

# Data Journalism Portfolio

## Jonathan Vincent

October 2023

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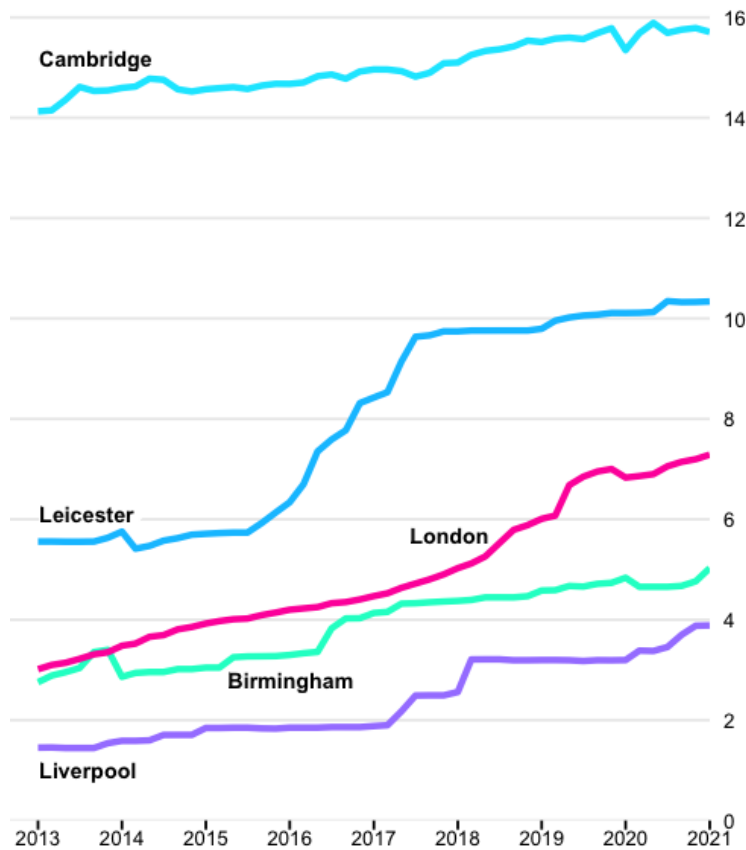
# Articles:

The following 3 articles were written independently and are unpublished:

## Going Dutch

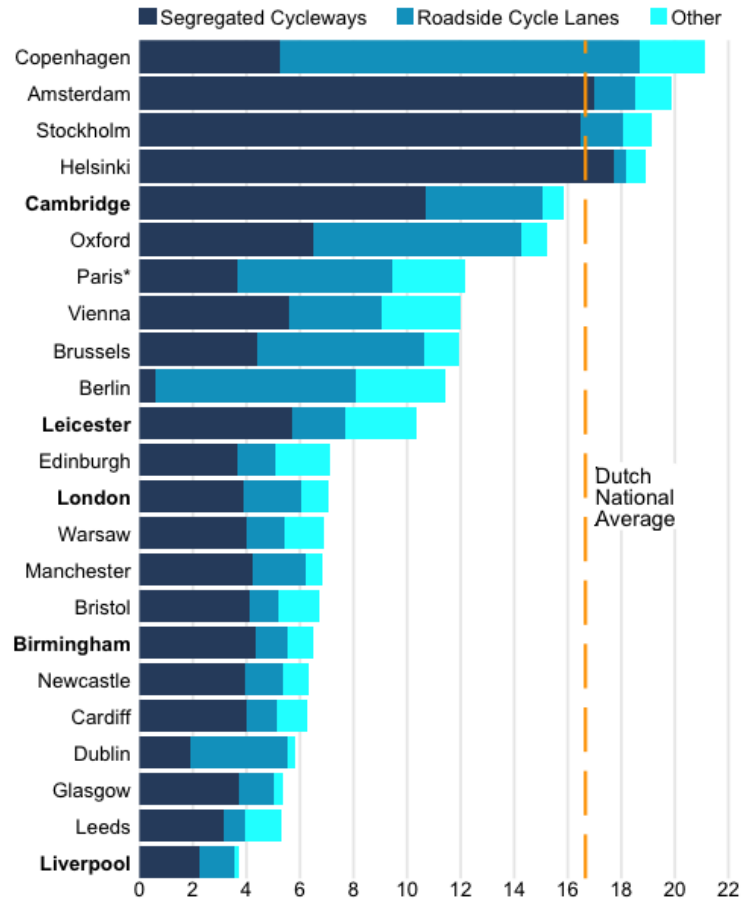
Proportion of roads and paths with cycling infrastructure, %

By year and UK city



Source: OpenStreetMap

By European city, February 2021



\*includes the departments Hauts-de-Seine, Seine-Saint-Denis and Val-de-Marne

March 2021

## British cities are greatly expanding their cycling infrastructure

It will take many more years to reach Dutch levels

“This document aims to kick off the most radical change to our cities since the arrival of mass motoring” proclaimed Boris Johnson in a Department for Transport policy paper released last year. Entitled ‘Gear Change’, the paper outlined the government’s plan to build thousands of miles of dedicated bicycle infrastructure over the next five years, paid for by a sixfold increase in funding. The result, it is hoped, will be millions of healthier, happier citizens, who cycle more often, breathe cleaner air and contribute less to global warming.

