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## SELF-EMPLOYMENT AND MOTHERHOOD — WHAT CAN WE INFER FROM THE SURVEY DATA?<sup>1</sup>

### Abstract

There is a broad discussion in the literature if self-employment is a solution allowing women to reconcile their work and family life. Nevertheless there is still very little empirical evidence supporting this hypothesis for different countries and institutional frameworks and the results are mixed. One of the reasons may be the lack of sufficient data containing questions on self-employment, entrepreneurship, innovations, firm performance and simultaneously questions fertility intentions and decisions. The article compares properties of several European representative surveys and discusses potential methodological issues.

**Keywords:** self-employment, fertility, survey data, work-life reconciliation

### Streszczenie

#### **Samozatrudnienie i macierzyństwo — co możemy wywnioskować z danych ankietowych?**

W literaturze przedmiotu istnieje szeroka dyskusja podejmująca próbę odpowiedzi na pytanie, czy samozatrudnienie jest rozwiązaniem pozwalającym kobietom na pogodzenie ich pracy zawodowej z życiem rodzinnym. Nadal jednak istnieje niewiele empirycznych dowodów na poparcie tej hipotezy na przestrzeni różnych krajów i ram instytucjonalnych, a wyniki są niejednoznaczne. Jednym z powodów może być brak adekwatnych danych zawierających jednocześnie pytania dotyczące zarówno samozatrudnienia, przedsiębiorczości, innowacji, skuteczności, jak i planów prokreacyjnych. W artykule zostały porównane charakterystyki najważniejszych europejskich reprezentatywnych badań ankietowych i omówione potencjalne problemy metodologiczne.

**Słowa kluczowe:** samozatrudnienie, płodność, dane ankietowe, równowaga praca-życie

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## Introduction. Research questions and technical issues

Women are underrepresented in entrepreneurship. This is policy relevant issue, since if the reasons were known, it would be easier to promote equal chances and opportunities for both genders. Additionally in theory promoting self-employment, both in the form of entrepreneurship or freelancing, can aim supporting work and family life reconciliation and promote higher fertility decisions. Although there exists a relatively large body of literature on the topic, the determinants and causal relationships are still unclear. One of the hypothesis of women switching to self-employment is the difficulty to reconcile work and family life [Kevane, Wydick, 2001; Rønsen, 2012; Marshall, Flaig, 2014; Broussard, Chami, Hess, 2015]. On the other hand, there are evidence supporting an opposite hypothesis, that self-employment supports the work-life balance and fertility decisions [Hundley, 2000; Wellington, 2006]. But the causality and timing of switching decisions and demographic events have not been convincingly established.

Wellington [2006] shows that women in US with larger number of children and more family responsibilities are more likely to choose self-employment. The effect is stronger for better educated women. Noseleit [2014] points out that although a positive correlation between fertility and female self-employment is shown in several studies, the causality direction is not verified yet. Two competing hypotheses can be formulated: self-employment is started by women because they have children or the occupation-specific characteristics of self-employed women impact their fertility. Some researchers claim it might depend on the institutional framework within the country. Torrini [2005] shows negative correlation of size of public sector and self-employment rates. On the other hand Andersson [2014] analyses Sweden as an example of non-Anglo-Saxon country, which has a generous welfare system and family friendly policies, including parental leaves, facilitating work-life balance. She finds evidence that the presence of young children increases the probability of choosing self-employment by women in Sweden, especially those with children aged 0–3. The difference in comparison to the results for other countries, like Spain [Gimenez-Nadal, Molina, Ortega, 2012], self-employed women don't spend less time on market work than wage earning women. Results obtained by Rønsen [2012] for Norway seem to be opposite to those from Sweden and more in line with the intuition of lower propensity of women to start their own business when they live in a welfare state.

Work and family life reconciliation is only one of several reasons of self-employment of women. Other side of the problem is the hazard and performance of the firms started with this motivation. Rey-Marti *et al.*, [2015] show that women whose motive is to pursue a better work–life balance are less likely to succeed, while women with risk-taking attitude are more likely to success. Similarly Williams [2004] shows negative effect of caring for children on self-employment venture duration.

