

**Better assessing the impact of globalization  
in business statistics : *Toward an implementation of  
Groups and Enterprises in the Business Register*  
(ITEM X agenda)**

Israeli Central Bureau of Statistics (ICBS)  
Business Economy Department  
Business Register Section  
Agnes Topiol

- \* Background
- \* Objectives
- \* The data sources and their use
- \* Technical issues
- \* Data processing
- \* First results
- \* Remaining challenges

\* The Israeli administrative BR is **the backbone of business statistics**.

It is built by matching administrative files from the Social Insurance Institute and/or from Value Added Tax authorities.

\* The main unit of the BR is the legal unit (LeU).

LeU was for long considered as a good proxy of the enterprise.

However for more than two decades, with the development of enterprise groups this assumption tends to be weaker.

\* With the acceleration of globalization and digitalization, new statistical issues have been raised, that cannot be tackled correctly, when working at legal unit level.

➤ **Need to introduce in the BR:**

➤ **Enterprise groups and Enterprises**

➤ **more insights about globalization and digitalization.**

**For the production of more relevant and comparable business statistics**

# Objectives (1)

**PILOT STUDY** carried out to test the feasibility of setting-up in the BR, aside the LeU database, a database for **Enterprise Groups (EGs)** and for **Enterprises (ENTs)**.

**Enterprise Groups can be domestic or foreign according the location of their global group head/decision center.**

**EGs and ENTs databases include :**

**\*identification data** (Name, ID)

For EGs: Name/ID and country of the global group head and decision center

For ENTs: Name and ID of the EGs to which they belong to

**\*main economic information** (main activity, revenue, employees, assets)

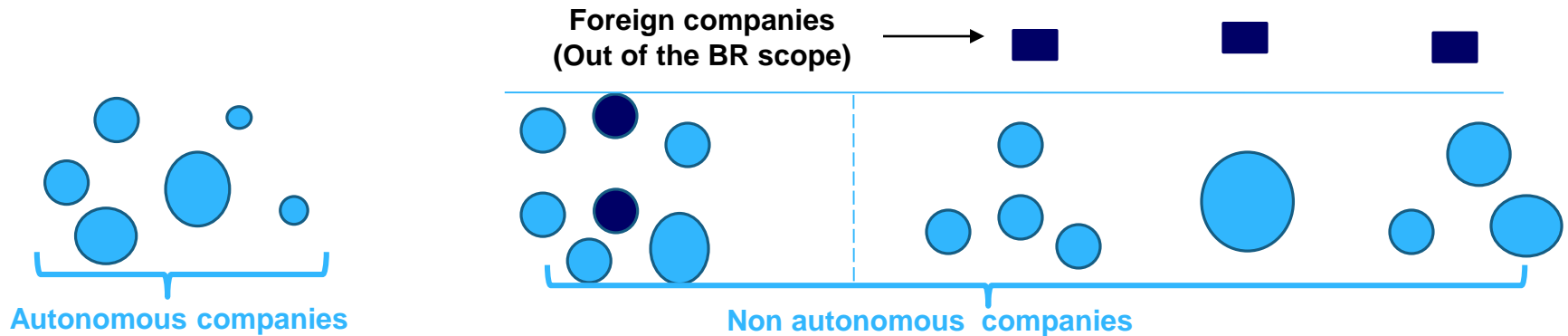
For EGs :number of ENTs, number of subsidiaries worldwide and in Israel