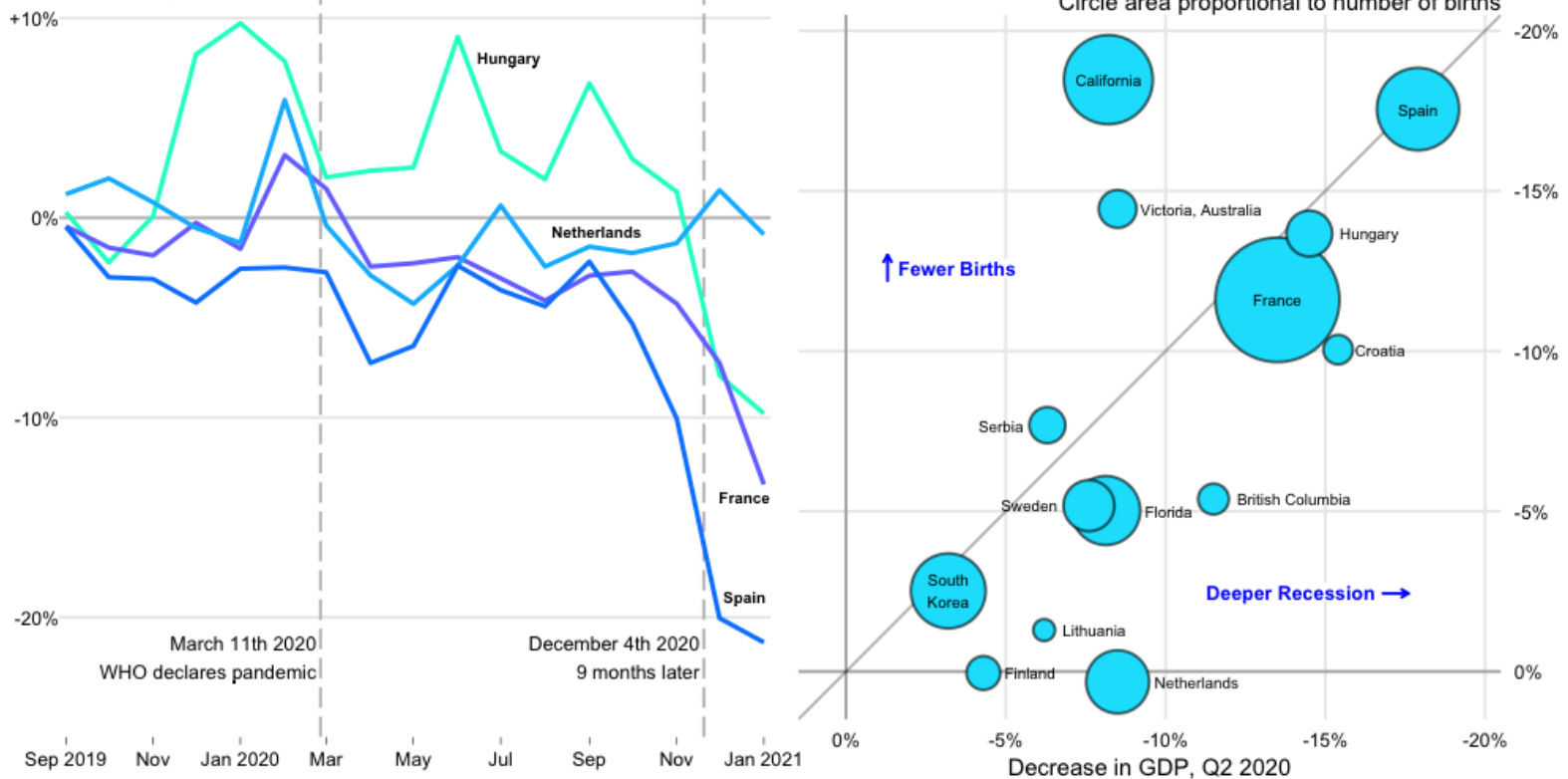
The Netherlands serves as an obvious role model. The country is similar in many ways to Britain - rich, rainy and densely populated. But over a quarter of all journeys there are made by bicycle, compared to just 2% in Britain. Decades of investment into the road network means cyclists are almost always physically separated from both motor vehicles and pedestrians. Schoolchildren, commuters and pensioners alike can cycle to their destination, without helmets, hi-viz jackets or any other specialist gear, safe in the knowledge that they will not be endangered by traffic.

Cambridge and Oxford are the two British cities closest to emulating this cycling utopia. While not quite up to Dutch standards, a comprehensive network of cycle lanes criss-cross both cities, and the share of commuters cycling to work now reaches 32% and 17% respectively. Other local authorities are trying to catch up. Cardiff, rather optimistically, plans to reach a cycling modal share of 18% by 2026, up from 9% in 2015. Three boroughs in Outer London, Enfield, Kingston and Waltham Forest, are part of the 'Mini Holland' scheme, introduced by Boris Johnson when he was Mayor of London, and have invested heavily in 'Dutch-style' walking and cycling infrastructure. Following the success of this program, which saw time spent cycling increase by 18% in a single year, the government now wants a further 12 non-London local authorities to become 'Mini Hollands'.

Nevertheless, most larger British cities still lag far behind their continental counterparts. Despite impressive improvements over the last few years, London has half the amount of designated cycleways as Paris, Vienna or Brussels, when measured as a proportion of all roads and paths. Manchester, Birmingham, Liverpool and Glasgow are worse still, and have been building at a slower rate. Even with grandiose promises of radical change and generous funding, it will be a long time yet before British cyclists can travel as safely as those across the Channel.

