# UK Data Service: Data about Countries

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Webinar: 12 November 2019



# Can you hear us?

You should be able to, please check:

Your local speakers/phones

Check also that you have the right audio selection chosen in the menu (top right corner)

There is an option to join by telephone (see menu in top right corner)



# What we will cover today

- Introduction
- International macrodata
- Documentation and tips
- Demo
- Questions
  - can be typed in, but we will wait until the end to answer them





## What is the UK Data Service?

- a comprehensive resource funded by the ESRC
- a single point of access to a wide range of secondary social science data
- support, training and guidance





## What data do we hold?

### Surveys

Large-scale government funded UK and cross-national surveys

#### Census

Census data 1971 – 2011

### Longitudinal

Major UK surveys following individuals over time

#### **Business**

Microdata and administrative data

#### International

Multi-nation aggregate databanks and survey data

### Qualitative

Range of multimedia qualitative data sources

















Register / Login

### Explore the UK's largest collection of social, economic and population data resources

Search data .



#### How to cite data correctly



#### Guides and resources

Dataset guides

Topic guides

Methods and software guides

Guides to exploring online

See more >



See our range of training videos

See data from all over the world

Browse our data map

#### Data types

Census data International macrodata Longitudinal studies





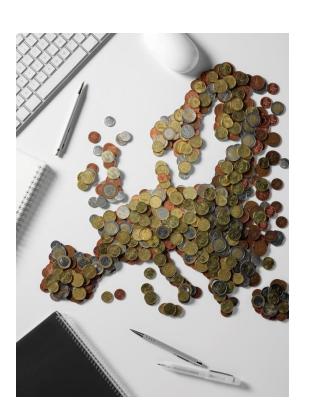
Our impact

Latest data

ukdataservice.ac.uk

# International macrodata: data about countries

- time series data aggregated to country/region
- international governmental organisations
- wide range of socioeconomic topics
- availability





# Data providers

- International Monetary Fund (IMF)
- Organisation for Economic Co-operation and Development (OECD)
- World Bank
- United Nations
- International Energy Agency (IEA)



## International data themes

#### Databanks cover:

- economic performance and development
- trade, industry and markets
- employment
- demography, migration and health
- governance
- human development
- social expenditure
- education
- science and technology
- land use and the environment
- energy



# International macrodata

	→ı Variables	Total population of the p	netropolitan area (perso	200)		▼	
	- variables						
	→ı Time	2009	2010	2011	2012	2013	2014
		<b>▲</b> ▼	<b>▲</b> ▼	<b>▲</b> ▼	<b>▲</b> ▼	<b>▲</b> ▼	<b>▲</b> ▼
→ Metropolita	tan areas						
■ Australia	V	21 691 653	22 031 750	22 340 024	22 728 254	23 125 868	23 490 736
Australia	Adelaide	1 237 354	1 253 097	1 264 091	1 278 600	1 291 377	1 304 631
	Brisbane	2 068 479	2 108 348	2 147 436	2 193 316	2 236 044	2 274 560
	Gold Coast-Tweed Heads	509 133	519 630	528 766	540 527	551 123	560 266
	Melbourne	4 031 787	4 105 857	4 169 366	4 252 458	4 344 673	4 440 328
	Perth	1 739 342	1 781 132	1 833 567	1 904 858	1 972 849	2 021 203
	Sydney	4 492 380	4 555 516	4 608 949	4 676 118	4 756 398	4 840 628
■ Austria		8 335 003	8 351 643	8 375 164	8 408 121	8 451 860	8 506 889
Austria	Graz	602 465	608 420	614 454	620 587	626 826	633 168
	Linz	604 006	606 514	609 054	611 622	614 214	616 829
	Vienna	2 656 523	2 683 251	2 710 331	2 737 753	2 765 519	2 793 631
■ Belgium		10 753 080	10 839 905	10 951 266	11 035 948	11 099 554	11 203 992
Belgium	Antwerp	1 046 834	1 053 725	1 060 675	1 067 688	1 074 765	1 081 904
	Brussels	2 460 663	2 485 480	2 510 626	2 536 106	2 561 930	2 588 102
	Ghent	572 560	576 408	580 281	584 187	588 127	592 100
	Liege	723 142	726 431	729 740	733 071	736 425	739 798
■ Canada		33 628 571	34 005 274	34 342 780	34 752 128	35 154 279	35 540 419
Canada	Calgary	1 237 622	1 271 737	1 306 924	1 342 733	1 379 633	1 417 661

