



OECD-UNSD Multinational Enterprise Information Platform

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A co-operation between OECD and UNSD

- Understanding the structure and behaviour of MNEs is fundamental to the production of **consistent global statistics** and understanding **GVCs**
- Have combined to create the **OECD-UNSD Multinational Enterprise Information Platform**
- Have made data **publicly available**, for NSOs, researchers and the general public alike as compiled from timely open-source information.



Framework

Smart data platform to bring together a range of sources from the traditional (eg. Annual Reports) to alternative (eg. Metadata from webpages).

Requires advanced data handling to match records, and new storage methods such as graph databases to query.

Our database is designed to cover all MNEs, but manual data capture and validation is required – so our initial release is limited to the largest 500 MNEs globally.



Data available











Currently for the largest 500 MNEs:

- **Global Register**: 123K subsidiaries including location, ownership structure and identifiers (Business Registry, OpenCorporates, LEI, PermID) when available.
- **Digital Register**: 113K websites with measures to determine their importance

Data sources and Construction



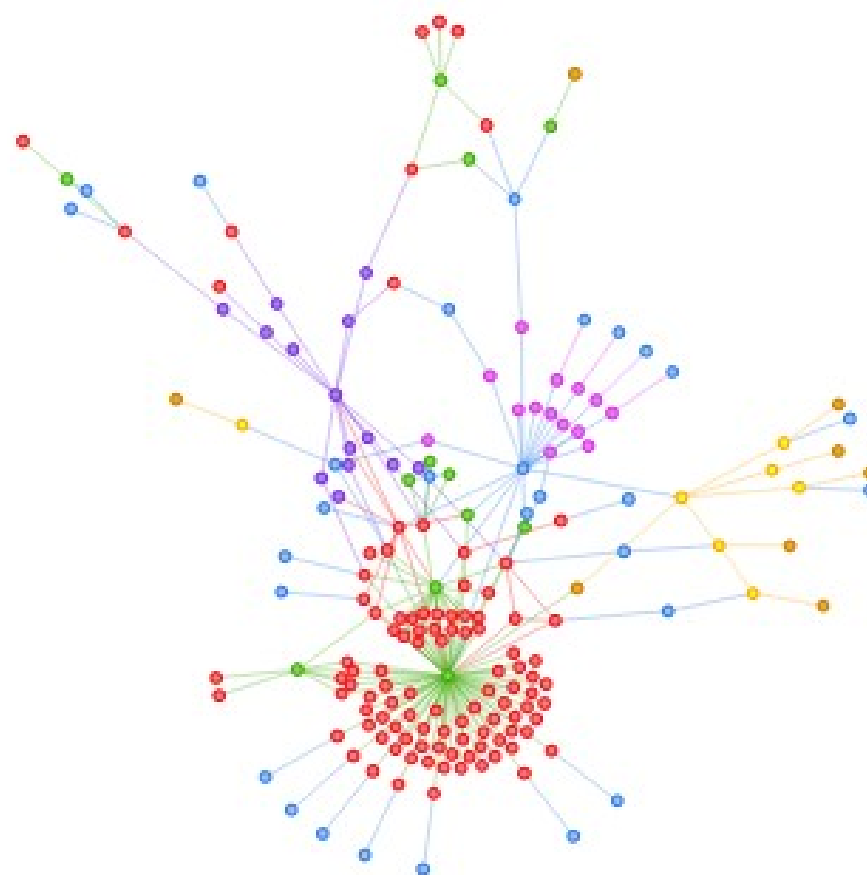
Data Sources

Data Source	Description
  Annual Reporting	Annual reports give details of financials and reporting scope. Manually captured.
 PermID	Database of companies made available by Thomson Reuters.
 Legal Entity Identifier	Database of companies engaging in financial transactions along with relationships.
 Security Certificates	Database of websites and the security certificate which exists on the site
 Common Crawl	Database of websites: metadata, underlying links and importance of each site
 Wikidata	Database of companies from Wikidata, including websites, relationships and daily page views
 GDELT Project	Database of global news and events, fully searchable by time period and phrase
 Open Street Map	Database of geographic locations (eg. Shops, Factories etc).
 Crunchbase	
Country Specific	Finland: WHOIS register UK: Persons of Significant Control, Gender Pay Gap, ICO, Modern Slavery US: Visa requests, Emails assigned to business registers



Construction

- Graph database:
 - Points are identifiers for a company
 - Lines are connections
 - Profile for an MNE is generated via a search algorithm for connected points from the root.
- Problems:
 - Find unique companies
 - Joint ventures



Challenges and Solution

Challenges in PDF Data Extraction

Annual reports serve as the primary data sources for the identification of the subsidiaries of an MNE. Annual reports are often published in PDF format.