## Conception Consternation

Birth rate, change from 12 months prior



### March 2021

## The pandemic has caused the world's birth rate to collapse

The economic recession and shaky household finances are to blame

The world reached peak lockdown on April 8th 2020, when the majority of the global population, over 3.9 billion people, were legally required to stay at home. Many spent more time together with their cohabitants than ever before. One might expect that couples, forced into close proximity and with little else to do, would have whiled away their time making more babies than usual. In fact, the opposite seems to have happened.

Birth rates in January 2021, 9 months after peak lockdown, have plummeted. California and Spain saw falls of over a fifth, year on year. France, often envied in Europe for its relatively high birth rate, recorded a decline of 14%. Hungary's rate fell by 10%, in spite of the government's generous pro-natal subsidies.

What is behind such a precipitous drop? The biggest culprit is money. Having a child is an expensive endeavour in the rich world, and couples are well aware of it. Sudden joblessness or

loss of income forces would-be parents to think twice about having children, potentially leading them to postpone or cancel their family plans.

The financial situation of aspiring parents is difficult to measure, but data on GDP growth can serve as a reasonable proxy for economic anxiety. By comparing each country's GDP growth in the second quarter of 2020, with the drop in the birth rate (relative to the yearly trend) 9 months later, a remarkable pattern emerges. Countries that weathered the economic storm best, like Lithuania and South Korea, saw only a minor pandemic-induced effect on their birth rates. In Finland, where the economy shrank by less than 5%, the birth rate even increased. Countries that were hit hard economically, like Spain and Hungary, were saddled with a big fall in births.

There remains a glimmer of hope for weary demographers. In a parallel to the Harvesting Effect, which posits that a high Covid-19 death rate now will be offset by fewer deaths later, the current birth rate may yet rebound to above average levels after the pandemic subsides. A [study by the Institute for Family Studies](#) shows that following other epidemics, the birth rate reaches a nadir 9 months after the initial outbreak, but goes on to recover, and after 20 months, it peaks at 120% of the historical level.

There may already be signs of this happening in South Korea. The outbreak there began earlier than in Europe or North America, with lockdowns and social distancing being imposed in February, rather than late March. The year on year decline in birth rate reached its lowest point in November, at -16%, but then rose to -8% in December. Global data for February, likely to be released later this month, will show whether couples were really forgoing children, or merely postponing them.

## The Growth of Motorways in Europe: 2007, 2018 and Planned Future Expansions

Sources: EUROSTAT, ADAC, UN, Wikipedia



March 2021

# European Motorways: East Overtaking West

Motorways in Eastern European countries are catching up with their Western counterparts

When the European Union expanded in 2004 to include 9 additional Central and Eastern European nations, a driver travelling eastwards from Germany would soon be forced to leave the smooth asphalt of the Autobahn behind, and rattle their way to their destination mostly along single-lane, concrete slabbed roads, better suited to Soviet tanks than modern cars. Today, just 20 years later, a surge of road infrastructure investment in post-Communist Europe, funded both by national governments and the European Union, has resulted in a network of motorways that can glide you along from Berlin to Warsaw in 5 hours, or from Vienna to Belgrade in less than 6.

Hungary, Croatia and Slovenia now boast motorway networks with coverage (measured both in terms of area and population) that surpass those in Britain or the Nordics. Slovakia, Serbia, the Czech Republic and Kosovo are not far behind. And they are not stopping there - most Central and Eastern European countries have plans to at least double the size of their networks within the next 10-20 years, potentially putting them on a par with the likes of Germany, France and