Data extracted on 30 Nov 2016 12:24 UTC (GMT) from UKDS.Sta

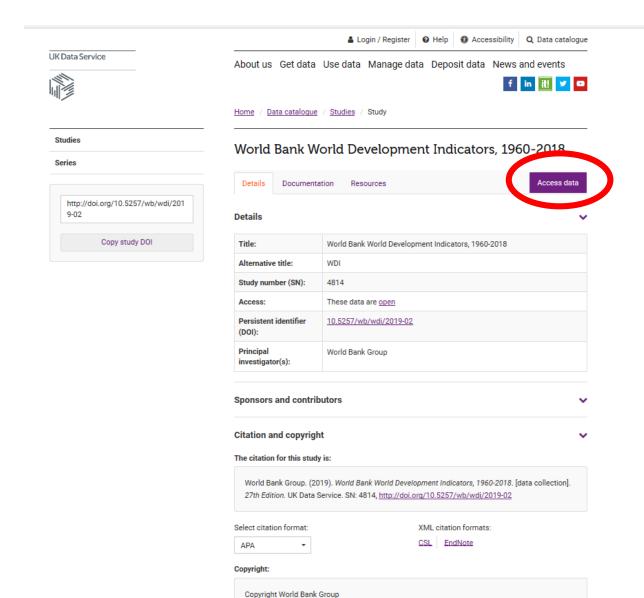
Login Contact of Site Map | Gu

# Accessing the international macrodata

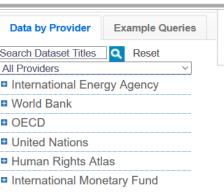
- World Bank IMF, OECD, UNESCO data are open to all
- Other data restricted to UK FE and HE (UNIDO, IEA)
- Access via Federated access (Shibboleth) authentication
- Data delivered over the web via UKDS.stat
- Download formats include \*.xls, \*.csv



## Catalogue record







# Welcome to international aggregate data from the UK Data Service

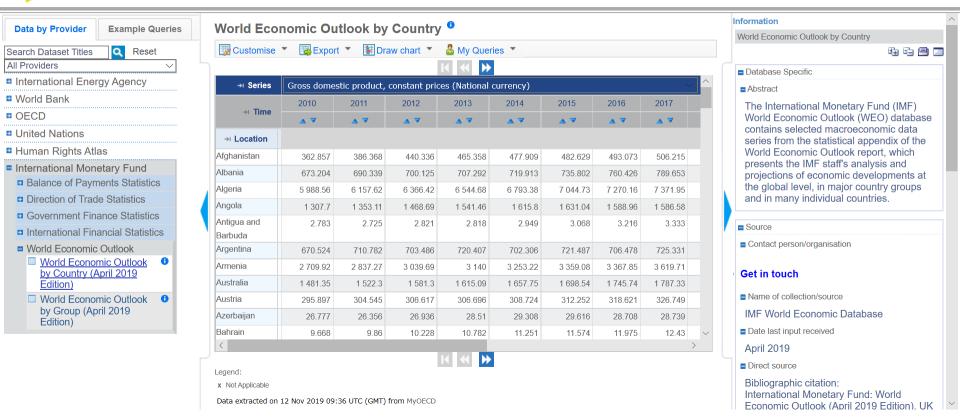
We host hundreds of economic and social datasets provided by the World Bank, OECD, International Monetary Fund, United Nations, and International Energy Agency. Key datasets include World Energy Balances, World Development Indicators, Balance of Payments Statistics, Direction of Trade Statistics, International Financial Statistics, World Economic Outlook, Main Economic Indicators, Quarterly National Accounts, and the Human Rights Atlas. Datasets also cover statistics on science, environment, education, health, and in depth regional statistics.

Find your dataset in the left-hand menu, or view the video Accessing, exploring and visualising data in UKDS.Stat to get started.

## International macrodata



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## World Bank Databases

- Collects data on all aspects of human development worldwide
- Annual data, designed for international comparability
- Open access
- Host 4 databases:
  - World Development Indicators
  - International Debt Statistics
  - Africa Development Indicators
  - Subnational Population Database







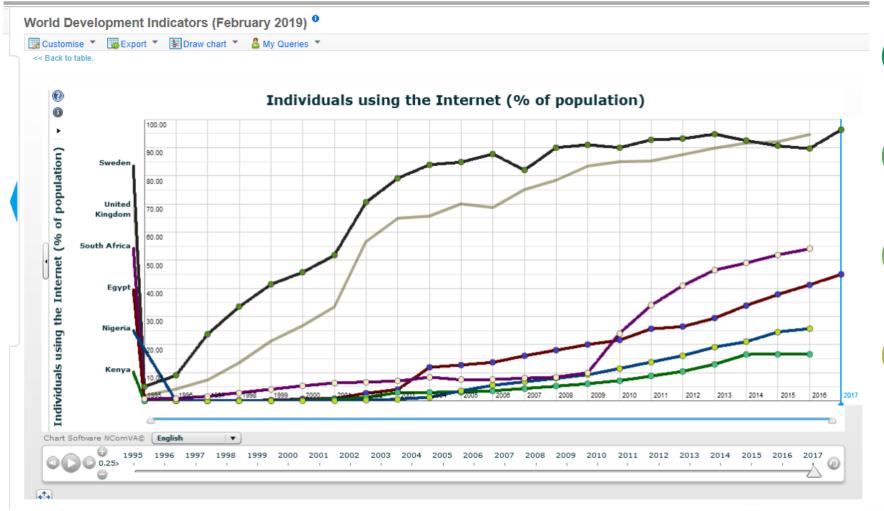
# World Development Indicators

- Covers over 200 countries
- Annual data starting 1960
- Widely cited
- Our most popular database