The aim of this paper is to provide a critical overview of the available data which can be used to investigate of underrepresentation of women in self-employment

and effectiveness of supporting female self-employment as a family policy means. Before we discuss the efficiency we need to know if there are sufficient datasets with sufficient survey questions to address. Main focus in analysis is pointed at Norway and Poland which have radically different family policy schemes and labor market institutions.

There are several data sources which potentially can be used to aim answering these questions:

- Registry data,
- Censuses,
- Surveys conducted by national statistical offices on individuals and households (ex. ECHP) or on companies (ex. CIS),
- Surveys conducted by universities and independent research institutes (in general: non-government entities) on individuals and households (ex. ISSP) or companies (ex. ECS, Kauffman),
- Surveys conducted within single projects and research grants.

In the remaining part of this article examples of the surveys of each type are described. We choose publicly available datasets. The shortcomings of each of them are discussed. Main focus is on Poland and Norway, which have different institutional framework. Poland is an example of post-transition country dealing with low fertility rate and Norway is a welfare state dealing with low entrepreneurship rate.

## Individual of household surveys carried out by non-government entities

### ISSP

International Social Survey Programme (ISSP) is a survey conducted every year covering topics important for social science research. Each module is run every 10 years. Those related to this paper are Work Orientations and Family and Gender Roles. Work Orientations IV (2015) is not yet available, as well as Citizenship II (2014). Data is published with significant delay.

An example is ISSP Work Orientations III, which has a sample size  $N = 43\,440$ . Subsample size for Norway is  $n_{NO} = 1\,322$ . Poland did not participate in the study. Self-employed are 3 310 individuals in the sample. In Norwegian subsample there are 98 self-employed individuals, including 74 women (75,51%). The questionnaire covers several questions on the attitude towards work and its features (Ex.: “How important is a job that allows someone to work independently?”), including its arrangement flexibility (“How important is a job that allows someone to decide their times or days of work?”). Respondents are also asked about wage-work and self-employment choice (Question: “Suppose you were working and could choose between different kinds of jobs. Which of the following would you personally choose? a) being an employee, b) being self-employed”) and the attitude towards

both options (Question: “To what extent do you agree or disagree with the following statements? a) Employees have more job security than the self-employed, b) Being an employee interferes more with family life than self-employment”). This allows respondents to distinguish between necessity- and opportunity- driven individuals. Additionally the questionnaire contains questions on family and work life tensions (“How often do you feel that: a) ...the demands of your job interfere with your family life?, b) ...the demands of your family life interfere with your job?”). There are also several qualitative questions on working hours, working conditions (including how the working day is organized or if it’s possible to go out for an hour?, remuneration and work satisfaction). Unemployed are asked for reasons of not working only if they had a job. Nonparticipation is not analyzed. If respondent is self-employed there is a question on the number of people supervised. But no explicit question of type of self-employment (with or without employees) is asked. Unemployed are not asked if they intend to start their own business. Employed workers are not asked if they intend to go on their own. Therefore it’s unknown if self-employment is considered as an option for the individuals. No questions on intentions or possible obstacles of self-employment are asked.

Earnings are not given as an explicit number, but there is an information on marital status, education and number of children in the household, but age of children is given by intervals.

ISSP Family and Gender Roles IV has a sample size  $N = 33\,293$ . Subsample for Norway is  $n_{NO} = 1\,444$  (754 females, 52,22%) and subsample for Poland is  $n_{PL} = 1\,115$  (602 females, 53,99%). In the full sample there are 1019 individuals self-employed with employees and 2 679 individuals self-employed without employees. For Norway there are 72 self-employed individuals without employees (25 females, 34,72%), and 48 with employees (9 are female, 18,75%). For Poland there are 90 self-employed individuals without employees (45 females, 50%), and 55 with employees (21 are female, 38,18%). The dataset contains several questions on attitudes towards children, decision making within the household and time, money and chores division between partners (Questions: “To what extent do you agree or disagree? a) A working mother can establish just as warm and secure a relationship with her children as a mother who does not work, b) A pre-school child is likely to suffer if his or her mother works”; “To what extent do you agree or disagree? Having children restricts the employment and career chances of one or both parents”). This allows to investigate the opportunity costs of children but only as the ex-post comparisons. Also data from multiple surveys can’t be properly merged into pseudo-panel.

