

Linking SBR with geo-spatial information

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Overview

- SBR: Roles and Characteristics
- SBR and geo-spatial information
- Examples
 - INEGI – Google earth
 - ABS – Land use
 - Statistics Canada – employment by community and economic activity
- SBR at Global Level

Roles of the SBR

	Role	Goal
1	SBR Live Register	The gateway between (different) source(s) and the statistical units
2	SBR Backbone	Coordinate populations of statistical and administrative units in space & time through register snapshots and frozen frames
3	SBR Survey Frame	Provide set of administrative units valid for the reference period with all attributes to draw a sample
4	SBR Survey support	Control administrative burden and monitor survey response
5	SBR based statistics	Business demography statistics, business dynamics based on register snapshots, and integration with external trade register
6	SBR Information Source	Support market investigation performance
7	SBR International data exchange	Coherence in global statistics

Characteristics of the SBR

	Characteristics	Variables
1	Identifier	<ul style="list-style-type: none"> • Identity number • Name, Address, Postal Code, Town, District
2	Economic characteristics	<ul style="list-style-type: none"> • Economic Activity • Class-size (employees) • Turnover • Foreign ownership (FDI) • Internationalization (Import / Export)
3	Business demographics	<ul style="list-style-type: none"> • Starting date • Activity flag • Age of enterprise

Geo-spatial aggregation of characteristics

	Geo-spatial	Characteristic	Aggregate variable
1	Postal Code	<ul style="list-style-type: none"> Economic Activity Class-size (employees) Foreign ownership Age of enterprise 	<ul style="list-style-type: none"> # of enterprises Turnover Volume of exports Volume of imports
2	Town	<ul style="list-style-type: none"> Economic Activity Class-size (employees) Foreign ownership Age of enterprise 	<ul style="list-style-type: none"> # of enterprises Turnover Volume of exports Volume of imports
3	District	<ul style="list-style-type: none"> Economic Activity Class-size (employees) Foreign ownership Age of enterprise 	<ul style="list-style-type: none"> # of enterprises Turnover Volume of exports Volume of imports

What can be gained from linking the SBR with Geo-spatial Information?

Cross-sectional views of enterprise characteristics by (sub-national) regions:

- Are economic activities regionally distributed?
- Are larger enterprises equally spread over the country?
- Is FDI equally spread over the country?
- Are there regional patterns of economic activity by class size, FDI or involvement in international trade?

Examples

- Mexico – DENVUE on Google Earth
- Australia
- Canada
- SBR at global level

Mexico – DENVUE on Google Earth

INEGI INSTITUTO NACIONAL DE ESTADÍSTICA Y GEOGRAFÍA

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Directorio Estadístico Nacional de Unidades Económicas

Introduzca su búsqueda: Búsqueda general: Nueva búsqueda

Actividad económica | Tamaño del establecimiento | Área geográfica | Variables adicionales

Ir a INV

Criterios seleccionados

Resultados de la consulta [Ver detalle](#)

- CENTRO DE BIENESTAR Y DESARROLLO INSURGENTES
AGUASCALIENTES, AGUASCALIENTES
- CENTRO DE INVESTIGACIÓN CARDIOMETABÓLICA
AGUASCALIENTES, AGUASCALIENTES
- CENTRO DE INVESTIGACIONES EN ÓPTICA A.C.
AGUASCALIENTES, AGUASCALIENTES
- CIATEQ A.C.
JESÚS MARÍA, AGUASCALIENTES
- FUNDACIÓN DHUCAV
AGUASCALIENTES, AGUASCALIENTES
- GRUPO OPCIÓN AGUASCALIENTES S.A. DE C.V.
AGUASCALIENTES, AGUASCALIENTES
- INSTITUTO BIOMÉDICO DE INVESTIGACION A.C.
AGUASCALIENTES, AGUASCALIENTES
- CENTRO DE INVESTIGACIÓN DEL NOROESTE SC
TULUANA, BAJA CALIFORNIA

