

Budapest,
September 2020

COVID-19 and female entrepreneurs throughout Europe

Leading researchers:

Luca Koltai, Réka Geambasu

Colleagues contributing to the research:

Zsuzsanna Bakacsi-Saffer

Andrea Barna-Petróczi

Virág Zsár

Partner organisations:

University of Economics, Prague (CZ);

Faculty of Sociology and Social Work in Babes-Bolyai University in Kolozsvár/Cluj Napoca (RO);

Regional Agency for Entrepreneurship and Innovations – Varna (BG);

Institute „Mihajlo Pupin“ – Science & Technology Policy Research Center in Belgrade (SRB);

Andalucía Emprene in Andalusia (ES);

ZSI - Centre for Social Innovation in Vienna (AT).

HETFA Research Institute Ltd.

Knowledge You Can Use

Hungary – H- 1051 Budapest, Október 6. street. 19., IV/2.

E-mail: info@hetfa.hu, Web: <http://www.hetfa.eu/>

Phone: +36 30 730 6668, Fax: +36 1 700 2257

Contents

List of figures	2
1. Executive summary	4
2. Introduction.....	7
3. Research methodology.....	8
4. International context	9
4.1. Female entrepreneurs in Europe and in countries involved in this research	9
4.2. Pandemic measures, restrictions and policy responses in the surveyed country.....	16
4.3. Policy support for small businesses during the pandemic	22
5. Survey respondents.....	29
6. The respondents' enterprises	32
7. The effects of the pandemic on the operation of the enterprises	36
7.1. Effects on the enterprises.....	36
7.2. Who has been affected the most severely by the pandemic?	40
7.2.1. Sectoral effects	41
7.2.2. The size of the enterprise	42
7.2.3. The age of the enterprise	43
7.2.4. The online presence made the enterprises more pandemic resistant.....	44
7.2.5. The demographic situation of female entrepreneurs (qualification, age, family structure)	47
7.3. Responses to the crisis	48
7.4. The use of support measures	50
8. Family responsibilities during the pandemic.....	52
8.1. The share of care duties	52
8.2. Varying time schedule	56
9. References	60

List of figures

1. figure, Ratio of female and male entrepreneurs.....	10
2. figure, Share of entrepreneurs by gender.....	11
3. figure, Proportion of part-time entrepreneurs	12
4. figure, Percentage of entrepreneurs by sector	12
5. figure, Proportion of entrepreneurs within sectors	13
6. figure, Potential for becoming entrepreneurs indicator	14
7. figure, Gender gap in self-employed earnings	14
8. figure, Access to trainings on how to start a business (%)	15

9. figure, Access to money to start business (%).....	15
10. figure, Number of COVID-19 cases per 100.000 inhabitants	16
11. figure, Number of COVID-19 deaths per 100,000 inhabitants	17
12. figure, Evolution of the severity index of pandemic measures	18
13. figure, Overview of epidemiological measures and restrictions in the countries studied	19
14. figure, Development of the economic support system.....	23
15. figure, Economic and policy support measures introduced in the countries studied	24
16. figure, The settlements of respondents.....	29
16. figure, The share of respondents by country (N=1681)	30
17. figure, The share of respondents' level of education (N=1594).....	30
18. figure, The enterprises' headquarter (N=1680)	31
19. figure, The share of respondents by the age of children (N=1581)	31
20. figure, The main wage earner before the pandemic (N=1532).....	32
21. figure, The share of respondents by age group (N=1587)	32
22. figure, Number of employees (February 2020) (N=1681)	33
23. figure, Is the activity of the enterprise related to children or motherhood/parenthood (N=1681)	34
24. figure, Do you have any other occupations/activities in addition to your enterprise? (N=1592)	34
25. figure, The main activity of the enterprises (N=1680)	35
26. figure, The change of the companies' activities during the pandemic (N=1676)	36
27. figure, The change in the companies' activities during the pandemic.....	37
28. figure, What kind of impact have the COVID-19 pandemic had on your enterprise? (N= 1681).....	38
29. figure, What kind of impact have the COVID-19 pandemic had on your enterprise?	38
30. figure, The expected rate of downturn (N=1681)	39
31. figure, The average change in the number of employees between February 2020 and the date of filling the questionnaire (N=1422)	39
32. figure, How did the COVID-19 pandemic affect your company? (N=1681)	40
33. figure, The share of respondents affected by the pandemic by sector (N=1680)	41
34. figure, The correlation between the size of the enterprise and effects of the COVID-19 pandemic.....	43
35. figure, The correlation between the age of the enterprise and the effects of the COVID-19 pandemic.....	43
36. figure, Use of online tools (N=1425)	45
37. figure, Use of online tools by sectors (N=1497)	45
38. figure, The average number of used online tools by the effects of COVID-19 (N=1497).....	46
39. figure, Correlation between the online activity and the expected income change	47
40. figure, Strategies in crisis management	49
41. figure, The classification of support measures	50
42. figure, Requested support measures (N=1619)	51
43. figure, The family characteristics of respondents (N=1581)	53
44. figure, Who was the main earner in the household before the pandemic? (N=1540)	53
45. figure, The share of responsibilities in domestic work and caring in different groups (N=1534)	54
46. figure, How frequently have you taken care for an elderly or disabled family member, neighbour or friend during the pandemic? (N=1587)	55
47. figure, The rate of care responsibilities in the different countries	55
48. figure, Caring tasks during the pandemic (N=1591).....	56
49. figure, The change of time spent with the enterprise	57
50. figure, The change of time schedule of female entrepreneurs in consequence of the COVID-19 pandemic (N=1184)	58
51. figure, What is the main reason for spending less time with the enterprise, if so? (N=1579)	59
52. figure, Currently how can you reconcile your work with your family responsibilities? (N=1594)	59

1. Executive summary

According to the results of our latest survey that covers several European countries, **women-led businesses have been negatively affected by the coronavirus epidemic**. Women entrepreneurs have had to deal with the difficulties caused by the virus, both on the economic and family fronts. It is more **difficult for women to cope with the complex management tasks of reconciling business, private and family responsibilities on a daily basis**, even in the ordinary course of life. This situation worsened due to the closures, the introduction of remote learning and the increase in caring responsibilities. Businesses led by women are also more vulnerable due to their size. Many of them are self-employed, and some of whom are 'forced entrepreneurs'. In addition, a **substantial part of female entrepreneurship are active in sectors that have been seriously affected by restrictions imposed by the coronavirus epidemic**, such as tourism or personal services. For many female entrepreneurs, the reduction in business income also threatens the livelihoods of their families.

HETFA Research Institute is the coordinator of the iFEMPOWER¹ (Interactive and mentorship based FEMale empowerment in the field of entrepreneurship) project, which is implemented under Erasmus+. Building on the experience of this project and the international relations of HETFA allowed us to launch a survey in connection with the coronavirus pandemic. We collected data from seven European countries (Hungary, Czech Republic, Bulgaria, Serbia, Austria, Andalusia in Spain and from female entrepreneurs in Transylvania). Our survey examined how female entrepreneurs in these countries fought against the virus between May and August 2020. Our aim was to examine the effects of the pandemic on the operation of companies led by women and the difficulties female entrepreneurs faced in reconciling their entrepreneurial and family roles during the pandemic.

In all examined countries, the vast majority of respondents were leaders of micro or small enterprises. Female enterprises are over-represented in the countries surveyed during this research process, as well as among respondents in the following three sectors: economic services, trade and personal/community services.

79% of the women-led businesses were negatively affected by the economic crisis. 11% of them reported that the pandemic and this situation made it impossible for them to continue operating their business. Two-thirds of the respondents said that their prospects had deteriorated to a lesser or greater extent, while nearly 8% of them believed that the pandemic had improved their businesses' opportunities. **68% believed that the impact of the pandemic will be felt throughout 2020 and that the full-year revenues would decrease compared to last year.** Overall, in the countries examined,

¹ <https://ifempower.eu/>

female entrepreneurs estimate they could lose about 28% of their annual income this year. The biggest revenue losses were reported by Austrian (47%), Andalusian and Bulgarian respondents (32-31%) and the smallest by Hungarian and Transylvanian Hungarian respondents (22 and 20%).

The number of employees of responding entrepreneurs decreased by an average of 10% during the pandemic. Due to strict restrictions, female entrepreneurs faced a rapid decreasing in revenues (62% of respondents), and a drop in demands and orders (52%). In addition, the suspension of activities and supply chain disruption had serious negative effects. Several respondents have also reported that this could strengthen their business in the long run. 23% were able to introduce new products and 14% were able to expand online sales.

Those working in the field of tourism and hospitality are in the most difficult situation, they claimed that they could loose possibly up to 50% of their annual income this year. Respondents from education, trade and personal services estimate they could lose a third of their revenue in 2020. Although, entrepreneurs in industry, crafts, health and social services also expect their revenues to fall by 25%.

Prior to the pandemic, online businesses were more resilient to the effect of the crisis. Those entrepreneurs who were not or positively affected by the crisis were more likely to use online tools before the pandemic as well. Those sectors were less affected by the pandemic, where the nature of the work allowed for the use of online tools. Pandemic measures affected those sectors more, in which personal presence plays a bigger role. The previous online presence played a huge role in enabling female entrepreneurs to carry out activities during the pandemic. **Businesses that have used more online tools in the past expect less revenue loss** than those who have used fewer or no online tools at all.

Experience from previous crises has shown that small businesses are trying to take advantage of their flexibility to cope with crisis situations. This was the case in the coronavirus crisis, too, when they dealt with the situation through a number of different measures and subsidies. About 10% of the respondents did not take any measures to mitigate the effects of the crisis. Most of these entrepreneurs were not affected by the crisis.

Female entrepreneurs used a variety of crisis management strategies and combinations of thereof. **Over 50% of respondents reduced their activity.** The most common measures were the suspension and reduction of activities (38%) and the reduction of working hours (22%). 6% had to introduce paid leave and 5% had to choose unpaid leave as a measure to mitigate the pandemic. 10% of the respondents had to introduce downsizing of staff.

Approximately **half of the respondents were looking for adaptation strategies**, too. One third of the respondents introduced new products and services, strengthened online sales, or searched for new markets. More than **a third of them also started developments that support the prospect of their businesses in the long run.** This includes carrying out renovation or maintenance works during the

restrictions or training employees, purchasing new production equipment or introducing home delivery.

Besides these measures, more than half of the respondents received some form of support. **More than 50% of the respondents of our questionnaire received some support in relation to the pandemic.** The proportion of beneficiaries is the highest among Austrian (86%), Serbian (74%) and Andalusian respondents (69%), and the lowest among Hungarian and Transylvanian Hungarian respondents (37% and 39%).

The most popular support were tax allowances, e.g. suspension of tax payments. One third of the respondents used this support instrument, followed by **wage subsidies** (27%), and subsidies related to various loans (payment discounts, preferential loans 8%). The suspension of loan repayment was used by 9%, but this opportunity was not available in all countries, and the availability and rules of this form varied considerably across countries.

The proportion of non-typical support instruments was the highest in Austria, where several sector-specific aids (for example film production aid) or monthly free-use lump sum aids for SMEs (Härtefallfonds für EPU & KMU, fixed cost aid) were available. **In Austria even the entrepreneurs without employees were able to use fixed amount lump sum subsidies, which involved less administration, than for example wage subsidies which were popular elsewhere.**

Reconciling entrepreneurial activity, **private and family responsibilities is a complex management task** even in normal periods. The epidemiological crisis posed serious challenges on women worldwide. Approximately **50% of the respondents raised children under the age of 18**, and 10% of them had a child under the age of 7 in their family. 42% of them had only one child between the ages of 7 and 18 in their family and 9% raised their child alone.

The majority of female entrepreneurs (63%) spent less time on their business during the quarantine period. Respondents spent an average of almost 2 hours less on their business on an average weekday and spent 2 hours more on caring responsibilities.

In the case of female entrepreneurs that are raising children, the closure of childcare facilities heavily influenced and increased caring responsibilities. **On an average weekday, respondents raising young children under the age of 7 spent more than 3 hours a day with child related tasks, and 1.5 hour more with household tasks than before. Those raising children aged 7-18 spent 2.5 hours more on caring tasks.**

The reasons for decrease in working hours were mostly related to the operation of the company. 24% said that there was less work and more declining orders and 23% said that they could not carry out their job due to the restrictions. 10% of the respondents were hindered by increased household tasks. Female entrepreneurs **raising children under the age of seven sacrificed working hours seven times more, and those raising children (also) between the ages of 7-18 sacrificed working hours five times more due to their caring responsibilities.**

1. Introduction

In 2020, the coronavirus pandemic has posed a dual challenge to nations and economies around the world. Governments need to tackle the immediate health challenges of a global pandemic, and the economic and welfare implications of pandemic measures and closures. Start-ups and small enterprises are among the most vulnerable players in the economy (Walsh & Cunningham, 2016). Thus, small and medium-sized enterprises (SMEs) are expected to feel the economic downturn associated with the pandemic to a greater extent. Female-led businesses are usually small, most of the entrepreneurs are self-employed, some of whom are 'forced entrepreneurs' (de Vries, 2019). A significant share of female enterprises are active in sectors that have been severely affected by the restrictions, such as tourism and personal services. Many small businesses lack the liquid capital needed to tackle crises and do not have the tools for digitalizing their services (OECD/European Union, 2019). For many female entrepreneurs, decrease in business income also threatens the livelihoods of their families.

In the context of the 2008 crisis, several studies examined to what extent women-led businesses were affected by the crisis. In most of the countries examined (e.g. Italy, Finland, Slovakia or Austria), no significant difference was found between businesses run by men or women. Although in Poland, France and Spain, female-led businesses were severely affected by the crisis (OECD, 2012), (Buratti, Cesaroni and Sentuti, 2018).

We have little information on the effects of the current crisis. Enterprises had to react very quickly, due to sudden restrictions, however, the long-term effects of this crisis are still very uncertain. However, based on the fact that men usually have more capital and women have less access to resources and they work in sectors severely affected by the crisis; the crisis can make their situation definitely worse than their male counterparts (OECD/European Union, 2019).

Numerous flash reports, research materials and experts have drawn attention to the fact, that the coronavirus has affected men and women differently (Fisher et al. 2020; World Bank, 2020; UN, 2020; etc). Women were challenged in multiple ways in recent months. The majority of health and social frontline workers are women and typically, at the same time, they take on the lion's share of household and home care task. Female entrepreneurs coped difficulties caused by the virus, both on economic and family fronts during the closure period. In addition, the risk of domestic violence, which affects women in the first place, could increase during the closure period (OECD, 2020; World Bank, 2020). Reconciling entrepreneurial activity, private and family responsibilities is a complex management task even in normal periods (Hyytinen & Russkaren, 2017). This situation may have worsened due to restriction measures, with the introduction of distance learning and the increase in caring responsibilities.

Numerous articles have addressed how women cope with the difficulties of the coronavirus epidemic. These writings focused mainly on front-line health workers, (Adamecz et al, 2020), female academics (Degruyter, 2020) and mothers (Fodor et al., 2020) who experienced increased burdens at home following the closure of educational and health care institutions. At the same time, women who run businesses have received significantly less attention, even though they have been challenged in multiple ways in recent months. On the one hand, as entrepreneurs and employers, they had to deal with the limitations of epidemiological measures and the accompanying economic effects. On the other hand, as women and mothers, they typically also took on the lion's share of household and home care tasks, such as studying with children, cooking for the family or looking after elderly family members (Fodor et al., 2020).

In 2018, HETFA Research institute launched its three-year EU project called iFEMPOWER (Interactive and mentorship based FEMale empowerment in the field of entrepreneurship). iFEMPOWER aims to encourage entrepreneurship among female students. As a result of the joint work with the partners from 7 countries, a complex international higher education module will be created, which will encourage young female students and prepare them for entrepreneurship. As a starting point, a research was conducted in 7 partner countries under the leadership of HETFA. Building on the experience of the project and the international relations of HETFA in connection with the coronavirus pandemic, it was possible to collect international data with the help of our partners. The international survey examined the situation of female entrepreneurs during the coronavirus pandemic, the effect of the pandemic on the operation of companies led by women and the difficulties female entrepreneurs faced in reconciling their entrepreneurial and family roles during the pandemic. The main results of the research are presented below.

2. Research methodology

The research is based on an online questionnaire that collected responses and data between May and August 2020. The questionnaire was shared on various online platforms with the help of our partners, and the sample of respondents is representative of the core population of highly educated, Internet-user SME entrepreneurs, living in larger cities. The questionnaire was completed by 1681 people and it would not have been possible without our well-targeted Facebook campaign and without our partners. Countries and regions were selected based on the international network of HETFA and the available capacities of our partners. The questionnaire was completed in seven countries, however, in two countries, only one region could be involved. In addition to Hungary, we collected data from the Czech Republic, Bulgaria, Serbia, Austria, and the Andalusian region of Spain. We distributed the questionnaire among Hungarian female entrepreneurs in Transylvania as well. Each geographical unit has a population of around 8-10 million. The natural limitations of research is that the examined countries differ in many respects. They have very different economic structure. The characteristics of

the enterprises, the restrictions and the support systems introduced are also differ. Furthermore, it is important to note that the international data collection took several months. During this time, the pandemic varied in every country, therefore we asked the respondents to focus on the time of severe restrictions. Obviously, the restriction measures also varied from country to country.