**\*delineation in terms of legal units**, which will remain the basic bricks of these two statistical units.

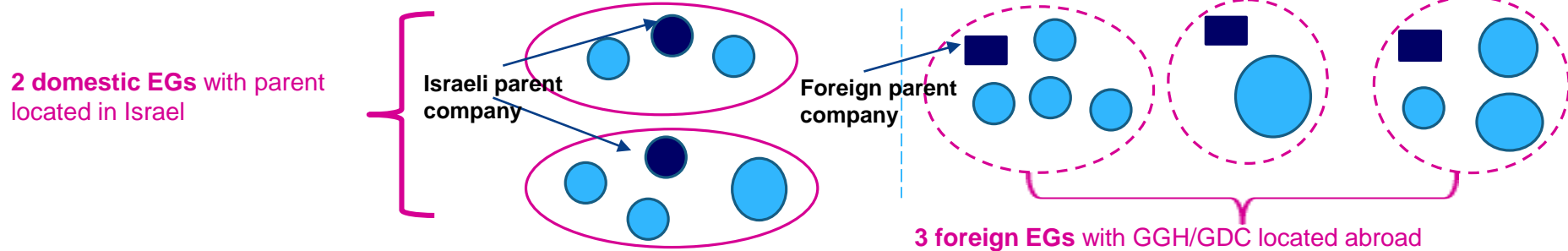
**=> This study relied on the concepts and methodology defined in the more recent guidelines from UNECE and Eurostat concerning standards of BRs.**

# Objectives (2)

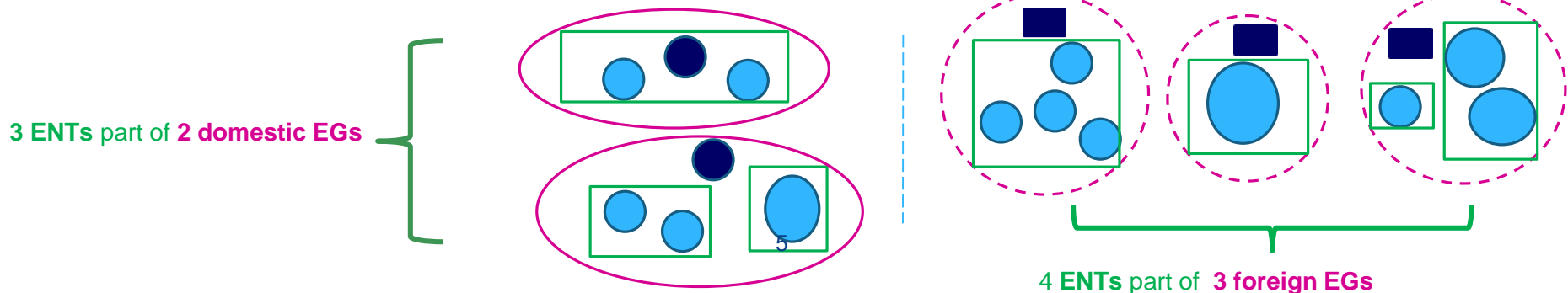
- **LeUs database** : in the BR, all companies are considered as “autonomous enterprises”



- **EGs database (both domestic and foreign)**



- **ENTs database**



# The data sources and their use (1)

## ➤ For domestic enterprise group delineation

### Annex of the company revenue tax form on direct ownership

*188,000 companies*

#### ID of the Israeli company

##### For direct Israeli owners

- Israeli ID number
- Share of ownership (%)

##### For direct foreign owners:

- Generic ID (999999999)
- Share of ownership (%)

Use of  
other  
sources

- Selecting share of ownership > 50%
  - Selecting owners ID that start by 51,52,53,54,56
- Businesses are coded on a 9 digits basis. Company's IDs start by 51-52-53-54-56
- Matching with the BR (Name, main activity, employee jobs, revenue)

=>Algorithm based on several iterations to delineate all domestic EGs

# The data sources and their use (2)

## ➤ For foreign enterprise groups delineation

**D&B commercial database**  
**with all foreign owners**  
*12,200 companies*

- Name of all foreign owners  
In Hebrew or in English letters
- Share of ownership (%)

**OECD-ADIMA**

*500 largest publicly traded MNEs*

- Name of the parent of the MNE (English)
- National ID / name of the Israeli subsidiaries

- Selecting share of ownership > 50% (proxy of control share).
- Processing on foreign name owner to select only companies
- Matching with ADIMA to find out the global decision center (GDC)  
*300 foreign subsidiaries part of 150 MNEs on 500 MNEs in ADIMA.*
- Matching with the BR (Name, main activity, employee jobs, revenue)