## World Development Indicators: example



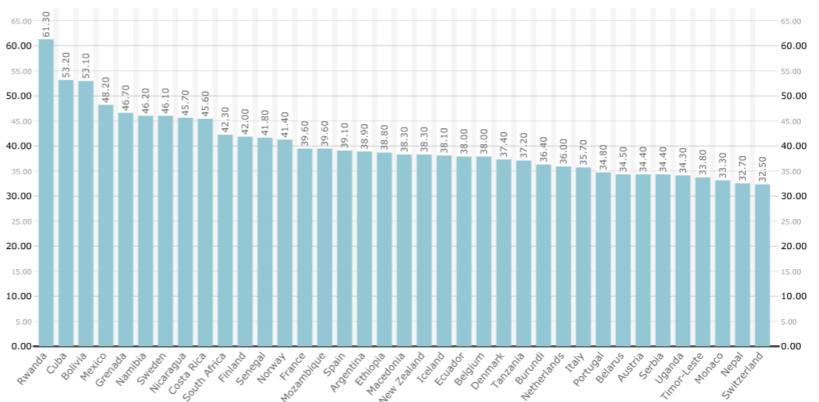


Which country had the largest proportion of women in parliament during 2018?



# Proportion of seats held by women in national parliaments, 2018 (%)

#### Proportion of seats held by women in national parliaments (%)



World Bank (2019): World Development Indicators (Data downloaded: February 2019). UK Data Service. https://doi.org/10.5257/wb/wdi/2019-02





## International Debt Statistics

- Financial flows
- Contains the Bank's projections for debt repayments etc for next five years
- Annual data starting 1970s
- Replaces Government Development Finance



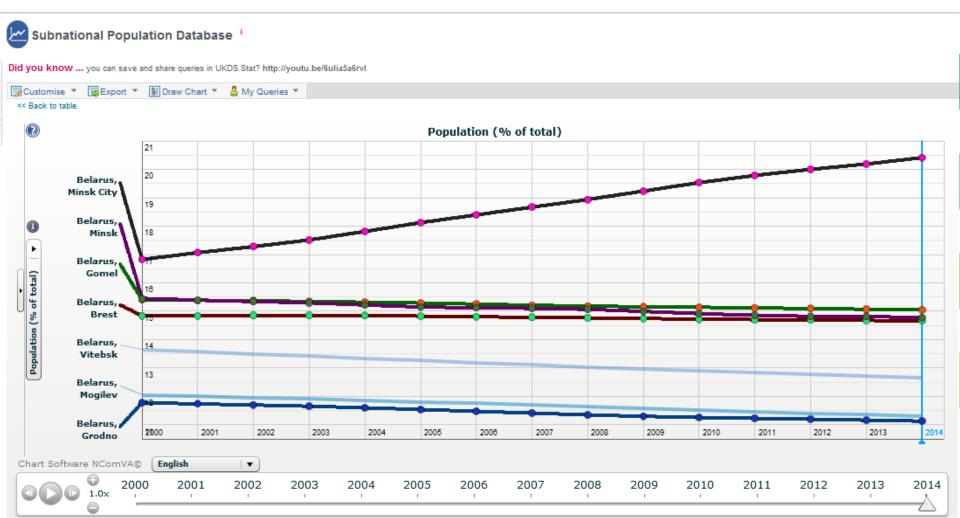


# Subnational Population Database

- Provinces, states, or regions below the national level
- 2000 to 2016
- Subnational areas and the shares relative to total national population estimates
- Allows researchers, students and practitioners to investigate population and intra-country migration trends



# Belarus subnational data





World Bank (2018): Subnational Population Database (Data downloaded: 15th October 2018). UK Data Service. DOI: https://doi.org/10.5257/wb/spd/2018-10

## IMF databanks

- International Financial Statistics
- Government Finance Statistics
- Balance of Payments Statistics
- Direction of Trade
- World Economic Outlook
- Open access





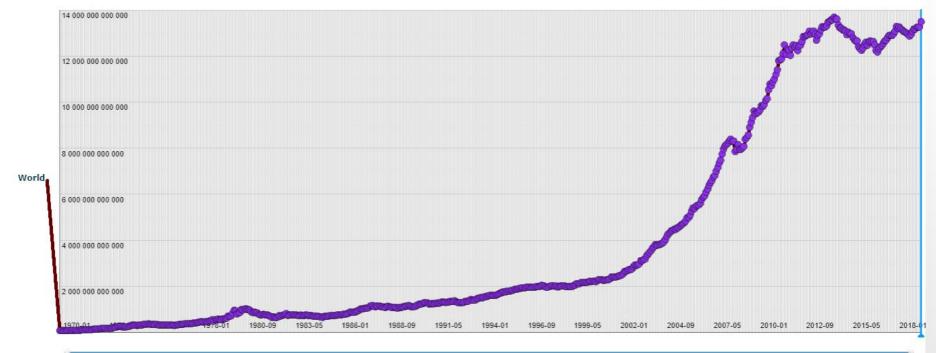
# IMF International Financial Statistics

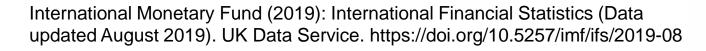
- Standard source for all aspects of international and domestic finance
- Monthly, Quarterly, and Annual data
- Includes over 200 countries
- Reports time series data on exchange rates, international liquidity, money and banking, interest rates, prices, production, national accounts...