We should highlight that due to the specific characteristics of our chosen methodology, we primarily reached the highly educated female entrepreneurs, who are also frequent Internet-users. During the data collection, we aimed at reaching out to most female entrepreneurs in each country or region examined, hence all questionnaires were distributed in the local language. Thus, our data is representative in this narrower subpopulation of female entrepreneurs.

3. International context

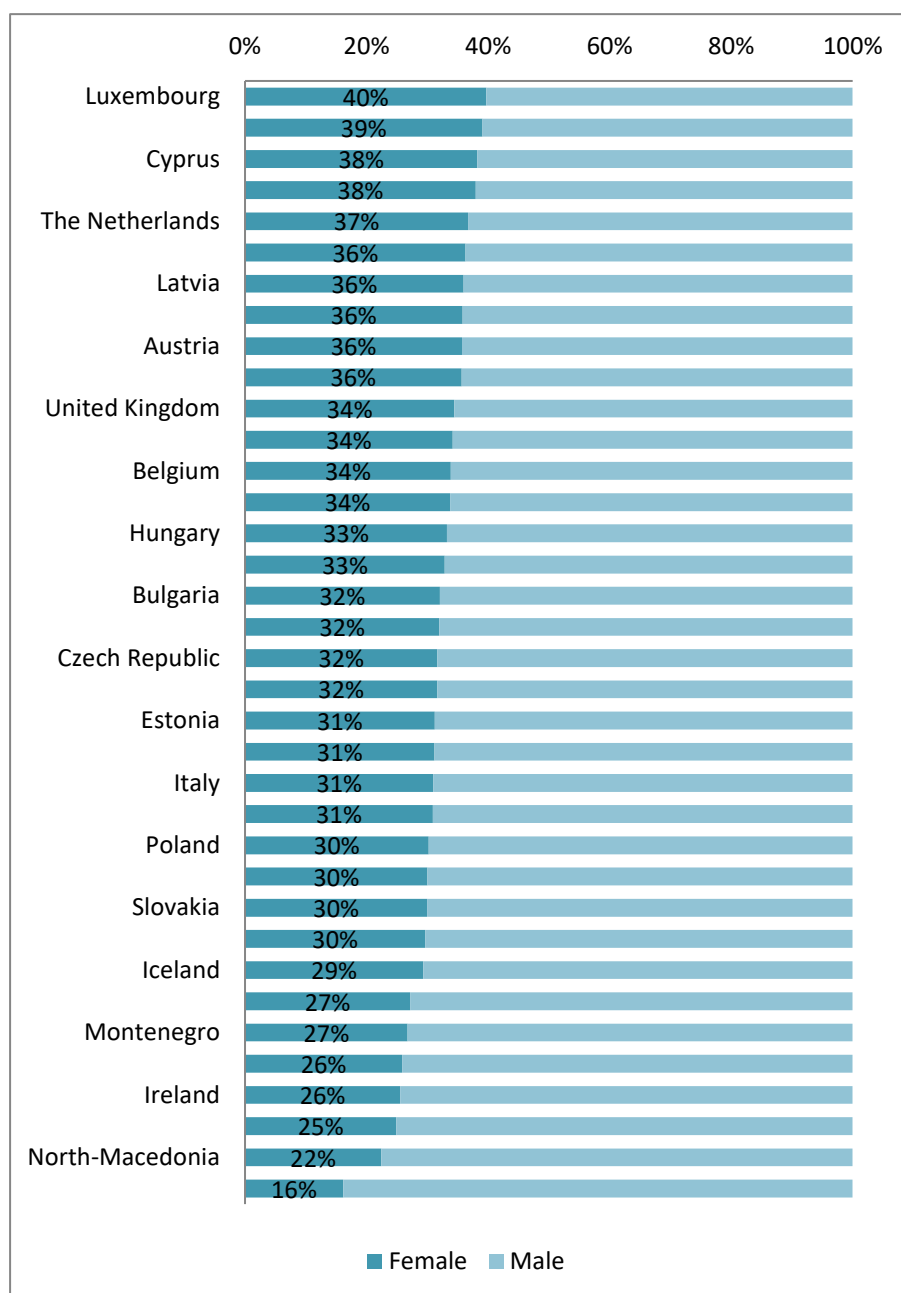
3.1. Female entrepreneurs in Europe and in countries involved in this research

Generally, statistics are not available specifically on female entrepreneurs, only in a few special and focused analyses. Such an analysis was prepared by the European Commission in 2014 relying on data collected in 2012 in EU Member States (EU28) and in eight additional countries (Albania, Former Yugoslav Republic of Macedonia (FYROM), Iceland, Israel, Turkey, Liechtenstein, Montenegro, Norway and Serbia), from now on referred to as Europe-37. In addition, since 2011, OECD has been publishing annually the “Entrepreneurship at a Glance Report” in which statistics are presented with regard to the rate and trends of self-employed women.² In addition, we can obtain up-to-date information from the data of the European Union Labour Force Survey (EU LFS). LFS approaches entrepreneurship primarily on the basis of the legal relationship of employment. The LFS considers self-employed those people, who are employees of an enterprise owned fully or partially by them (regardless of the form of employment), self-employed entrepreneurs, and those who claim themselves ‘self-employed’ in surveys.

Obviously, these statistics do not include those entrepreneurs who run their business besides their full-time work, however there are numerous women, who are working like this. In 2019, 33% of entrepreneurs in European Union Member States are women, which means that there were more than 10 million women entrepreneurs. The highest rates can be found in Luxembourg (40% of entrepreneurs are women), followed by Portugal (39%) and Cyprus (38%). The lowest rates are presented in Turkey (15%), North Macedonia (22%) and in Romania (25%) (EUROSTAT-LFS 2019Q4). Out of the seven surveyed countries, Austria (36%) and Spain (34%) have rates above the EU average, while the percentage in Romania is well below the average.

² In case of the OECD data the problem faced is that it includes data primarily for OECD member countries, whereas not all countries involved in the current survey are member of OECD. Thus, data for Romania, Serbia and Bulgaria are unavailable.

1. figure, Ratio of female and male entrepreneurs

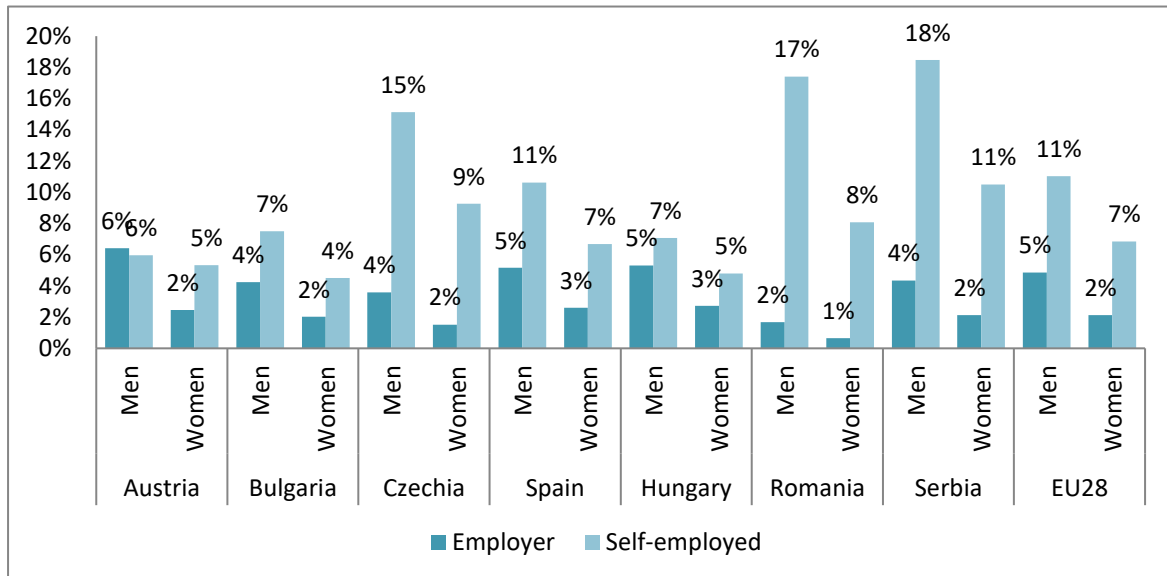


Source: own calculations based on data from Eurostat, LFS 2019Q4

Entrepreneurial motivation shows significant differences among genders in the EU Member States. The rate of men in entrepreneurship has remained 16% since 2012. Meanwhile, the rate of women is 9% and it is similarly unchanged. Among the countries surveyed, the share of female entrepreneurs in Serbia and Czech Republic is above the EU average. The majority of entrepreneurs were self-employed, which means that 69% of men, and 76% of female entrepreneurs are self-employed in the EU. Among the countries surveyed, more than 80% of female entrepreneurs in Czech Republic and Bulgaria are self-employed, meanwhile in Romania, more than 90% are self-employed. Therefore, the high

proportion of female entrepreneurs in these countries is based on the higher number of self-employed entrepreneurs.

2. figure, Share of entrepreneurs by gender

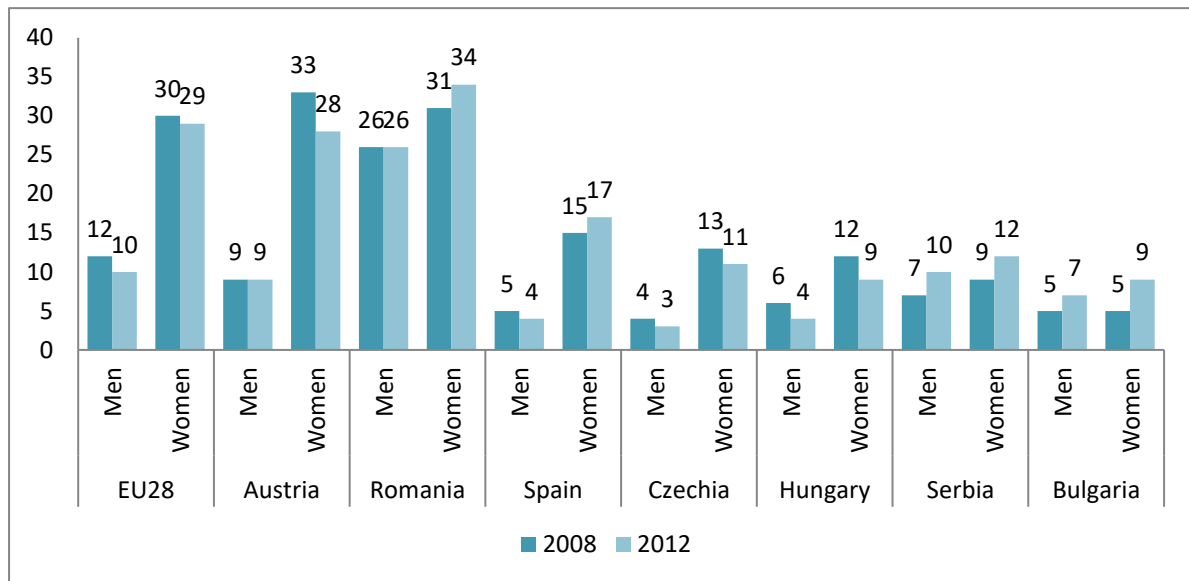


Source: own calculations based on Eurostat, LFS 2019Q4

Many entrepreneurs do not **work** as full time- or **part-time employees**, but many women run their business besides a full-time job, or in addition to their caring responsibilities. Unfortunately, there is no updated data on the ratio of part-time female entrepreneurs since 2014, when the report under the title ‘Statistical data on Women entrepreneurs in Europe’ by the European Commission in 2014 was published.

In 2012, 30% of female entrepreneurs worked part-time in their business, compared to the 12% of men in the EU-28 countries. Among the countries surveyed, the largest differences between men and female entrepreneurs working in part-time can be seen in Austria (19% in 2012), and in Spain (12% in 2012). The smallest differences were seen in Bulgaria (2% in 2012).

3. figure, Proportion of part-time entrepreneurs



Source: European Commission 2014a

The sectoral distribution of women-led enterprises can be based on the LFS statistics, too. These statistics consider entrepreneurs those persons, whose main activity is being an entrepreneur. Therefore, those working on their businesses in addition to their main job are not included in these indicators.

Among female entrepreneurs, the most common sectors are economic and professional services (15% worked in these fields), trade (14%), health and social services (14%), personal services (12%), agriculture (11%) and tourism (6%).

4. figure, Percentage of entrepreneurs by sector

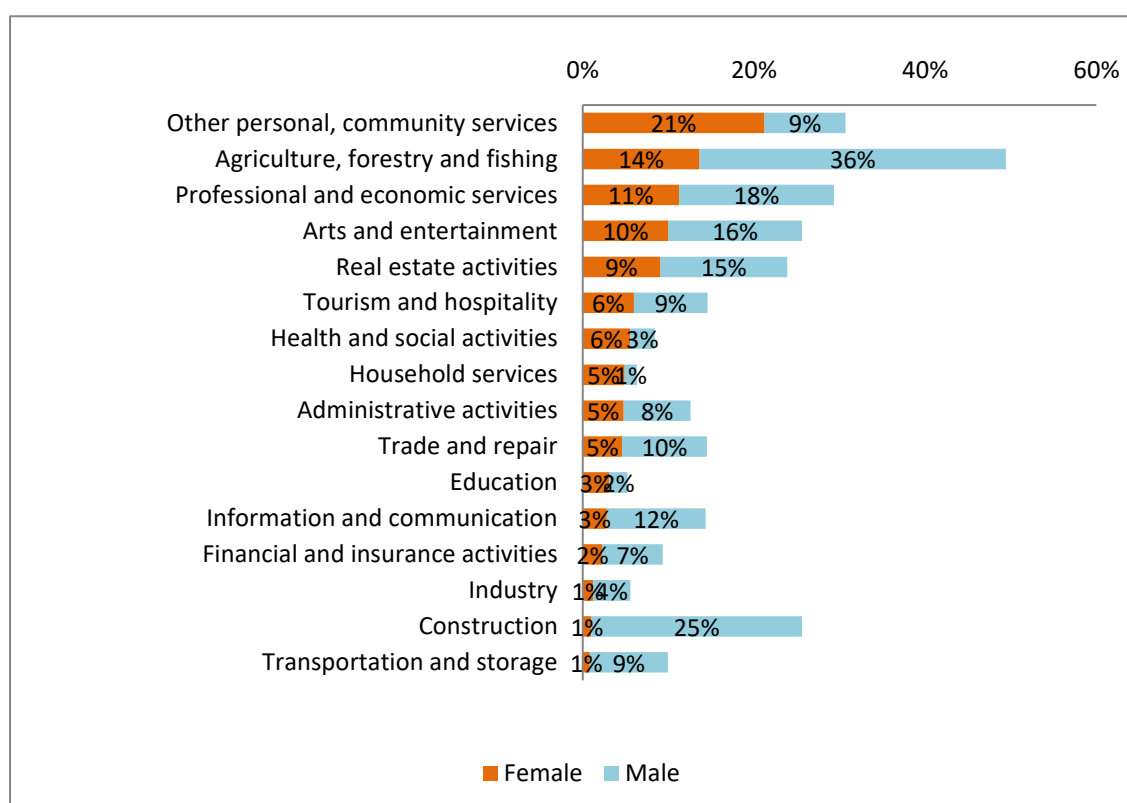
	Share of male entrepreneurs	Share of female entrepreneurs
Professional services and counselling	12%	15%
Trade and vehicle repair	15%	14%
Health and social services	4%	14%
Other, community services	3%	12%
Agriculture, forestry and fishing	14%	11%
Tourism and hospitality	5%	6%
Education	2%	5%
Administrative and support service activities	4%	5%
Industry	7%	4%
Arts, entertainment	3%	4%
Information and communication	4%	2%
Real estate activities	1%	2%
Construction	19%	2%
Financial activities	2%	1%

Household services	0%	1%
Transportation and storage	5%	1%
Public Administration	0%	0%

Source: LFS 2019Q4, European Union 28

We always need to take into account the employment capacity of each sector. Therefore, we can see that the share of male and female entrepreneurs is outstanding in some sectors. In 'other services' (this includes personal and community services) 21% of all workers were female entrepreneurs in the EU in 2019. This percentage was 14% in agriculture, 11% in professional and economic services and 10% in arts.

