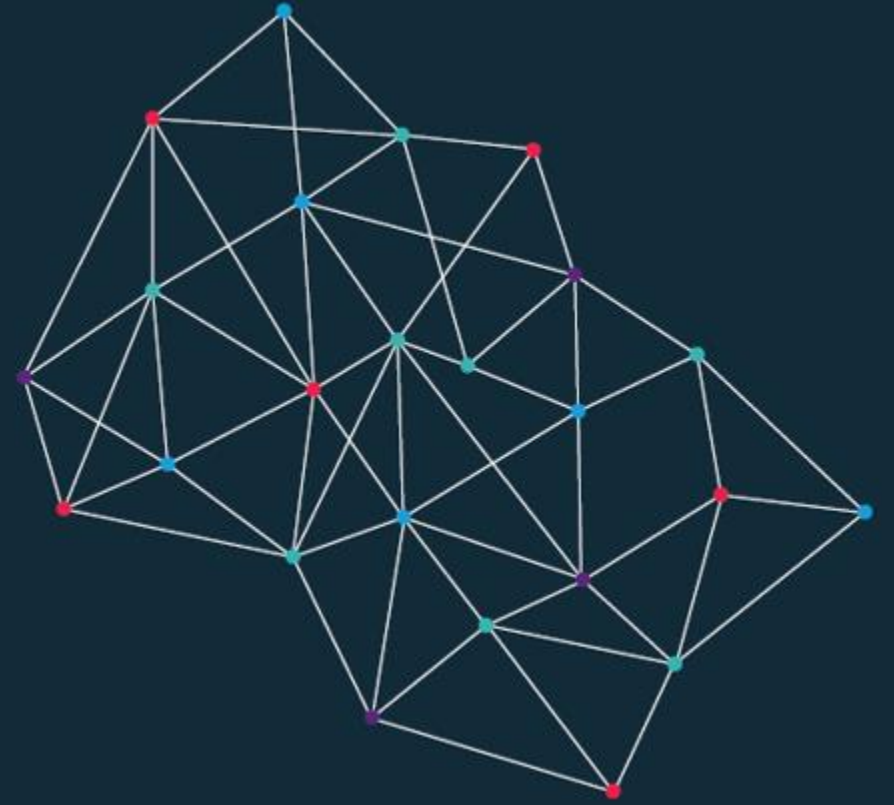
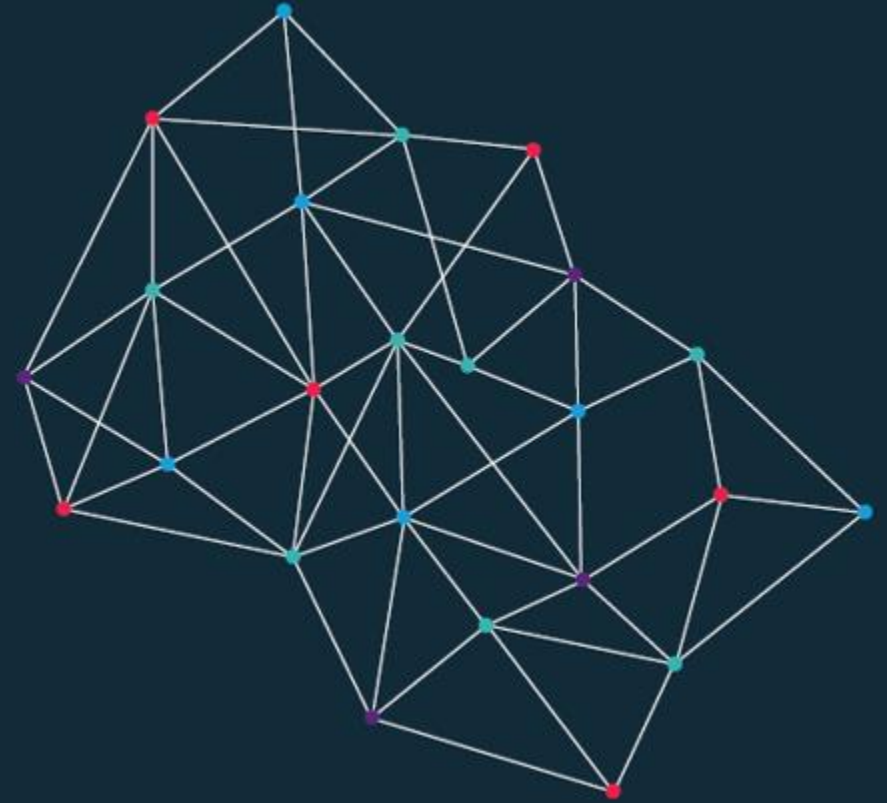


Communicating Economics.

Lecture 4



Story-telling



Communicating
Economics.

Today's session

- Stories in economics
- Data story
 - What do we mean by a data story?
 - What does a good chart look like?
 - Next steps

For years, America has been getting screwed by China. They've been taking our jobs, stealing our intellectual property, and flooding our markets with cheap goods. The trade deficit with China reached a record high—billions of dollars. This is not the deal we should have made, folks. It's a disaster. Previous administrations were weak. They let China take advantage of us without batting an eye. But I came in and said, 'No more.'

The power of stories

“Homo sapiens is a post-truth species whose power depends on creating and believing fictions”

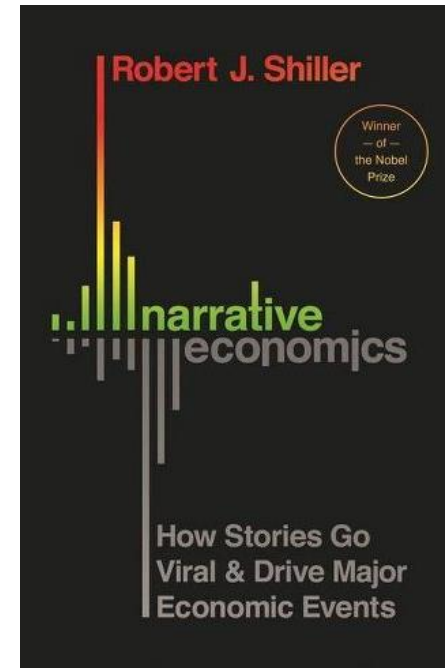
Noah Yuval Harari

“We are, as humans, constantly creating stories to make sense of the world around us”

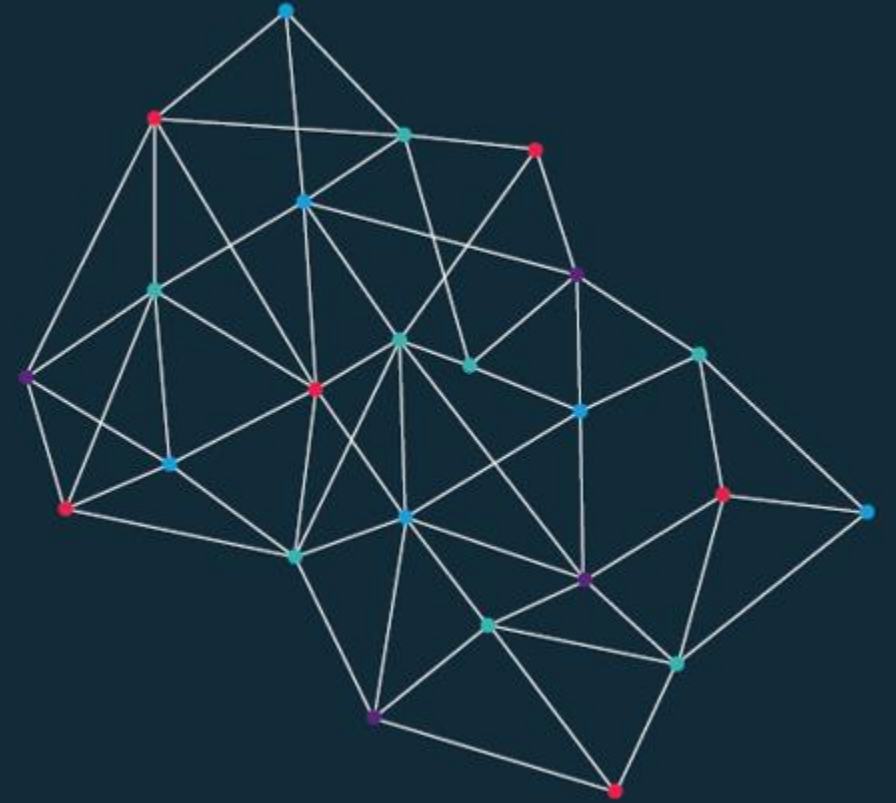
Robert Shiller, Narrative Economics

Narrative economics

- Stories help us to understand the world – more than evidence and facts?
 - Evidence and facts are likely to be more powerful when they fit a narrative
- Stories drive behaviour
- Not a new idea:
 - Keynes' animal spirits
 - Roosevelt in the 1930s: "The only thing we have to fear is fear itself"
- More relevant today



What is a story?



What is a story?

For years, America has been getting screwed by China. They've been taking our jobs, stealing our intellectual property, and flooding our markets with cheap goods. The trade deficit with China reached a record high—billions of dollars. This is not the deal we should have made, folks. It's a disaster. Previous administrations were weak. They let China take advantage of us without batting an eye. But I came in and said, 'No more.'

What is a story?

- An account of events, incidents, people
- Organised in a coherent way to convey actions, intentions and causality (narrative)
- With an overarching theme (big picture)
- That engages and resonates with people and helps them to make sense of the world

Economics as story-telling

"When we **communicate**—even in the supposedly objective language of science—we are telling stories. **The facts alone do not speak; they must be organized, given context, and made relevant through the narrative form.**"

(Deirdre McCloskey, If You're So Smart: The Narrative of Economic Expertise)

- At its heart, economics is telling stories about the way the world works
- Economic models connect events/ data and provide a coherent narrative
- But the models and the data get in the way

Economics as story-telling

Economists are great storytellers. Their tales might be **anecdotes of economic events** that they have observed and which seem significant. More often, they are small, thoughtfully imagined **stories about how the economic world works**. Economists use these narratives to reason about **why things happen in the way that they do – and perhaps what might happen next**.