## International Financial Statistics: example









## **IMF** Direction of Trade

- Exports and imports
- Bilateral data between countries
- Monthly, quarterly and annual data are presented
- 1980 onwards

Long and consistent time series

Stable data domains

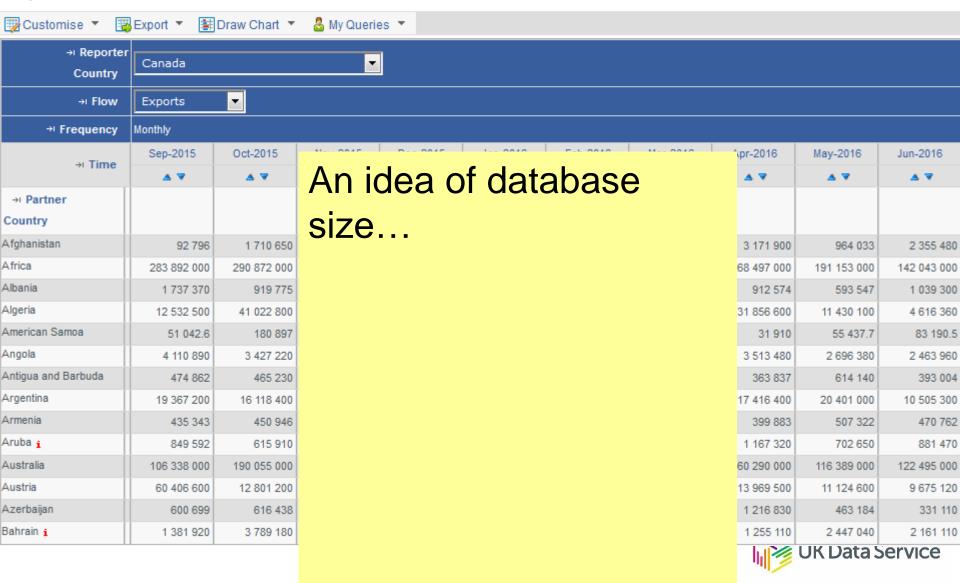
Good geographic and temporal coverage

Up-to-date data



# Inside the database — IMF Direction of Trade

Did you know ... how to change the layout in UKDS.Stat? http://youtu.be/\_ZnS0aGBQ3s



# IMF Balance of Payments Statistics



- Balance of payment components and international investment positions of countries worldwide
- 204 countries and country groups worldwide
- 1970s onwards
- Quarterly and annual data



# IMF Government Finance Statistics

- Data on government income
- Expenditure by sector
- All levels of government
- 174 countries worldwide
- Annual time series data, running 1990 onwards.



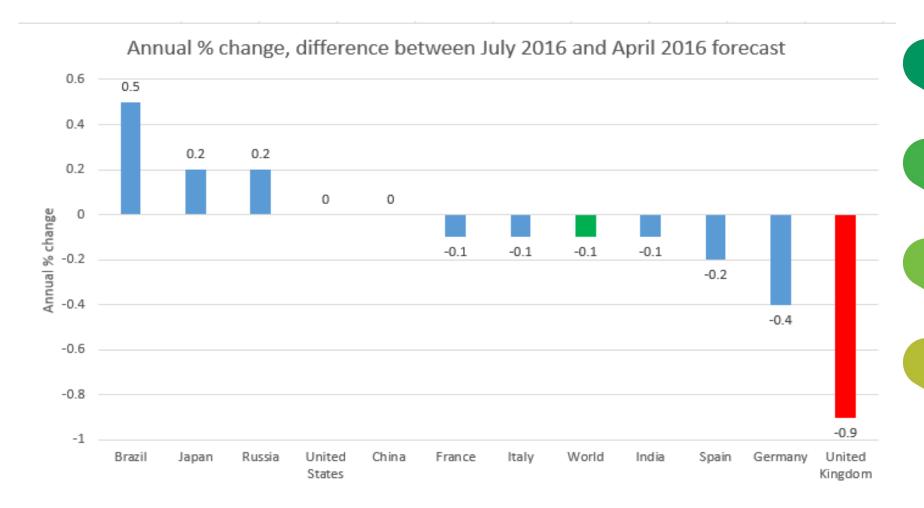
## World Economic Outlook



- World Economic Outlook report
- Data on national accounts, inflation, unemployment rates, balance of payments, fiscal indicators, and commodity prices
- Projections for most indicators run up to 2024