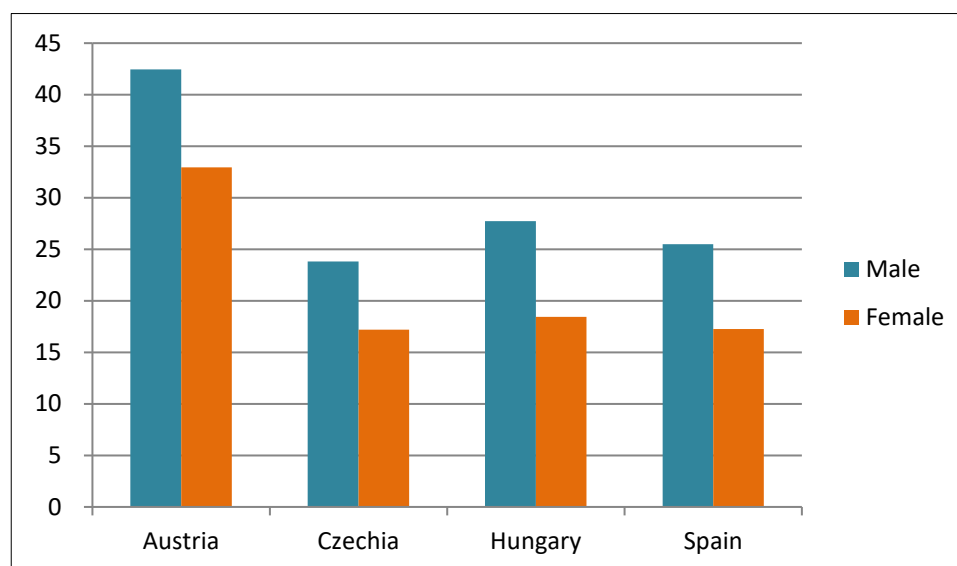
5. figure, Proportion of entrepreneurs within sectors



Source: LFS 2019Q4

The '**Potential for becoming entrepreneurs**' indicator refers to the percentage of persons who claim it possible that they become entrepreneurs in the next five years. The figure below highlights that it is Austria, among the countries observed, that has the highest ratio of people being positive about launching a business, while Czechia has the lowest ratio. Compared to this, in Hungary, Czechia and Spain, the ratio of women thinking in the same manner are nearly 50% of men.

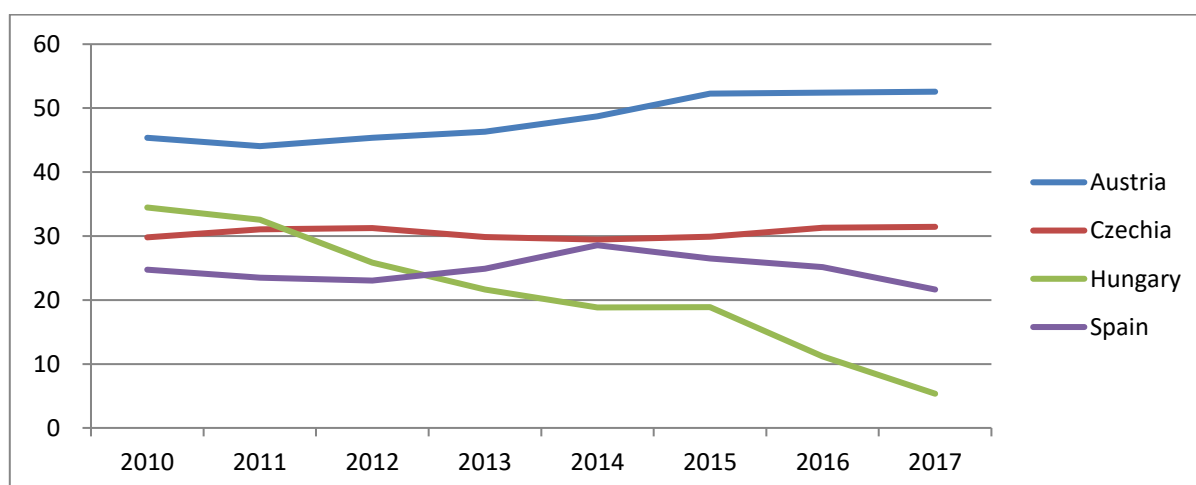
6. figure, Potential for becoming entrepreneurs indicator



Source: OECD, 2013

The income gap shows how the average income of female entrepreneurs is related to the average income of male entrepreneurs. To calculate the annual average, we used the moving average of the last three years. The figure shows that in each country, there were significant differences between the entrepreneurial income of women and men. This difference might be explained by the lower wages of women and the higher proportion of women in part-time jobs.

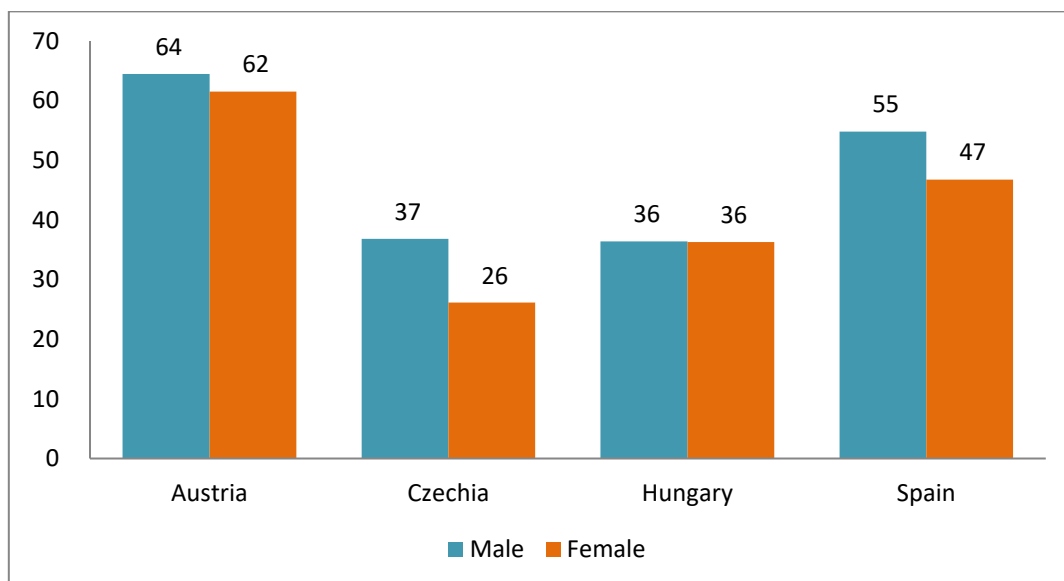
7. figure, Gender gap in self-employed earnings



Source: OECD

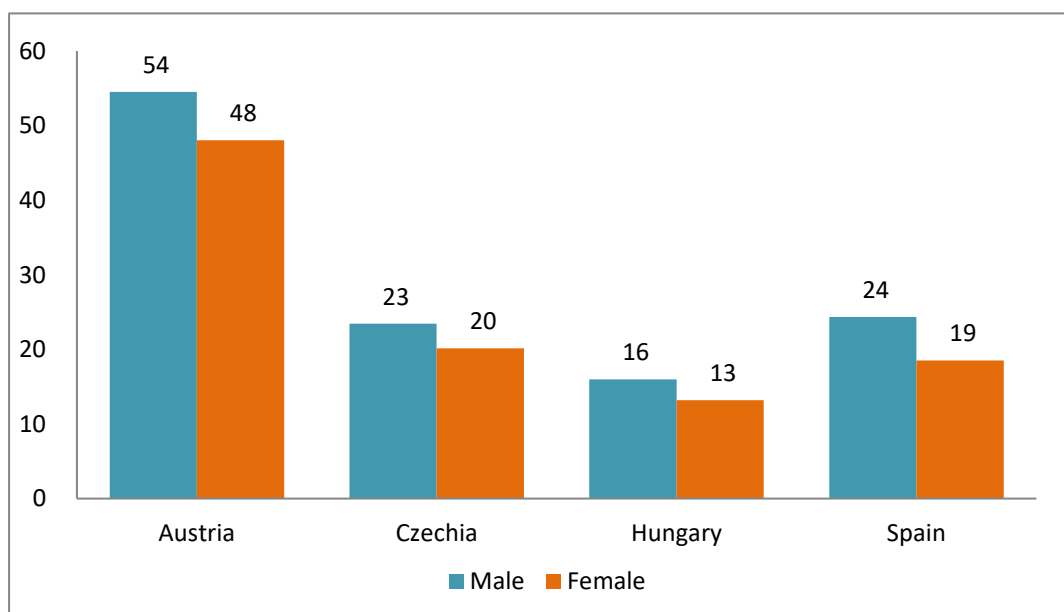
Access to training and resources is extremely important for starting a business. The figure below presents OECD data from 2013 and underlines one of the main challenges that women face before launching their business: in each country covered, the rate of women having access to training is lower than their male counterparts. The situation is the same when accessing money to start a business.

8. figure, Access to trainings on how to start a business (%)



Source: OECD, 2013

9. figure, Access to money to start business (%)



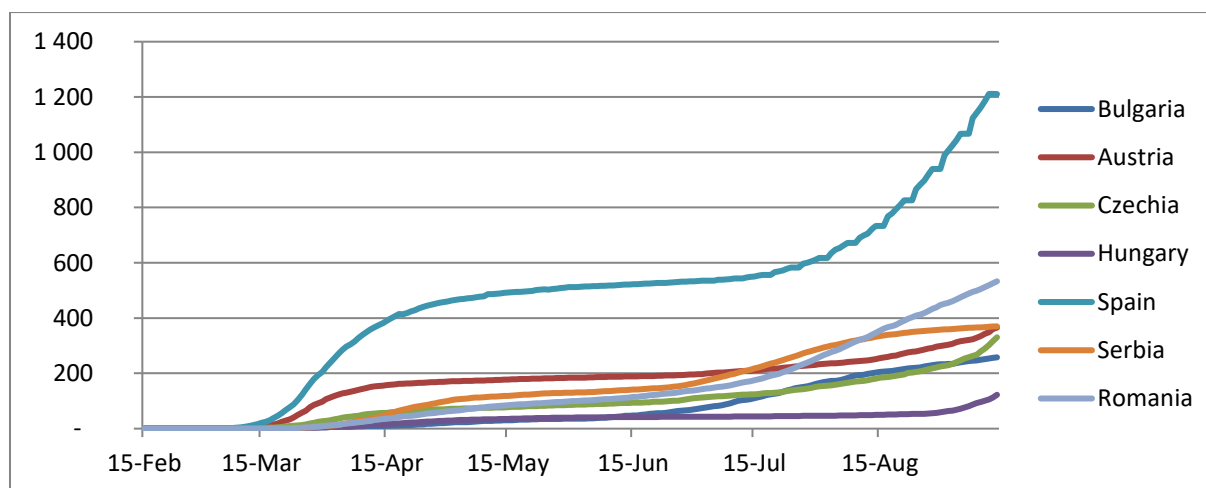
Source: OECD, 2013

3.2. Pandemic measures, restrictions and policy responses in the surveyed country

Countries involved in the research were affected differently by the course of the pandemic, therefore the protective measures were very different in every country. For example, in early spring, Spain had a higher number of confirmed cases, while in several Eastern European countries the same number was lower.

In case of Andalusia and Transylvania, no regional data on the number of confirmed COVID-19 cases are available thus the numbers have to be taken for the whole countries. The figure below shows that Spain had very high number of infections per 100,000 inhabitants, with more than 460,000 cases registered by 31 August, representing 900 cases per 100,000 inhabitants. Although, the number of cases in Austria increased faster during March and April than in Eastern European countries, this trend stopped abruptly. As of 31st August, the number of infected people was over 27,000, representing 308 cases per 100,000 inhabitants. Among Central and Eastern European countries studied, Romania had the highest number of infections. As of 31st August, more than 86,000 cases had been identified, representing 452 infected cases per 100,000 people. At that time, the number of infected people in Serbia was over 31,000 (359/100,000 people), and in the Czech Republic, 24,000 were infected (227/100,000 people). Meanwhile the share of identified cases was the lowest in Hungary, with 5600 infected people (65/100,000 people).

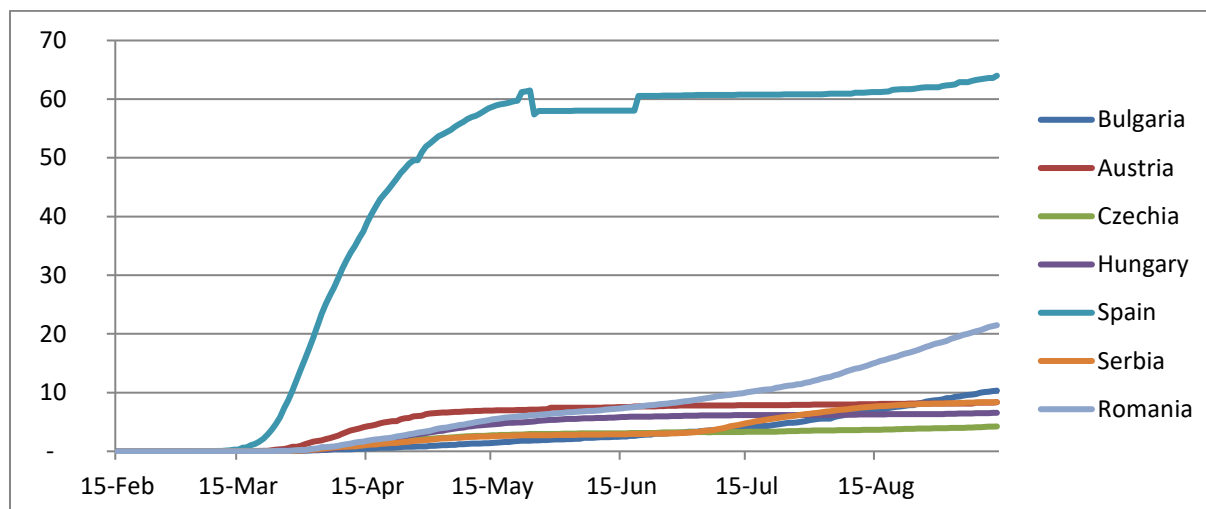
10. figure, Number of COVID-19 cases per 100.000 inhabitants



Source: Oxford University, OxCGRT

The highest mortality rates were to be found in Spain. By 31st August, more than 29,000 people lost their lives during the pandemic, which means 62 people per 100,000 inhabitants. In the rest of the surveyed countries: 3500 people in Romania (19/100,000 people), 733 people in Austria (8/100,000 people), 709 people in Serbia (8/100,000 people), 611 people in Hungary (6/100,000 people), 603 people in Bulgaria (9/100,000 people) died of novel coronavirus infection.

11. figure, Number of COVID-19 deaths per 100,000 inhabitants



Source: Oxford University, OxCGRT (Spain corrected its previous figures on 25 May, leading to a decrease in cases)

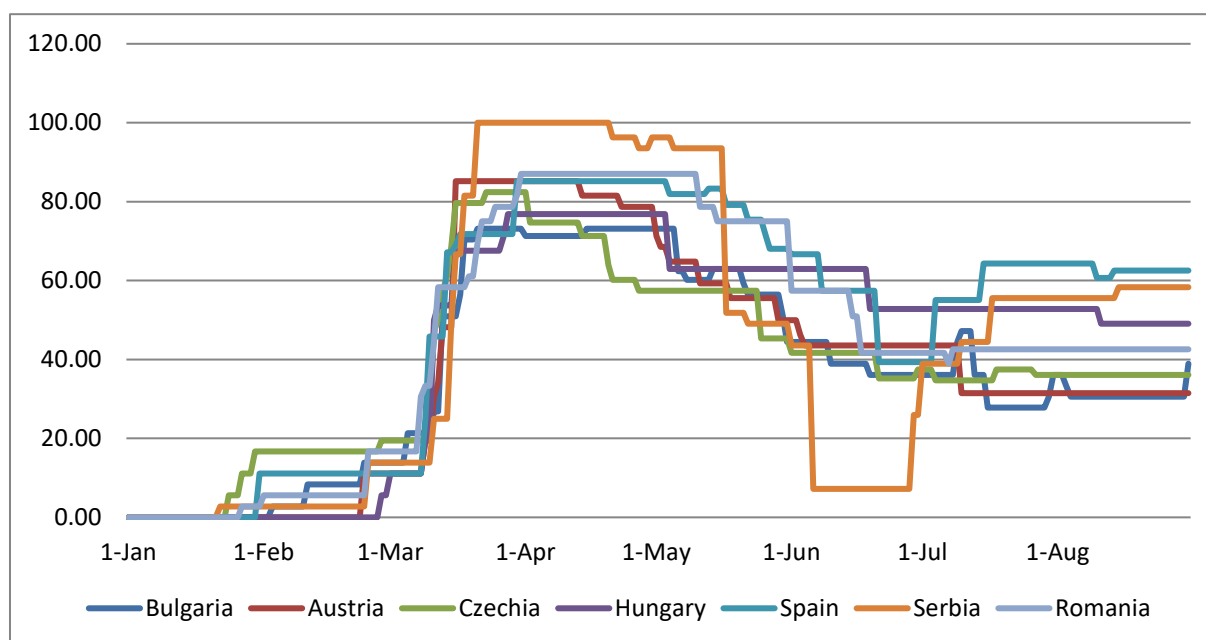
In the countries studied, the first COVID-19 cases were reported between 25-26 February in Romania, Spain and Austria. In the rest of the countries covered, first cases appeared between 1-8 March. The declaration of a state of emergency was one of the first decisions in most countries, as well as the restriction of public events and the introduction of a quarantine requirements for those coming from abroad (BG, RO, AT).

Apart from Austria, all studied countries declared a state of emergency between 11-15 March. During this period, all EU Member States closed their borders, their schools and all educational institutions. Shops operated with limited opening hours and other restrictions. However, the severity of these measures varied by country.

The University of Oxford has produced several complex indicators of government pandemic measures. The OxCGRT indexes³ examine measures introduced in countries around the world based on 17 types of public data. These include indexes on the overall government response, severity of restrictions, containment and health, economic support. The figure below shows the index on the severity of restrictions.