**=> Algorithm that gathers all Israeli subsidiaries with same name of foreign controlling company for foreign EGs delineation**

# The data sources and their use (3)

- For the largest and more complex EGs, manual profiling for ENTs delineation

- 
- Financial reports
  - Financial & corporate websites
  - Direct contacts with financial officers

**Delineation of ENTs inside the most complex EGs  
(both foreign and domestic)**



## ➤ Technical issues for enterprise groups identification

-The data includes all types of direct foreign owners (individuals, companies...), One considers here only the owners that are **companies**.

- The owner shouldn't be a company that is a **captive financial unit** (financial holding located in a tax heaven, a risk equity or capital equity fund...).

- For foreign owners, there is no ID, only names:

Foreign owner names

- can be written with Hebrew or Latin letters (GOOGLE/ גוגל)
- can be an Israeli name or an English name (Enterprise/ חברה)
- be an English name written in Hebrew letters (Enterprise / אנטרפרייז)
- be written literally or be abbreviated (IBM-International Business Machine)

=> many processing on the foreign owner name

# Data Processing (1)

## ➤ Examples to understand the method of foreign company names identification

### LATIN LETTERS

HELEN BRAUN  
DAVID COHEN

GOOGLE **INC**  
L'OREAL **SAS**  
DOLPHIN **B.V**  
**Establishment** ABCD  
Generation **capital venture**  
Almaric **Technologies**  
  
Tempura **R&D**

### HEBREW LETTERS

הלן ברון  
דוד כהן

גוגל **אינק**  
לאראל **אס אי**  
דולפין **בי.וי**  
**אסטבלישמנט** איי.בי.סי  
דור **קפיטל ונטור**  
**אלמריק** טכנולוג'ס  
  
טמפורה **מו"פ**

=> Detection of specific words in the owner names such as legal forms (in red) and business terminology (in green)

# Data processing (2)

<b>legal forms</b>	<p>Limited liabilities companies / cooperative/associations/partnership /public limited company/ Corporation/Private limited company/ limited liabilities company</p> <p>Société anonyme - SA , public limited company - PLC , corporation-CORP , Aktiengesellschaft – AG , Oyj , A/S - Naamloze Vennootschap – NV, Società per azioni- Spa,</p> <p>Sociedad Anónima - SA, Publikt aktiebolag- AB -Société à responsabilité limitée-SARL , private limited company-LTD, limited liability company-LLC , Gesellschaft mitbeschränkter Haftung-GMBH, Oy, besloten vennootschap –BV, Societa a responsabilitada limitata-Srl, Sociedad limitada-SL, Aktiebolag- AB</p> <p>Société par actions simplifiée –SAS , limited liability company LLC , unlisted public company, close corporation (CC), private corporation</p> <p>Société Civile Immobilière-SCI, Societas Europaea -SE, kft, Sro, AS...</p>
<b>Business terminology</b>	<p>Establishment/Company/Enterprise/Holding/Group/Business/</p> <p>Headquarter/Organization/Partner/Associate/Bureau/Agency/Bureau/Agency</p> <p>Agriculture/ Industry /Manufacturing/ Production/Services/Commerce/Construction/ /&amp;/Branch/Affiliate/Subsidiary</p> <p>Marketing/Human Resources (HR)</p> <p>Network/ Logistic/Transport/Information/Export/Import/Stock</p> <p>Electronic/Sales/Electric/Mechanic/Pharmaceutical/Medical/Cosmetic/Apparel/Devices/Food</p> <p>/Foundation Finance/Trading/ Bank/Insurance/Real Estate/Trust/Capital/Fund/Hedge/Assets/Equity/ Venture/Family office/ Investment/Resource/Management/Accounting</p> <p>Semiconductor/Telecommunication/Optical/Technologies</p> <p>R&amp;D/Research/Laboratory/Development/Computer/Communication/Machine/</p> <p>and co/.com/Hub/Network/Hotels/Store/retail/wholesale/</p> <p>Technical/Center/Reparation/I.T/Digital/Platform/Delivery/Support/Adviser/Engineering/</p> <p>Corporation/Analysis/Outsourcing/ leisure/sport/social</p>
<b>Geographic terminology</b>	<p>Global/ Worldwide/ International/ National/ Regional/America/ Europe/ EMEA/ Asia/ Africa/ Middle East/United States (US)/ United Kingdom (UK)/ Germany (DE)/ Israel (IL)/</p> <p>Netherlands (NL)/ France (FR)/Switzerland (CH)/Luxembourg (LU)/Cyprus (CY)/</p> <p>Holland, China (CN), Japan (JP)/ Singapore (SG)/ India (IN)/Taiwan (TW)/ Turkey (TR)/Egypt (EG)</p>