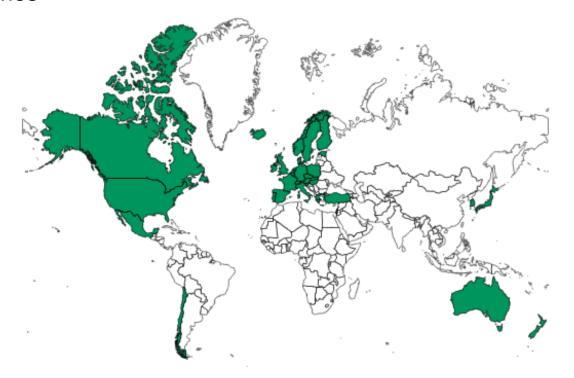
## IMF revision of GDP growth forecasts for 2017



Data source: IMF World Economic Outlook, April 2016, updated 19 July UK Data Service

# Organisation for Economic Cooperation and Development (OECD) Data

- Open data
- Comparable data
- Limited number of countries
- Wide range of data







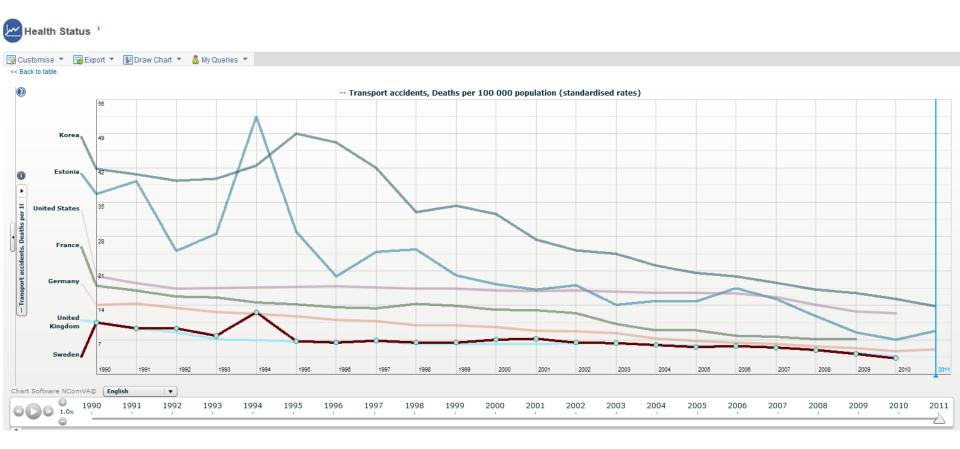
## **OECD** data

- Banking Statistics
- Economic Outlook
- Education and Training
- Employment and Labour Market Statistics
- Environment Statistics
- Health Statistics
- Institutional Investors Statistics
- Insurance Statistics
- International Development Statistics
- International Direct Investment Statistics
- International Trade in Services
- International Migration Statistics
- Main Economic Indicators
- Main Science and Technology

#### **Indicators**

- Measuring Globalisation
- Monthly Statistics of International Trade
- National Accounts
- Patent Statistics
- Pensions Statistics
- Product Market Regulation
- Productivity Statistics
- Regional Statistics
- Social and Welfare Statistics
- Structural Analysis
- Tax Statistics
- Telecommunications and Internet Statistics

### **OECD Health Statistics**



Organisation for Economic Cooperation and Development (2014): OECD Health Statistics (Data downloaded: 2014-06). UK Data Service.

DOI: http://dx.doi.org/10.5257/oecd/health/2014-06



### Nationalities in the UK in 2017

International Migration Database (June 2019 Edition) • Export Draw chart My Queries << Back to table Stock of foreign population by nationality, Total, United Kingdom 1 100 000 1 100 000 Stock of foreign population by nationality, Tota 1 000 000 1 000 000 900 000 800 000 800 000 600 000 600 000 500 000 400 000 400 000 200 000 200 000 100 000

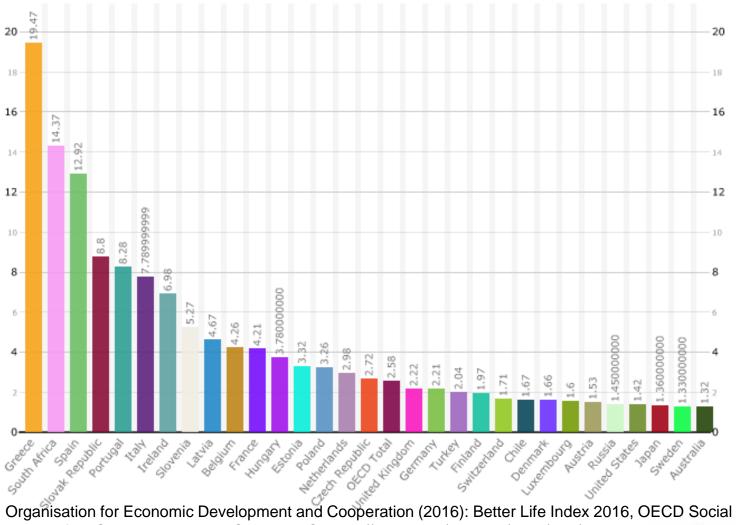




Which country had the highest long term unemployment rate in 2016?



