q_2 , therefore implying that prices for oil increase during wars

North South divide

November 2023
Issue #1

By Brooklyn Allamani

INSIDE

What does Sunak say?

Sunak says Manchester leg on HS2 is 100% scrapped, with £71bn better spent on other transportation methods that are better value for money and delivered faster.

What are the consequences?

The North is fuming with potential jobs and better links to London (geographical mobility), it has been described as 'disrespecting people across the North'.

Manchester United write

"Commit to the line and avoid economic self-sabotage".



Source: Department for Transport

B

New finds this week

Sunak has announced plans to cancel the Manchester leg of HS2, HS2 is a high-speed railway which will connect important British cities to London, allowing commuting to happen amazingly fast.

Mr Sunak said the money is better spent strengthening Northern Powerhouse Rail (NPR) improving connections between Leeds, Manchester and Liverpool.

Oil crisis

Saudi Arabia

Why are oil prices increasing?

Many countries have agreed on boycotting buying oil coming from Russia in attempts to stop the war in Ukraine, it reduces Russia's funding, therefore leaving them less money to invest in supplies.

This puts pressure on other oil exporters like Saudi Arabia. The UK's imports from Saudi Arabia quadrupled from £50.4m to £263.8m in February 2023.

Due to countries switching their imports to countries like Saudi Arabia, it puts a strain on their supply, they must extract more oil to meet the rising demands.

This is a problem because Saudi Arabia's energy minister has announced that they are going to reduce their output of oil and decrease production also whilst increasing the price of their oil from \$70 to \$80 per barrel.

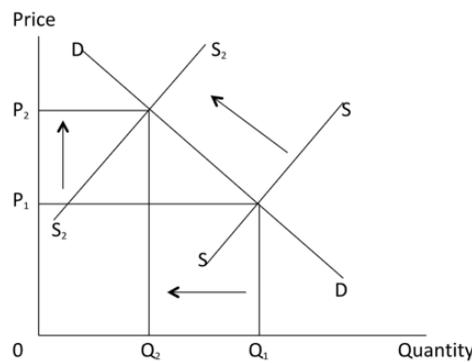
Saudi Arabia want to use their oil wealth to fund their own development such as tourism, they want to open more to the public and therefore want to use the oil for their own benefit to stop depending on oil exports so much.

They also want to invest in mineral mining and work on expanding their military production.

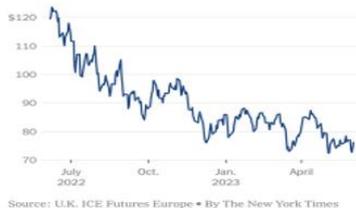


Why is this a problem?

This is one of the leading causes of inflation in the UK because supply of oil has fallen from Russia and Saudi Arabia. Since the boycott and Saudi's objectives (S shift to S₂) quantity supplied of oil falls from Q₁ to Q₂ and therefore oil prices increase from P₁ to P₂. Think of oil as a limited-edition trainers, because there are few of them, people are prepared to pay more driving up the price (inflation). Oil is used in almost everything so firms and consumers are willing to pay more at P₂.



Brent crude

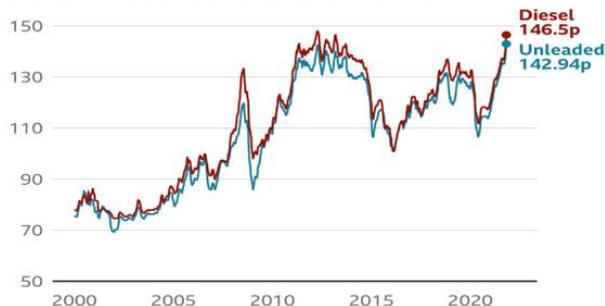


Source: U.K. ICE Futures Europe • By The New York Times

THIS SHOWS PRODUCTION OF OIL DECREASING IN SAUDI ARABIA

UK fuel prices

Diesel and petrol at the pump, pence per litre



Source: Experian. Last update: 25 October 2021



THIS SHOWS HOW FUEL PRICES ARE INCREASEING

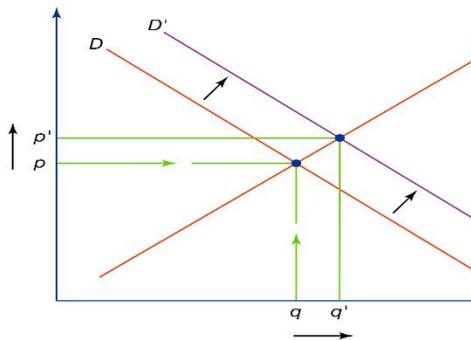


Post Covid 19 growth fuels inflation

Lucas Barbosa

One of the primary factors contributing to this surge is the increasing demand for oil as economies recover from the detrimental effects of the COVID-19 pandemic. As countries gradually reopen their doors and people resume their normal activities, the need for transportation and energy has surged. This surge in demand has outpaced the rate at which oil producers are able to increase their output, leading to a sharp rise in prices.