=>Same terminology search has been carried out<sup>11</sup> in Hebrew (אינק/בי.וי/אס אי/חברה/ישראל...)

# Data processing (3)

## ➤ Removing Foreign/Israeli owner that are captive financial units or not GDC of the enterprise group (Work in progress)

- Removing the owners that are well known **Israeli equity funds** (Fortissimo, Viola...) or **foreign equity funds** investing in Israel (Permira, Apax, BC partners, Bessemer...)  
Source : Crunchbase website
- Removing owners whom names content 'trust', 'family office', 'foundation'...  
'נאמנות', 'הון סיכון', 'טרוסט'...
- Removing companies with names including countries knowns as tax heaven (Cayman, Delaware, Jersey, Gibraltar...).
- Removing well known **Transfer agents** of Israeli based business that are listed on the NASDAQ (Continental Stock Transfer, American Stock Transfer & Trust Company...) or other foreign stock exchange.

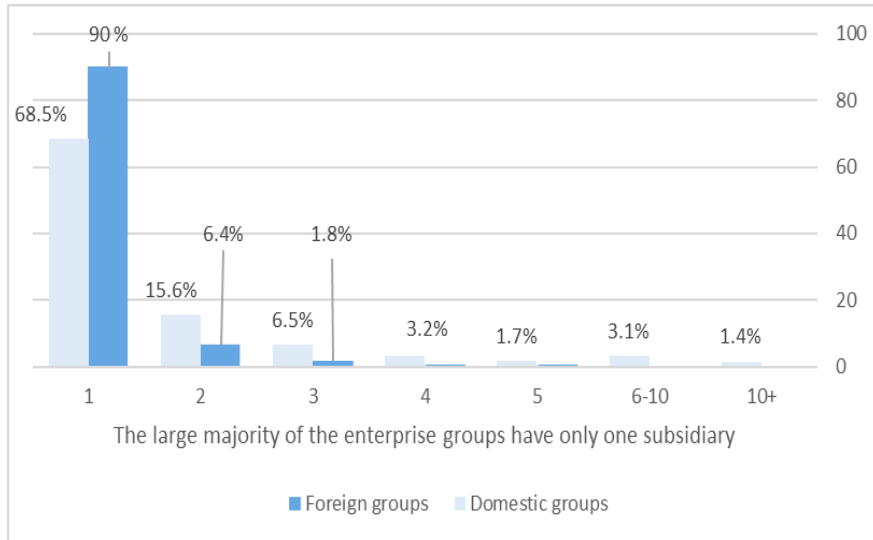
# First results (1)

	Number of legal units (companies) part of an enterprise group	Number of enterprise groups	Number of employees	Revenue (B. NIS)
<b>Domestic</b>	<b>28,800</b>	<b>9,200</b>	<b>899,500</b>	<b>897</b>
<b>Foreign</b>	<b>7,600</b>	<b>6,400</b>	<b>176,900</b>	<b>207</b>
<b>All</b>	<b>36,400</b>	<b>15,600</b>	<b>1,070,046</b>	<b>1,114</b>

- The population of the enterprise groups (both domestic and foreign) represent less than 20% of all companies of the BR but about 50% of all employees jobs and revenue.
- Export of goods and services represents a third of total revenue (almost 60% for the subsidiaries that belong to a foreign enterprise group).