³ More methodological information can be found on: <https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker>

12. figure, Evolution of the severity index of pandemic measures



Source: Oxford University, OxCGRT

The measures considered as most severe are for example, the imposition of a total night curfew in Serbia for 1.5 months. There was also strict curfew in Romania and Spain where people could only leave their homes to go to work or do shopping for basic needs. In these countries, strict police controls were also introduced along with the restrictions. All countries have encouraged remote working (home office), where possible. Also, childcare and educational institutions were closed everywhere and distance education was introduced.

The most severe restrictions remained in force from April to May. In all countries, the reopening was launched gradually and took place from the beginning of May till mid-June. The reopening mainly concerned the shops, shopping malls, restaurants, and other businesses in the service sector, but with regards to educational institutions, only kindergartens were reopened in the countries covered by the research. At the same time, schools and universities remained closed until the summer break.

The epidemiological measures are summarized on the basis of a website launched by the World Bank, which keeps up-to-date the measures, policy decisions and their effects of the coronavirus pandemic.⁴

⁴ More information: <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#H>

13. figure, Overview of epidemiological measures and restrictions in the countries studied

	Hungary	Romania	Czechia	Serbia	Bulgaria	Spain	Austria
First detected case	4 March	26 Feb	1 March	6 March	8 March	25 Feb	25 Feb
First measures		8 March: ban on public events	-	-	1 March - restriction on public events to up to 250 persons - mandatory 14-day isolation of participants in international sports events coming from risk countries	-	1 March - self-quarantine for people with symptoms (and those who travelled from Italy) - bans on large gathering in public spaces, closing schools, and university classes - isolation of several ski resorts
State of emergency (incl. border)	11 March (till 17 June)	12 March	12 March: declared for 1 month (then	15 March	13 March: declared for 1 month	14 March: repeatedly	-

closure and quarantine)			extended till 30 Apr, 17 May)			prolonged till 21 June	
Special measures	close-down & quarantine travel restrictions dedicated hours for people above the age of 65 in shops	close-down & quarantine self-declaration from for citizens to leave the house	close-down & quarantine strict mask requirement	night curfew, banning people over 65 to leave their homes, suspension of public transport	close-down & quarantine social distancing, travel restrictions	close-down & quarantine limited commercial, cultural, recreational, hotel and restaurant activities, reduced operation of public transport	close down and quarantine from 16 March obligatory use of masks, random tests
Reopening	Gradually, from 4 May , till 18 June	Gradually, from 15 May and 1 June	Gradually, from 17 May, 1 June	Gradually, form 21 April, 11 May, 22 May	Gradually, from 4 May , then from 1 June	From 21 June , unconstrained mobility across all provinces and reopening of EU borders	Gradually from 13 April, 15 May, 16 June
Measures in force till 31	Health crisis situation social distancing	National alert period	- events of up to 500 people	- compulsory wear of masks	- extraordinary epidemic situation has	- schools will not reopen until September,	- wearing mask on public transport

August or beyond	wearing masks in closed venues, public transport	schools remained closed till 16 September compulsory wear of mask compulsory quarantine for certain countries	- wearing face masks in public transport in mandatory - vocational school classes were partially reopened at limited class sizes	- outdoor sports competitions with public, outdoor public gatherings allowed with a maximum of one 1000 people	been extended until 30 Sept - mandatory mask wearing	except for graduating classes - restrictions on certain public venues and large group gathering - Social distancing requirements, capacity limitations, - hygiene measures at workplaces	- regional differences regarding mask wearing
------------------	--	---	---	--	---	---	---

Table 1: Overview of the policy measures and restrictions in the countries covered (source: IMF, ILO)

3.3. Policy support for small businesses during the pandemic

The impact of the pandemic on the global, national and local economies, with a special view to small businesses has not been addressed thoroughly. There are different estimations with regard to the size and extent of its impact (e.g. Fairlie, 2020; OECD 2020A). Experts argue that SMEs are more vulnerable to social distancing than other companies due to their higher level of fragility and lower resilience related to their size (OECD 2020B). However, their importance and survival is underlined by the fact that SMEs represent 99.2% of companies established in the EU giving employment to 66.4 million people and generating an important value added (EUROSTAT).

As it is described in several articles and reports, SMEs in service sector, i.e. retailing, tourism, hospitality and transport suffered the most from the restrictive measures (OECD 2020A). Researchers and analysts publishing the first papers have already started to compare the impact of the economic crisis started in 2008 with the impact of the COVID-19 epidemic. The previous crisis showed no differences in the vulnerability of businesses between male and female owners (women-led businesses were mainly in the health, education and personal services sector. However, COVID-19 and the restrictions significantly limited the retail of these services, which was aggregated by the close-down of educational institutions. Any further disadvantage or disability (being solo parent) is supposed to aggravate the situation.

Facebook, in cooperation with OECD and World Bank prepared two reports on the Global State of Small Businesses based on the results of online questionnaires completed by more than 30 thousand respondents. The first report highlighted that globally 26% of small businesses were closed down. Two third of small businesses reported losses in income, and one third reported that they reduced the number of workforce. Despite all these difficulties only 23% of small businesses reported that they got access to financial support. Many of the small businesses referenced a need for salary subsidies (32% in aggregate), tax deferrals (32%), and access to loans and credit (29%) to offset ongoing cash flow and demand-side problems (Facebook/OECD/World Bank, 2020).

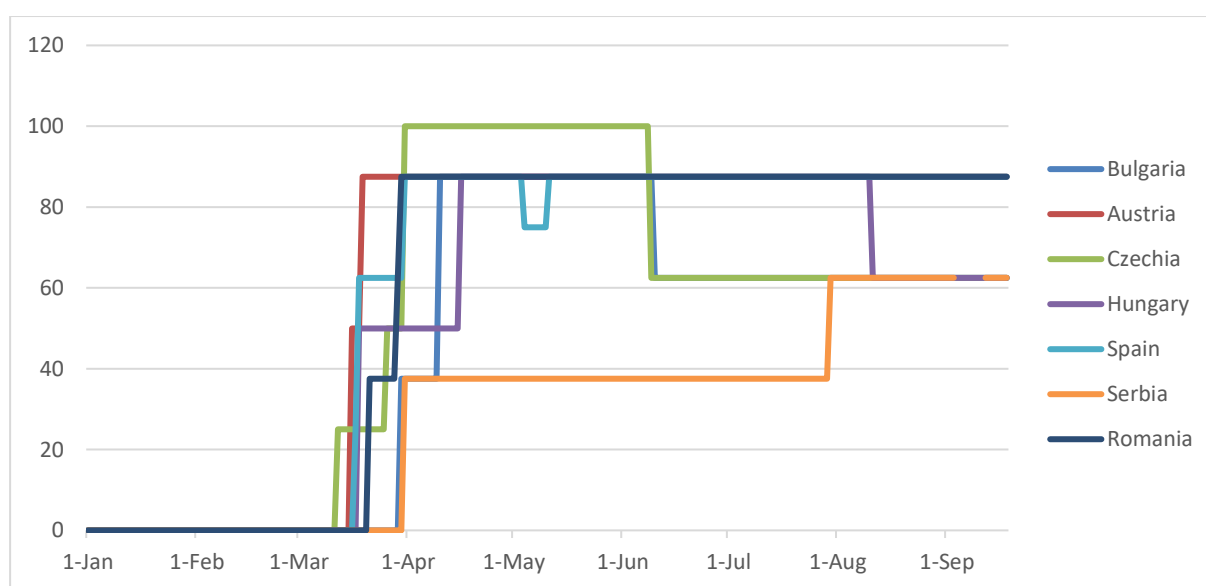
Despite the closure of nurseries and educational institutions and the necessary extension of capacities in health and social care, that all presumed significant efforts from women working in these fields (e.g. OECD, 2020A; World Bank, 2020), the situation of female entrepreneurs has been barely touched upon. Apart from newspaper articles, where some outstanding examples were showcased during the first few months, the report prepared by the Canadian Women Entrepreneurship Knowledge Hub was the only report arguing for the necessity of specific measures supporting female entrepreneurs. On the one hand, as entrepreneurs and employers, they had to deal with the limitations of epidemiological measures and the accompanying economic effects. On the other hand, as women and mothers, they

typically also took on the lion's share of household and home care tasks, such as studying with children, cooking for the family or looking after elderly family members.

Since then, further reports published underlined that female-led small businesses had to face even harder situations: globally, these businesses were 7% more likely to close down than those of the male counterparts. As presented above, most female business leaders operate micro-enterprises with no employees. Moreover, female-led SMEs are also concentrated in the sectors that have been most affected by lockdown measures. 30% demonstrated particularly high closure rates on the one hand; on the other hand, female business leaders responding the online survey reported spending six or more hours per day on domestic tasks and caring for family members, while only 11 % of male business leaders reported the same (Facebook/OECD/World Bank, 2020).

Oxford University's OxVGRT complex indicators include an economic support index as well. The following figure represents this index that makes the scope of measures comparable. As we can see, several types and sizes of measures were introduced in each countries studied.

14. figure, Development of the economic support system



Source: Oxford University, OxCGRT

Nevertheless, policy support for SMEs has not differentiated between the businesses based on their owners' gender. The main aim of the introduced support measures was to enable the survival of the enterprises. In the first 2-3 months after the outbreak of the pandemic, already 50% of the surveyed businesses reported income losses (OECD 2020B). Countries launched different forms of supporting schemes for businesses or self-employed people. According to the OECD report, the most common forms included the reduction, deferral or cancellation of social contributions and taxes. Others

included the provision of emergency capital or specific unemployment aids. Other policy interventions included moratorium on tax for SMEs and self-employed persons, and temporary suspension of mortgage payment. Structural policies have not been used broadly. If used, they related mainly to teleworking and digitalization.

The following table summarizes the main policy instruments aiming at the improving conditions for SMEs. The division of the instruments follows the methodology of OECD in the SME Policy Responses report (OECD, 2020B). It is important to see that all the countries covered introduced a mix of policy measures covering interventions with regard to regulations on labour, deferral of taxes and loans, as well as financial instruments. However, it must be highlighted, that most instruments targeted enterprises with employees – whereas, as it has been presented above, a significant ratio of female entrepreneurs or self-employed persons do not have employees.

15. figure, Economic and policy support measures introduced in the countries studied

	Hungary	Romania	Czechia	Serbia	Bulgaria	Spain	Austria
LABOUR							
	partial redundancies, wage subsidies	wage subsidies	wage subsidies	Financial assistance for employees, business entities: entrepreneurs, branches and representative offices which did not reduce number of employees by more than 10%	for start-ups 60% coverage of employees salary for the first month	wage subsidies	5-12 billion EUR for funding short-term work was increased
	subsidies for self-employed	covering 75% of the salary of employees sent into technical unemployment by companies affected by the coronavirus				subsidies for self-employed: provides self-employed similar benefits as unemployed in case of "force majeure"	2,000 EUR for companies recruiting apprentices
	relaxed conditions to shorten employees hours					extended social security bonuses in discontinuous fixed contracts	wage subsidies
							measures to reduce hours worked
DEFERRAL							

	around 80,000 SMEs (mainly in the services sector) was exempt from the small business tax (the payment of the tax by other companies in affected sectors will be deferred until the end of the state of emergency);	selective tax advantages	The waiver of the minimum compulsory advance payment to social security and health insurance		tax measures and government reliefs in response to COVID-19	tax payment deferrals for SMEs and self-employed for six months, with the first four months exempt from interest	deferral on income/corporate tax and rent/utilises/local tax: 10 million EUR on tax deferral
	the tourism development contributions were temporarily cancelled	debt moratorium	debt moratorium			flexibility for SMEs and self-employed to calculate their income tax and VAT instalment payment based on the actual profit in 2020	specific tax relief measures for the agricultural and forestry sectors, culture and publishing.
	procedures for collecting tax arrears were suspended during the state of emergency	deferral on income/corporate tax, rent/utilises/local taxes	deferral on income/corporate tax, rent/utilises/local taxes			6-month suspension of social security contributions for the self-employed and companies in selected industries (€352 million)	Households and SMEs may also delay their debt servicing by 3 months

	social security and pension – total exemption for sectors most severely hit by the pandemic		Applying losses retrospectively			debt moratorium	500 million EUR tax relief measures for the hospitality sector
	debt moratorium		stop on the payment of tax advances			deferral on income/corporate tax, rent/utilises/local taxes	deferral on social security and pension
	extension of loan payment					extension of loan payment	
FINANCIAL INSTRUMENTS:							
			specific COVID-19 loan funds, providing working capital to SMEs				specific COVID-19 loan funds, providing working capital to SMEs
	a new package of new measures was announced, supported by the creation two new funds, the Anti-Epidemic Protection Fund and the Economy Protection Fund	Direct grants, equity injections, and advance payments	Financial contribution of CZK 25,000 entrepreneurs who perform self-employment	Decree on Fiscal Benefits and Direct Aid to Companies in the Private Sector and Monetary Aid to Citizens Aimed at Reducing Economic Consequences due to COVID 19 (Decree)	81.8 million EUR freed for job and SME support	expansion of ERTE to cover workers and companies with significant activity reduction in sectors considered essential	9 billion EUR in guarantees to companies, including exporters and the tourism industry;

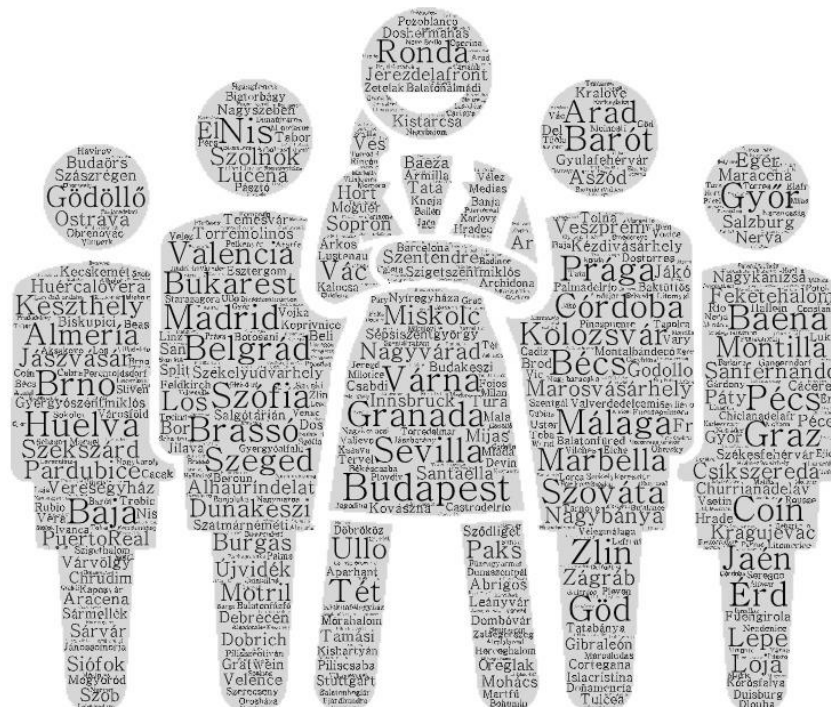
	Interest-free loans to SMEs; a new SME lending program was also announced (FGS GO!) with increased amounts and increase in the interest rate subsidy	State guarantees for loans taken by companies	Entrepreneurs are entitled to the nursing allowance	Program of Financial Support for Businesses Aiming to Improve Liquidity and Working Capital Throughout Economic Difficulties Induced by the COVID-19 Pandemic	flexibility and incentives for bank loan payments	temporary subsidy for household employees affected by COVID-19 with an amount equal to 70 percent of their contribution base (€3 million)	4 billion EUR for the health care system, long-term care, short-term work, and to compensate self-employed, family- and micro-business for the loss of earnings related to the sickness
		3.3 billion EUR scheme to support small and medium-sized enterprises (SMEs) through the European Commission	CZK 1.9 billion has been allocated to support employers and employees in the form of direct landing			3.8 billion EUR extraordinary benefit for self-employed workers affected by economic activity suspension	new guarantees for SMEs worth EUR 10 million up to 80% of the loan amount or EUR 2.5 million for five years – moreover, self-employed can also apply for guarantee
	equity finance to viable SMEs that ran into difficulty during the pandemic					EUR 400 million credit line to most affected sectors such as tourism and transport	EUR 100 million is available for loans to hotels that suffer more than 15% losses in sales.

Table 2: Policy measures in the countries covered introduced during the first wave of the pandemic (source: IMF, OECD)

4. Survey respondents

1681 respondents filled in the questionnaire, the responses came from 420 settlements out of 7 countries in total. 34% of the responses were from Andalusia region, 22% from Hungary, 18% from Transylvania, 10% from Austria, 6-6% from Bulgaria and Serbia, and 5% from Czechia. As shown – even though we collected answers from territories inhabited by approximately same size of population – the different countries differed in the response rate was quite different across countries.