Poland participated in the survey only in the years 2010–2013.

## EVS

European Values Study (EVS) is a survey conducted every 10 years. Latest round was performed in 2008. It contains  $N = 67\,786$  individual observations. Subsample for Norway is  $n_{NO} = 1\,090$  (528 females, 48,57%) and the subsample

for Poland is  $n_{PL} = 1\,510$  (842 females, 55,76%). There are 3 981 self-employed individuals in the sample of 34 027 having a job. 2 129 of currently not working (including those who never worked) were self-employed in their last job. No question is asked about the reasons of current nonworking. In a Norwegian subsample 91 of 754 working individuals are self-employed. 28 of them are women, which is 30,77% of all self-employed. In Polish subsample there are 84 self-employed in the pool of 767 individuals working. 29 of them are women, which is 34,52% of all self-employed. Very little is known about household structure of the respondents. The only questions are: “How many children do you have?”, “Of all your children, in which year was your first child born?”. Survey contains questions of the work features important for the respondents (good hours, an opportunity to use initiative, family friendly environment etc.) and work life related issues (Question: “People talk about the changing roles of men and women today. (...) Can you tell me how much you agree with each? A working mother can establish just as warm and secure a relationship with her children as a mother who does not work; A preschool child is likely to suffer if his or her mother works; A job is alright but what most women really want is a home and children; Being a housewife is just as fulfilling as working for pay; Having a job is the best way for a woman to be an independent person”). There is a question if parents of respondents were self-employed when respondent was 14 years old, which could allow to track intergenerational mobility. But due to nonresponses there are no relevant observations for Poland nor Norway. Income is measured with intervals. Data is collected too rarely to grasp changes in the attitudes and values of individuals.

## ESS

European Social Survey (ESS) is an academically driven cross-national survey conducted biannually. In 2014 in wave 7 the sample size is  $N = 28\,221$ . The subsample for Norway is  $n_{NO} = 1\,436$ , the subsample for Poland is  $n_{PL} = 1\,615$ . In the full sample self-employed are 2 932 of 10 502 working individuals (1 078 female, 36,8%). Norway: 122 self-employed, 39 (31,97%) are female. Poland: 253 self-employed, 134 of them are female (52,96%). The study lacks questions on motivation behind fertility decisions, self-employment and employment decisions, work and family life reconciliation or any other providing insight on discussed issues. The questionnaire has several questions on socio-economic situation of the respondents, their personal wellbeing and household composition. There are several rotating modules but none of them is about fertility intentions and decisions nor the motivation for switching to self-employment. Therefore analysis can be based only on self-reported activities and events.

## Eurobarometer

Eurobarometer is the series of surveys aiming to measure opinions on contemporary topics. They show the fractions of investigated phenomena but rarely can be used for inference. At least 1 000 complete interviews per country is collected each round. Self-employment is measured with 4 categories: farmers, fishermen, professionals, owners of shops and other premises and business proprietors and company owners. The age of adults and children in the household is measured by intervals: 0–10, 11–14, 15+. The only questions concerning personal and household income are vague-respondents are asked if they have difficulties with paying bills and to place themselves at some level of society (“On the following scale, step ‘1’ corresponds to ‘the lowest level in the society’; step ‘10’ corresponds to ‘the highest level in the society’. Could you tell me on which step you would place yourself?”), but most of the studies have questions on economic and social situation (ex. health care provision, housing affordability). Very little questions are asked on self-employment opportunities.