# First results (2)

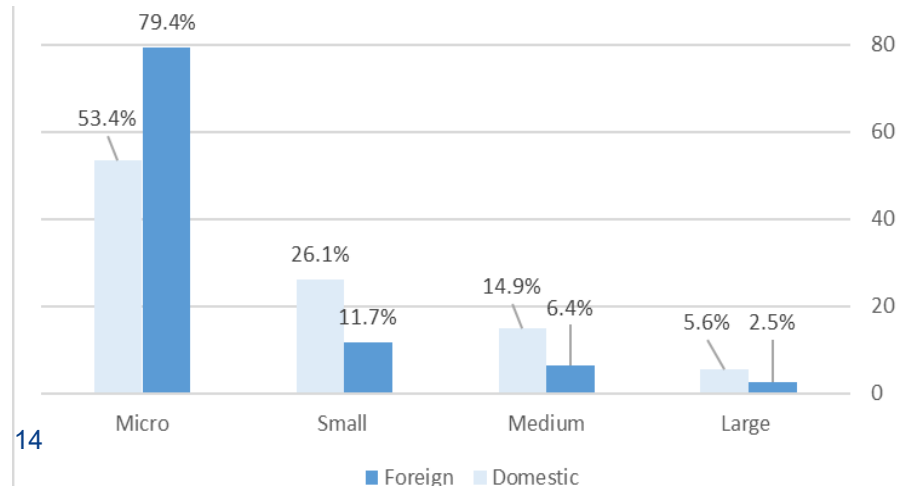
## Breakdown of EGs by number of subsidiaries



- The large majority of enterprise groups operating in Israel have only one subsidiary.
- 90% of foreign enterprise groups. Almost all foreign enterprise groups have 3 subsidiaries or less.

- The large majority of enterprise groups operating in Israel employ less than 50 persons (SMEs) : 80% of domestic groups and 90% of foreign enterprise groups.
- 5.6% of domestic groups have more than 250 employee jobs and only 2.5% of foreign enterprise groups.

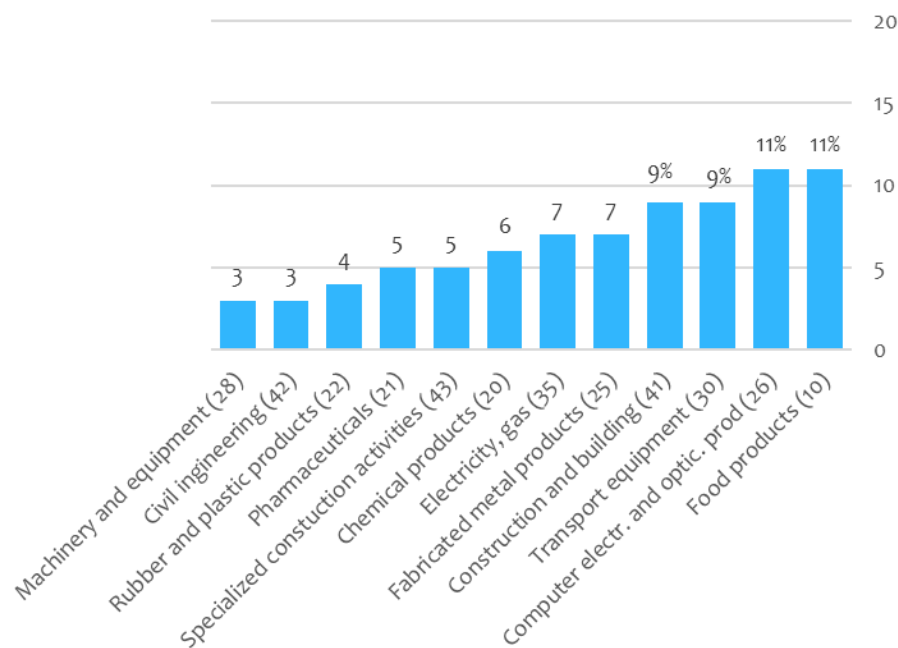
## Breakdown of EGs by size (nb of employee jobs)