16. figure, The settlements of respondents



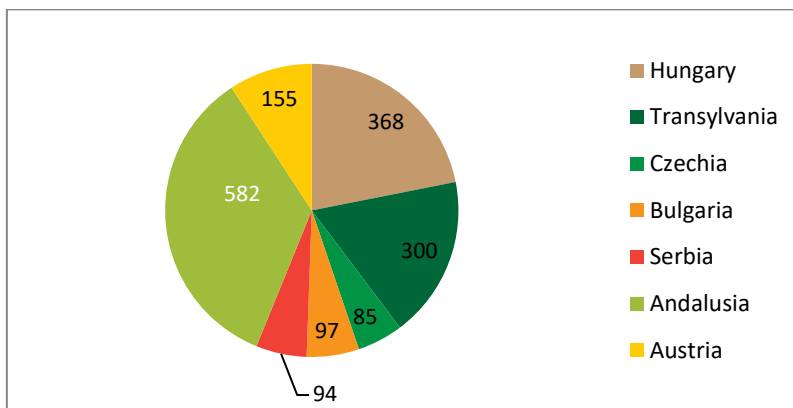
The respondents were mainly highly qualified: 61% of all respondents completed tertiary education, 36% of them completed secondary education, while nearly 3% of respondents had basic education only. In the Andalusian sample the basic education rate was somewhat higher (9% basic, 45% secondary and 46% of respondents completed tertiary education), whereas the respondents with tertiary education dominated in the Bulgarian sample (89% of them completed tertiary education).

29% of the respondents operated their enterprise in the capital or in its agglomeration, 23% of all enterprises was operating in bigger cities, 20% of them in smaller cities, and 29% in smaller towns and villages. The rate of respondents living in smaller settlements was the highest among the Spanish respondents (56%) and the lowest in the Bulgarian sample (2%).

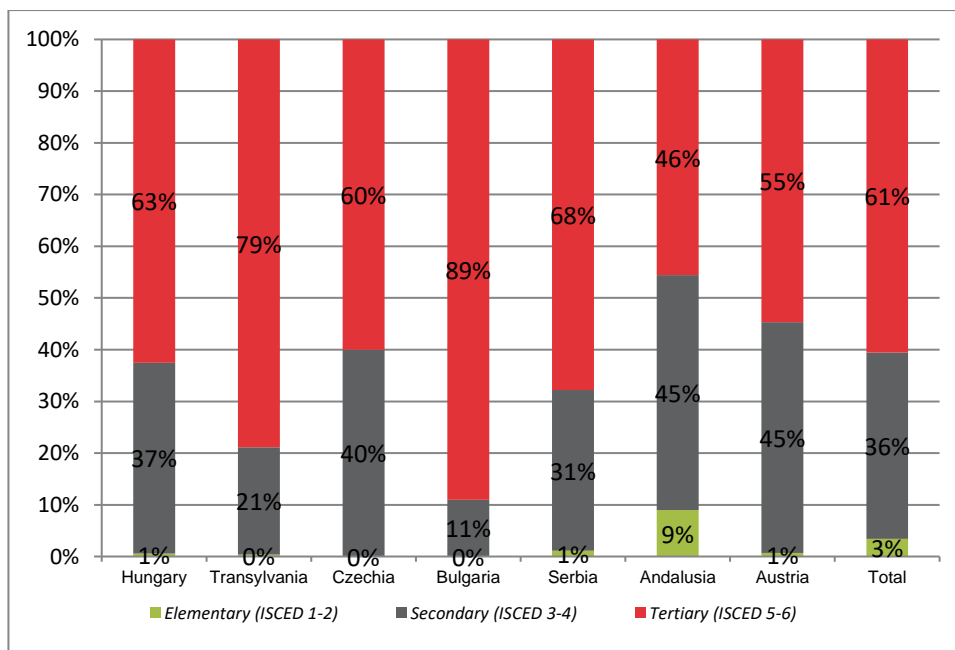
More than half of the respondents raised at least one child under 18, 10% of them had at least one child under 7, while 41% only had child or children over 7 years old. The majority of respondents

belonged to the age groups under 30 (33%) and 40 (35%). The respondents' partner earned more money in nearly one third of the cases, 29% of respondents lived in a single earner household, 17% of them had a partner who was earning income, but she was the main wage earner and 24% of the respondents was earning equally with their partners.

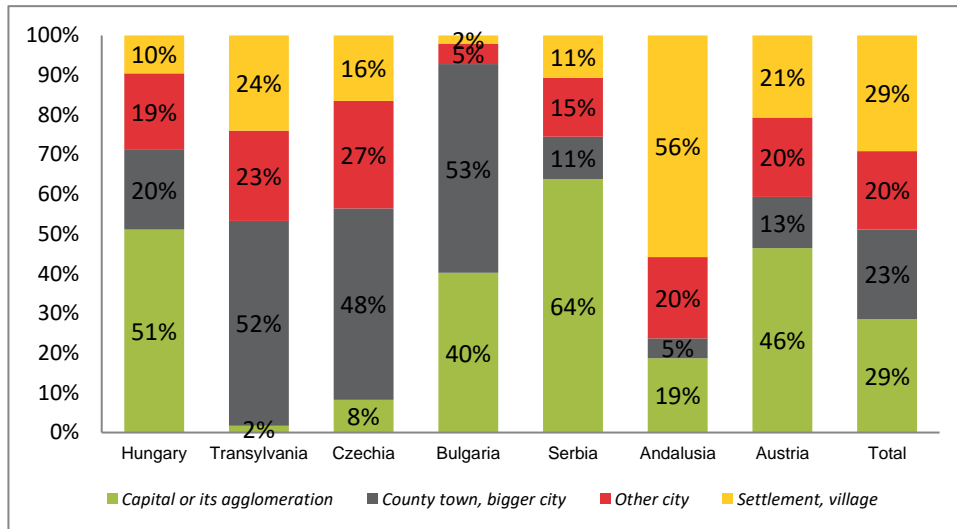
17. figure, The share of respondents by country (N=1681)



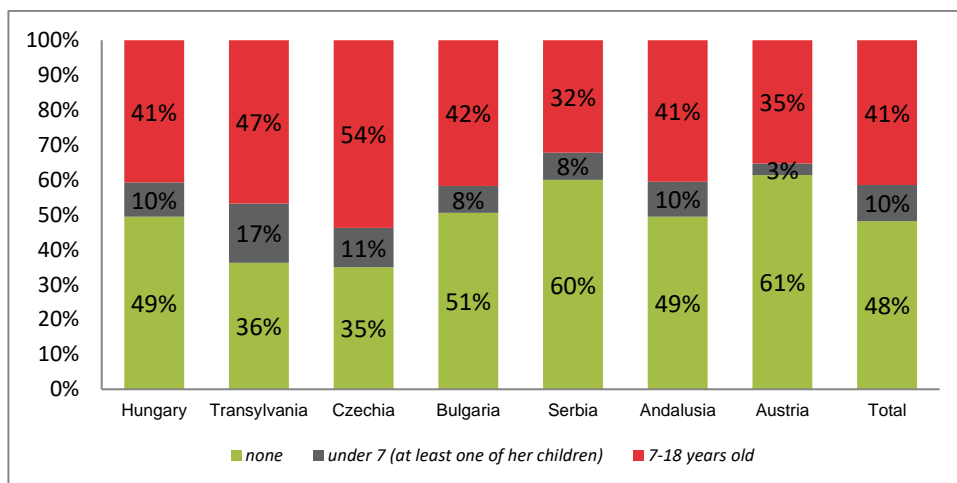
18. figure, The share of respondents' level of education (N=1594)



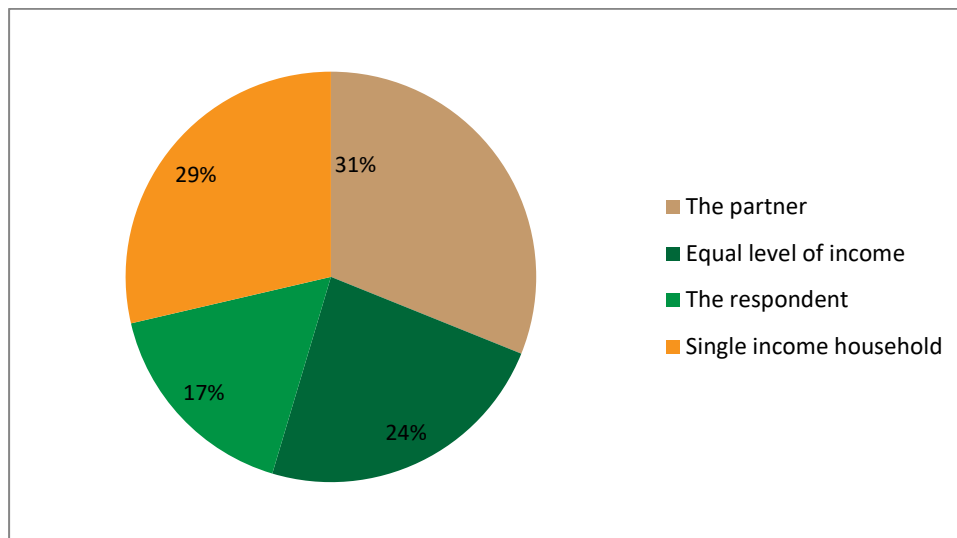
19. figure, The enterprises' headquarter (N=1680)



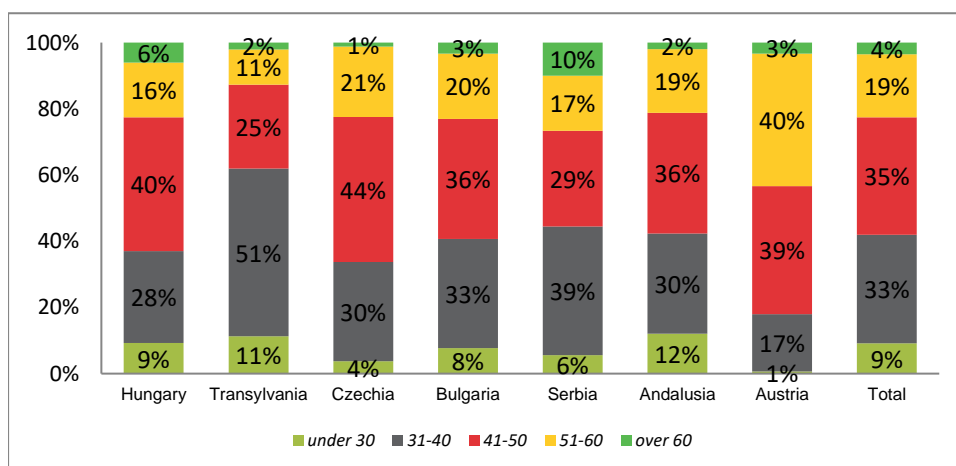
20. figure, The share of respondents by the age of children (N=1581)



21. figure, The main wage earner before the pandemic (N=1532)



22. figure, The share of respondents by age group (N=1587)



5. The respondents' enterprises

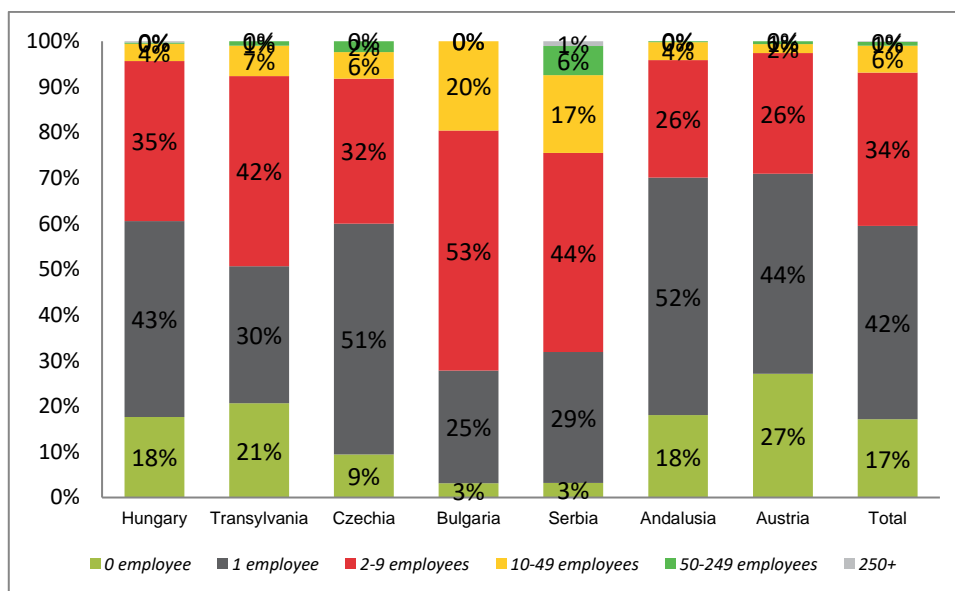
The share of small enterprises is usually higher among the enterprises run by women which was the case in the sample of this research as well. The vast majority of them were micro or small enterprises in all the countries participating – whereas a great number of analysis predict that the pandemic situation will have the most significant effect on this size of companies. Indeed, these enterprises possess less amount of capital and reserves to mobilise or they are less flexible in adapting to the change of supply chains. (OECD 2020)

17% of the responding enterprises did not have employees, 42% of them had one employee (including the self-employed individuals) and 34% operated with 2-9 employees. The enterprises employing at

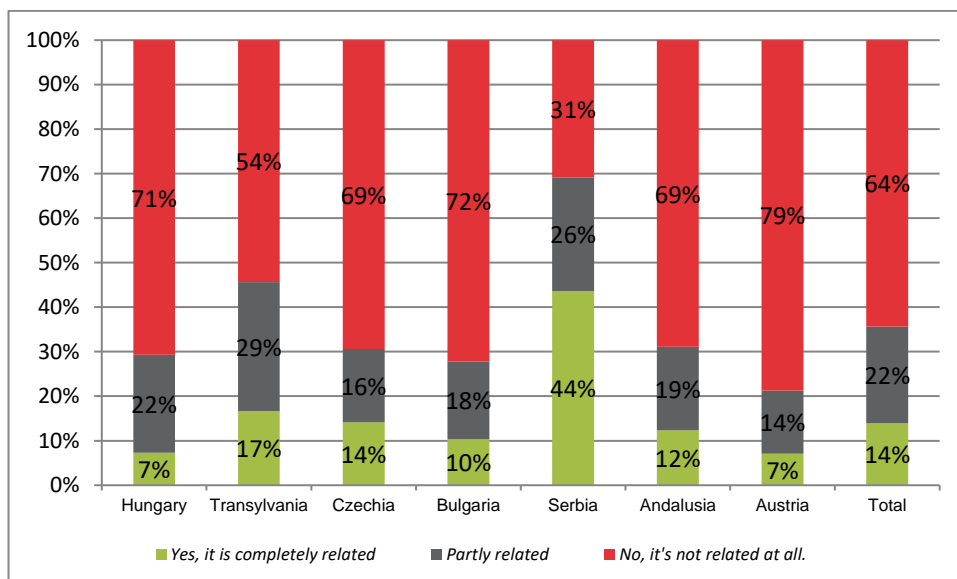
least 10 person reached only 6% in the sample. **More than half of the responding enterprises (52%) were sole entrepreneurs (regardless of the legal form), owned by the female entrepreneur and employing at most one employee.** In these enterprises the female entrepreneur typically works alone without any help.

The female entrepreneurs usually run the business in part-time beside their main activity, many of them launch their enterprise while they care for children or other relatives. This pattern was represented in case of the survey's sample. Half of the respondents (51%) run their enterprises as their main activity, while 27% of them had a contract of employment and 22% was economically inactive (childcare, student, etc.) beside the operation of their enterprise.

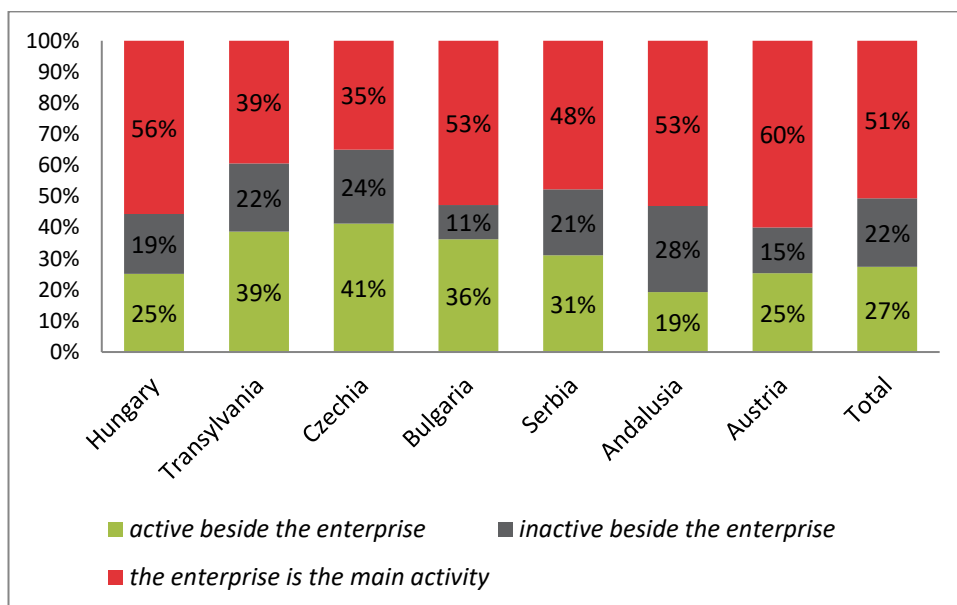
23. figure, Number of employees (February 2020) (N=1681)



24. figure, Is the activity of the enterprise related to children or motherhood/parenthood (N=1681)



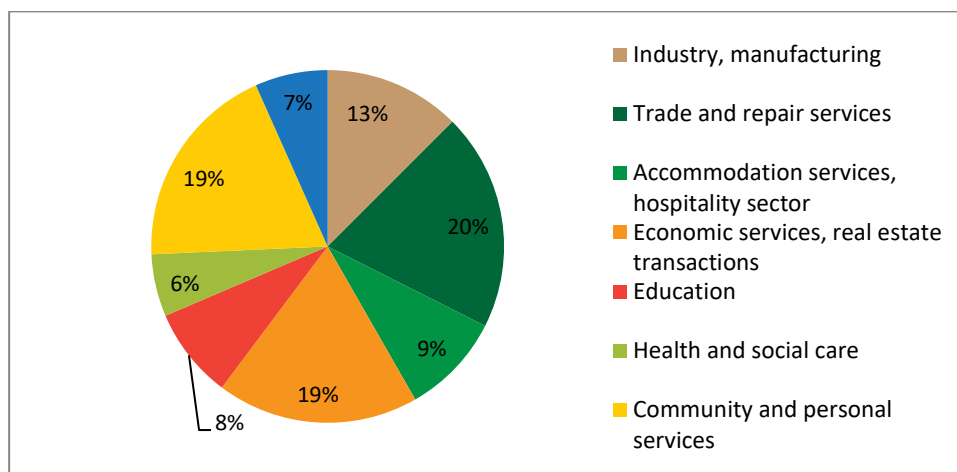
25. figure, Do you have any other occupations/activities in addition to your enterprise? (N=1592)



The share of the survey sample by sectors reflects the share of female entrepreneurs, however the agricultural enterprises are underrepresented due to the method of online survey. The enterprises run by women are over-represented in three sectors in the countries surveyed: economic services, trade, and community and personal services. **The enterprises of survey respondents mostly operate in these three sectors: 19% of them are involved in economic services, 19% in community and personal services and 20% are involved in trade and related services.** Besides, 3% of the enterprises operate in

the field of industry, 9% in tourism and hospitality sector, 8% in education and 6% in health and social services. The female entrepreneurs (especially those raising a child under 18) prefer to launch an enterprise that is relating to children or motherhood/parenting. In respect of this, nearly one third (36%) of the respondents' activity is related to this topic to some extent.