Challenges include:

- Unstructured data
- Inconsistent formatting
- Variability in languages and font
- Large volume of data

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2022 CONSOLIDATED FINANCIAL STATEMENTS

Main consolidated companies at 31 December 2022

5.7. Main consolidated companies at 31 December 2022

5.7.1. Fully consolidated companies

Company	Head office	% interest
ATELIER COLOGNE (as a sub-group)	France	100.00
AZZARO MAUGLER BEAUTE France	France	100.00
BEAUTE RECHERCHE & INDUSTRIES	France	100.00
BEAUTYCOS INTERNATIONAL COMPANY LIMITED	China	100.00
BEAUTYLIK INTERNATIONAL COSMETICS (SHANGHAI) CO LTD	China	100.00
BIOHERM	Monaco	99.80
BOLD Business Opportunities for L'Oréal Development	France	100.00
CANAN KOSMETIK SANAYI VE TICARET A.S.	Turkey	100.00
CENTRE LOGISTIQUE D'ESIGNY ou CLOE	France	100.00
CENTRE THERMAL DE LA ROCHE POSAY	France	100.00
CORBELA COSMETICOS, S.A.	Spain	100.00
COMPAGNIE THERMALE HOTELIERE ET FINANCIERE - C.T.H.F.	France	99.98
COMPTON LAINIER AFRICAIN	Morocco	100.00
COSBEL S.A. de C.V.	Mexico	100.00
COSMELOR LTD	Japan	100.00
COSMEPHIL HOLDINGS CORPORATION PHILIPPINES	The Philippines	100.00
COSMETIL	Morocco	49.80
COSMETIQUE ACTIVE INTERNATIONAL - CAI	France	100.00
COSMETIQUE ACTIVE PRODUCTION - C.A.P.	France	100.00
EGYPTELOR LLC	Egypt	100.00
ELURVILLE (PROPRIETARY) LIMITED	South Africa	100.00
EPISKIN	France	99.92
EPISKIN BRASIL BIOTECNOLOGIA EIRELI	Brazil	99.92
ERWITON S.A.	Uruguay	100.00
FAPAGAU & CIE	France	100.00
FARISORAL	France	100.00
FINVAL	France	100.00
FINE GESUNDHEIT UND WELLNESS GmbH	Germany	100.00
FRABEL S.A. de C.V.	Mexico	100.00
GENEY PARIS - MAYELLINE NEW YORK	France	100.00
GUANGZHOU L'OREAL BUNCOOR INTERNET SCIENCE & TECHNOLOGY CO., LTD	China	100.00
HELENA RUBINSTEIN ITALIA S.p.A.	Italy	100.00
HOLDVAL	France	100.00
INTERBEAUTY COSMETICS LTD	Brazil	92.97
INTERBEAUTY PRODUCTS LIMITED	Kenya	100.00
JSC L'OREAL	Russia	100.00
KOSMEPHIL S.p.A.	Belgium	100.00



Solution – PDF Data Extraction

- Use of Data Extraction Tools, including:
 - Optical Character Recognition (OCR) technology, which converts scanned documents, including PDFs, into machine-readable text.
 - Online platforms that provide PDF to Excel and PDF to CSV conversion services.
 - Desktop applications (e.g., Power BI and Able2Extract Professional) for converting PDFs into various formats, including Excel and CSV.
- Collaborative initiatives:
 - Collaborative efforts among organizations to develop and share AI solutions for automated data extraction from annual reports.



Challenges in Timeliness of Data

- Limited Real-time Capture:
 - Traditional data extraction methods, often reliant on periodic reports or batch processing, may not capture real-time events effectively.
 - Significant restructuring events, such as mergers, acquisitions, or sudden financial changes, can reshape the landscape of an organization.

Solution:

- The use of alternative data sources allows for the near-to-real-time understanding of a firm.
- Incorporating a “news tracking tool” to identify major restructuring events that can have significant impacts on MNE structure and behavior.

News monitor: identifying key events

- Daily news articles for Adobe Inc.