#### Long-term unemployment rate % (2016)



Organisation for Economic Development and Cooperation (2016): Better Life Index 2016, OECD Social and Welfare Statistics, UK Data Service. DOI: http://dx.doi.org/10.5257/oecd/sws/2016

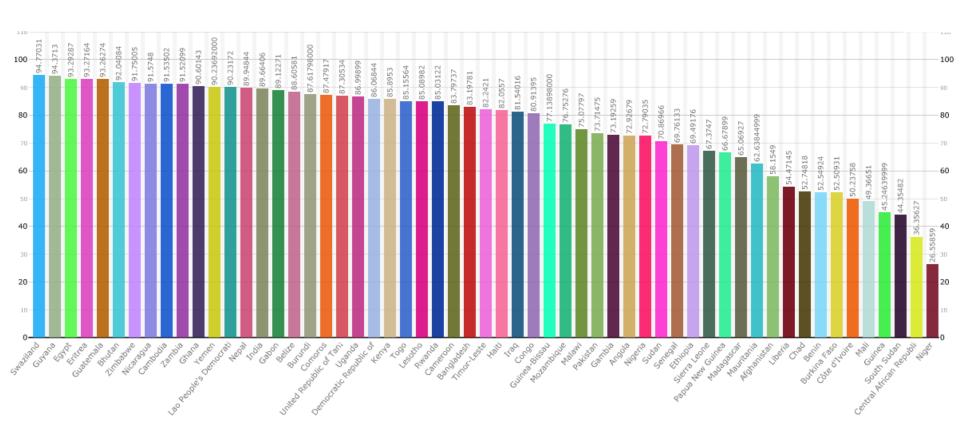
UK Data Service

#### **UNESCO**

- Open data
- Education Statistics (1970 onwards)
  - Out of school, progression, attainment, literacy, student migration, teachers, financial resources and much more
- Innovation Statistics (2005 onwards)
  - R&D activity data
- Culture
  - Cultural employment (2009 onwards)
  - Feature film statistics (1995 onwards)
- Communication and information (1995 onwards)



# Youth literacy rate, population 15-24 years, both sexes (%)



UNESCO (2016): Education Statistics (Edition: June 2016). UK Data Service. DOI: http://dx.doi.org/10.5257/unesco/edulit/2016-06



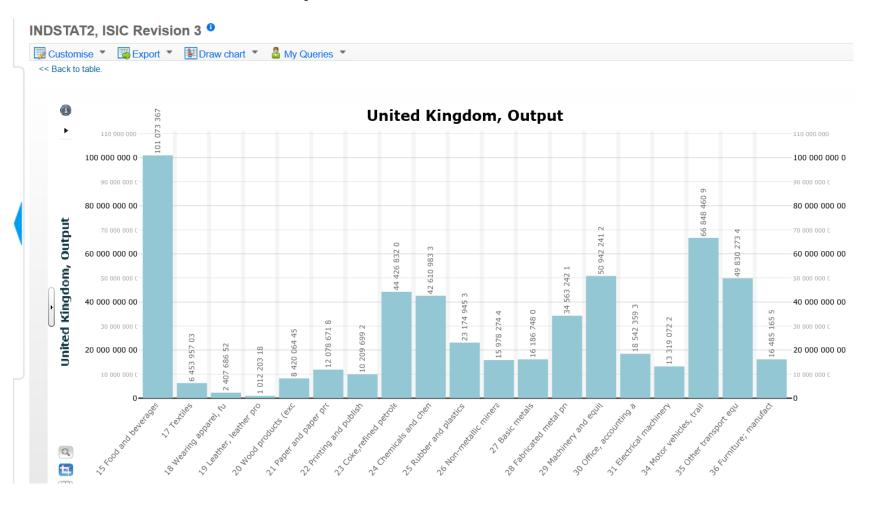
# United Nations Industrial Development Organization (UNIDO)

- Restricted to UK FE/HE
- UNIDO Industrial Statistics Databases
   Employment, wages and trade world-wide, broken down by manufacturing sector
  - INDSTAT2
  - INDSTAT4
- UNIDO Industrial Demand Supply Balance Databases
  Imports, exports and apparent consumption by
  manufacturing sector, from 1990 onwards
- Annual data, updated each year



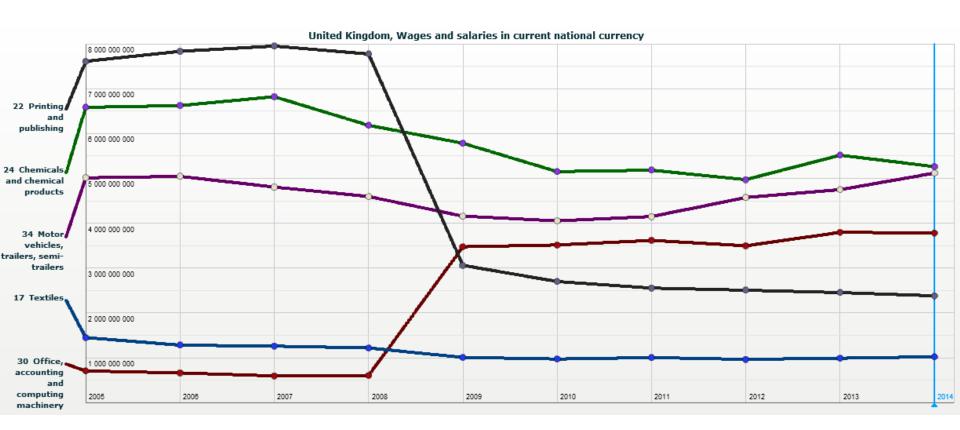


### UNIDO data: Output UK 2017



United Nations Industrial Development Organization: INDSTAT2 Rev. 3 Industrial Statistics Database (2019 Edition). UK Data Service. <a href="https://doi.org/10.5257/unido/ind2/2019">https://doi.org/10.5257/unido/ind2/2019</a>