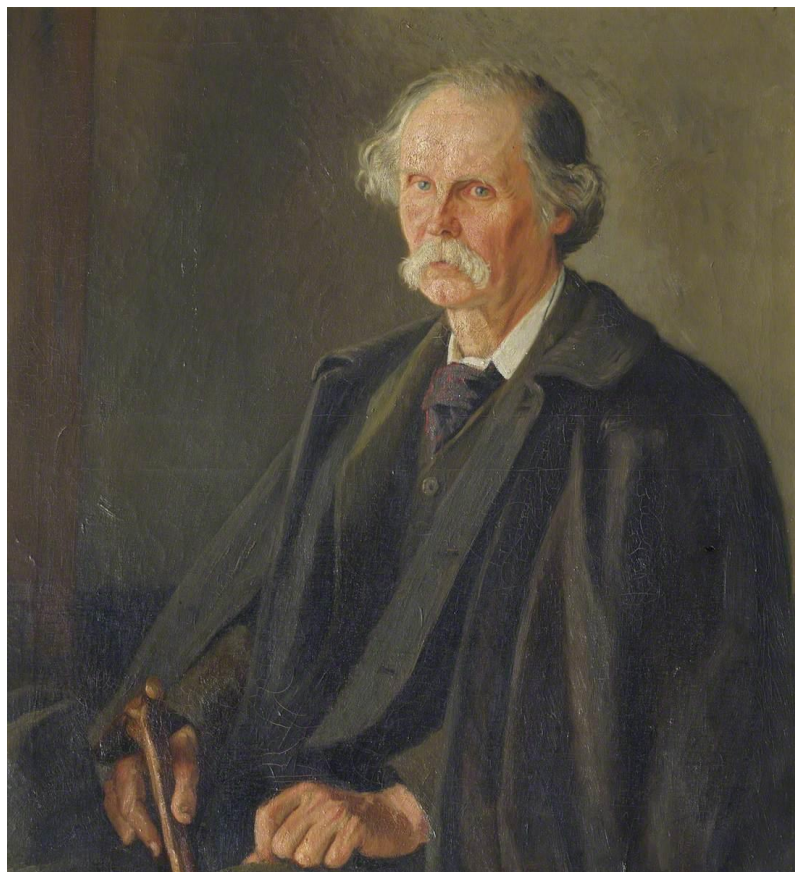
Mary Morgan

([What is the role of storytelling in economics? - Economics Observatory](#))

"People don't think in terms of numbers or models; they think in terms of stories. A good economic story has the power to capture attention, **explain a problem, and, maybe, point to a solution.**"

(Tim Harford, The Undercover Economist Striked Back)

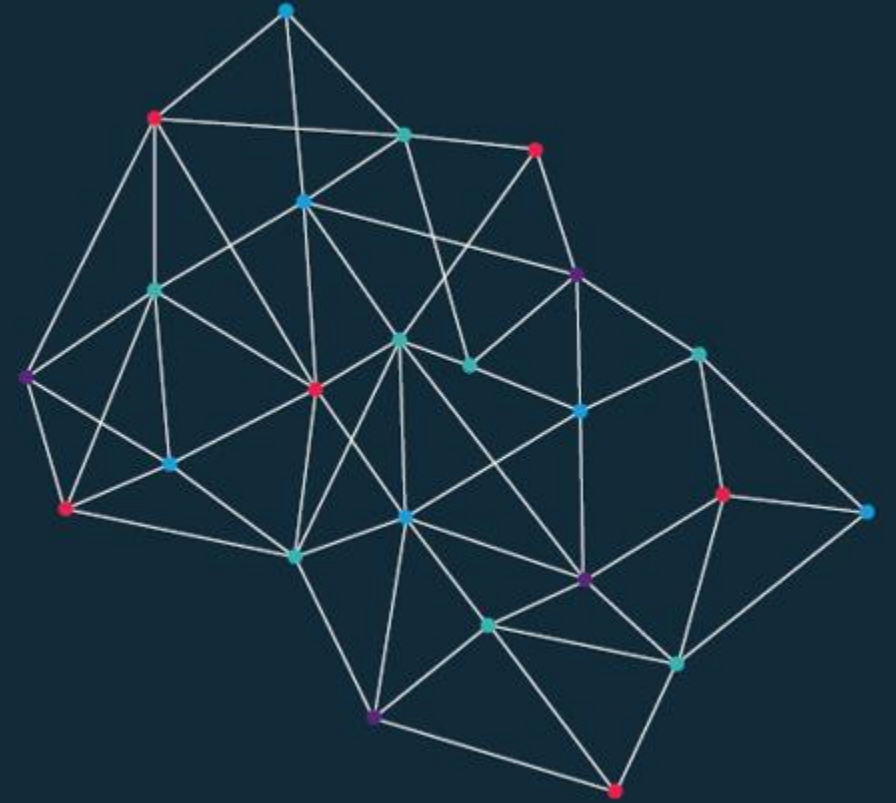
Economics as story-telling



“I had a growing feeling in the later years of my work at the subject that a good mathematical theorem dealing with economic hypotheses was very unlikely to be good economics: and I went more and more on the rules---**(1) Use mathematics as a short-hand language, rather than as an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life. (5) Burn the mathematics. (6) If you can't succeed in 4, burn 3.** This last I did often.”

Think about the story that the mathematical models are telling
Tell the story using clear language
Use real-life examples to illustrate and make it relevant

What do we mean by a data story?



What do we mean?

- One, two or three charts plus up to 300 words of text that tell a clear story
- Not an interactive data visualisation
- Plenty of good examples (not all of them are data stories in the sense we mean)
- Economist – Graphic Detail
- Financial Times – Data Points
- Our world in data

What do we mean?

- A data visualisation tells you what has happened; a data story tells you **why** something has happened/ with **what consequences**
- i.e. there is an underlying narrative
- The charts play the starring role in telling the story; The words play a supporting role, providing context, any required explanation, drawing out key findings and implications
 - A key test is whether the story is clear without referring to the text.
- The charts themselves must be clear and informative

What we don't mean (1)

[Silver bullet or sticking plaster? Weight-loss drugs and the UK's obesity crisis | Nesta](#)

www.nesta.org.uk/healthy-life/ **Is this a data story?**

The visuals are good but this is a standard article. The words tell the story.

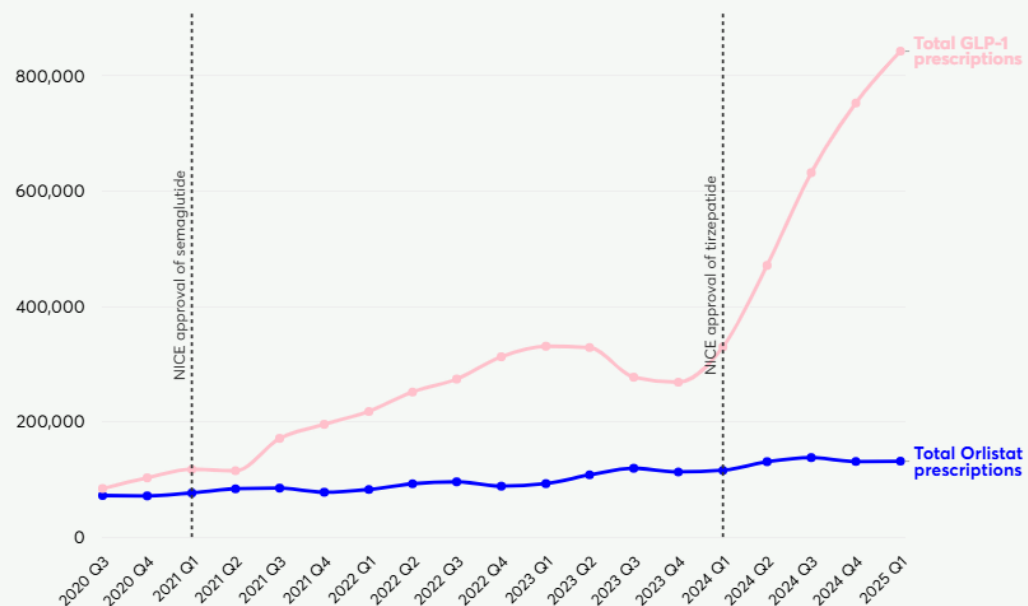
What would you need to do to make this into a data story?

