Measuring entrepreneurship in gender perspective through business statistics international level

Caterina Viviano (ISTAT)

Workshop on Developing Entrepreneurship Statistics by Gender in the Republic of Moldova

Chisinau, Republic of Moldova, 30 June-1 July 2015
Contents:

Part 1 - Overview of concepts, definitions and data sources for developing statistics on women’s Entrepreneurship (E-ship)

• Definition of entrepreneurship: same basic concepts
• The Eurostat/OECD framework for measuring Entrepreneurship and the EIP (Entrepreneurship Indicators Programme ) project
• Operational definition and some open questions
• The self employment data for E-ship measurement
• Data sources
Contents:

Part 2 – The Factors of Business Success (FOBS) survey

Part 3 – The Business register and other integrated administrative sources: the Italian experience

3.1 - An overview of the Italian BR: main characteristics, updating process, used administrative sources

3.2 – Business Demography and Indicators

3.3 - The new Informative structure on Employment – the Linked Employer-Employees Database (LEED)
Background

Entrepreneurship (E-ship) and Entrepreneurs are important drivers of economic growth, employment, innovation, productivity and individual empowerment.

Women are one of the relevant resources for E-ship.

E-ship gender gap: what reasons?

Women are less likely than men to become entrepreneurs, and when they do, their enterprises are smaller and concentrated in a limited range of sectors (Piacentini, 2013).

Need for statistical data to quantify this gap and make comparative analyses
- characteristics of women (and men) entrepreneurs (i.e. age, education skills, experience) and analyses on their impact on
- the performance of their business (survival, job creations, productivity)
Internationally comparable statistics in E-ship by gender should to take into consideration:

- **Definition**
- Common and shared **methodology**
- Relevant **sources** of data

**Definition** of entrepreneurs (women /men) and of women-run businesses

The definition of entrepreneurs poses theoretical and empirical challenges

- Identification problem: how to distinguish entrepreneurs from others business agent; how to distinguish women and men – owned/managed enterprises

Broad definitions or characterization of an entrepreneur one of the most elusive to measure (Shumpeter, Cantillon, Baumol, etc etc).
The OECD framework for measuring E-ship

The Entrepreneurship Indicators Programme (EIP)

1) The Entrepreneurship Indicators Programme (EIP), launched by OECD in September 2006, has as main goal to build internationally comparable statistics on entrepreneurship and its determinants. In 2007, Eurostat joined forces with the OECD to create a joint OECD-Eurostat EIP, and work began with the development of standard definitions and concepts as a basis for the collection of empirical data.

2) The OECD-Eurostat approach has tried to combine the more conceptual definitions of entrepreneurship with (available) empirical indicators.
3) The E-ship definition consider three components:

- **ENTREPRENEURS** are those persons (business owners) who seek to generate value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.

- **ENTREPRENEURIAL ACTIVITY** is enterprising human action in pursuit of the generation of value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.

- **ENTREPRENEURSHIP** is the phenomenon associated with entrepreneurial activity.
Entrepreneurship Indicators Programme (EIP)

Topic categories for entrepreneurship indicators

Determinants
- Regulatory framework
- R&D and technology
- Culture
- Entrepreneurial capabilities

Entrepreneurial Performance
- Firms-based indicators
- Employment-based indicators
- Wealth-based indicators

Impact
- Creation of more and better jobs
- Economic growth
- Poverty reductions
The conceptual definition of ENTREPRENEUR underlines some factors:
- personal attitudes to bear risks
- “value creation” and “innovation” as the distinguishing features of entrepreneurial activities

3 substantial elements:

- the entrepreneur is defined as long as exist an output of his/her behaviour that is the existence of a business activity
- a level of innovation: something “new” created
- generating additional value (economic/social) (i.e. the ability to generate growth)
Entrepreneurship Indicators Programme (EIP)

Entrepreneurs

- very close to the start-up (newly creation of enterprises)

- entrepreneurial performance and impact component of EIP mainly based on business demography data generating a value (job creators i.e with employees) and generating growth (high-growth and gazelles)
Translation into operational rules is very difficult:
• Not measurable in a direct and unique way
• Not a complete shared methodology

○ a substantial problem of recognizing the entrepreneur having the specified entrepreneurial characteristics
  ≈ some aspects of newly / generation of value are related to the type of enterprise

○ the identification of the entrepreneur as a physical person (women/men)
  ≈ business owner (or structure of ownership) or founder or some managerial skills
According to the EIP definition and other OECD studies there are some open questions

- size of the business (Lower /Upper bound)

- ownership requirements (involving the juridical status of the business)

- participation in the creation of the business (to be the founder or manager)

- management skills
Size of the business

Which kind of enterprises for E-ship statistics?