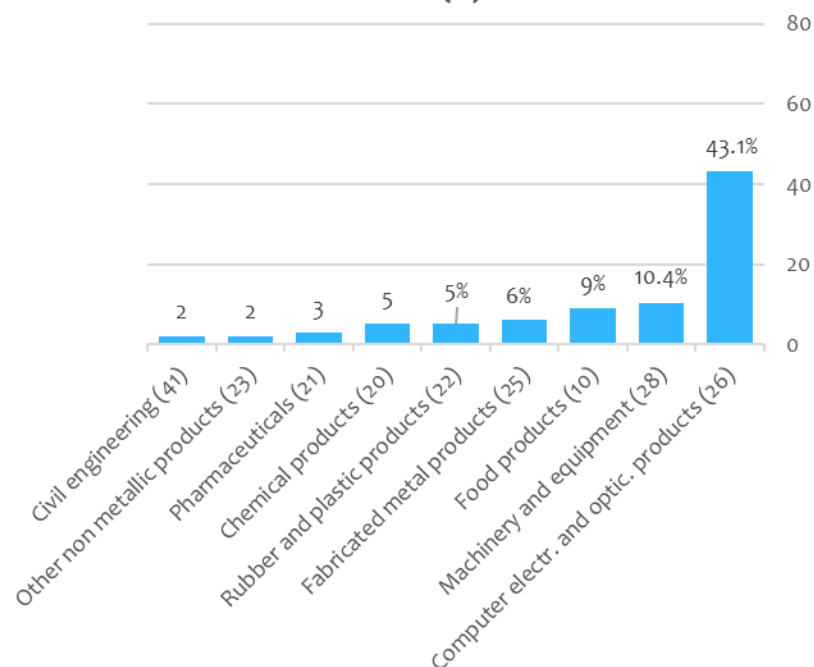
# First results (3)

## A different concentration of the enterprise groups by industries (ISIC 2 digits)

Among Domestic Enterprise Groups, ISIC divisions with the most employee jobs in the manufacturing industries and construction (%)



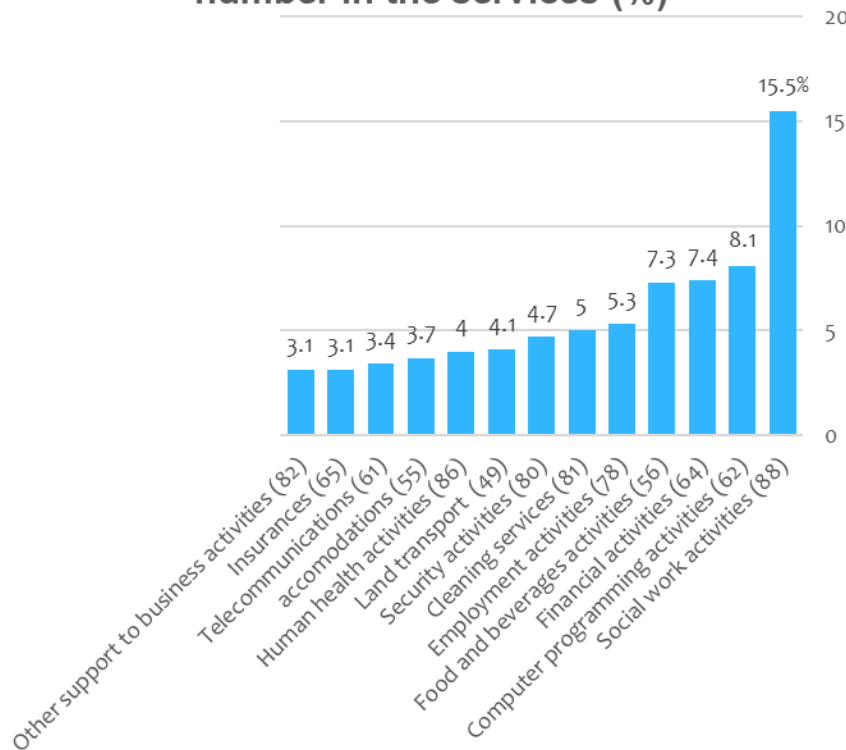
Among Foreign enterprise groups, ISIC divisions with the most employee jobs number in the manufacturing industries and construction (%)