- Cut the text
- Make the piece more focused – there should be one main message
- Ensure that the charts tell the story

Silver bullet or sticking plaster? Weight-loss drugs and the UK's obesity crisis | Nesta

GLP-1s are now much more common than traditional weight-loss medication

Number of NHS England prescriptions for different weight-loss treatments, by quarter



Source: [OpenPrescribing.net](#), Bennett Institute for Applied Data Science, University of Oxford, 2025. Accessed via The King's Fund

Total GLP-1 prescriptions series includes prescriptions for semaglutide and tirzepatide.

nesta

Adults in England living with obesity - including those offered tirzepatide

Number of people in each selected BMI class

Class 1-2 obesity (BMI: 30-39.9) Class 3 obesity (BMI>40)



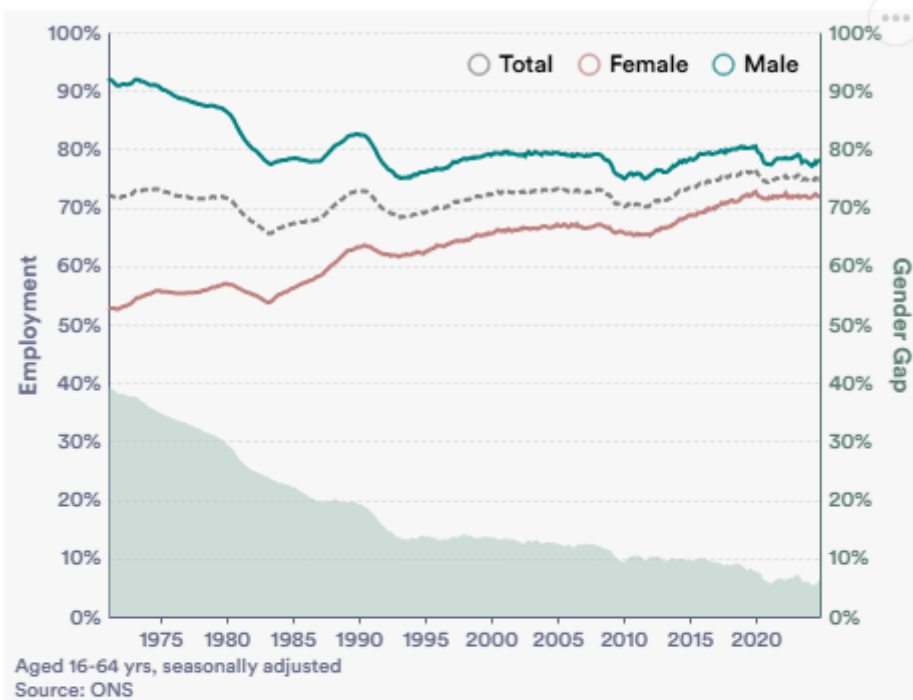
Source: Nesta calculations for the first five years of tirzepatide roll out based on NICE recommendations. Analysis is for adults aged 18 and above using data from Health Survey for England 2019.

nesta

Good chart/ not so good chart?

What we don't mean (2)

[Data Hub Explore - Economics Observatory](#)



@JHellings

In 1971, the UK's female employment rate lagged men's by nearly 40 percentage points. Today, that gap stands at just 6.4%. Interestingly, major economic shocks often spurred this convergence, as recessions hit male-dominated industries hardest. Economists refer to this as a "man-cession" effect, though it also reflects longer-term sectoral shifts that favour service and knowledge-based work. Other factors include the "added worker" effect—where some women join the labour force when male earnings drop—and the possibility of "forced renewal," where post-layoff hiring opens doors for more women. So, do recessions boost gender equality—or simply speed up changes already in motion? Saturday 8th March

Is this a data story?

It looks like a data story.

The chart is the focus; the words supplement the chart

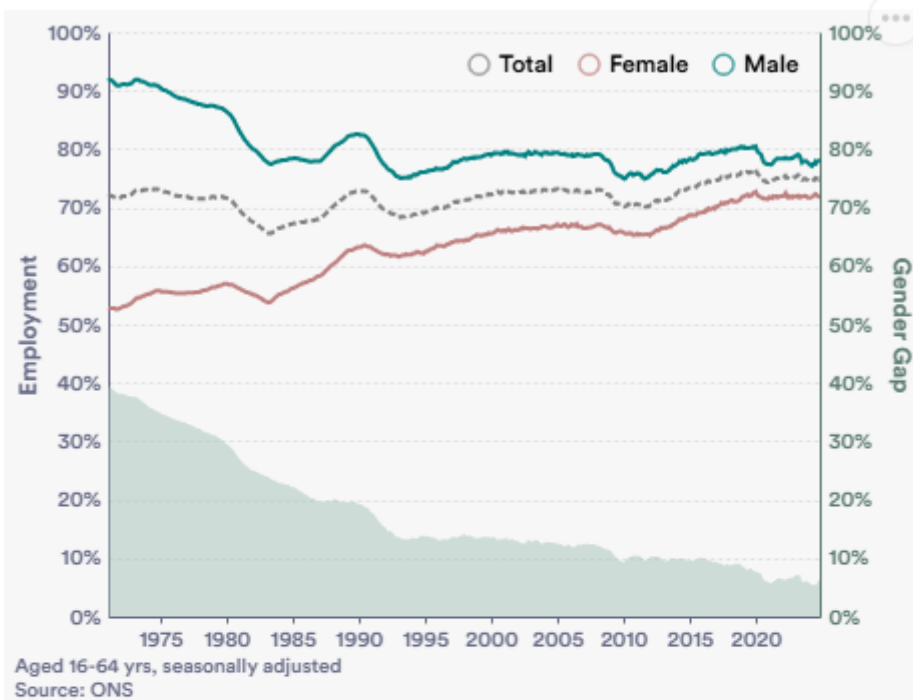
But the chart does not tell a story – no meaningful connections

The data tell us **what** has happened to the gender gap over time
But not **why**, or with what consequences

The text does this with claims about what drives the gender gap
But the piece tells, not shows

What we don't mean (2)

[Data Hub Explore - Economics Observatory](#)



@JHellings

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How could this be turned into a data story?

He-cessions/ she-cessions

- Show recessions on the chart

Added worker effect

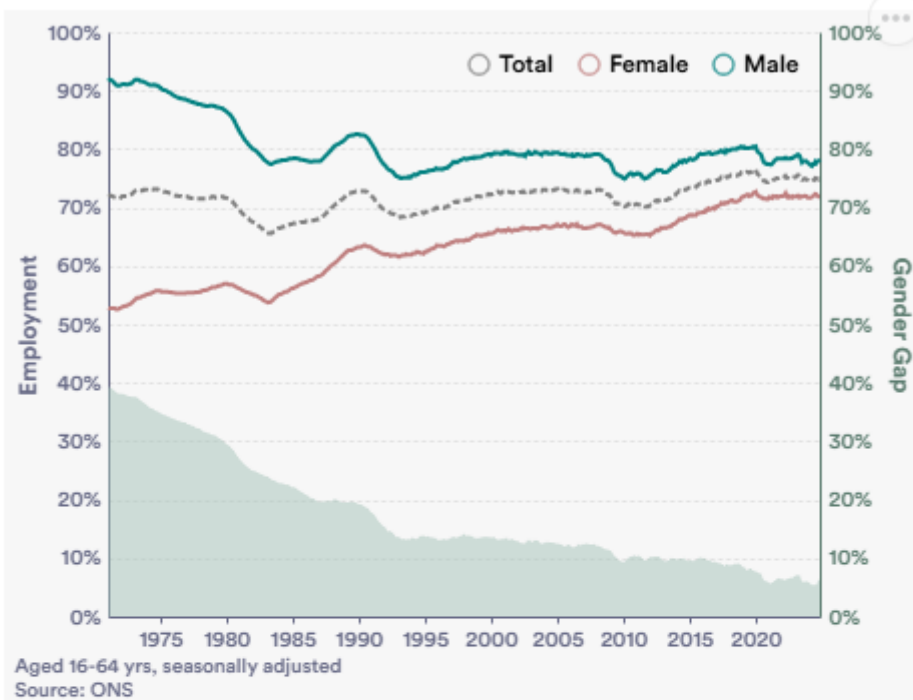
- Add information on earnings

Other stories?

- Effects of policies
- Cross-country comparison – countries with different paths – if this illuminates the drivers of the gender gap

What we don't mean (2)

[Data Hub Explore - Economics Observatory](#)



@JHellings

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What about the chart

Total is unnecessary, as is plotting the gap

Two axes are confusing

Axes labelling

Line labelling

Title

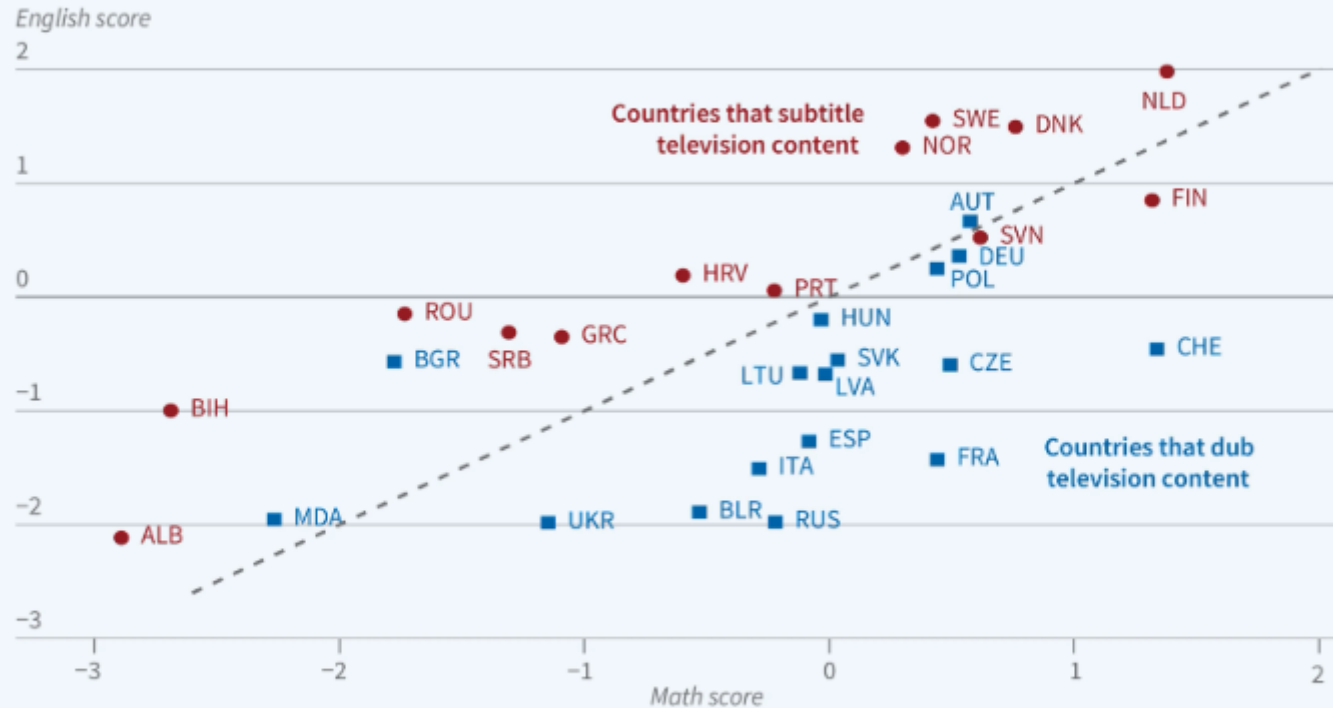
A good data story:

- Has a clear focus
- Does not just tell you what has happened but uncovers connections
- Sheds light on important economic relationships through
 - Comparisons between different groups – eg with different outcomes/ characteristics
 - Comparisons over time – eg related to key events/ policy changes
- Uses graphics that are engaging, easy to understand
- Uses the text to expand/ explain/ discuss
- See Economist's **Graphic Detail**, FT's **visual and data journalism**

“The purpose of data storytelling is to deliver **fresh insights or knowledge** to your audience that will educate them. Discover hidden **patterns**, trends, or **correlations** in data that are not immediately apparent. Data visualizations may be used to show information in a way that **uncovers important connections** and helps your audience develop a deeper grasp of the subject matter.”

Melis Altinoluk (Data Detective)
How To Craft A Data Story?

English and Math Achievement by Television Translation Mode



Source: Researchers' calculations using data from the EF English Proficiency Index and the Programme for International Student Assessment.

Would this make a good data story?

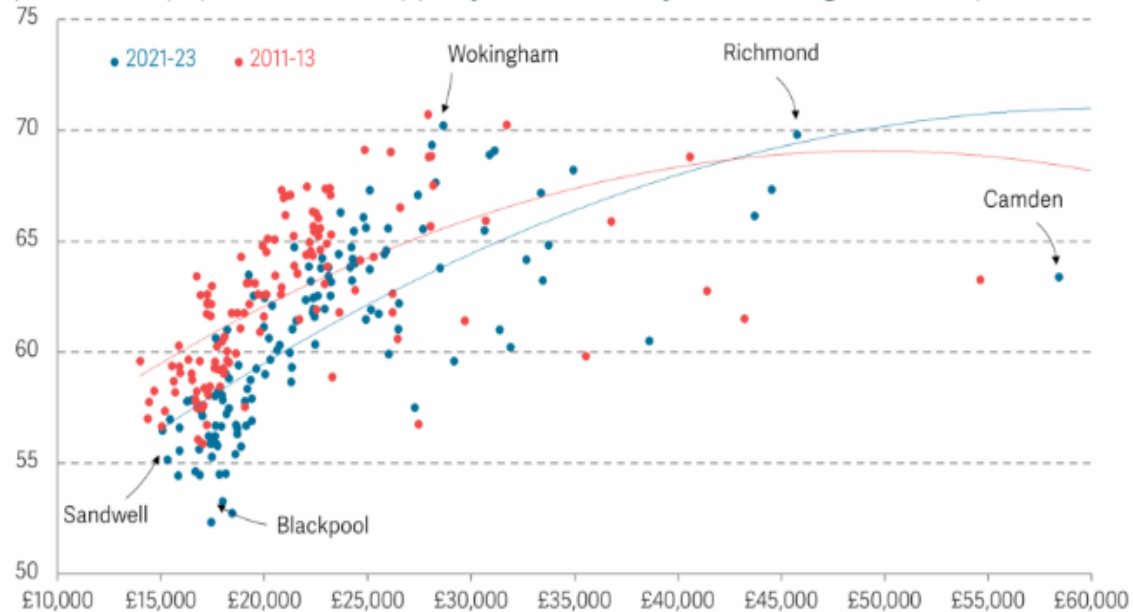
Makes a comparison between two groups that uncovers an important relationship

Is the chart engaging and clear?

The point is not immediately obvious (title)
Colours/ labelling work
Axes labels?

Average healthy life expectancy at birth and gross disposable household income per head of population (GDHI pp), by local authority district: England, 2022 prices

Resolution
Foundation



Notes: Due to data limitations, only 130 of 297 lower-tier local authorities are shown and used to calculate the trend line. Some local authorities with average disposable income higher than £60,000 are not shown.
Source: RF analysis of Department of Health and Social Care life expectancy data and ONS, Regional gross disposable household income by local authority.
© Resolution Foundation 2025
resolutionfoundation.org

Would this make a good data story?

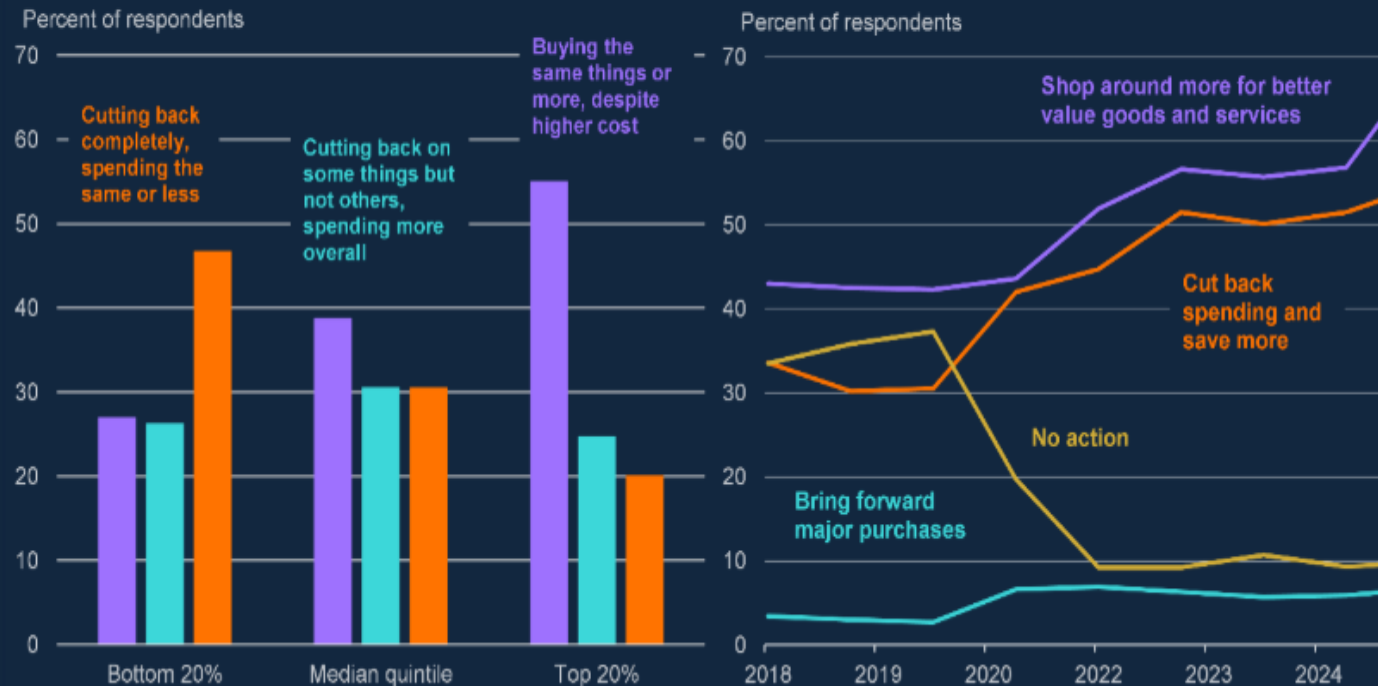
Comparison between groups/ over time
Too much going on. Lack of focus
Needs a why

Is the chart engaging and clear?

The point is not immediately obvious
Needs a heading
Colours work
Point labels?
Scale of data (levels/ logs)
Non-linear fit/ outliers

Chart 10: Share of respondents changing expenditure in response to cost of living (LHS) and inflation expectations (RHS)

Q3 2022 (LHS), 2018-2025 (RHS)



Would this make a good data story?

Comparison between groups/ over time

Lack of a clear focus

RHS chart could be combined with data on inflation expectations/ consumer spending

Are the charts engaging and clear?

Confusing colours!