E-ship involve both SMEs and large firms (also large firms can be entrepreneurial)

Size is measured according to employment: only those enterprise who employ at least one person should be classified as entrepreneurs

excluding the rest (without employees) means excluding a high number of very small enterprises (so-called own-account employer) that represent business owners creating their own employment and then creating economic value (maybe there are many women-owned non-employer entrepreneurs).

own account employer (no employees) and employers generally such information can be obtained from business register
Ownership requirements

The entrepreneur as business owner.

The form of ownership depends upon the organizational structure of their business.

**identification problem:**
- For small and very small firms often organized according to simple business structures like sole-proprietorship or partnerships it is sufficiently simple and gender derivation is more easier (very simple if the owner is only one)
- For complex organizations like corporations assign gender is a difficult task. Ownership structure in corporations:
  - composed by juridical and physical persons
  - decision making is usually assigned by the position and shares owned
Ownership requirements

- A variety of legal categories defined differently among countries
- Scarcity of sources detailed
- Not shared rules to measure gender ownership in presence of high number of shareholders
- Need of Operational rules to enumerate or calculate shares controlled by the majority of persons

Many analysis and data have been historically produced only based on some categories of firms i.e sole-proprietorships, partnerships, where the subjective elements represented by shareholders prevails over the capital one.
Other questions:

**Management and ownership**: Managers or other board members without share holding are not entrepreneurs.

**Business owner and business founder**: they cannot coincide while the business founder (the one who had the innovative idea) if more likely to be also entrepreneur, the owner that acquired the activity through an inheritance or by acquisition. Both types can be relevant for the analysis depending whether it is oriented more to understand the reason of start-up or the business growth and both info depending on data sources available.
The operational definition of entrepreneur suggested by OECD is:

*Entrepreneurs are persons that have a direct control over the activities of an enterprise, by owning the totality or a significant share of the business. Employer entrepreneurs are those entrepreneurs who employ at least one other person.*

EIP has focused on the production of info from business register meaning that the gender dimension must be included or derivable form the BR in order to produce women-men owned enterprises and carry out traditional analysis on productivity, growth, etc.
The way of identifying entrepreneurs is still under discussion and can differ among Countries according to different operational rules, used proxies, available sources.

Empirically there could exist a variety of quantitative proxies of the entrepreneurs.

The most common is using *Self employment* data for measuring E-ship.

Employment statistics are very well covered by Business Register and by household surveys.

They refer to official international standards (SNA2008, ISCE93).
International conceptual framework dealing with the definition of entrepreneur

In year 2013, ILO defined entrepreneurs as: “workers who have arrangements whereby the worker and the establishment they own and operate are separate legal entities. It considered employees of the enterprises they own; exposed to less financial and legal risk than other self-employed persons as entrepreneurs”

Economic and labour market policy analysts use statistics on status in employment to assess the impact of self-employment and entrepreneurialism on employment and economic growth and to evaluate the consequences for government policies related to economic development and job creation.
ICSE definition
The 15th International Conference of Labour Statisticians adopted, in January 1993, a resolution concerning the ICSE (International Classification of Status in Employment)

7. *Self-employment jobs* are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context "enterprise" includes one-person operations.)
9.2. **Employers** are those workers who, working on their own account or with one or a few partners, hold the type of job defined as a "self-employment job" (cf. paragraph 7), and, in this capacity, on a continuous basis (including the reference period) have engaged one or more persons to work for them in their business as "employee(s)" (cf. paragraph 8). The meaning of "engage on a continuous basis" is to be determined by national circumstances, in a way which is consistent with the definition of "employees with stable contracts" (cf. paragraph 8). (The partners may or may not be members of the same family or household.)

10.3. **Own-account workers** are those workers who, working on their own account or with one or more partners, hold the type of job defined as "a self-employment job" (cf. paragraph 7), and have not engaged on a continuous basis any "employees" (cf. paragraph 8) to work for them during the reference period. It should be noted that during the reference period the members of this group may have engaged "employees", provided that this is on a non-continuous basis. (The partners may or may not be members of the same family or household.)
Using self-employment data: some precautions, remarks and points of discussion

Advantages:
- Accessibility: it is available in multiple sources (Business register, labour force survey)
- Availability: it is quite an harmonized concept - comparison across country is feasible

Disadvantages
- Too narrow: all entrepreneurs are not self-employed
- Too broad: all self-employed persons are not entrepreneurs
- Classification errors: depending on the way data are collected by the interviewer (classification error) by the respondent (self perception error) by the employer (for fiscal or contributory reasons)
Definition are not implemented in the same way (National peculiarities in regulatory framework): inclusion/not inclusion of owners of incorporated businesses

According to official definitions (ISCE93 and SNA2008), a person operating his/her business as a sole proprietorship in unincorporated business is classified as self-employed.