The questionnaires vary across the following surveys. Study 72.2 has the sets of questions on corruption and gender equality. The latter aims to collect respondents’ opinions on female labor market participation, gender pay gap, working women, family work balance and the existence, awareness and knowledge of EU actions to promote gender equality and equal opportunities. Additionally questionnaire 72.2, along with questionnaire 76.2 among others, has a set of questions about women on responsible positions – if they are less willing, less interested, equally qualified etc. than males. Study 75.4 has a set of questions on the fertility intentions (Questions: “How many (more) children do you intend to have?”, “How sure are you that you will have the number of children that you have just mentioned?”, “Do you intend to have a (another) child in the next three years?”). Study 76.2 is an example of a survey with the set of questions on employment affected by economic crisis (For example question “If you were to be laid-off, how would you find a job?” has an option “By starting your own business without employees”), the knowledge on the procedures to start an own business (Question “Would you know how to start a new business in terms of administrative procedures?” is asked to respondents who declare willingness to start a firm.). The questionnaire 76.2 also has a set of questions about the opinions on the issues concerning self-employment (For example: “Please tell me to what extent do you agree or disagree that it is more difficult for the following types of people than for others to start their own business?” with options “a young person leaving full time education” and “a woman” to assess. Parents are not considered in the survey as people who might have troubles starting and running own business. Part of the explanation is that survey is on administrative/systematical obstacles, not work-rife reconciliation issues), opinions on measures which can be undertaken to encourage people to start an own business (Question “For each of the following measures, how effective or not do you think they are in getting more people into work or staying at work longer in their life?” has options “Increasing availability of child care facilities” and “Increasing affordability of child care facilities”) and if

EU has an impact on easiness of starting an own business. Additionally study 76.2 has a module on gender equality on the boards. Study 79.2 set of questions on role of science and technology (Questions: “How important do you think it is that scientific research takes equally into account women’s and men’s needs?”, “Why do you think it is important that scientific research takes equally into account women’s and men’s needs?”), while study 81.5 asks for priorities for science and technological innovation.

On the regular basis Eurobarometer surveys have a module on a financial and regular crisis issues, initiatives undertaken by UE to recover and priorities of Europe 2020 strategy. An example is a study 82.3 (respondents are asked to assess the recommendation “to help the EU’s industrial base to be more competitive by promoting entrepreneurship and developing new skills”).

A special edition Eurobarometer 75.1 EP, subtitled “Women in the European Union” covers several topics concerning women, but very little attention is paid to entrepreneurship and work-life balance (An example is a question: “In the EU, 45% of people in the labor market are women. According to you, which of the following measures would be the most effective for enabling Europeans to reconcile their private and working lives better? 1) Develop flexibility within companies and public services (teleworking, flexible hours, etc.), 2) Encourage a balance between women and men in the sharing of domestic tasks and in the care of children and dependents, 3) Make childcare outside the home easier (develop crèches and nurseries and reduce the costs), 4) Other”). Discussed are: gender equality and work, including gender pay gap and paternal leave, women representation in politics and violence against women.

The main problem with the dataset is the number of observations. For example Eurobarometer 76.2 has a sample size of  $n = 31\,280$  observations. A subsamples for Norway is  $n_{\text{NO}} = 1\,000$  and for Poland it is  $n_{\text{PL}} = 1\,000$ . Polish subsample limited to self-employed women consists of 40 observations, 19 of which are marked as farmers. A subsample for Norway consists of 5 observations. When the subsamples are reduced to women having children younger than 10 years old, subsamples’ sizes are 19 and 1 respectively. These are definitely too little to base on a reasonable analysis.

## Polish panel studies and other single country examples

There are some surveys conducted in Poland, which may be useful, but are not harmonized with survey studies conducted in other countries. Good examples are Social Diagnosis and Polish Panel Study. Several examples can be also given for other countries, like Russia Longitudinal Monitoring Survey or German Socio-Economic Panel.