A shift in demand



	2021	2022	2023	2024
Brent crude oil (dollars per barrel)	70.89	100.94	84.09	94.91
Gasoline retail price (dollars per gallon)	3.02	3.97	3.62	3.69
U.S. crude oil production (million barrels per day)	11.27	11.91	12.92	13.12

The consequences of rising oil prices can be far-reaching, affecting various sectors such as transportation, manufacturing, and agriculture. Higher fuel costs directly impact the transportation industry, leading to increased logistics expenses that could potentially be passed onto consumers in the form of higher prices for goods and services. Additionally, industries that rely heavily on petroleum by-products may face increased production costs, ultimately impacting profit margins and potentially leading to job cuts. Moreover, consumers may also feel the pinch, as increased oil prices tend to drive up the cost of gasoline and heating oil. The elderly are most vulnerable in the winter with energy bills sky rocketing, how will they keep warm?

The situation calls for careful monitoring and proactive measures to ensure stability and mitigate the potential adverse effects on both businesses and consumers. The Bank of England continue to monitor interest rates which help bring down inflation. (See Guilherme Pereira's article for how) *interest rates control inflation*)

COST OF LIVING

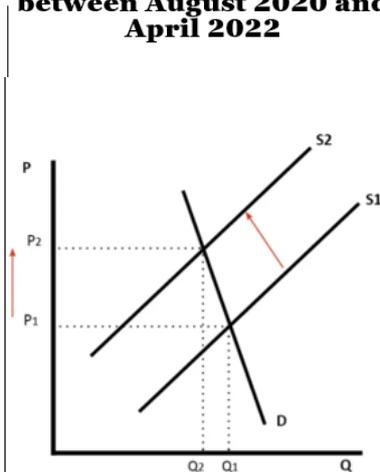
Latest news and bulletin updates

Kishan Gordon

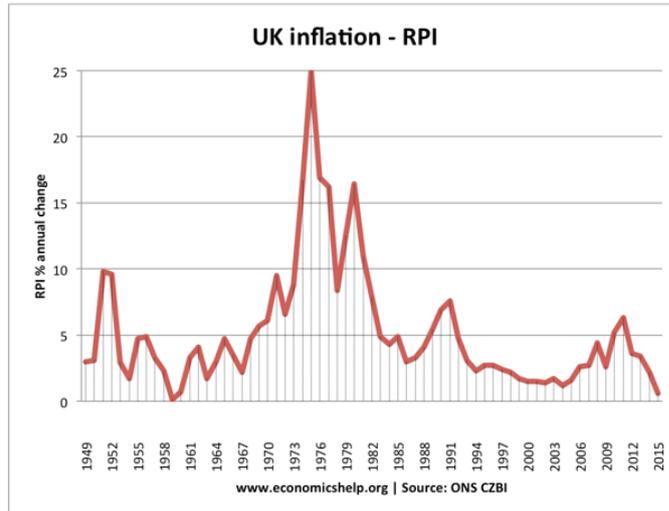
Rising prices

The latest updates

The cost-of-living crisis has sent the price of everything through the roof, and it is difficult to find a good or service in the UK that has not been impacted by rising inflation. The most noticeable change has been the cost of electricity, gas, and fuel with the energy price cap, rising from £1042 to £1971 between August 2020 and April 2022



Supply is shifting to the left due to a fall in the supply of oil which is used in everything from food and transport. Therefore price increases from P1 to P2.



UK inflation frequently fluctuates because of oil prices and interest rates

What is the cost-of-living and what has caused the cost-of-living crisis?

Daily news updates and opinions

The underlying cause of the cost-of-living crisis is a combination of rising inflation and low wage growth but there are several other factors that have contributed to worsening conditions across the board. For example, the Russia-Ukraine conflict is fueling the cost-of-living crisis across the continent with a recent YouGov poll showing that 83% of families in Spain, 76% in Italy and 66% in both France and Denmark have reported a noticeable rise in everyday costs this year.

The cost of living is the amount of money needed to cover basic expenses such as housing, food, taxes and healthcare in a certain place and time. It is often used to compare how expensive it is to live in one city compared to another.