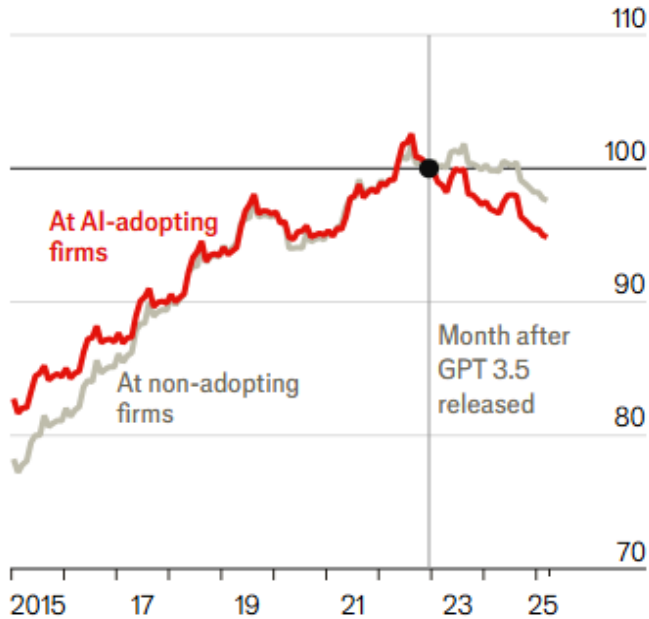
The point is not immediately obvious

Needs a heading

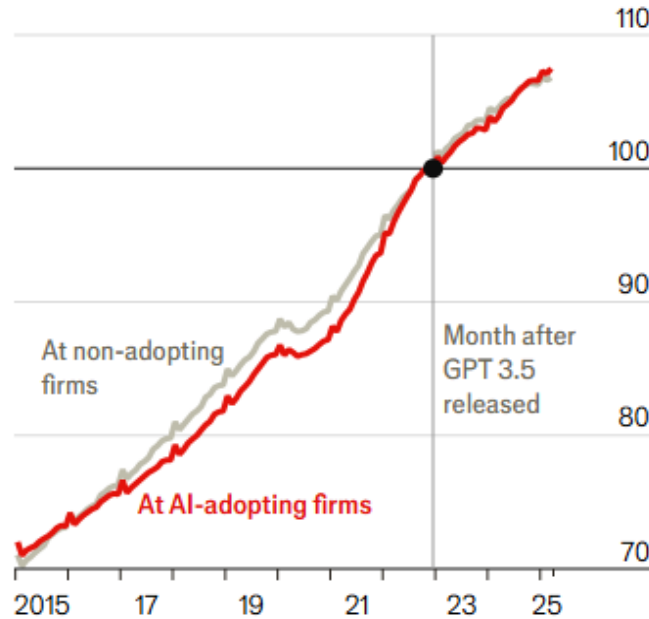
Rage against the machine

United States, change in employment, December 2022=100

Junior employees



Senior employees



Would this make a good data story?

Makes a comparison over time (linked to a specific event) and between two groups that uncovers an important relationship

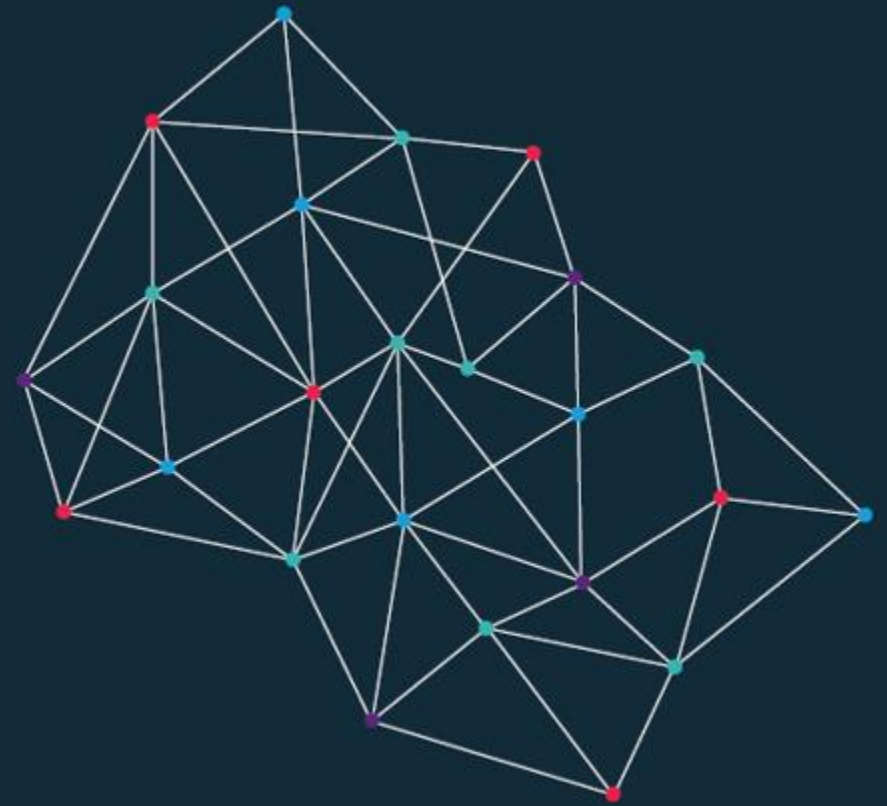
Are the charts engaging and clear?

Colours/ labelling work

Axes are clear

Title?

Creating good charts



- This is not a data visualization course
- Your aim is to create the **simplest chart(s) that display the data accurately and make the point clearly**
- **Think about the type of chart**
 - FT Visual Vocabulary (<https://ft-interactive.github.io/visual-vocabulary/>)
 - Data to Viz (<https://www.data-to-viz.com/#connection>)