- Articles during period of interest suggest M&A activity:

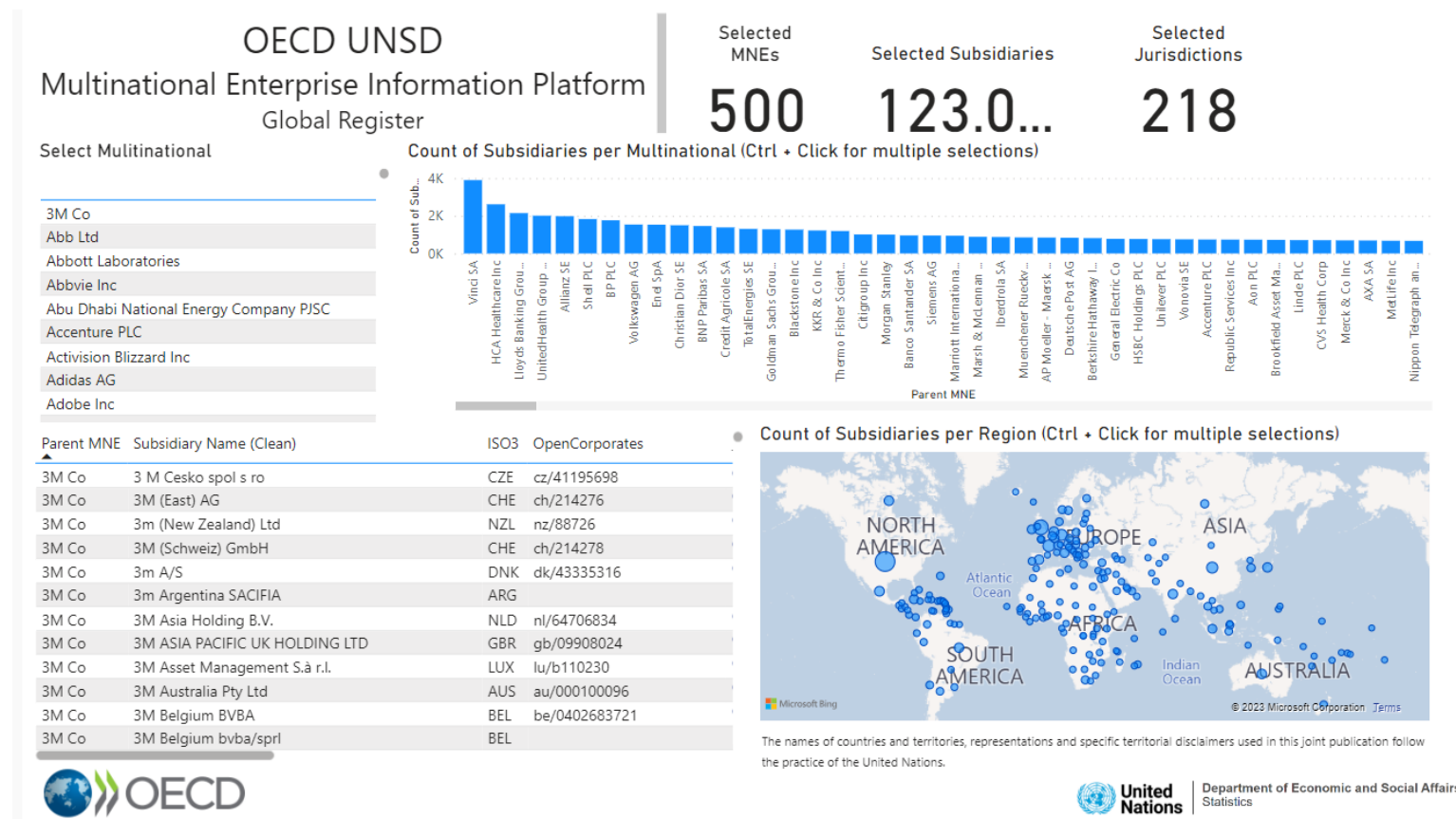
date	title	Sum of avgSalience
9/16/2022 8:01:38 PM	Adobe Set To Acquire Web-Based Design Platform Figma For \$20 Billion	0.57
9/16/2022 11:47:13 AM	Adobe's Product Chief Explains Its \$20 Billion Bid for Figma	0.49
9/16/2022 5:17:00 PM	Adobe (NASDAQ:ADBE) Price Target Raised to \$388.00	0.49
9/16/2022 2:17:02 AM	Adobe se fusionará con su rival en diseño, Figma; la compra será por 20 billones de dólares	0.44
9/16/2022 6:32:59 PM	The Adobe-Figma Combination Bodes Well For Collaboration In And Beyond Design	0.42
9/16/2022 12:48:11 PM	Adobe acquires Figma design platform for \$20B	0.40



Outputs and policy use

Dashboard

- Select a company and explore the available information:

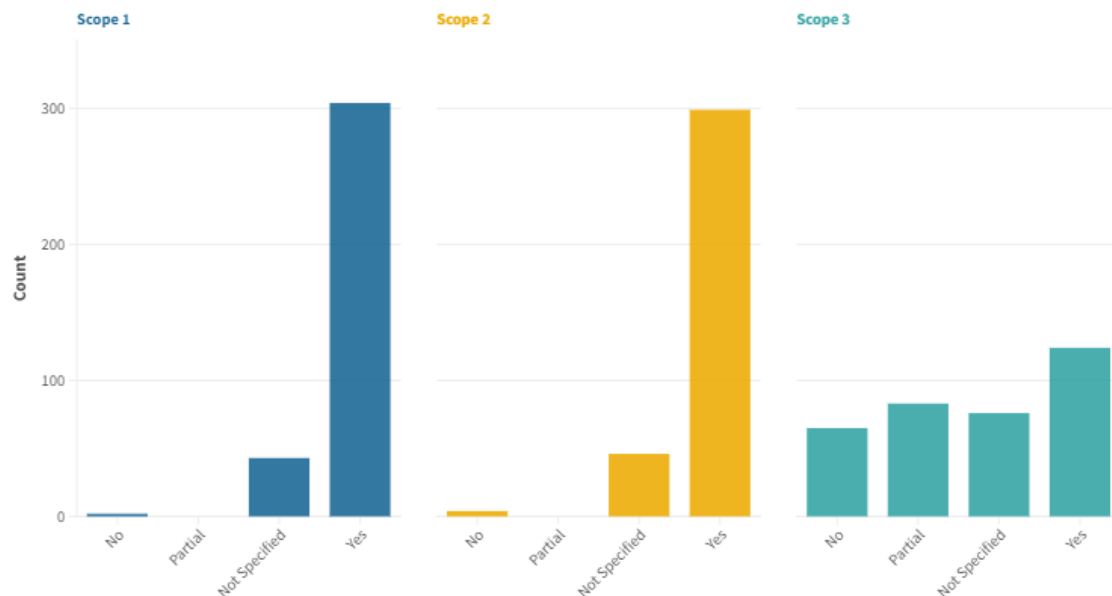




OECD study: Russia-Ukraine impacts and climate change commitments

- Reaction to Russia-Ukraine conflict has determined by region and industry in many cases

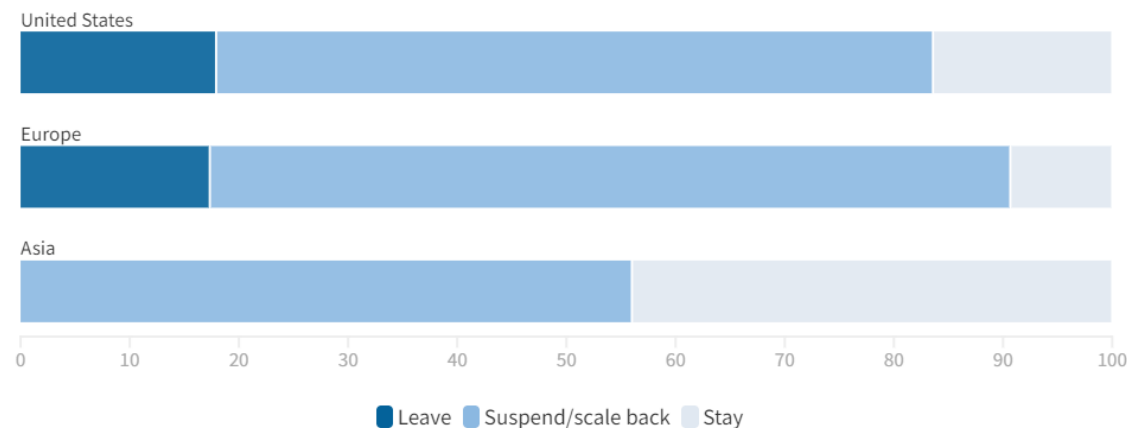
Figure 4: Emissions reduction by scope
Number of MNEs declaring targets for scopes 1, 2 and 3



Source: OECD UNSD Multinational Enterprise Information Platform, <https://zerotracker.net/>, author's calculations



Figure 2B. The response to the war was uneven by the source region
Number of MNEs



- Most MNEs have made targets for reduction of emissions in Scope 1 and 2, however Scope 3 targets are limited.



Uses for measuring resilience?

- Given issues in country X, which large companies headquartered in my jurisdiction are likely to experience problems?
- Identify major events for large companies headquartered in my jurisdiction
- Identify companies operating primarily digitally within your jurisdiction (lower barriers to change)



Global Initiative on Unique Identifiers for Businesses

- The Global Initiative on Unique Identifiers for Businesses aims to strengthen and availability of national identifiers in country to strengthen SBRs and the mapping to global identifiers such as LEI
- This initiative was endorsed by the UNSC in March 2023
- The availability of global identifiers would greatly facilitate the establishment and maintenance of MEIP



THANK YOU

Download the data and explore the
dashboard: bit.ly/mne-platform



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OECD Statistics



www.oecd.org/sdd



www.stats.oecd.org