100 de 443 unidades económicas

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Historial de consultas

Capas

Nivel de zoom: 5

Google

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ABS - Geospatial Strategy

- ABS will include location data on the ABS Business Register
- ABS develops an expanded and more outwardly focused Business Register.
- The vision is that a re-developed ABS Business Register will (among others)
 - **Improve the availability and quality of regional economic business counts**
 - **Enable a broader range of regional economic data to become available via modelling and data linkage**
 - **Enable site-level business activity from a number of sources to be linked, including employment data projects**
 - **In the longer term, enable coherent approaches to the production of regional statistics and provide a framework to support the production of gross regional product estimates**

Statistics Canada – Geolocation of SBR data

- To study the potential of conducting economic analysis of small geographic areas by using Business Register (BR) microdata
- Using BR data geocoded at the census subdivision (CSD) level, in combination with travel distance data generated from the Google Maps API
- The identification of resource sectors is based on the aggregation of business data at the CSD level from the BR
- A database was created, containing:
 - **BR employment data, derived from payroll deduction files**
 - **BR revenue data, derived from the General Index of Financial Information, and**
 - **the six-digit North American Industrial Classification System (NAICS) code from the Business Register.**

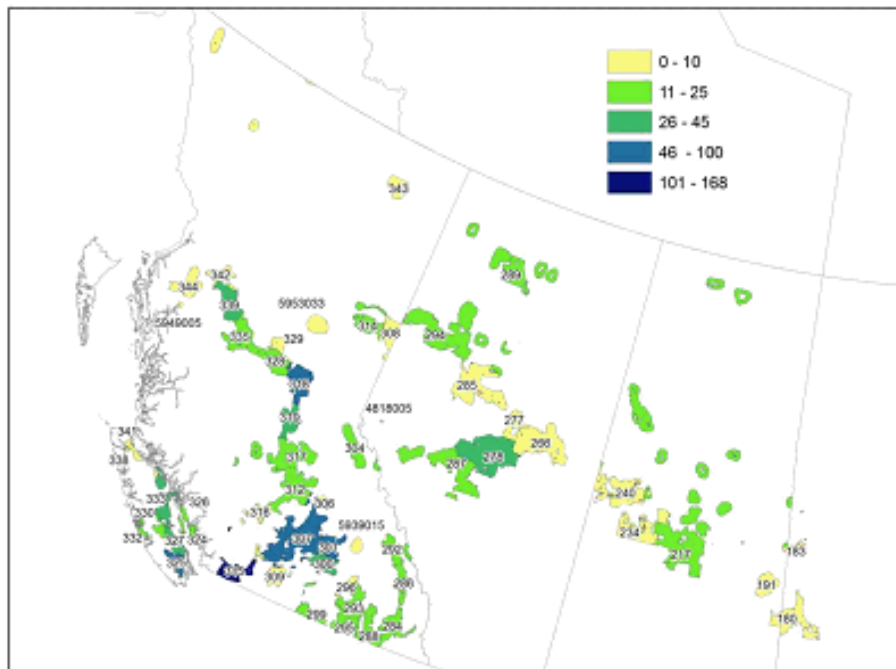
Statistics Canada – employment by community & economic activity



Statistics Canada
Statistique Canada

Canada

Number of businesses in Timber Tract Operations (1131), Forest nurseries and gathering of forest products (1132), Logging (1133) and Support activities



Source: CSBP, Statistics Canada, 2013. Business Register, 2011.

Map produced by Remote Sensing and Geospatial Analysis, Agriculture Division, Statistics Canada.

UNSD – SBR at Global Level?

Can we create and maintain a global database with

- SBR per country (in terms of # of enterprises and value-added) broken down by
 - **Economic Activity,**
 - **Class-size (employees),**
 - **Percentage of Foreign ownership,**
 - **Age structure of enterprises**

International Trade in Goods based on UN Comtrade data

Developed by the Department for Business Innovation and Skills (UK)