Display the data accurately, make the point clearly

Original

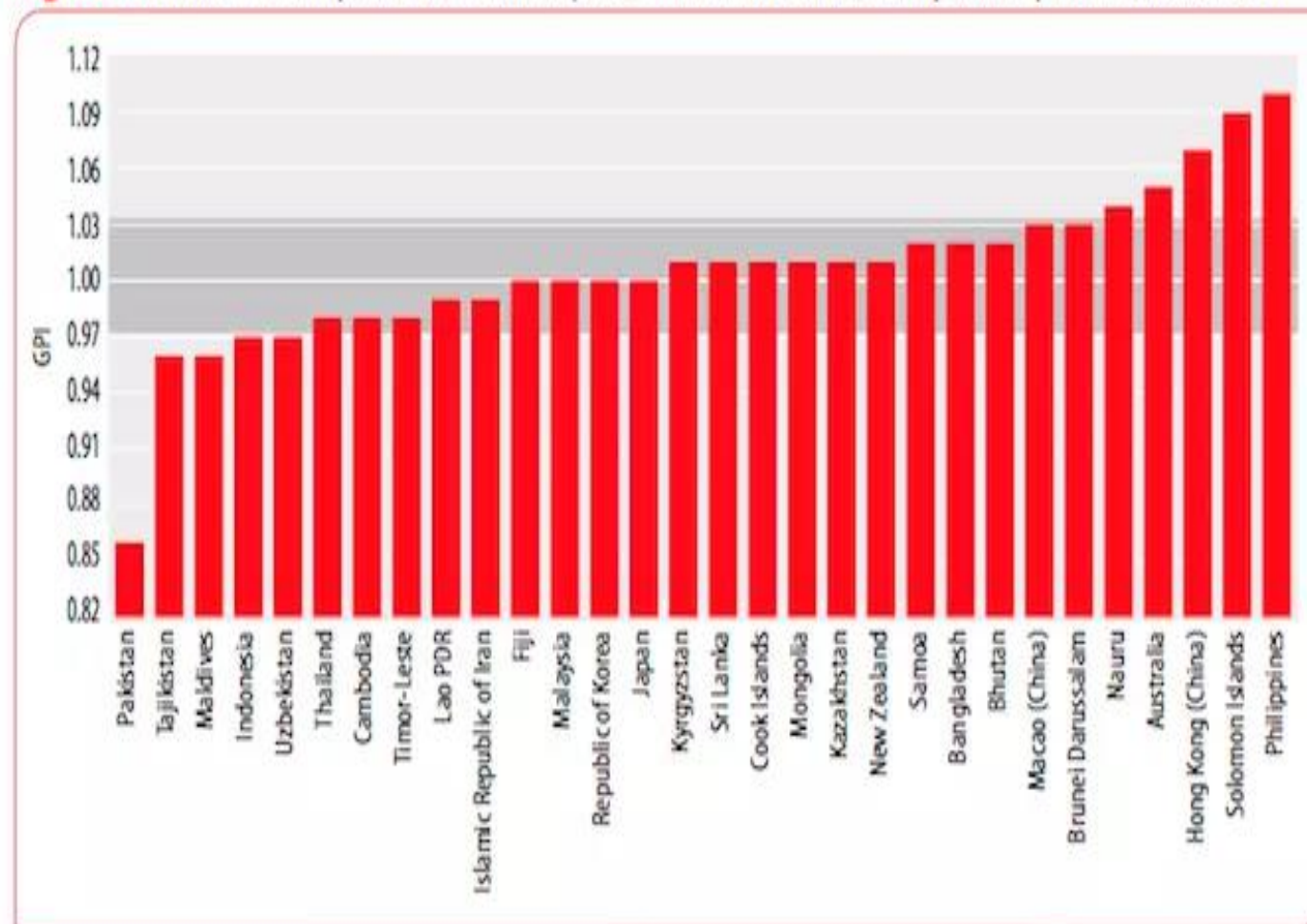


Better



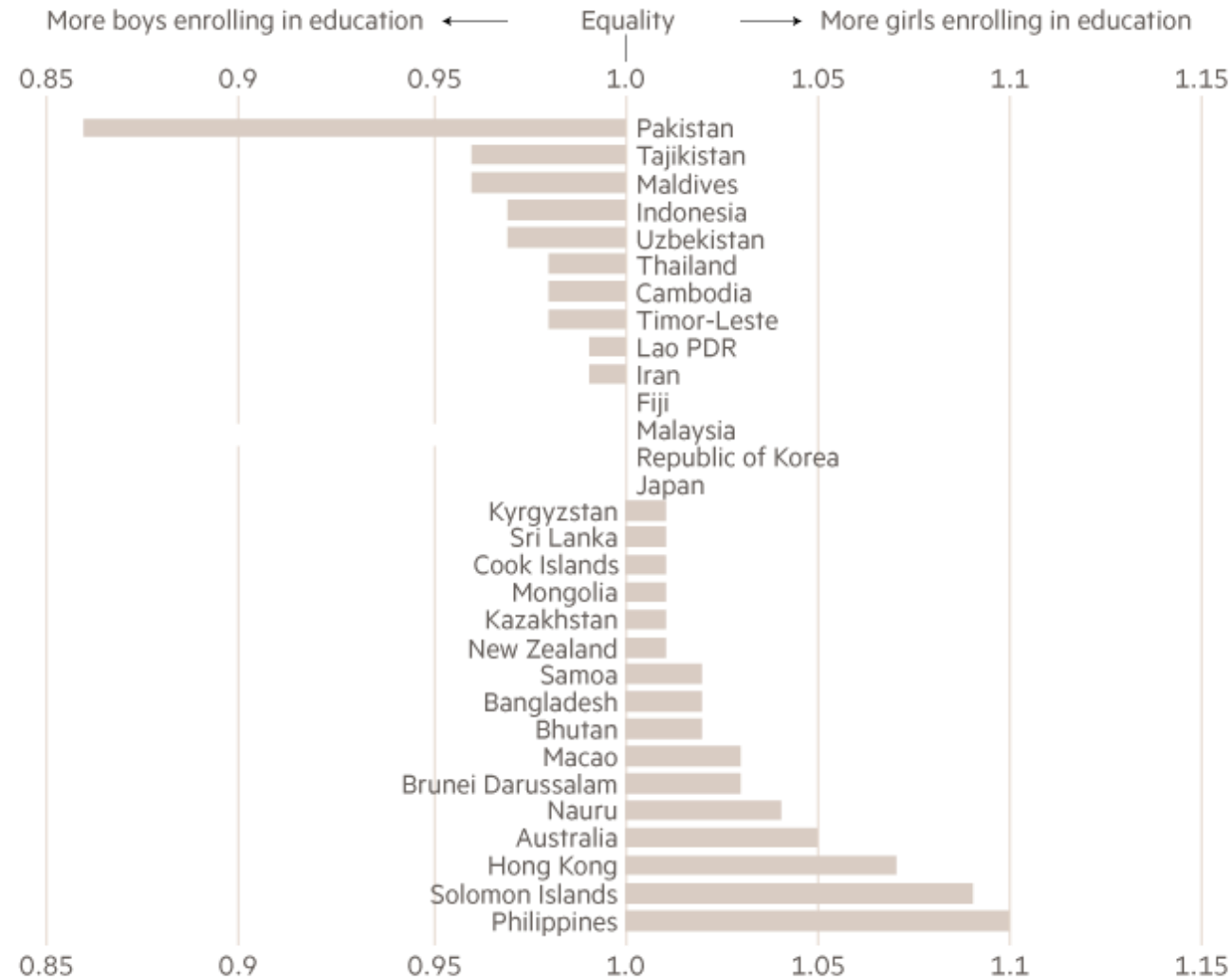
Display the data accurately, make the point clearly

Figure 7: Gender Parity Index of the adjusted net intake rate in primary education, 2009



Source: UIS, 2011, Statistical Table 2.

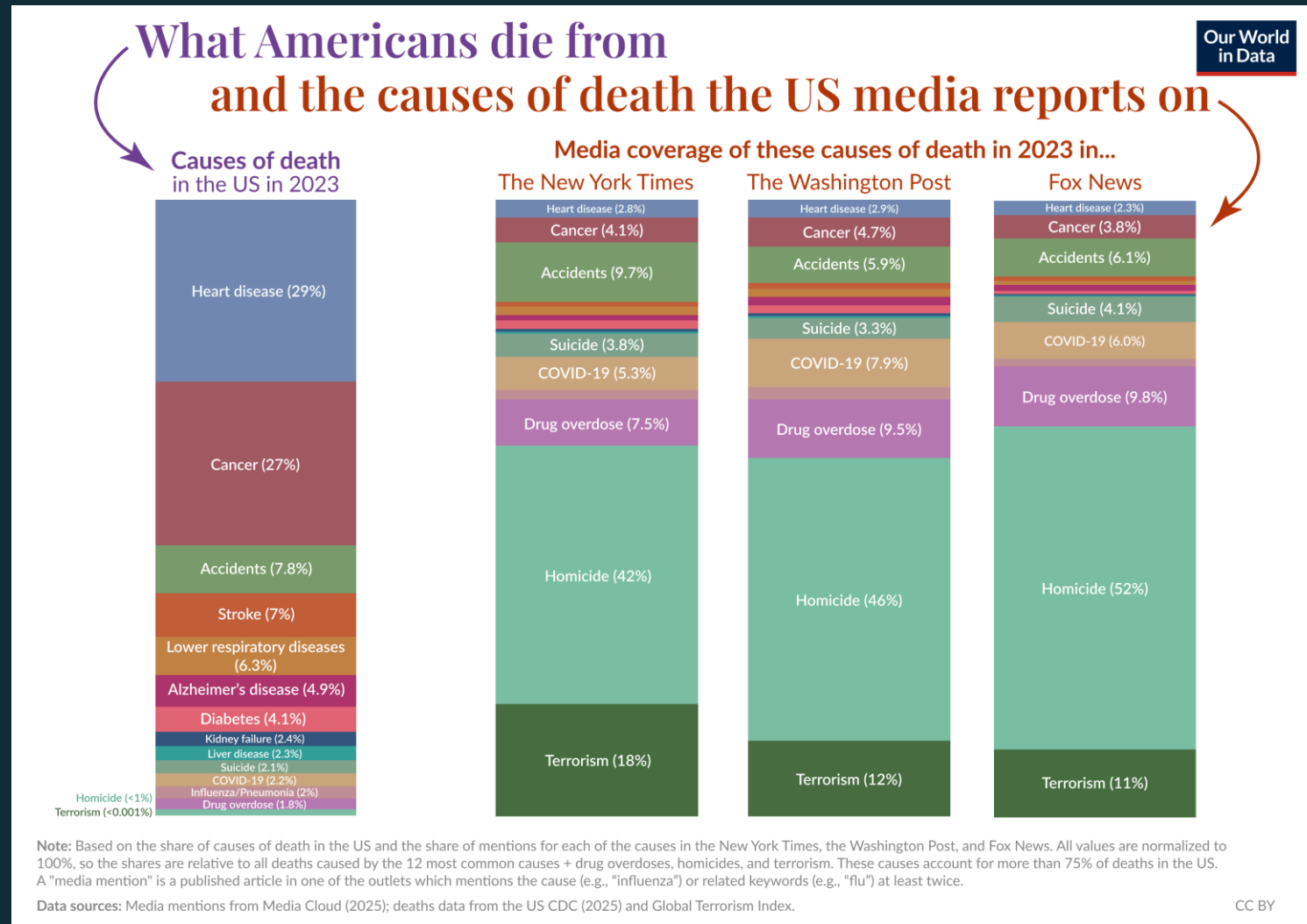
Gender parity index*, 2009, Asia-Pacific region



* Of adjusted net intake rate Source: UIS, 2011, Statistical table 2 Graphic by Alan Smith

© FT

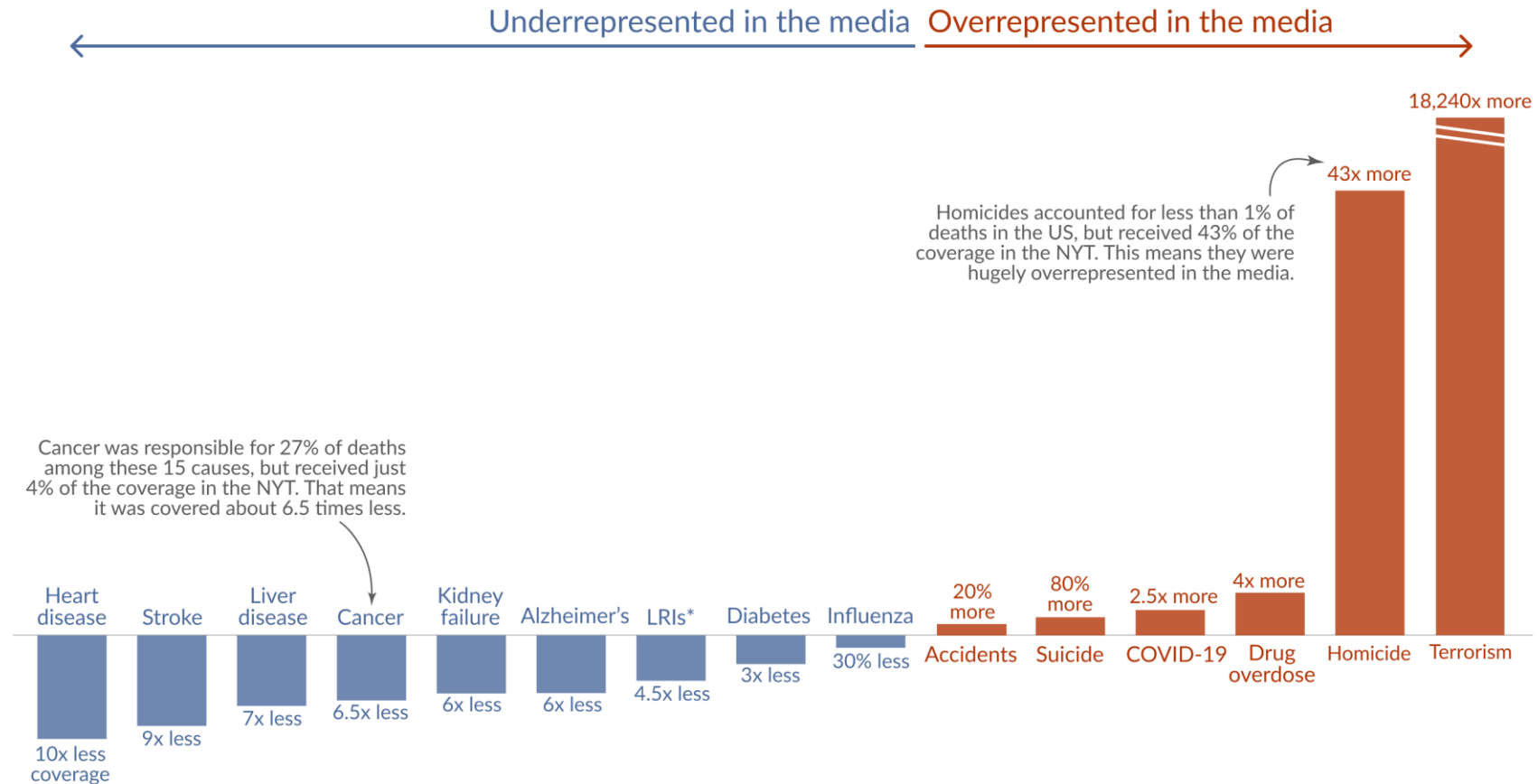
Display the data accurately, make the point clearly



Does the news reflect what we die from?