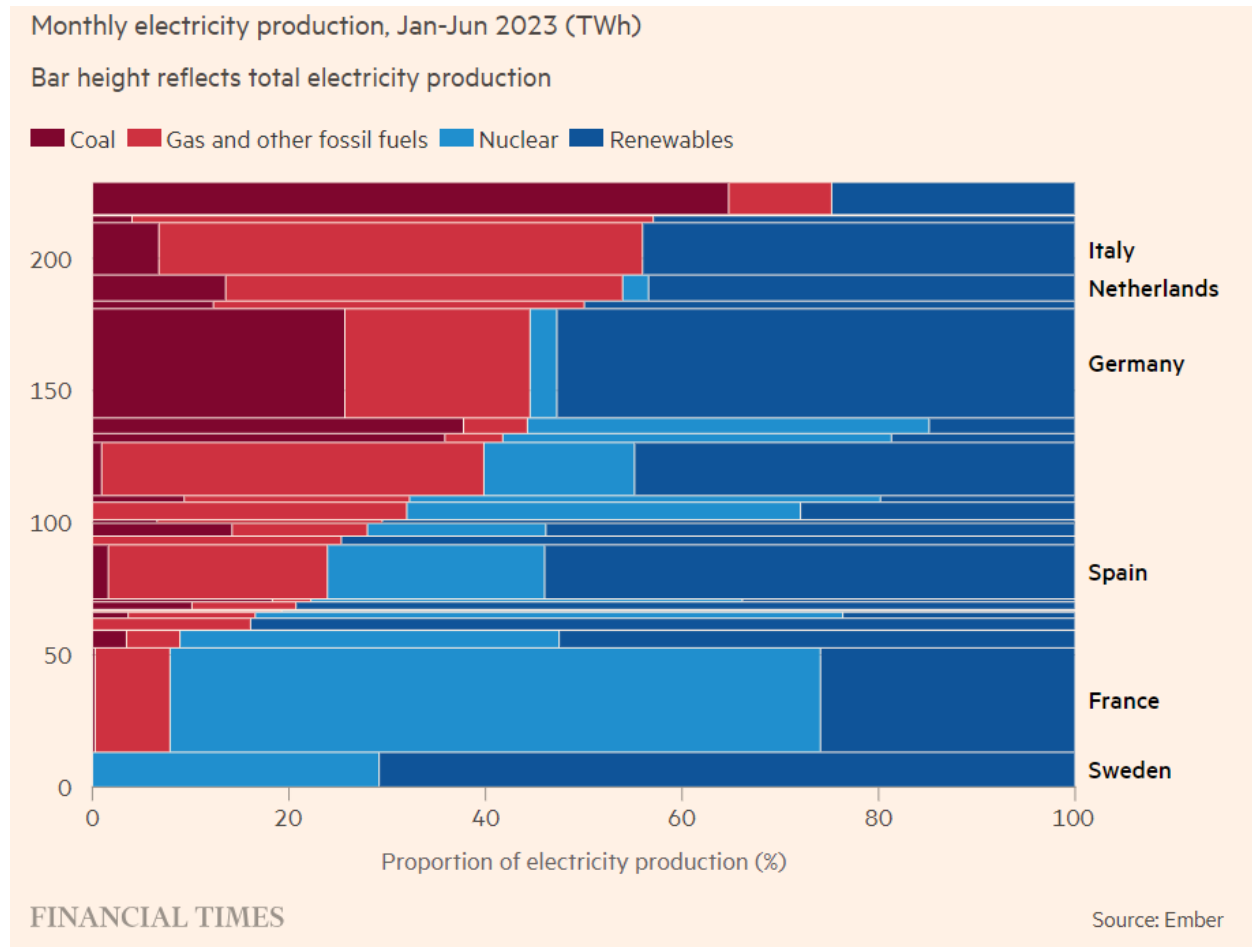
Spain. Whether these plans will come to fruition, or indeed whether they are wise at all, remains open to debate. Much of the low-hanging fruit of infrastructure spending has already been picked.

Take Hungary as an example, there already exists good connections from Budapest to every other Hungarian city with over 200,000 inhabitants, as well as with all nearby capital cities; Vienna, Bratislava, Belgrade, Ljubljana and Zagreb. The proposed new motorways aim to connect the capital with second tier cities in neighbouring countries, such as Košice (Slovakia), Osijek (Croatia) and Uzhhorod (Ukraine). Although some of these would help to form wider pan European corridors, the economic argument for their completion is not nearly as strong as it was for the motorways built up until now. With the EU aiming to lower carbon emissions by moving away from the automobile towards rail, as well as Hungary's continued obstinance in Brussels, Orban and his party may struggle to find funding for new projects.

The following articles were published in the Financial Times online [DataWatch](#) column:

**July 23rd 2023**

## Europe is far from completing its energy transition



Only a handful of European countries have successfully decarbonised, despite the EU's commitment to reach net zero emissions by 2050, according to data from energy think-tank Ember.

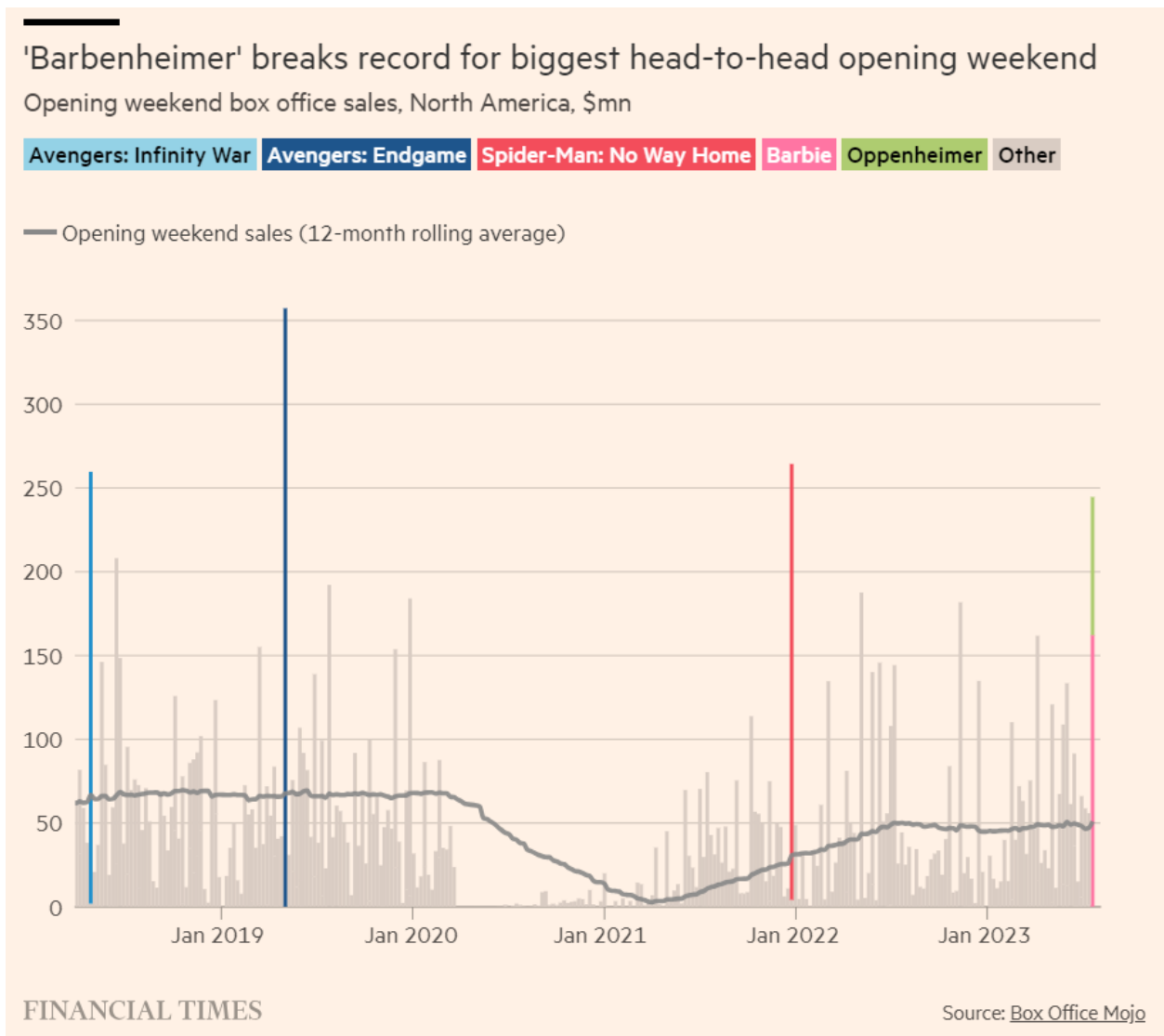
Sweden was the first member state to fully eliminate fossil fuels in electricity production, using a mixture of nuclear and renewables. Poland, on the other hand, is the most reliant on fossil fuels, which still accounted for 75 per cent of production.