26. figure, The main activity of the enterprises (N=1680)

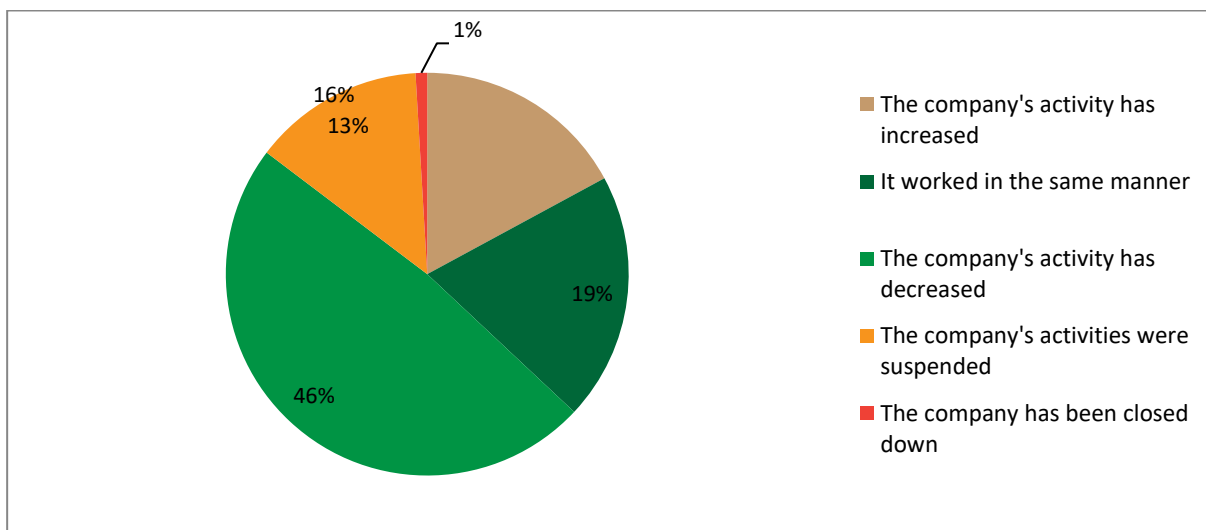


6. The effects of the pandemic on the operation of the enterprises

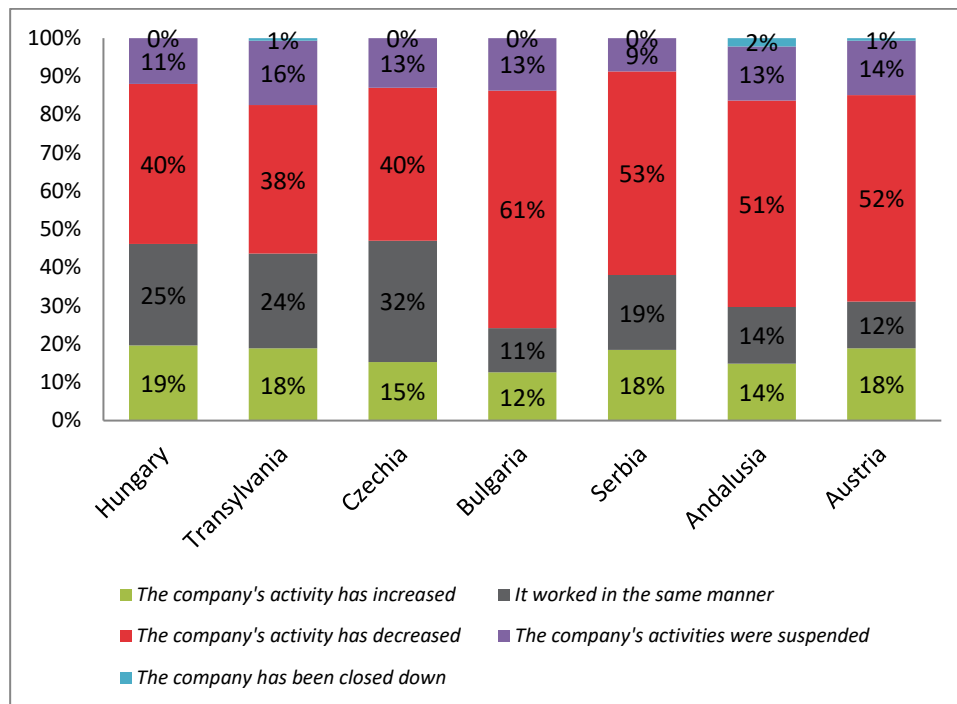
6.1. Effects on the enterprises

The restrictions introduced due to the pandemic situation entailed decrease in the activities of enterprises' in half of the cases. During the first wave of the pandemic when the situation was most severe, 46% of the responding enterprises decreased their activities, 13% of them had to suspend their companies' activities. Only a few respondents had to close down their company (15 respondents), which is a longer process.

27. figure, The change of the companies' activities during the pandemic (N=1676)



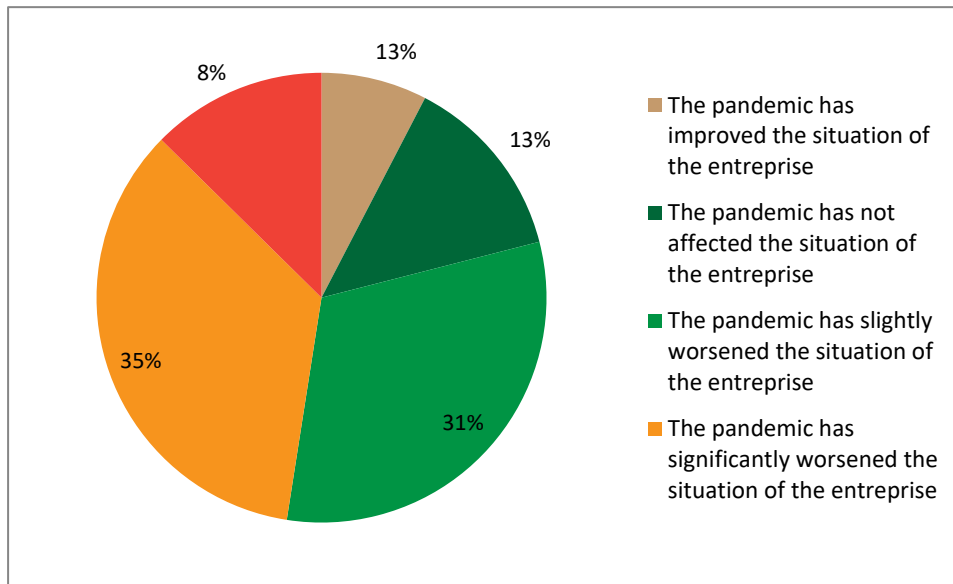
28. figure, The change in the companies' activities during the pandemic



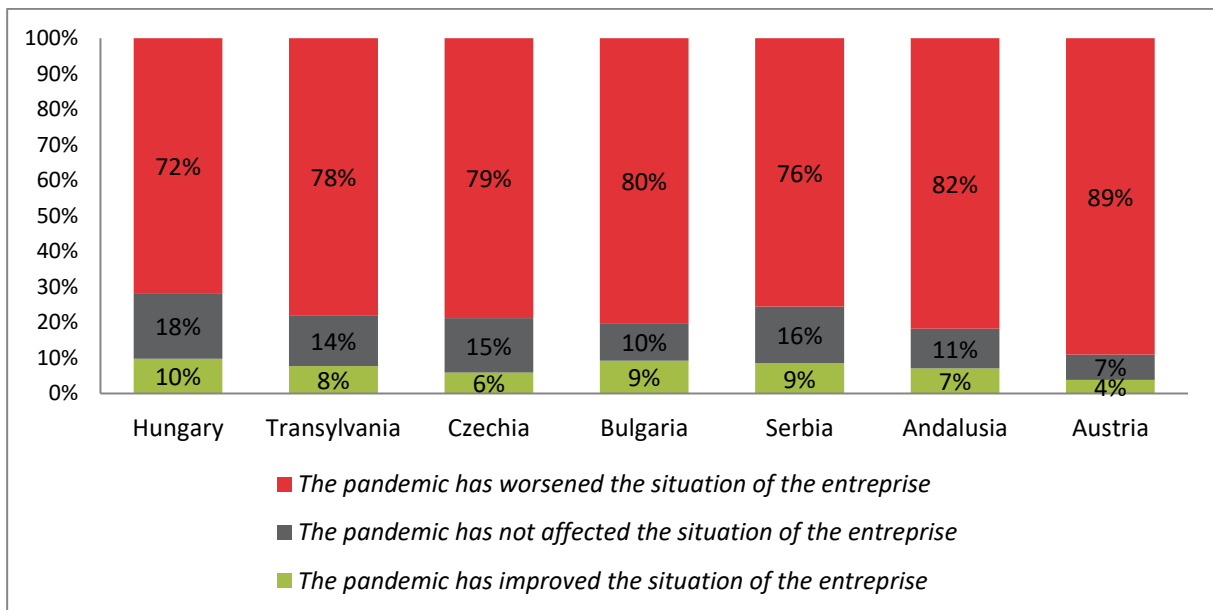
74% of responding enterprises had been affected negatively by the pandemic situation. For more than one-tenths of them (11%) it was impossible to continue their activities due to the impact of the pandemic, two-thirds of them think that their economic prospects deteriorated to a greater or lesser extent, but almost one-tenths of them reported that the pandemic improved their business opportunities. The highest share of those, who responded that their opportunities deteriorated, was among the Austrian respondents (82%), while half of them reported that the enterprises' economic prospects deteriorated to a great extent. The highest share of female entrepreneurs facing that the operation of their enterprise became impossible was in the Andalusian and Serbian sample (16% and 19%), which might correspond to the more severe restrictions introduced in these two countries.⁵

⁵ When analysing the result of the questionnaire it is important to highlight that due to technical reasons the questionnaires in the different countries had not been open in the same period of time that might affected the respondents' perception of the effects. In five countries (Hungary, Transylvania, Czechia, Bulgaria, Serbia) the questionnaires was running in June, in Andalusia it was open in July and in Austria in August. Therefore, the perception of the pandemic effects might also have been influenced by the different time of data collection and not only the geographical factor. As the pandemic progressed, the withdrawal of restrictions or reintroduction might have made the female entrepreneurs more optimistic or pessimistic, but we can not sort out the influence of time factor separated from the geographical one given the fact that two questionnaires were separately running in the last two summer months.

29. figure, What kind of impact have the COVID-19 pandemic had on your enterprise? (N= 1681)



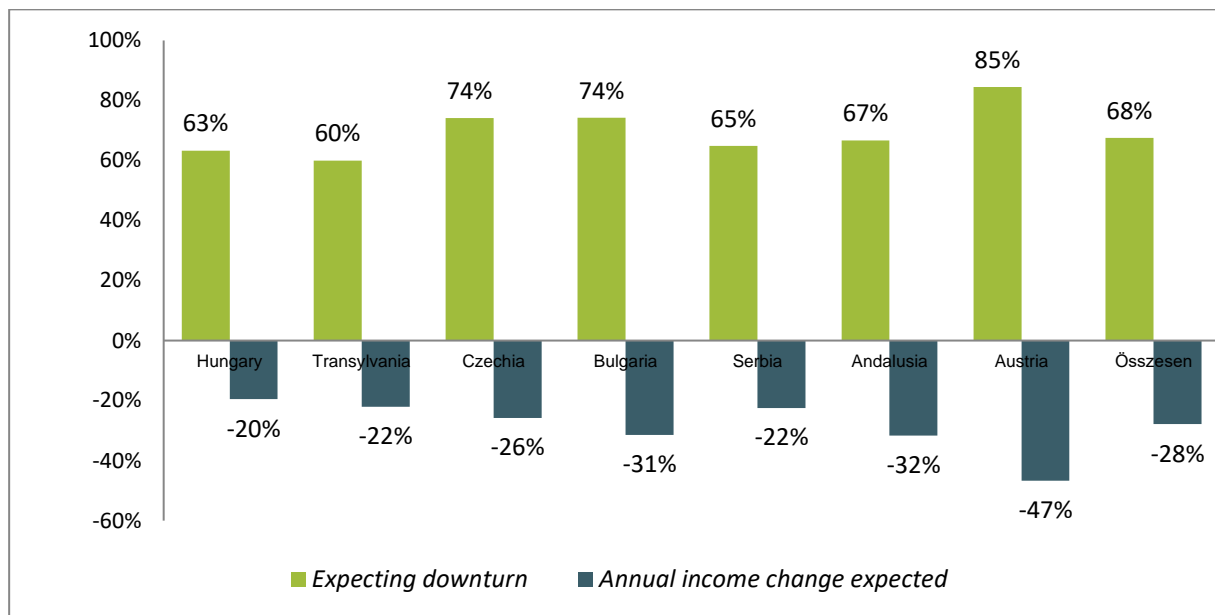
30. figure, What kind of impact have the COVID-19 pandemic had on your enterprise?



68% of the respondents expected that that effects of the pandemic situation will be tangible throughout the year of 2020 and their annual income will decrease compared to the previous year. The companies facing worse circumstances are expecting 40-50% decrease in their annual income in 2020. However, some female entrepreneurs (14%) expect to have an increase in 2020. **Overall**, the female entrepreneurs in the observed countries expect to have 72% of their 2019 annual income,

meaning they expect a 28% decline in revenues. The greatest revenue decline was expected by the Austrian (47%), the Andalusian and Bulgarian respondents (32-31%), whereas the Hungarian female entrepreneurs and Hungarian respondents from Transylvania expect the least revenue decline (20% and 22%).

31. figure, The expected rate of downturn (N=1681)



In the questionnaire we specifically explored how the number of employees within the responding enterprises might have changed during the pandemic compared to the previous period. The responding enterprises employed 7461 persons altogether (number of employees in February 2020 including self-employed). The responding enterprises were employing 6734 persons during the pandemic. Accordingly, **the number of employees in the responding enterprises run by women decreased by 10%**. The greatest decline in the number of employees were reported by the Bulgarian and Andalusian respondents with 12-13% decrease.

32. figure, The average change in the number of employees between February 2020 and the date of filling the questionnaire (N=1422)

	Change in number of employees	N
Andalusia	-13%	476
Bulgaria	-12%	93
Austria	-9%	112
Transylvania	-8%	236
Hungary	-7%	302

Czechia	-5%	77
Serbia	-6%	89

Due to the severe restrictions, the female entrepreneurs experienced primarily the decrease in income (62% of respondents), loss of demand and missing assignments (52%). Moreover, they faced the significant negative effects of suspension on activities and malfunctions in the support chains, too. In several cases however, respondents reported a certain impact that can strengthen the enterprises. 23% of the respondents could have introduced new products during the pandemic and 14% of them realized the increase of online sales.

33. figure, How did the COVID-19 pandemic affect your company? (N=1681)

	Mention	
Revenues have decreased	1036	62%
Demand has decreased / ceased to exist	878	52%
New products / services were introduced	389	23%
The enterprise was affected in a different manner	335	20%
The activity had to be terminated	289	17%
Suppliers stuttered	250	15%
Online sales have expanded	229	14%
My enterprise was not affected	151	9%
New markets were identified	166	10%

6.2. Who has been affected the most severely by the pandemic?

During the research we investigated if there were certain factors influencing how the responding enterprises has been affected by the pandemic. In order to examine this, we used three indicators. The indicators involved were the answers to the question (1) „How did the COVID-19 pandemic affect your company?”, (2) the respondents predictions of their expected income in 2020 and (3) the change in the number of employees in the enterprise. These three indicators showed significant correlation in the database. However the correlation is significant, but it is somewhat weaker in terms of change in the numbers of employees indicated by the Austrian respondents: apparently, this subgroup has

decreased the number of employees in their enterprises to a lesser extent despite the deteriorating economic prospects.