Our World
in Data

Comparison of the share of deaths in the United States from 15 causes of death versus the share of media coverage these topics receive in the New York Times. "3x more" means that the share of media coverage is three times the share of deaths in the US.



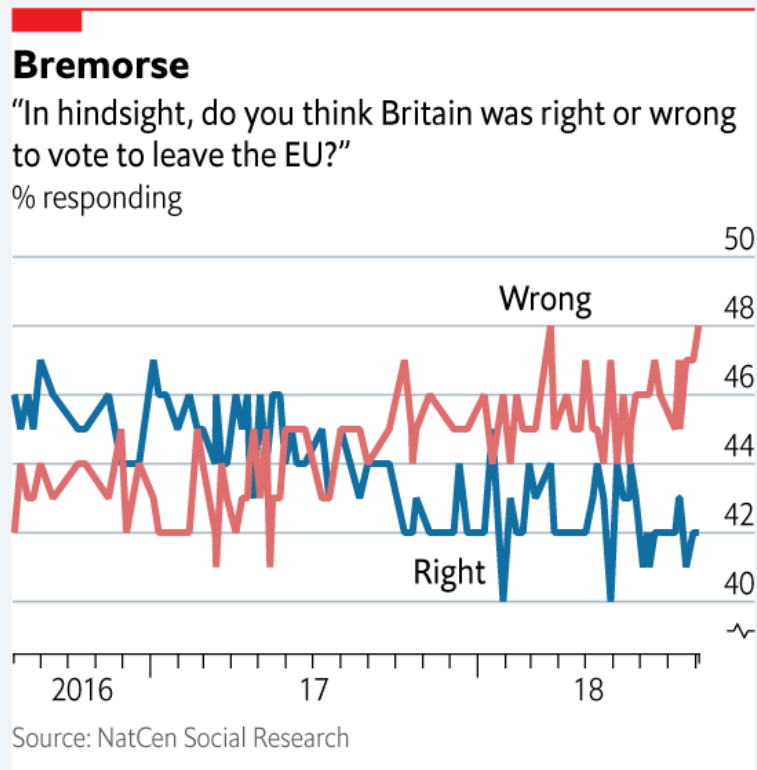
Note: *LRIs = Lower respiratory infections. All data refers to 2023. The figures are based on the ratio of each cause of death's share of total deaths (among these 15 causes) to its share of news coverage in the New York Times. The factor shown represents the over- or underrepresentation of each cause in media coverage. Figures have been rounded for simplicity.

Data source: Media mentions from Media Cloud (2025); deaths data from the US CDC (2025) and Global Terrorism Index.

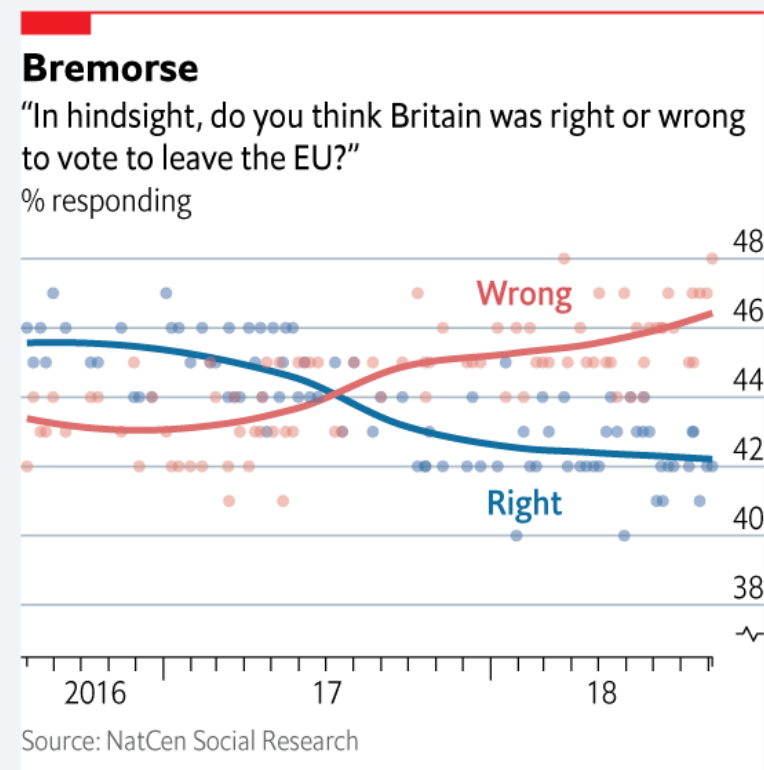
Licensed under CC-BY by the authors.

Display the data accurately, make the point clearly

Original



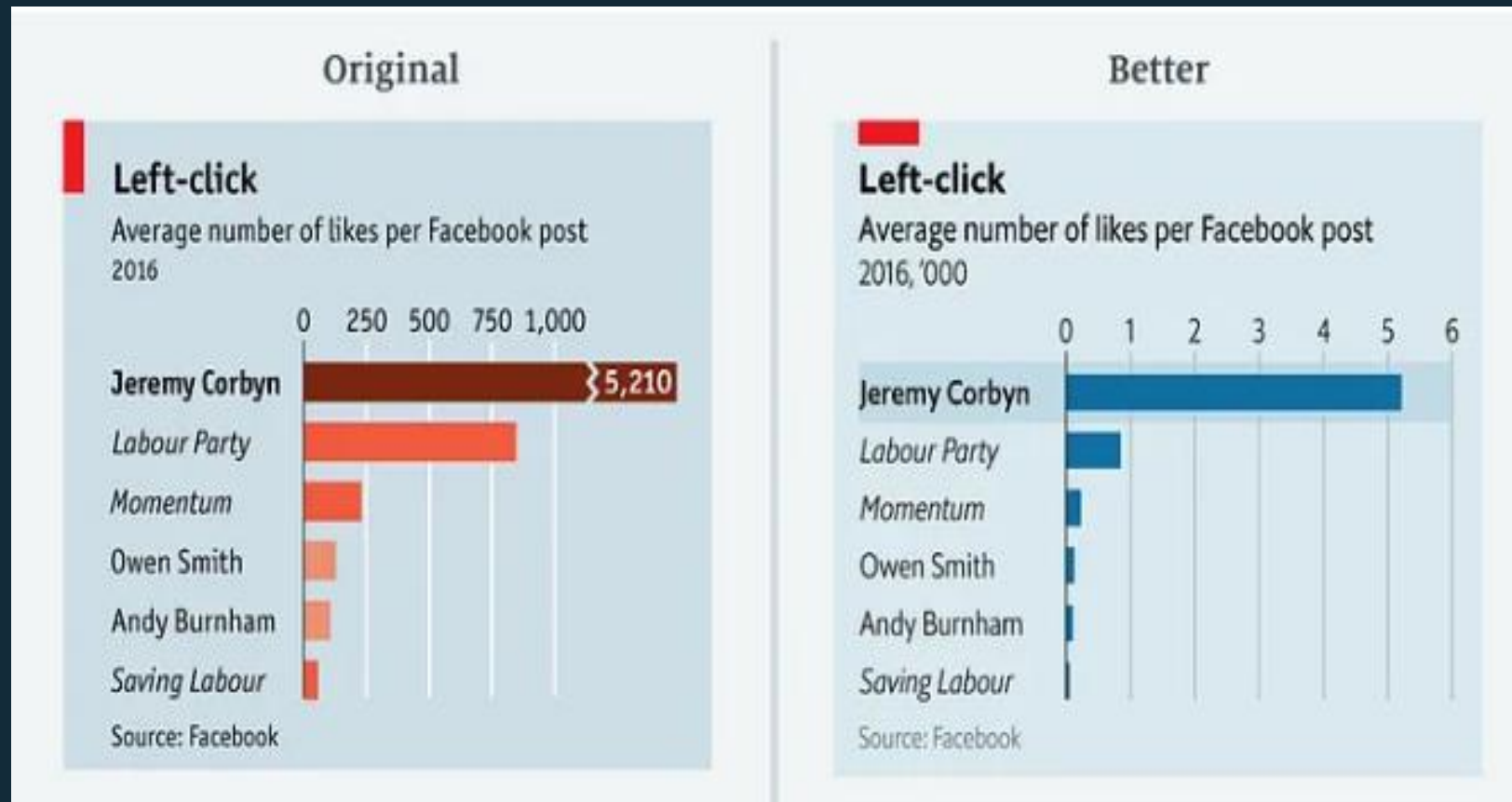
Better



Think about the axis

Here a compressed axis works because the comparison matters. But it can exaggerate changes