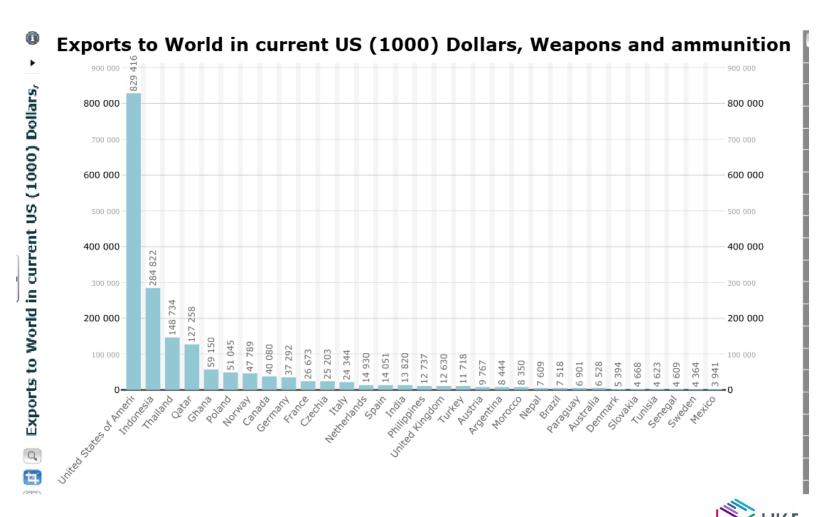
### UK Wages and salaries



The US had the highest value of weapons and ammunition exports in 2016. But which country came second?



# Weapons and ammunition Exports (current US\$ (1000) in 2016

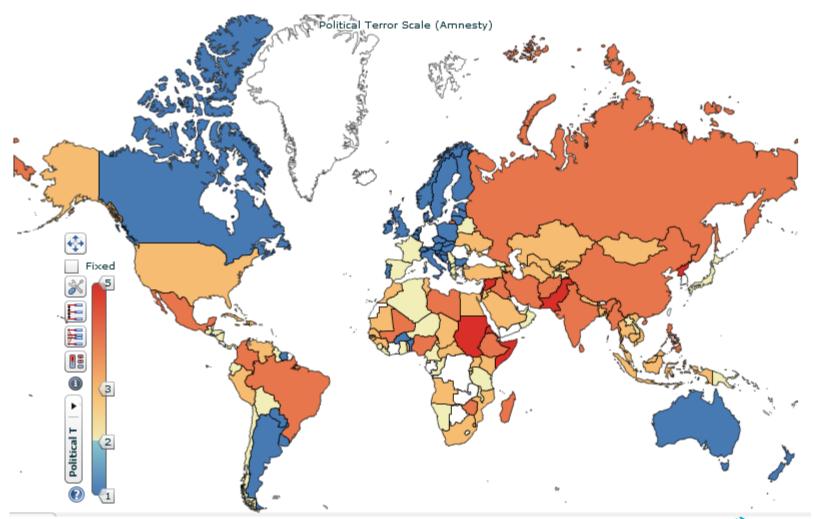


#### Human Rights Atlas

- open data
- 1981 2012
- 240 indicators
- combines data from World Bank, UN, academia, and non-governmental organisation
- ESRC funded project



### Political Terror Scale (Amnesty, 2012)





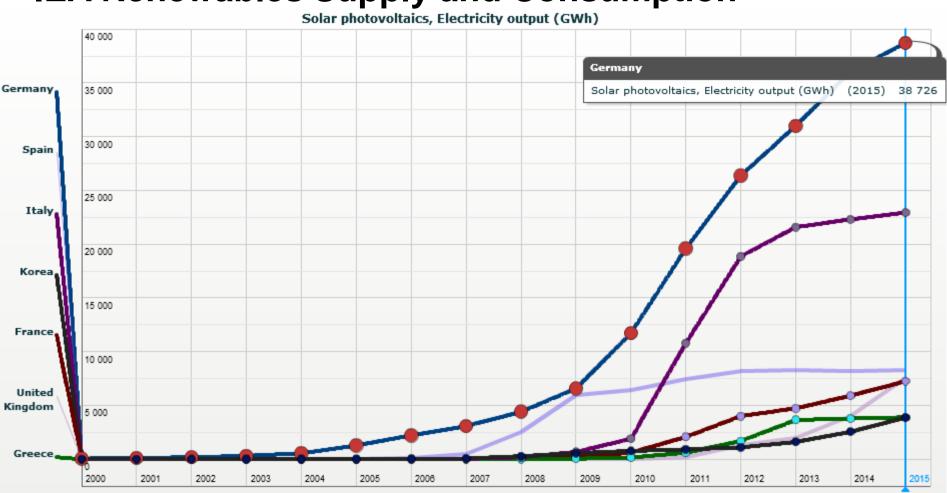
## International Energy Agency

- Restricted to UK FE/HE
- CO<sub>2</sub> Emissions from Fuel Combustion
- Energy Prices and Taxes
- Energy Technology Research and Development Database
- World Energy Statistics and Balances
- Specialist databanks:
  - Electricity information
  - Coal Information
  - Natural Gas Information
  - Oil Information
  - Renewables Information