The following possible factors had been investigated based on the research's data in relation to their correlation with how the pandemic affected the enterprises:

- economic sector/industry,
- size of the enterprise,
- age of the enterprise,
- online presence,
- demographic characteristics of female entrepreneurs (qualification, age, family structure).

6.2.1. Sectoral effects

The COVID-19 pandemic has affected and it is still affecting the economic sectors differently. Based on international and Hungarian research findings one can state that the **measures triggered by the pandemic affected primarily the tourism and hospitality sector, artistic services and personal services**. In these sectors the rate of women is higher in terms of employees and the number of small enterprises as well. The responding female entrepreneurs involved in these sectors had been affected the most by the negative effects of the pandemic situation. However, the female entrepreneurs working in the field of education and health care are affected to greater extent than all the sectors in total, because these companies are usually present in the private sector of education and health care, so they had to suspend their activities (for example they couldn't provide private education and health care services).

The greatest obstacles had been experienced by the companies operating in the field of tourism and hospitality sector: they were expecting to lose half of their revenue this year. The respondents operating in education, trade and personal services were expecting to lose one-third of their annual revenues in 2020. However, the female entrepreneurs active in industry, handicraft and health care, and social services are also expecting a decrease in their revenues by 25%.

34. figure, The share of respondents affected by the pandemic by sector (N=1680)

	Level of involvement in the effects of the pandemic	Rate of respondents in the given sectors	Rate of respondents affected negatively by the pandemic	Expected change in revenue
Accommodation services, hospitality sector	high	9%	84%	-47%

Community and personal services	high	19%	72%	31%
Trade and repair services	medium	20%	70%	-29%
Economic services, real estate transactions	medium	19%	59%	-19%
Industry, manufacturing	low	13%	63%	-23%
Education	low	8%	71%	-37%
Health and social care	low	6%	70%	-27%
Other		7%	51%	-21%

The sectoral distribution of the decrease in the number of employees reflects the effects of measures introduced: the employment level decreased to the greatest extent in the enterprises involved in tourism (18%), and in education and trade (12%), while it decreased to the least extent among those operating in economic services and community services. However, it is important to highlight that a considerable proportion of the enterprises led by women in the sectors above have no employees or their owner is self-employed. Moreover, the recovery of tourism in the extended running periods of the questionnaire in the different countries might influence these results, namely respondents filling the questionnaire in June and July reported greater fall back in employment of the tourism sector than the Austrian respondents that was open in August. Therefore, we presume that the questionnaire running in this period represents a prosperous trend, because the results of enterprises responding between May and July reported an average 22% decrease in this sector.

6.2.2. The size of the enterprise

As we mentioned earlier, the enterprises led by women are usually smaller, there is a higher rate of self-employment among them and in many cases women run their enterprises in part-time beside other activities or duties. Half of the respondents were self-employed, and only two respondents were enterprises employing more than 250 employees.

The enterprises employing 1 person, and those employing 10-49 persons expected the greatest losses caused by the consequences of the pandemic.

35. figure, The correlation between the size of the enterprise and effects of the COVID-19 pandemic

	The estimation of income in 2020 compared to previous annual income (average)	How did the COVID-19 pandemic affect your company? (average)	The change in number of employees (February =100%) (average)
0 employee	-27%	3,3	
1 employees	-29%	3,3	-7%
2-9 employees	-27%	3,3	-13%
10-49 employees	-28%	3,4	-13%
50-249 employees *	-19%	3,2	-1%
N	1681	1681	1384

*low case number (N=14)

6.2.3. The age of the enterprise

One can assume that older enterprises have already faced certain difficult economic situations and survived them. The questionnaire did not focus on the enterprises' previous experiences, it only contained a question regarding the year of foundation.

22% of the responding enterprises had been operating for less than 3 years, one-third of them were 3-5 years old, 16% of them were operating for 6-10 years, whereas 28% of them had been operating for more than 10 years. The older enterprises were employing more people, while the start-up companies had an average 1,5 employees prior to the pandemic. The enterprises that were older than 10 years had 9 employees on average. The enterprises with 3-5 and 6-10 years of operation were expecting the highest shortfall in income in 2020.

36. figure, The correlation between the age of the enterprise and the effects of the COVID-19 pandemic

The age of enterprise	N	Number of employees in February 2020 (average)	The estimation of income change in 2020 compared to previous annual income (average)	How did the COVID-19 pandemic affect your company? (average)	The change in number of employees (February =100%) (average)
0-2 years	368	1,3	-19,2	3,4	-7,9
3-5 years	563	2,7	-31,3	3,4	-13,1
6-10 years	226	3,4	-30,3	3,3	-9,0
older than 10 years	474	9,7	-29,5	3,2	-8,0
Total	1671	4,5	-27,9	3,3	-9,8

6.2.4. The online presence made the enterprises more pandemic resistant

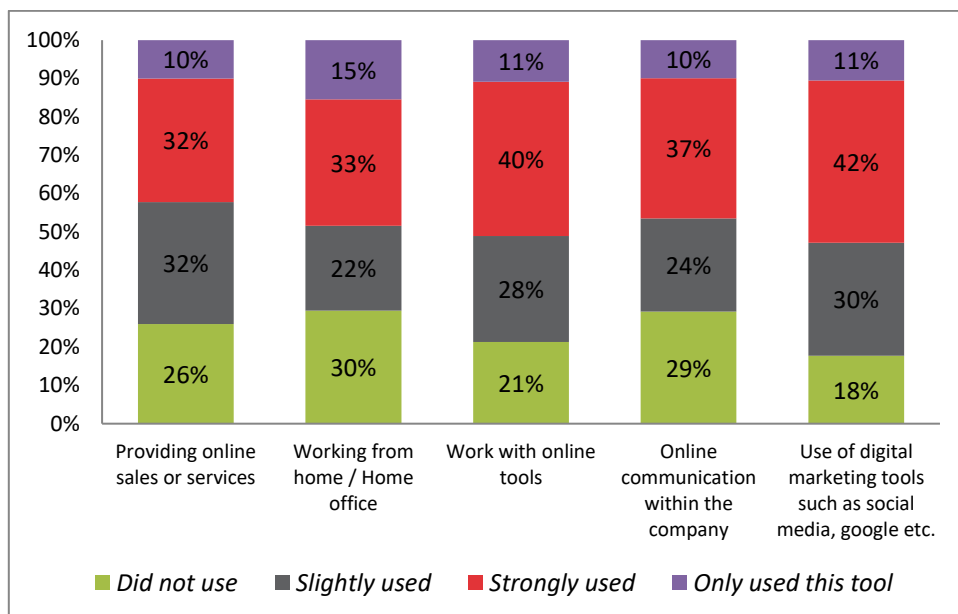
The Canadian Women Entrepreneurship Knowledge Hub conducted an impact analysis (2020) which found that female entrepreneurs are less likely to use online tools than their male counterparts. However, the use of online tools could have supported the operation of the enterprises during the first wave of the pandemic. With the questionnaire we collected information on how much the use of online tools were widespread among the female entrepreneurs and if this factor could have mitigated the negative effects of the pandemic.

In opposition to the Canadian results, the majority of our respondents have already used more online tools before the pandemic⁶ (more than half of them used 3-5 online tools regularly). More than a quarter (27%) of the responding enterprises though had not used any online tools before. (Necessarily, this result is not independent from the sampling method of our research as the online questionnaire primarily reached those using the internet more often. Therefore, among these female entrepreneurs there are necessarily a higher rate of those using more online tools in their entrepreneurial operations than compared to the whole female entrepreneurs' population.)

The use of social media was the most popular out of the 5 investigated online tools: 82% of the respondents used social media to some extent. Beside specialized online softwares, online communication tools within the company and online sales, the remote work was the online tool that the most respondents reported that they never used in their business operations. However, 15% of the respondents worked exclusively remotely, that helped them to adapt to the restrictions in a more flexible way.

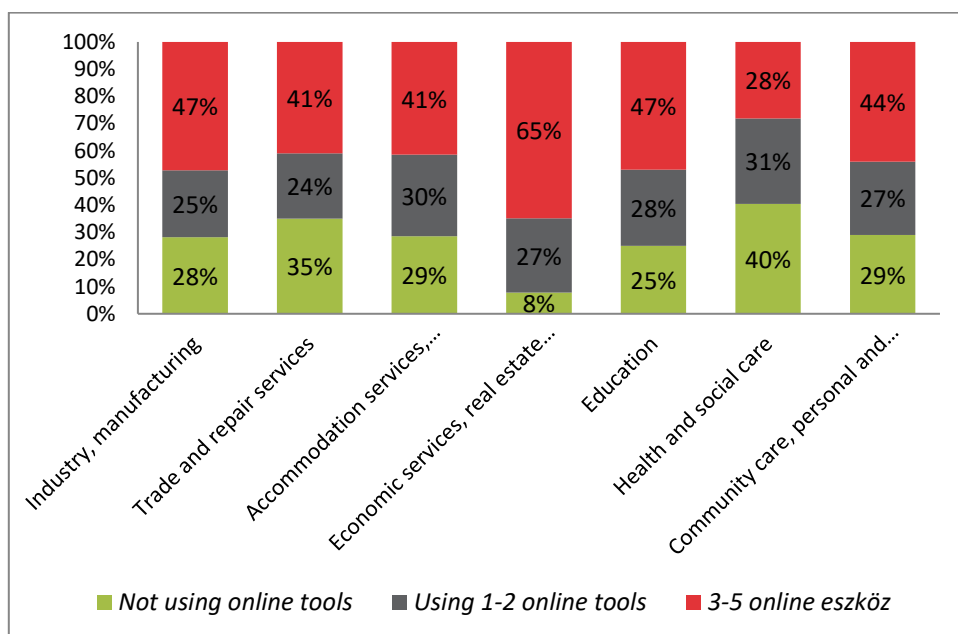
⁶ In the questionnaire we asked about the following online tools: Providing online sales or services, Working from home / Home office, Work with online tools, Online communication within the company, Use of digital marketing tools such as social media, google etc.

37. figure, Use of online tools (N=1425)



The enterprises operating in the field of economic services, education and industry/handicraft activities were using online tools the most frequently. In contrast, the enterprises involved in health, social services and tourism were using the least online tools before the pandemic. The female entrepreneurs creating handicraft products and selling them online and those providing consulting services that is manageable to do online were those most active in the online space.

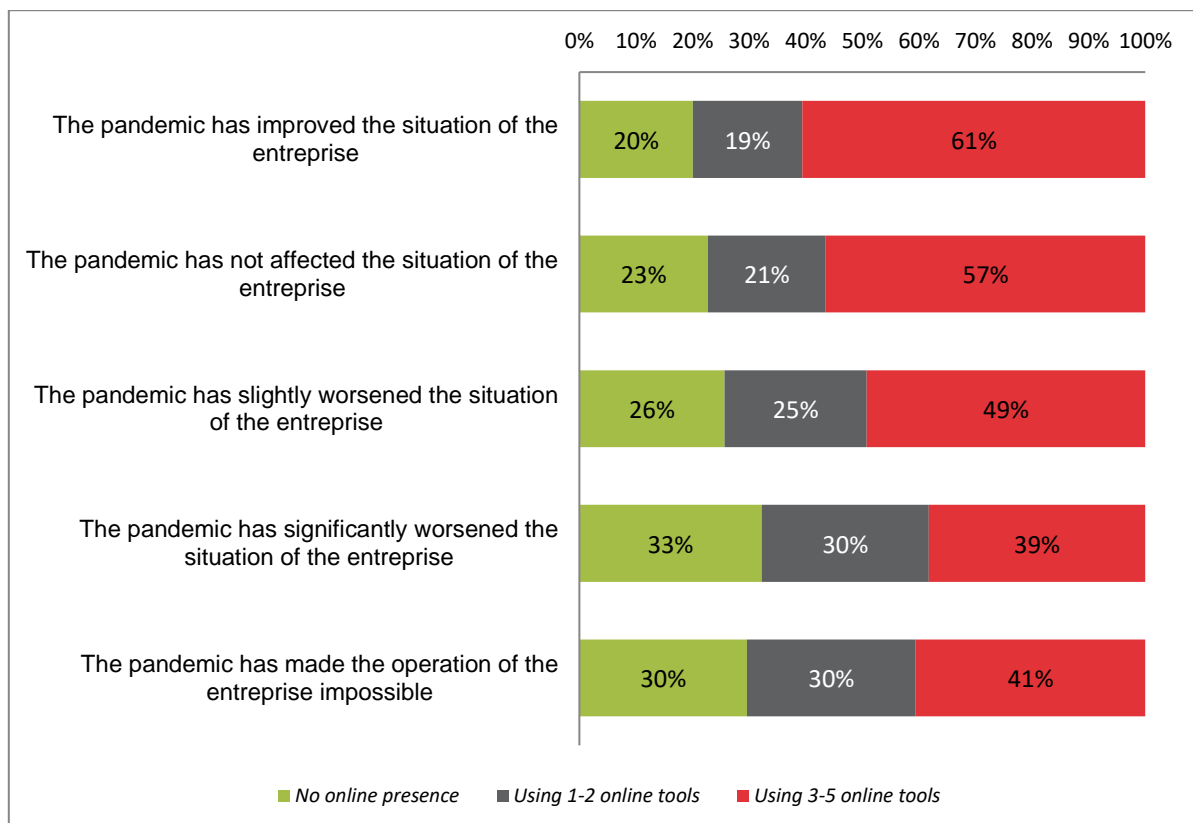
38. figure, Use of online tools by sectors (N=1497)



Difference has also appeared in the data analysis based on the age of children. **The female entrepreneurs raising young children used to apply more online tools prior to the pandemic, too.** 56% of those, raising (also) a child under 7 years old used 3 or more online tools for work, while female entrepreneurs raising older child(ren) or no children, this rate was around 47% and 45%.

There was significant correlation between the effects of the pandemic and the use of online tools. Those female entrepreneurs who reported that their enterprise was not affected or positively affected by the pandemic used online tools more often already before the pandemic situation occurred. This result might be partly explained by the fact that those sectors were less affected where the characteristics of the activities made it possible to use online tools, whereas the restrictions introduced due to the pandemic affected more severely the sectors where the personal presence is important.

39. figure, The average number of used online tools by the effects of COVID-19 (N=1497)⁷



⁷ The indicator shows how many online tools were used by the respondents or if the given online tool was the only one they used.

The correlation between the online presence and the effects of the pandemic is also proven by the fact, that those enterprises which used to apply more online tools are expecting less income loss than those who used less or no online tools before the pandemic. Thus based on several indicators, it appears to be significant that enterprises more active in the online space were more resistant to the effects of the pandemic.

40. figure, Correlation between the online activity and the expected income change

Online activity indicator (The number of used online tools)	The estimation of income change in 2020 compared to previous annual income
0	-35,1
1	-28,8
2	-30,9
3	-28,7
4	-22,9
5	-17,8

6.2.5.The demographic situation of female entrepreneurs (qualification, age, family structure)

The female entrepreneurs met numerous new challenges not only in business but also in their homes during the first wave of the pandemic. In many families women had the burden of extra care responsibilities caused by the closure of the nurseries and kindergartens. Therefore, we examined the demographic factors, seeing if they somehow correlate with the female enterprises' resilience. We examined the following aspects: qualification, age, family structure, age of children and in the main wage earner of the household. Analysing these indicators only the qualification and age showed significant correlation.

The more qualified female entrepreneurs are expecting less income loss in 2020 and they also decreased the number of employees to a lesser extent. The higher qualified women were operating their enterprises in sectors less affected by the pandemic and they were more likely to fill positions that could have been transformed to online jobs. In the contrary, the women with intermediate level of education were more likely to be involved in those business activities that necessitates personal presence. The younger the female entrepreneur was, the less income loss they were expecting in 2020. The respondents under 30 years old expected to 23% of income loss on average, while at the other end of the spectrum those responding entrepreneurs over 60 years old were counting with a 35% loss of income. In terms of family structure and the age of the children we did not find any

significant correlation: single women (33%) and single mothers (32%) were expecting the greatest income losses and the couples raising 1-2 children the slightest losses (25%).

6.3. Responses to the crisis

Numerous researches had been conducted in recent years about how the small enterprises react to crisis and how their resilience work out (e.i. Doern et al., 2019, Williams et al 2017, Spillan and Hough 2003). The ability to prepare and have adequate crisis management can be of utmost importance regarding the survival of the enterprise. Even though the preparedness can be a key to resilience (Bullogh et al 2014), it was almost impossible for most enterprises to prepare for something like the COVID-19 pandemic. An adequate crisis management approach however could have helped the quick recovery of the enterprise or even its development. According to the experiences of previous crises, the small enterprises are taking advantage of their flexibility to adapt to the changing circumstances caused by the crisis (Smallbone et al 2012). The small enterprises equipped with „do it yourself” methods try to mobilize all available resources and constantly change their plans in a flexible way in order to improve the opportunities of the enterprise. Unlike bigger companies, small enterprises usually do not realize planned management schemes (Mallak 1998). However, it is important to mention that the crisis caused by COVID-19 pandemic differs considerably from previous crises thanks to the protective measures introduced. The female entrepreneurs responding to our questionnaire also reacted to the effects of the pandemic in many ways.