Display the data accurately, make the point clearly

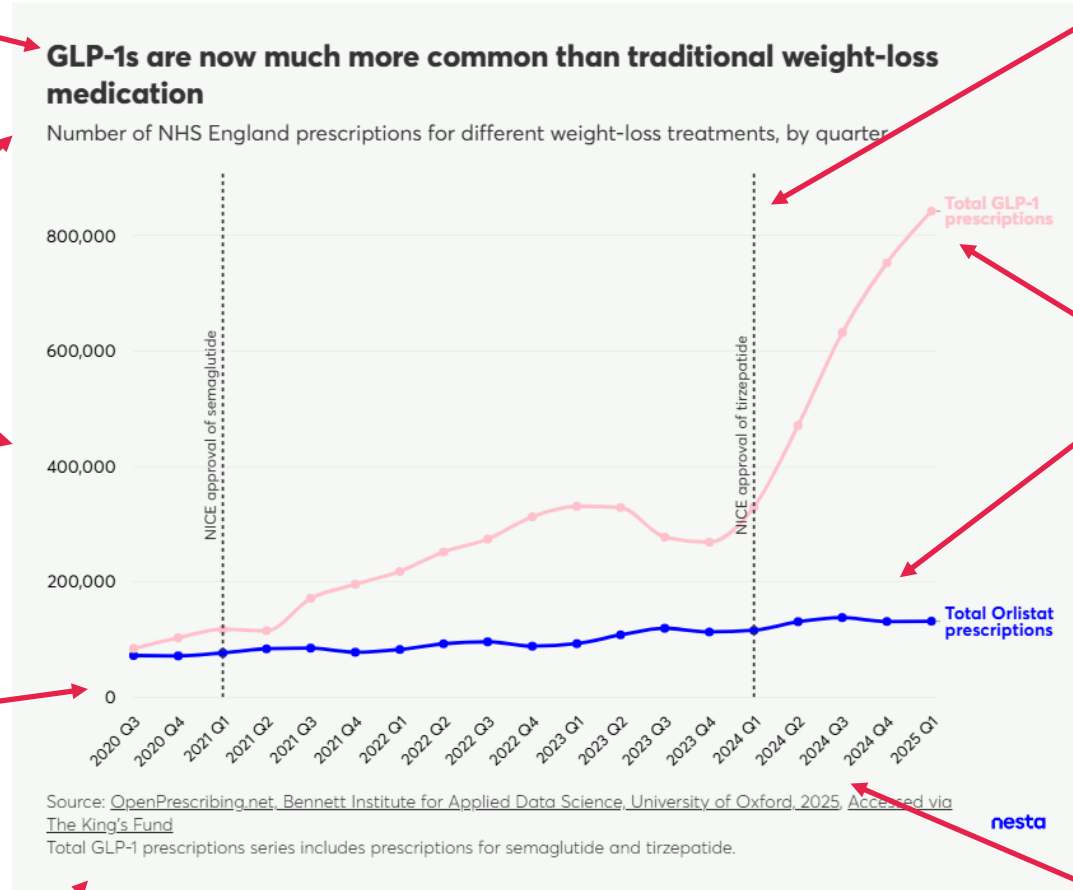


The heading tells you what to take-away from the chart

The Y axis metric is included in the sub-title; you don't need a separate axis label

Quantitative data should start from zero by default

The source is given – plus some further info on the data

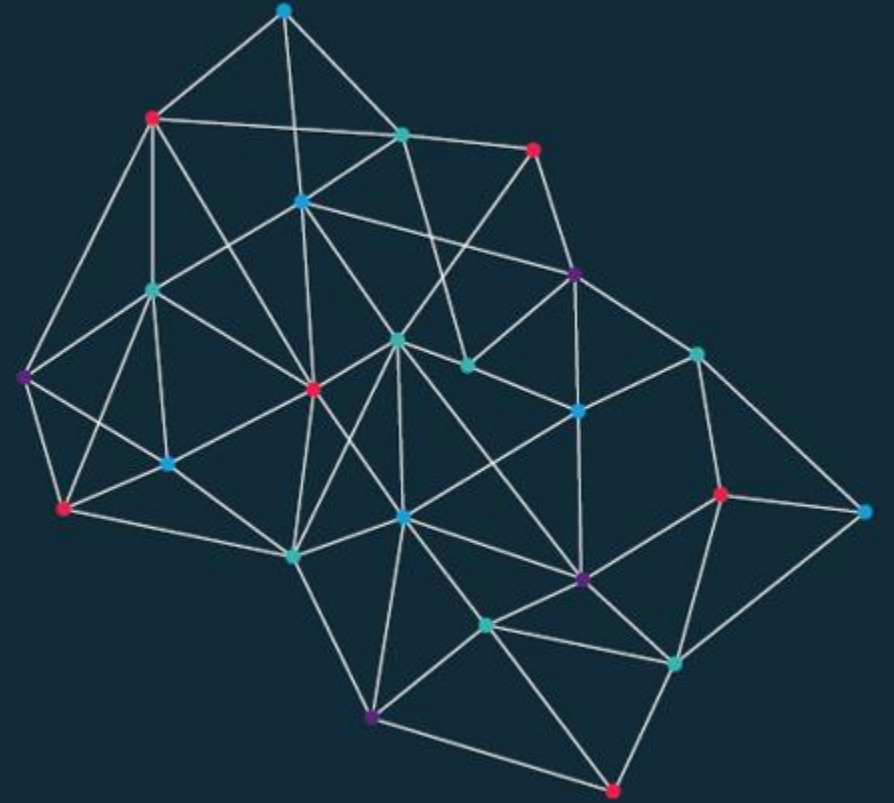


The timing of key events is shown with vertical lines, helping you to see the discrete change caused by the event. The vertical lines are labelled.

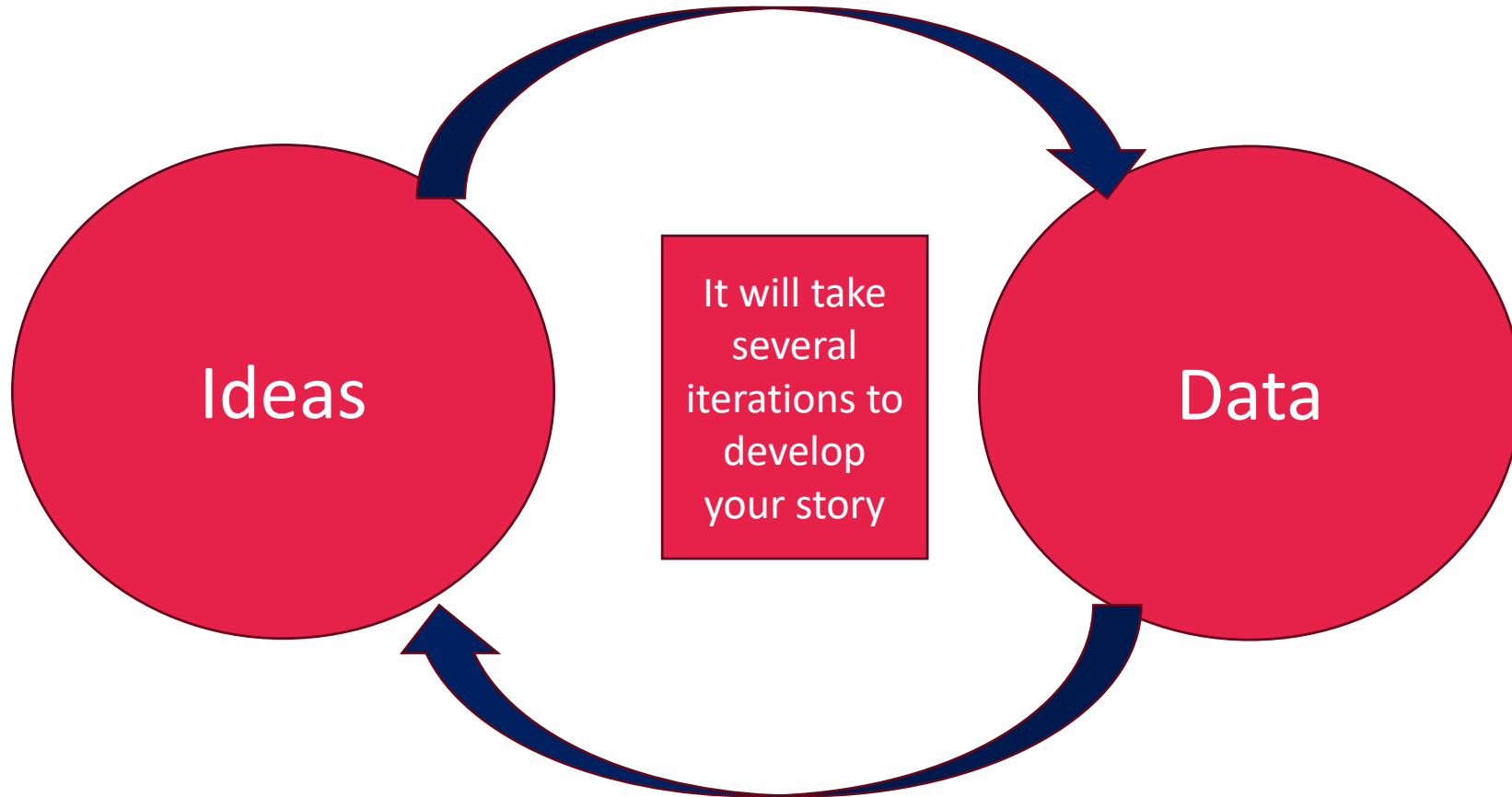
The lines are labelled so it's easy to tell what they show (easier to read than a legend). And the colours are different (but which one do you focus on?)

X axis label not needed because time is obvious. The frequency of the data is appropriate to what is being shown.

Starting your data story



I've got a good idea, let's find the data to explore it



Here's something interesting in the data, what's the causes/ consequences

Practical next steps

- Start thinking about ideas – think back to writing the opinion piece
- Reading, reflection
- Explore sources of data
- https://economicsnetwork.ac.uk/links/data_free/
- Look critically at examples

Questions?