Germany, Europe's largest producer of renewable energy, phased out nuclear power entirely in April 2023, and continues to use significant amounts of coal. The government plans to close all coal plants by 2038.



**July 30th 2023**

## 'Barbenheimer' breaks record for biggest head-to-head opening weekend



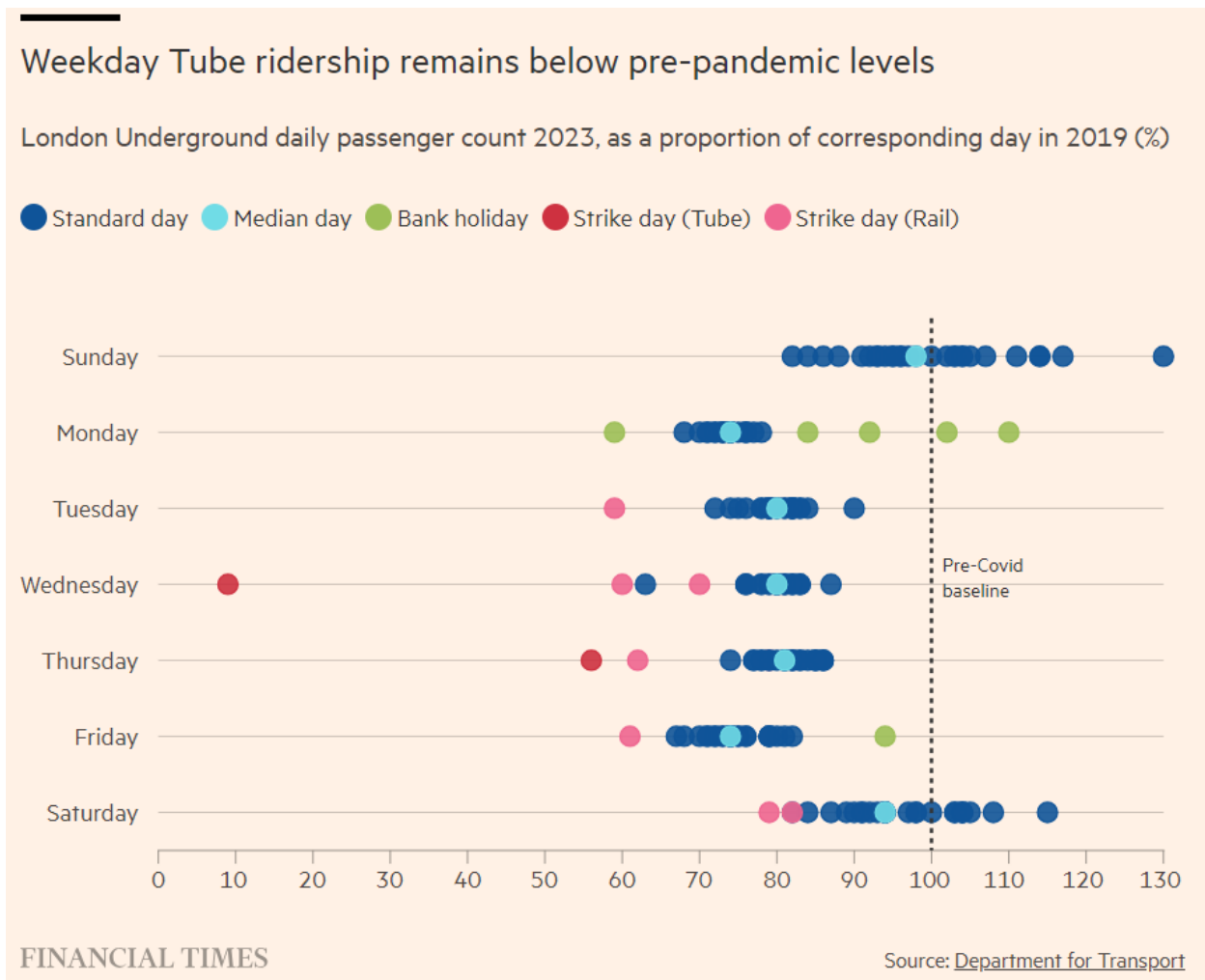
Barbie and Oppenheimer have set the record for the biggest head-to-head opening weekend in cinema history. The pair grossed \$244mn combined on their debut in North American theatres, beating the previous record of \$115mn set in May 2015, when Pitch Perfect 2 faced off against Mad Max: Fury Road.