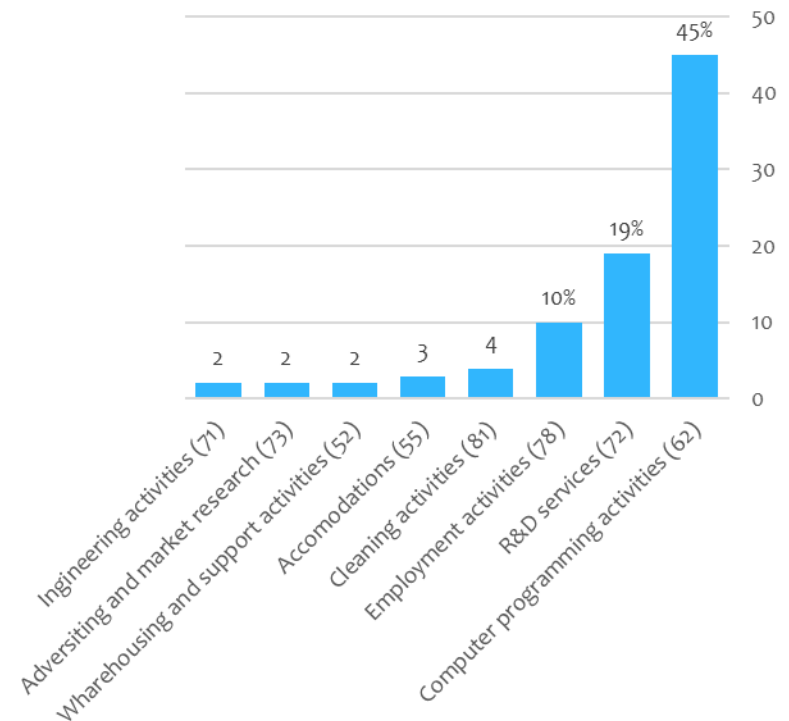
- Foreign enterprise groups are more concentrated in **the high-tech manufacturing industries** : divisions 26 and 28 represent all together most of half of the employees in the manufacturing industries.

# First results (4)

**Among Domestic Enterprise Groups, ISIC divisions with the most employee jobs number in the services (%)**



**Among Foreign Enterprise Groups, ISIC divisions with the most employee jobs in the services (%)**



- Foreign enterprise groups are more concentrated in the high-tech industries in the services: divisions 62 and 72 represent all together 65% of the employees in the services. Most of these employees are employees of international R&D centers of MNEs (Intel, IBM, Google...).



# Remaining Challenges

- \* Building an algorithm to provide main economic activity of the enterprise groups, based on most prominent economic activity (ies) of Israeli subsidiaries according the number of employee jobs and revenue.
- \* Choosing of the enterprise groups that will be manually profiled based on size and complexity of the enterprise groups and on resources available.
- \* Introducing indicators about the enterprise groups when possible (Name and location of the global group head and decision center, main activity, number of subsidiaries worldwide, revenue, total number of employee jobs, assets).
- \* Preparing the current work process in order to update these databases on a yearly basis and produce demographic indicators.
- \* The last but not least, **refer to the enterprise instead of the legal unit** to collect business statistic.

**Thank you very much for your attention**  
**Questions, remarks?**



**Contact: Agnes Topiol - ICBS**  
**Anisy@cbs.gov.il**