## Entrepreneurship and company surveys

Additional source of the data which can potentially provide evidence on the nature of combining motherhood and self-employment are entrepreneurship and company surveys. Aim of conducting this type of surveys usually are neither providing evidence for family nor labor market policy. They do not provide much information on reconciliation of family and work-life reconciliation or labor market activation. But they can provide information of the innovations, organizational solutions and financial performance of the companies led by women. Some of the surveys collect additionally information on the socio-economic status of the owners and managers, but the data on those topics is rather scarce. Below we provide a brief description of most important free datasets containing data from entrepreneurship and company surveys. Readers interested in other data sources are encouraged to check IZA WOL datasets website.

### Global Entrepreneurship Monitor

Global Entrepreneurship Monitor (GEM) is a study conducted on the firms every 2 years. It consists of 2 surveys National Expert Survey (NIS) and Adult Population Survey (APS). NIS covers questions on entrepreneurial finances, including R&D transfers. Additionally there are questions on cultural and social norms within the company, but none of the questions is related to work-life balance. In 2012 706 of 2 784 experts surveyed with NIS questionnaire were women (25,69%). No age, education, marital status or number of children of experts is given. In 2012 APS included  $n_{NO} = 27\,964$  observations for Norway (13 646 males, 14 318 females) and  $n_{PL} = 10\,004$  observations for Poland (4 891 males, 5 113 females), but most of the respondents (95%) does not qualify for any module (nascent, new firm, nor informal investor). The APS dataset does not include information on the number of children or fertility intentions. There are only 5 socio-demographic variables. There is a question on necessity/opportunity reasons of starting a business, but there are no questions on work-life balance and work-family reconciliation issues. Nevertheless there are several papers discussing gender differences in ownership or management, talents or gender pay gaps. Nevertheless within this dataset the researchers have to deal with broad range of problems associated with attrition, sample selection etc.

### European Company Survey

European Company Survey (ECS) is a representative telephone-based survey carried out every 4 years by Eurofond. It consists of two types of questionnaires: management questionnaire (MM) is targeting top managers responsible

for human resources in a company and employee representative questionnaire (ER) targeting members of formal employee representation. The potential disadvantage of this study is that it covers only companies with at least 10 workers, so it does not contain start-ups and small businesses started by women with young children with the work-life balance motivation. The advantage of this study, somehow relevant to the discussed topic, is the set of questions on the flexibility of work arrangements in the surveyed companies. In 2009 there were 3 214 companies and 145 228 workers in the sample. Poland had 176 companies and 8 213 workers. Norway does not participate in the study. The employers questionnaire covers issues of working time arrangements and contractual flexibility and geographical mobility of employees. The report of the study published by Eurofond shows that 56% of companies in Europe offers time flexible work arrangements and about two-thirds of the companies offers part-time arrangements.

In the final report there is information on the gender composition of companies, but in the questionnaires neither management nor employees representative contains question on gender, or any other socio-economic variables of respondents. It's impossible to distinguish which companies are led by women just on the basis of the available microdata.

Similar project is the Establishment Survey on Working Time and Work-Life Balance (ESWT 2004/2005). It also consists of management and employee representative questionnaires. The size of the sample is  $n = 21\ 031$ . The subsample for Poland is  $n_{PL} = 1\ 088$ . Norway did not participate in the study.

## European Working Conditions Survey

European Working Conditions Survey is a representative survey carried out every 5 years. It aims to support assess different aspects of working conditions of employees and self-employed across Europe. The size of the sample is  $n = 43\ 816$ . The subsample for Poland consists of  $n_{PL} = 1\ 500$  observations. Norway does not participate in the survey. Number of women self-employed without employees in the sample is  $n' = 1\ 904$  and the number of women self-employed with employees is  $n'' = 621$ . Number of women self-employed without employees in the Polish subsample is  $n'_{PL} = 93$ , which is 12,02% of the subsample and the number of women self-employed with employees is  $n''_{PL} = 21$ , which is 2,71% of the subsample. The subsamples are relatively small. It gets even smaller if it's limited to self-employed women in Poland who have children. The numbers are 61 (14,15%) and 15 (3,48%) respectively. These numbers make it hard to inference. The positive aspect of the survey are the questions on number of hours worked per week and a possibility to make a free choice on the working hours, which may be useful to verify the hypothesis of self-employment being an opportunity to reduce the work-life tension. Additionally there are questions on the desired of number of hours worked, main place of work and if the work affects respondent's health. On the other hand there are no explicit questions on the work and family reconciliation issues.