Individually, the films came in at 20th and 111th of all time opening weekend sales respectively.

Despite their box office success, average opening weekend revenues still linger below the pre-pandemic trend. In the years before 2020, new releases' takings averaged \$67mn, compared with \$48mn over the past year.

**August 13th 2023**

## Weekday Tube ridership remains below pre-pandemic levels



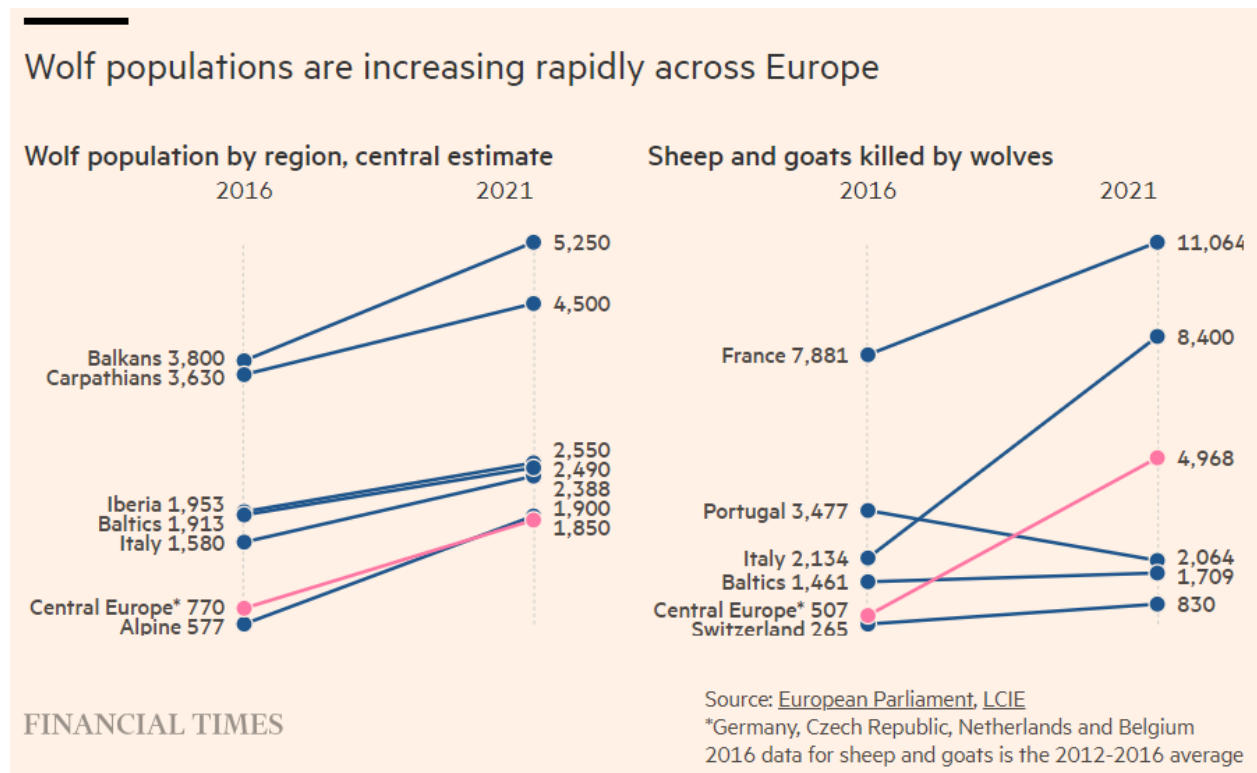
Passenger numbers on the London Underground remain significantly below 2019 levels, according to data from the Department for Transport.

The failure of ridership to recover since the pandemic indicates that the shift in commuting patterns may have become permanent. Despite businesses' efforts to entice them back in to the office, many employees are still opting to work from home, for at least part of the week.

Mondays and Fridays are particularly affected, with on average 26 per cent fewer passengers recorded this year compared with 2019. Tuesdays, Wednesdays and Thursdays have recovered somewhat more, experiencing a drop of 20 per cent, while weekend traffic has largely returned to previous levels.

**August 13th 2023**

## Wolf populations are increasing rapidly across Europe



The population of wolves is growing dramatically across Europe, according to estimates from the Large Carnivore Initiative for Europe.

Thanks to widespread conservation efforts, wolves have returned to many areas where they were previously driven to extinction. In Germany, where the last indigenous wolf was hunted in 1904, there were an estimated 158 wolf packs in 2021.