#### **IEA Renewables Supply and Consumption**



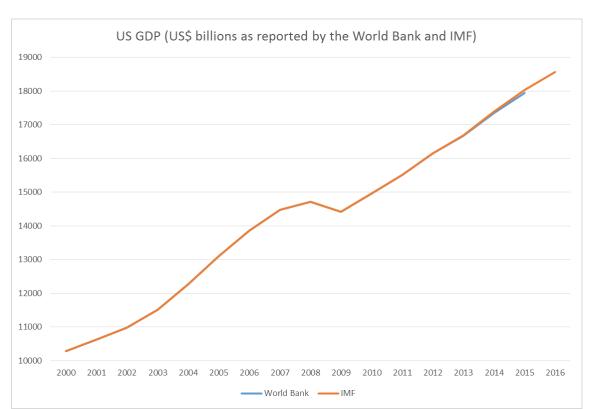
JK Data Service

International Energy Agency: Renewables Information: OECD Renewables Supply and Consumption (2017 Preliminary Edition), 1990-2015 (Data downloaded: 28 June 2017). UK Data Service, DOI: http://dx.doi.org/10.5257/jea/ri/2017-04

#### Some tips on using the databanks

#### Tip 1: choose your data from the same databank or family of databanks

- comparability issues between data from different databanks, even for series with wellestablished standards
- theoretically identical series can have slightly different values in different databanks



Time	World Bank	IMF	
2000	10284.8	10284.8	
2001	10621.8	10621.8	
2002	10977.5	10977.5	
2003	11510.7	11510.7	
2004	12274.9	12274.9	
2005	13093.7	13093.7	
2006	13855.9	13855.9	
2007	14477.6	14477.6	
2008	14718.6	14718.6	
2009	14418.7	14418.7	
2010	14964.4	14964.4	
2011	15517.9	15517.9	
2012	16155.3	16155.3	
2013	16663.2	16691.5	
2014	17348.1	17393.1	
2015	17947.0	18036.7	ervice
2016		18567	

# Tip 2: some of the databanks have better cross country comparability than others.

- OECD databanks are specifically designed for country comparisons
- IMF International Financial Statistics is not.

#### Tip 3: Examine more info and footnotes

World Development Indicators (December 2014)

☐ Customise ▼ ☐ Export ▼ ☐ Draw chart ▼ ☐ My queries ▼									
→ Subject	Gross intake ratio in first grade of primary education, female (% of relevant age group)								▼ i
→ı Time	2003 <b>△</b> ▼	2004	2005	2006 <b>△ ▼</b>	2007	2008	2009 ▲▼	2010 <b>△</b> ₹	2014
→ Location									
Afgnanistan	143.80228		86.01333		73.16143		83.8826	91.17004	96.26532
Albania i	93.8336								
Algeria i	94.86725	96.3032	94.91865	93.78017	97.56141	102.66329	103.49781	112.37794	110.10127
All Developing	110.0799484253	110.5738601685	111.2811737061	112.1305770874	114.0525131226	115.3629379272	112.446647644	113.6741409302	113.0870437622
Countries i									
American									
Samoai									
Andorra i									
Angola <u>i</u>						i 146.83711	144.99312	<b>i</b> 144.82924	143.01736
Antigua and					101.31062	97.8975	<b>i</b> 93.28947		92.54328
Barbuda i									
Arab World i	91.5697097778	92.9570617676	94.8448028564	<b>i</b> 95.7619400024	97.5129928589	<b>i</b> 98.6844711304	<b>i</b> 98.4914474487	99.3586273193	99.8152923584
Argentina <u>i</u>	110.65418	109.56736	109.12878	111.2247	111.04491	111.9544	114.636	114.58618	115.12126
Armenia i	94.74919	95.57744	103.16127	107.40804		97.70087	99.55503		
Aruba i	100.26954	97.83784	104.25824	107.173	104.29185	104.92754	105.27859	100.59084	

## What we provide

- Data free at point of use
- Single portal and search across a wide range of international databanks from several intergovernmental organisations
- Consistent and comprehensive documentation
- Training, user support, knowledgeable helpdesk
- Web: <u>ukdataservice.ac.uk</u>



#### Data Skills modules

- Survey
- Longitudinal
- Aggregate
- <u>ukdataservice.ac.uk/use-data/data-skills-modules</u>



## Demo

https://stats.ukdataservice.ac.uk/



#### Questions

ukdataservice.ac.uk/help/

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### Questions