Owner/manager of incorporated businesses (OMIBs) actively engaged in their businesses are often classified as employees for taxation purposes, as they receive wages as part of their compensation.
Measurement remarks: Gender status refers to individuals, it is difficult to transpose it to enterprises (women(male) owned businesses like a firm’s characteristics).

In firm-level data, Self-employment is a job position measured at a point in time or on average; it can range between 0-1.

In terms of accuracy with respect to the OECD operational definition:

- for sole-proprietorships – very close
- for partnerships – close, measurement problems in the case of many persons
- for corporations – not close, self-employment often not existing
The structure of enterprises and self-employment in the Italian data (BR, year 2013)

<table>
<thead>
<tr>
<th>Enterprise juridical form</th>
<th>presence of employees</th>
<th>Number of Active Enterprises</th>
<th>Percentage of active enterprises</th>
<th>Percentage of enterprises without self-employment</th>
<th>Self_employment (owners) % over total SE by juridical form and gender</th>
<th>Self_employment (contributing family workers) % over total SE by juridical form and gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietorship</td>
<td>NO</td>
<td>2,124,100</td>
<td>48.4</td>
<td>0.0</td>
<td>26.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Sole Proprietorship</td>
<td>YES</td>
<td>619,652</td>
<td>14.1</td>
<td>0.0</td>
<td>23.5</td>
<td>59.5</td>
</tr>
<tr>
<td>Partnership</td>
<td>NO</td>
<td>378,873</td>
<td>8.6</td>
<td>0.0</td>
<td>31.2</td>
<td>67.4</td>
</tr>
<tr>
<td>Partnership</td>
<td>YES</td>
<td>363,682</td>
<td>8.3</td>
<td>0.0</td>
<td>29.6</td>
<td>68.4</td>
</tr>
<tr>
<td>Corporations</td>
<td>NO</td>
<td>304,517</td>
<td>6.9</td>
<td>49.8</td>
<td>28.2</td>
<td>71.8</td>
</tr>
<tr>
<td>Corporations</td>
<td>YES</td>
<td>524,029</td>
<td>11.9</td>
<td>43.2</td>
<td>23.8</td>
<td>76.2</td>
</tr>
<tr>
<td>Cooperative</td>
<td>NO</td>
<td>12,417</td>
<td>0.3</td>
<td>80.8</td>
<td>43.2</td>
<td>56.8</td>
</tr>
<tr>
<td>Cooperative</td>
<td>YES</td>
<td>44,802</td>
<td>1.0</td>
<td>77.9</td>
<td>34.0</td>
<td>66.0</td>
</tr>
<tr>
<td>Others</td>
<td>NO</td>
<td>8,704</td>
<td>0.2</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>YES</td>
<td>9,737</td>
<td>0.2</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4,390,513</td>
<td>100.0</td>
<td></td>
<td>26.7</td>
<td>67.0</td>
</tr>
</tbody>
</table>
Data Sources

E-ship combines elements of the activity (available from the Business register data) with elements of ownership structure (available from some administrative sources or from household and labour force data) with elements directly acquired from the entrepreneur (founder, motivations)
Data Sources

Data sources are based on two observation units: **individuals and firms**

- Population level data: Census of individuals and households

- Population based census sample survey: the labor force survey

- Enterprise-level data: the business register covering all businesses or the economic census

- Business surveys based on the business register/economic census

- Administrative sources
Data Sources

The quality and the type of information of each source for gender analysis depends on concept, definitions, classification used, collection methods, scope and purposes.

Integration between more than one source can be necessary.

Difficulties: availability of sources, coverage, reference time, linking problem (existing of common identifiers, data processing work, maintenance of linked data infrastructure).
Following presentation focus on:

**Part 2** - Survey data at firm level: FOBS survey (Factors of Business Success)

**Part 3** - Business register and integrated administrative sources:

- SBR – The Italian statistical Business Register (ASIA register)

- The Business demography: employer (The newly born enterprises, survival enterprises, high growth, gazelles)

  Some indicator to measure gaps between women and men-owned businesses

- LEED – ASIA - Employment register and the satellite register of integrated administrative records on ownership structure and persons positions (administrators) for the self-employment component (ASIA – Self-Employment BASE infrastructure)