## Business Environment and Enterprise Performance Survey

Business Environment and Enterprise Performance Survey is an international survey conducted by World Bank every year in Eastern Europe and Central Asia. In 2013 542 Polish companies were surveyed. The questionnaire contains question if the top manager is male or female, his or her marital status and number of children, but this last variable contains mostly nonresponses. Although information of top management may be useful for some research questions it is not helpful in discussion on self-employment. This type of surveys interviews only people who already are in the entrepreneurship. It generates sample selection bias and does not show the full picture of the potential entry barriers.

Several institutions provide paid services of reports, analysis and data on companies, their capital structure, financial results and other data relevant for managers and consultants, used for risk assessment, b2b solutions or marketing. Examples among others are: Amadeus, Orbis or Catalyst provided by Bureau Van Dijk. Some of the information can be useful but rather scarce therefore are not described in this article.

Registry data have very limited availability due to both data collection standards and legal restrictions. There can be used mostly in the Scandinavian countries, Netherlands or United States. Data collected by national statistical offices and published by Eurostat, like European Community Household Panel, are commonly known and excluding the number of observations issue, suffer from similar shortcomings as surveys conducted by independent entities. Therefore these types of surveys are not discussed in this paper.

## Conclusions. Possible solutions

In this article we review main publicly available datasets from both household and company surveys. We discuss them in the context of sample size and questions useful to analyze combining motherhood and self-employment.

International individual survey studies conducted by independent entities usually consist of limited sample size, which gives small number of women self-employed or considering self-employment. Usually no heterogeneity can be analyzed, nor the distinction between opportunity and necessity entrepreneurship can be investigated. Additionally there are too little observations to make a robust, consistent inference, since the number of degrees of freedom is limited. Additionally most of these studies are not panel. Therefore it's relatively difficult to put a timeline of switching to self-employment and demographic events of the respondents. The data collected are self-reported and retrospective, therefore can be systematically biased. Additionally most of the studies do not contain questions on the fertility intentions. Motivation for switching to self-employment is also rarely covered. Therefore we can conclude that not all the relevant questions are asked.

International company surveys cover most of the relevant firm-related issues. But most of these studies does not cover self-employed individuals without employees, small companies and start-ups. For policy recommendations it is worth to distinguish entrepreneurs (those with employees) and independent contractors or freelancers (those without employees). The former are captured by the company surveys, but there is no reliable source to assess the efficiency and profitability of the economic activity of the latter group. Some of these shortcomings can be bridged by data obtained on the basis of Crunchbase. Most of the surveys don't contain questions on the motivation of starting a company nor the questions on the work and family life reconciliation. There are no questions on family support or childcare services usage.

Therefore there are two separate areas of research and surveys provide only partial answers for the research questions given in the introduction. And in consequence there are no papers telling the full story on self-employment and motherhood (and parenthood in general). There are attempts to run surveys dedicated to given research question, but they rarely cover sufficient amount of countries and they are rarely continued when the grant funding ends.

Additionally we need to remember that the limited sample size gives limited opportunities to provide evidence-based recommendations. Most of the studies which can be done would show descriptive rather than causal results. Possibility of using rotating and pseudo-panels or matching methods is not possible in most of the cases.