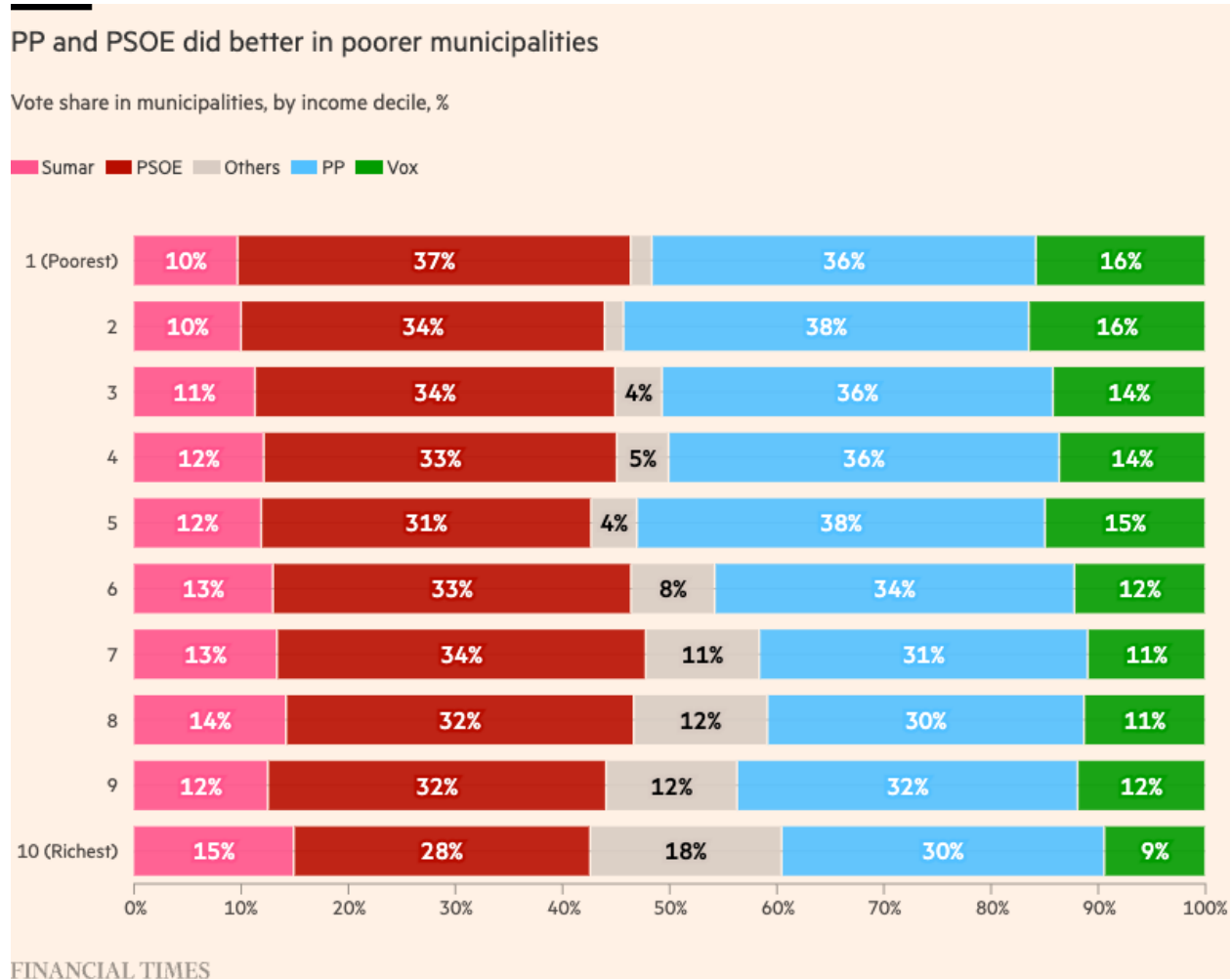
The success of the wolf revival has not been without controversy. Following a 10-fold increase in attacks on livestock in central Europe, considerable opposition has emerged among farmers and conservative parties. Multiple German states have already relaxed laws governing the culling of wolves, and the European parliament passed a motion in November to consider downgrading wolves' protected status.

# Graphics:

The following graphics were made shortly after the Spanish Election, while I was at the FT, but were not published due to time constraints:

## Spanish Election Coverage:

### PP and PSOE did better in poorer municipalities

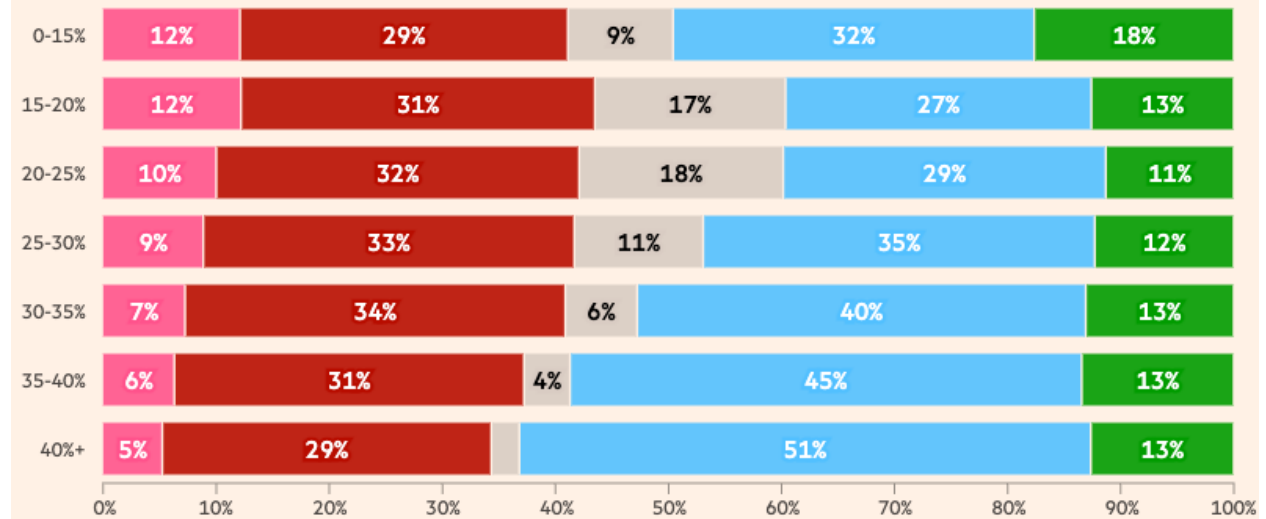


# PP dominated in older municipalities

## PP dominated in older municipalities

Municipality vote share, by population over the age of 65, %

Sumar PSOE Others PP Vox



FINANCIAL TIMES

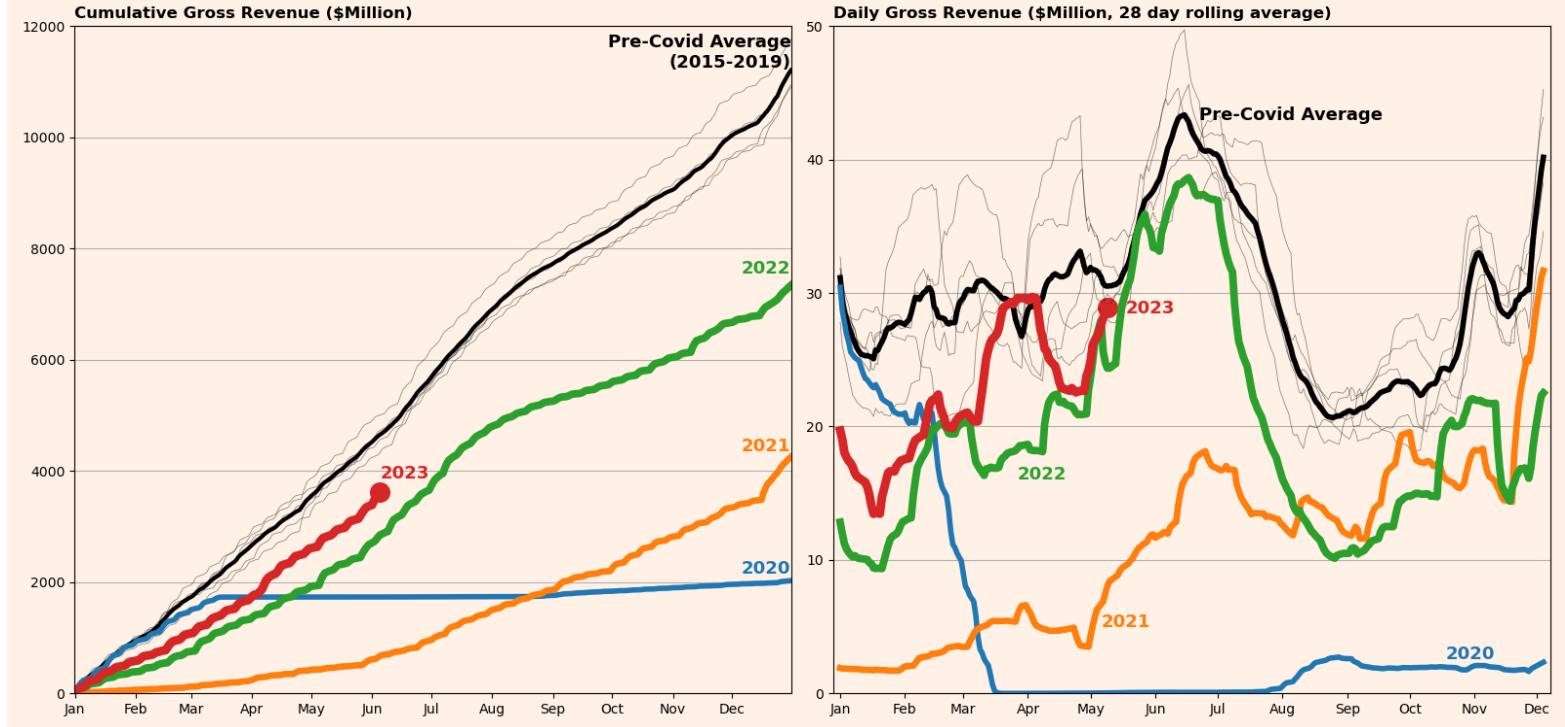
The following graphics were made as part of my application for the Financial Times Fellowship:

# Will the Film Industry Fully Recover in 2023?

## Will The Film Industry Fully Recover In 2023?

Box Office Gross Revenues, 2015-2023 (USA and Canada)

Source: BoxOfficeMojo.com



# The Post Pandemic Box Office: Fewer films are being released, but blockbusters are staying in cinemas longer

**The Post-Pandemic Box Office: Fewer films are being released, but blockbusters are staying in cinemas longer**

Source: BoxOfficeMojo.com

Number of days each film was screened in at least 600 cinemas, by date. Circle area is proportional to total gross revenue. Colour-coded by studio