Reporter: United Kingdom

Partner: Select a partner

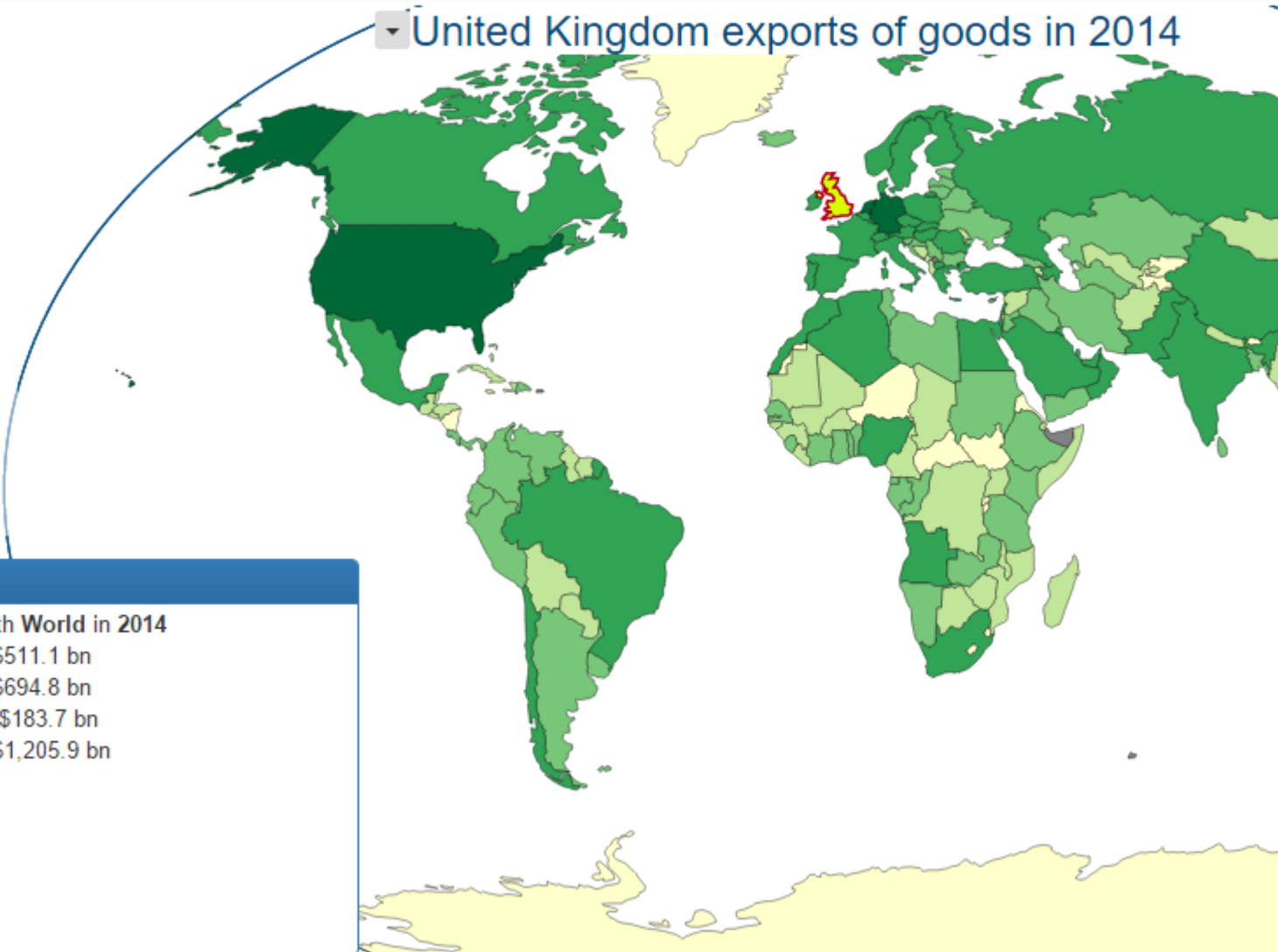
Commodity: Select a commodity

United Kingdom exports of goods in 2014

Exports Imports Balance

Exports Legend

- No data available
- \$2.8 th - \$11.4 m (58 partners)
Up to 25th percentile
- \$12.9 m - \$76.6 m (58 partners)
25th to 50th percentile
- \$77.6 m - \$727.7 m (58 partners)
50th to 75th percentile
- \$759.4 m - \$35.1 bn (54 partners)
Above 75th percentile excl. top 3
- \$36.7 bn - \$64.2 bn (3 partners)
Top 3 - above 1.3 percentile



Key Facts

United Kingdom trade in goods with World in 2014

Exports: \$511.1 bn
 Imports: \$694.8 bn
 Trade balance: -\$183.7 bn
 Bilateral trade: \$1,205.9 bn

Thank you