Given the data overview provided in this article and keeping in mind all the described shortcomings, we can conclude with the research questions which remain open:

- Are self-employment and motherhood mutually exclusive choices? Or is there some sort of complementarity? And what is the causality direction? Does the country-context matter?
- What is the relation between fertility intentions, completed fertility and own business?
- What is the performance of firms run by women motivated with need of work-life balance? What is the hazard of those firms? How many of them survive through the start-up phase? How many of them are able to create new jobs? Should there be policies supporting these types of firms? Would these policies be complementary to labor market policies or family policies?
- Are female entrepreneurs more or less likely to have another child than other women? Are the start-ups due to necessity or opportunity? Do institutions make a difference? Can we make international comparisons?
- Can we make comparisons over time? What are the trends? Are the opportunity of work-life balance improving?
- Is supporting self-employment a reasonable and efficient policy supporting work-life balance?

## References

- Andersson J.P. (2014), *Female Self-Employment and Children: The Case of Sweden*, “IZA Discussion Papers” 8486, Institute for the Study of Labor (IZA).
- Broussard N., Chami R., Hess G. (2015), (*Why*) *Do self-employed parents have more children?*, “Review of Economics of the Household”, Vol. 13(2), pp. 297–321.
- Bureau Van Dijk, <http://www.bvdinfo.com> [accessed: 21.04.2017].
- Business Environment and Enterprise Performance Survey, <http://ebrd-beeps.com/> [accessed: 21.04.2017].
- Crunchbase, <https://www.crunchbase.com/> [accessed: 21.04.2017].
- Diagnoza Społeczna, <http://www.diagnoza.com/> [accessed: 21.04.2017].
- Establishment Survey on Working Time and Work-Life Balance (ESWT 2004/2005), <http://www.data-archive.ac.uk/> [accessed: 21.04.2017].
- Eurobarometr, <http://ec.europa.eu/COMMFrontOffice/PublicOpinion/> [accessed: 21.04.2017].
- European Commission (2014), Eurobarometer 72.2 (2009). TNS Opinion & Social, Brussels [Producer]. GESIS Data Archive, Cologne. ZA4976 data file version 3.0.0, doi: 10.4232/1.11137 [accessed: 21.04.2017].
- European Commission (2014), Eurobarometer 75.1 EP (2011). TNS Opinion & Social [Producer]. GESIS Data Archive, Cologne. ZA5526 Data file Version 2.0.0, doi: 10.4232/1.11645 [accessed: 21.04.2017].
- European Commission (2014), Eurobarometer 76.1 (2011). TNS OPINION & SOCIAL, Brussels [Producer]. GESIS Data Archive, Cologne. ZA5565 Data file Version 4.0.0, doi: 10.4232/1.11847 [accessed: 21.04.2017].
- European Commission (2014), Eurobarometer 75.4 (2011). TNS OPINION & SOCIAL, Brussels. [Producer]. GESIS Data Archive, Cologne. ZA5564 Data file Version 3.0.1, doi: 10.4232/1.11851 [accessed: 21.04.2017].
- European Commission (2014), Eurobarometer 76.2 (2011). TNS OPINION & SOCIAL, Brussels [Producer]. GESIS Data Archive, Cologne. ZA5566 Data file Version 2.0.1, doi: 10.4232/1.12006 [accessed: 21.04.2017].
- European Commission, Brussels (2015), Eurobarometer 82.3 (2014). TNS Opinion, Brussels [Producer]. GESIS Data Archive, Cologne. ZA5932 Data file Version 2.0.0, doi: 10.4232/1.12251 [accessed: 21.04.2017].
- European Commission, Brussels (2015), Eurobarometer 83.1 (2015). TNS Opinion [Producer]. GESIS Data Archive, Cologne. ZA5964 Data file Version 1.0.0, doi: 10.4232/1.12340 [accessed: 21.04.2017].
- European Commission, Brussels (2015), Eurobarometer 81.5 (2014). TNS Opinion [producer]. GESIS Data Archive, Cologne. ZA5929 Data file Version 2.0.0, doi: 10.4232/1.12250 [accessed: 21.04.2017].
- European Company Survey, <http://www.eurofound.europa.eu/surveys/european-company-surveys> [accessed: 21.04.2017].
- European Working Conditions, <http://www.eurofound.europa.eu/european-working-conditions-surveys-ewcs> [accessed: 21.04.2017].
- EVS, <http://www.europeanvaluesstudy.eu/> [accessed: 21.04.2017].

- EVS (2011), European Values Study 2008: Integrated Dataset (EVS 2008). GESIS Data Archive, Cologne. ZA4800 Data file version 3.0.0, doi: 10.4232/1.11004 [accessed: 21.04.2017].
- GEM, <http://www.gemconsortium.org/> [accessed: 21.04.2017].
- German Socio-Economic Panel, <http://www.diw.de/en/soep> [accessed: 21.04.2017].
- Gimenez-Nadal J.I., Molina J.A., Ortega R. (2012), *Self-employed mothers and the work-family conflict*, “Applied Economics”, Vol. 44(17), pp. 2133–2147.
- Global Entrepreneurship Monitor [GEM], Adult Population Survey Data Set, 1998–2010 [accessed: 21.04.2017].
- <http://www.enterprisesurveys.org/> [accessed: 21.04.2017].
- Hundley G. (2000), *Male/female earnings differences in self-employment: the effects of marriage, children, and household division of labor*, “Industrial and Labor Relations Review”, Vol. 54(1), pp. 95–114.
- ISSP, <http://www.issp.org/> [accessed: 21.04.2017].
- ISSP Research Group (2013), International Social Survey Programme: Work Orientation III – ISSP 2005. GESIS Data Archive, Cologne. ZA4350 Data file Version 2.0.0, doi: 10.4232/1.11648 [accessed: 21.04.2017].
- ISSP Research Group (2016), International Social Survey Programme: Family and Changing Gender Roles IV – ISSP 2012. GESIS Data Archive, Cologne. ZA5900 Data file Version 3.0.0, doi: 10.4232/1.12339 [accessed: 21.04.2017].
- IZA Data Sources, <https://wol.iza.org/data-sources?SourcesSearch%5BsourceTaxonomies%5D=32#> [accessed: 21.04.2017].
- Kaufman Database, <http://www1.kauffman.org> [accessed: 21.04.2017].
- Kevane M., Wydick B. (2001), *Microenterprise Lending to Female Entrepreneurs: Sacrificing Economic Growth for Poverty Alleviation?*, “A World Development”, Vol. 29(7), pp. 1225–1236.
- Marshall M., Flaig A. (2014), *Marriage, Children, and Self-employment Earnings: An Analysis of Self-Employed Women in the US*, “Journal of Family and Economic Issues”, Vol. 35(3), pp. 313–322.
- Noseleit F. (2014), *Female Self-employment and Children*, “Small Business Economics”, Vol. 43(3), pp. 549–569.
- POLPAN, <http://polpan.org/> [accessed: 21.04.2017].
- Rey-Marti A., Tur Porcar A., Mas-Tur A. (2015), *Linking Female Entrepreneurs’ Motivation to Business Survival*, “Journal of Business Research”, Vol. 68(4), pp. 810–814.
- Rønsen M. (2012), *The Family – a Barrier or Motivation for Female Entrepreneurship?*, “Discussion Papers 727”, Statistics Norway, Research Department.
- Russia Longitudinal Monitoring Survey, <http://www.cpc.unc.edu/projects/rlms-hs> [accessed: 21.04.2017].
- Torrini R. (2005), *Cross-country Differences in Self-employment Rates: The Role of Institutions*, “Labour Economics, Elsevier”, Vol. 12(5), pp. 661–683.
- Wellington A.J. (2006), *Self-employment: The New Solution for Balancing Family and Career?*, “Labour Economics”, Vol. 13(3), pp. 357–386.
- Williams D.R. (2004), *Effects of Childcare Activities on the Duration of Self-employment in Europe*, “Entrepreneurship Theory and Practice”, Vol. 28(5), pp. 467–485.