One-tenths of the responding entrepreneurs did not do anything to mitigate the crisis’ effects. Half of these enterprises were not affected by the crisis at all.

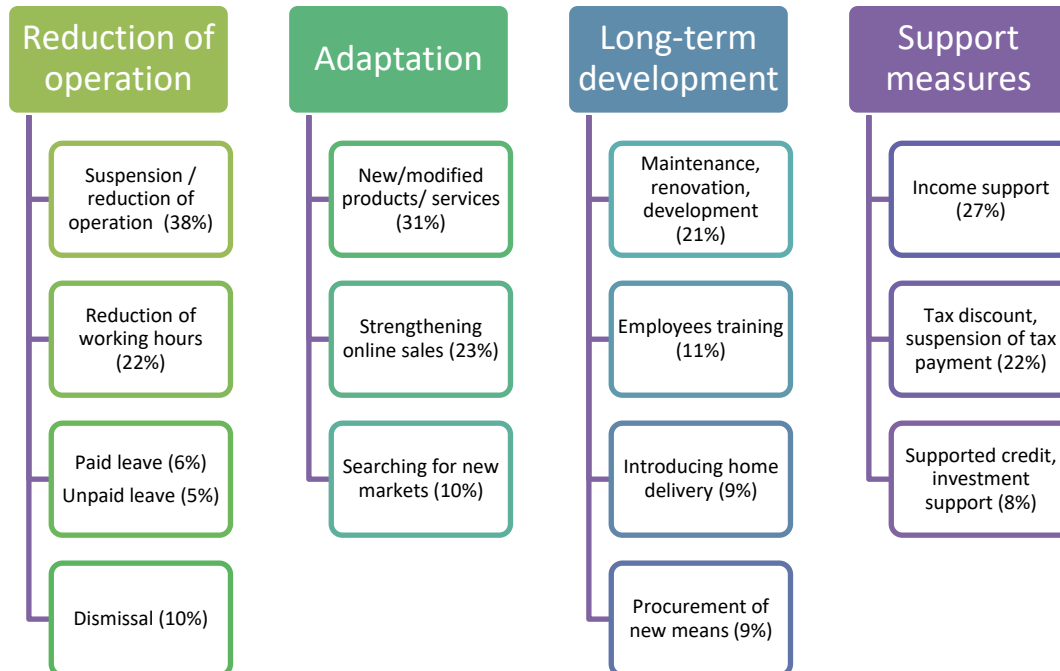
Slightly more than half of the respondents introduced measures to reduce their operation (or introduced them as well as other measures). These measures were primarily the suspension or reduction of the operation (38%). In addition, respondents also reported the decrease of working hours (22%) and paid or unpaid leave (6% and 5%).

Half of the respondents were looking for adaptation strategies. One third of them introduced new products or services, strengthened their existing online sales or looked for new markets.

More than **one-third have started long-term developments to improve the future opportunities of the enterprise.** Such developments were maintenance and development activities during the lock-down or the employees’ training, procurement of new production means or introduction of home delivery.

Besides, more than half of the respondents have had recourse to some kind of support measure. About the support measures we write more in detail in chapter 7.4.

41. figure, Strategies in crisis management



The crisis measures introduced by the enterprises were in significant correlation with how they could overcome the crisis. In order to examine this, we used two indicators. The indicators were the responses to the question „How did the COVID-19 pandemic affect your company?“ and the respondents’ predictions about their expected income in 2020.

The enterprises not affected by the crisis or affected positively were twice as likely to not react in any ways compared to those who experienced the negative effects. Half of the enterprises that did not introduce any measures as a response to the crisis reported that their economic situation improved or did not change during the first wave of the pandemic. They were only expecting 10% of income loss in 2020. Furthermore, the enterprises not affected by the crisis were more likely to improve their business activities and invest in the long-term development. One-third of them used some sort of support measures for that.

The enterprises that had been affected negatively to some extent by the crisis were more likely to reduce their business operation somehow or tried to adapt to the new circumstances in a certain way. Two-thirds of them introduced a reduction measure and the same proportion of them also used support measures.

The enterprises that were obliged to suspend their operation primarily reacted to the crisis with the decrease of production or service provision. One-third of them experimented with new activities during the lock-down and a quarter of them invested in long-term developments.

6.4. The use of support measures

Half of the responding female entrepreneurs did not use any support measures introduced during the pandemic. The rate of female entrepreneurs using support measures was the highest among the Austrian (69%), Serbian (74%) and Andalusian (69%) respondents, and the lowest among the Hungarian and Transylvanian (37% and 39%) respondents.

The countries that are subject of our research tried to mitigate the effects of the pandemic with different set of support measures. In most countries several different support measures were available for the troubled enterprises, but the level of support and conditions differed. These differences could have been significant in enterprises' choice of which and how much support to use. In order to make it comparable between the countries, we classified the varying support measures and created 5 groups.

42. figure, The classification of support measures

Name of groups	Type of support measures
Suspension of loan repayment	Suspension of loan repayment, moratorium
Wage subsidies	Wage subsidy, support for part-time employment, support for R&I workers, Kurzarbeit-type programs, paid leave for people raising young children paid by the state, support of minimum wage for self-employed
Tax discount, suspension	Tax / contribution discount; subsequent payment of taxes and contributions; Suspension payment of Small taxpayers' itemized lump sum tax, local tax discount/suspension, VAT discount
Supported credit, investment aid	Taking reduced loan, investment aid, liquidity loan, state credit guarantee, Venture capital subvention
Other	Other type of support that do not fit in the above categories: such as the female entrepreneurs answers in other sections, lump sum subsidy, "Digital Team Austria", Special support measures for enterprises in the film industry, ОПИК liquidity support

The most popular support measures used by the respondents were the wage subsidies (27%), then the tax discounts, subsequent payment of taxes (22%). It was followed in popularity by the different credit schemes (subsequent payment, supported credit (8%)). The suspension of credit payment had been used by 9% of respondents, but this type of support was not available in all the examined countries, thus its availability and conditions differed the most in the countries. The other type of subsidies not fitting in our categorisation was the most popular among the Austrian respondents, where several sector specific support measure had been initiated (e.g. support for film production) or discretionary monthly lump sum support for SMEs (e.i. Härtefallfonds für EPU&KMU, assistance for the costs). Perhaps the discretionary support measures giving fixed amount of money was easier to access by the

small enterprises or self-employed and needed less administration than the wage subsidies that were popular in other countries.

43. figure, Requested support measures (N=1619)

	Used any support measure	Suspension of loan repayment	Wage subsidy	Tax discount, suspension	Supported credit, investment aid	Other	N
Hungary	37%	13%	8%	22%	2%	2%	363
Transylvania	39%	2%	16%	9%	4%	1%	296
Czechia	64%	19%	16%	49%	4%	12%	80
Bulgaria	39%	12%	22%	1%	4%	18%	84
Serbia	74%	37%	45%	48%	5%	3%	91
Andalusia	66%	7%	48%	19%	15%	8%	558
Austria	86%	0%	7%	46%	8%	77%	147
Total	56%	9%	27%	22%	8%	12%	1619

7. Family responsibilities during the pandemic

Even before the pandemic, dominantly the women had the burden of running the household and care responsibilities (based on time-budget survey of KSH).⁸ As it was highlighted by more articles and analyses (such as Fodor et al., 2020; Worldbank, 2020; Lewis, 2020), in terms of sharing the care responsibilities, these tasks are usually the responsibility of the person with lower salary.

The reconciliation of work and family life was already a permanent task for female entrepreneurs even before the pandemic (Jennings & Brush, 2013). Moreover, many women choose the entrepreneurial life because it gives them the opportunity to reconcile the work and family obligations in a more flexible way (McGowan, Redeker, Cooper, & Greenan, 2011; Singh & Lucas, 2005) – which is especially the case for „mompreneurs” (Duberley & Carrigan, 2012; Ekinsmyth, 2011). At the same time, family responsibilities restrict women in many cases to start or improve their enterprises (Budig, 2006) and this might be the reason for the lower rate of female owners among the fast-growing companies (Coleman, 2007).

The effect of the COVID-19 pandemic increased the amount of tasks to take on by women worldwide. While women had been less affected in respect to health, their tasks concerning care responsibilities increased significantly. Typically, women were those taking care of the children and support them in studying at home. Whereas taking care for old or sick family members was likewise mainly the responsibility of women (Fodor et al., 2020).

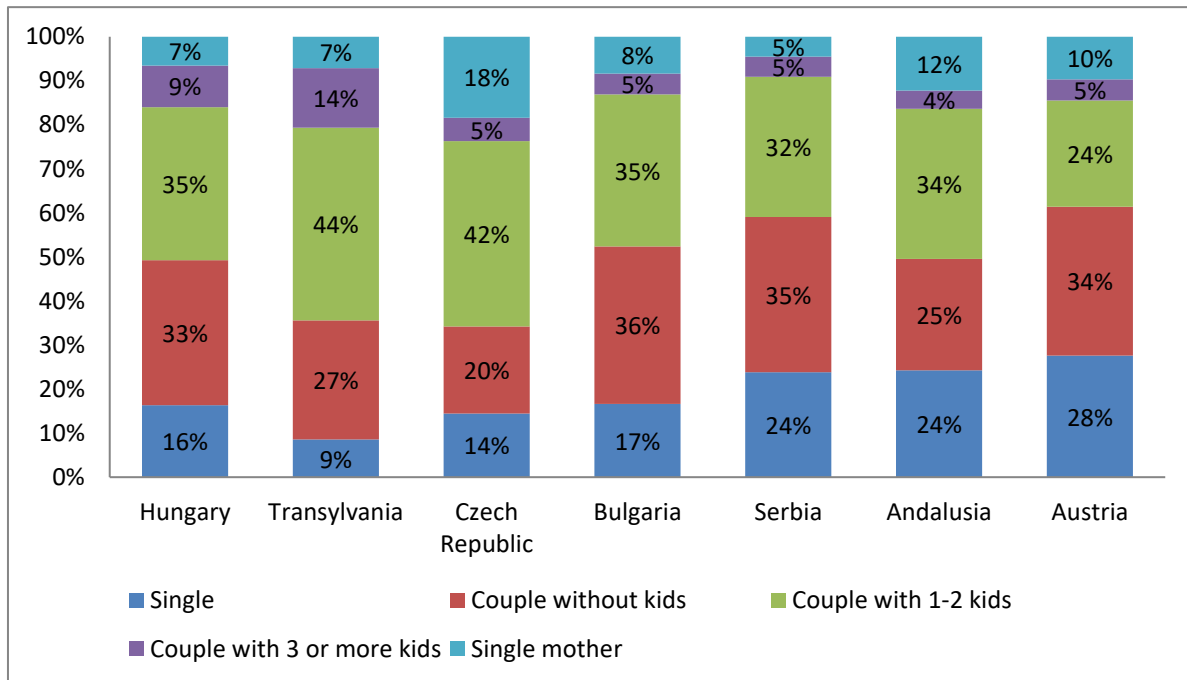
7.1. The share of care duties

In the questionnaire we intended to measure what and how much additional care duties were caused by the measures introduced in connection with the pandemic for female entrepreneurs.

Approximately half of the respondents raised children under 18 years old. 10% of these respondents were raising (also) a child under 7 years old and 42% of them had child between 7-18 years old in the family. 9% of the respondents raised her child/children as a single parent.

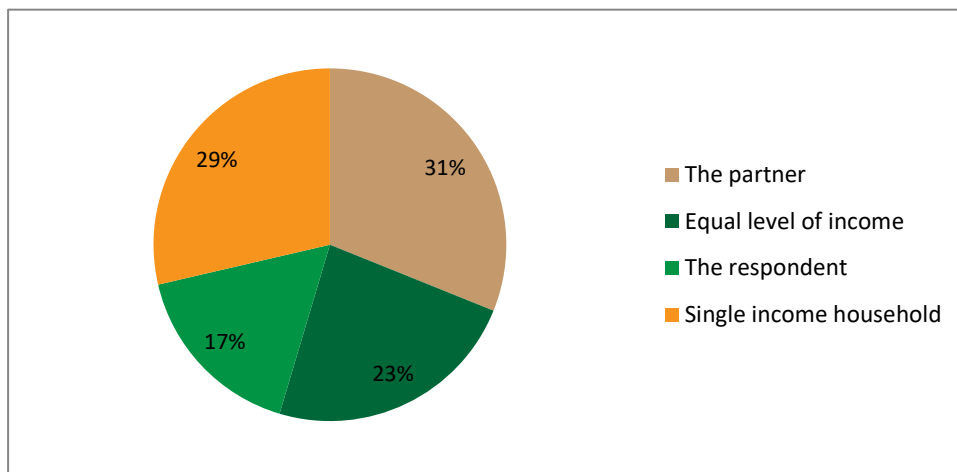
⁸ <https://www.ksh.hu/idofelhasznalas-idomerleg>

44. figure, The family characteristics of respondents (N=1581)



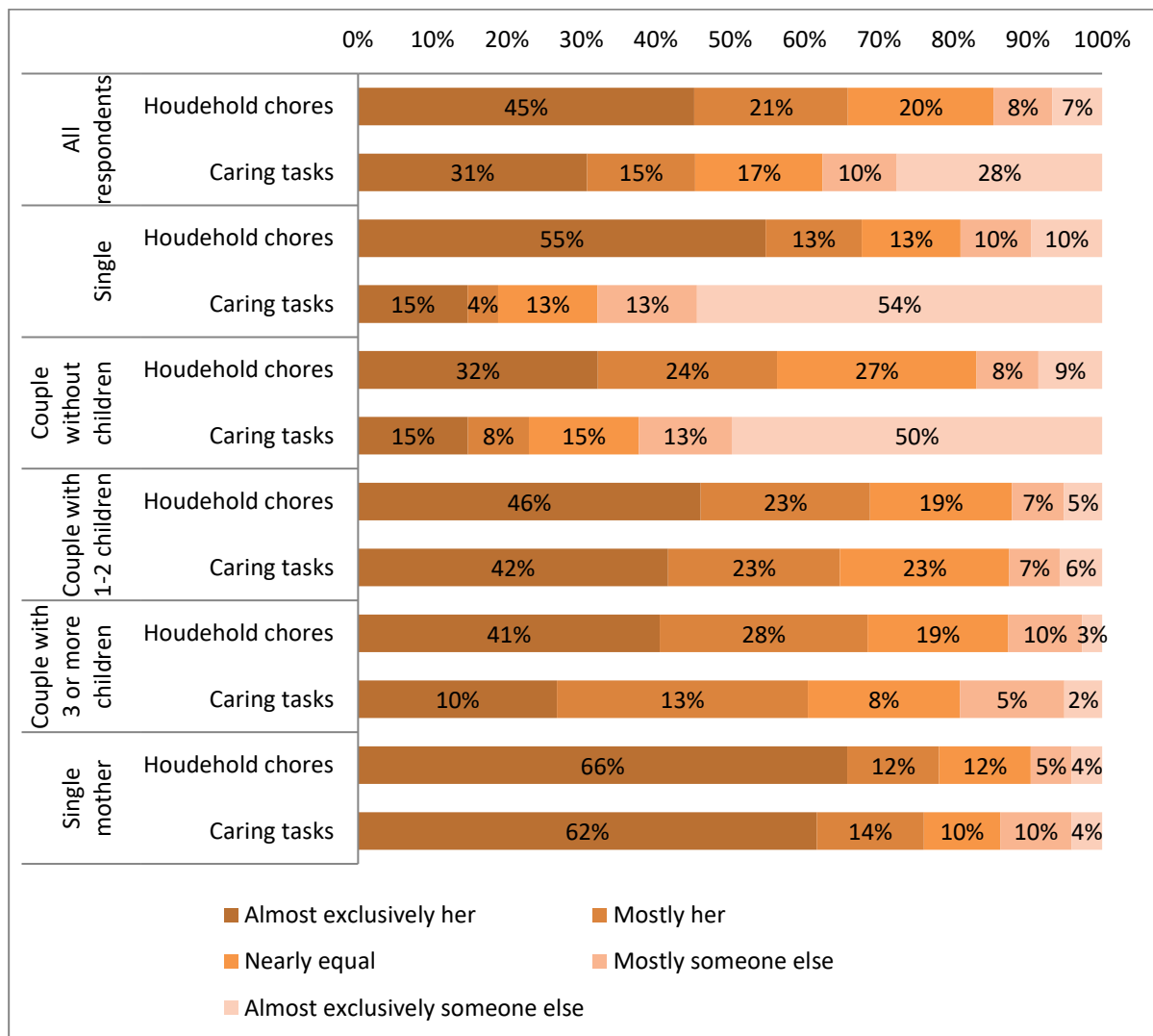
31% of respondents reported that their partner earned more money in their household, 23% of them were having roughly equal income with their partner. 29% of respondents lived in a household with no other earners, while 17% of female entrepreneurs reported that there was another earner in their household but they had earned more money before the pandemic. In 19% of the households, it has changed who the main earner was during the pandemic. In most cases this means that men from the couples with roughly equal salaries became the main earners but in some cases women gave up their position.

45. figure, Who was the main earner in the household before the pandemic? (N=1540)



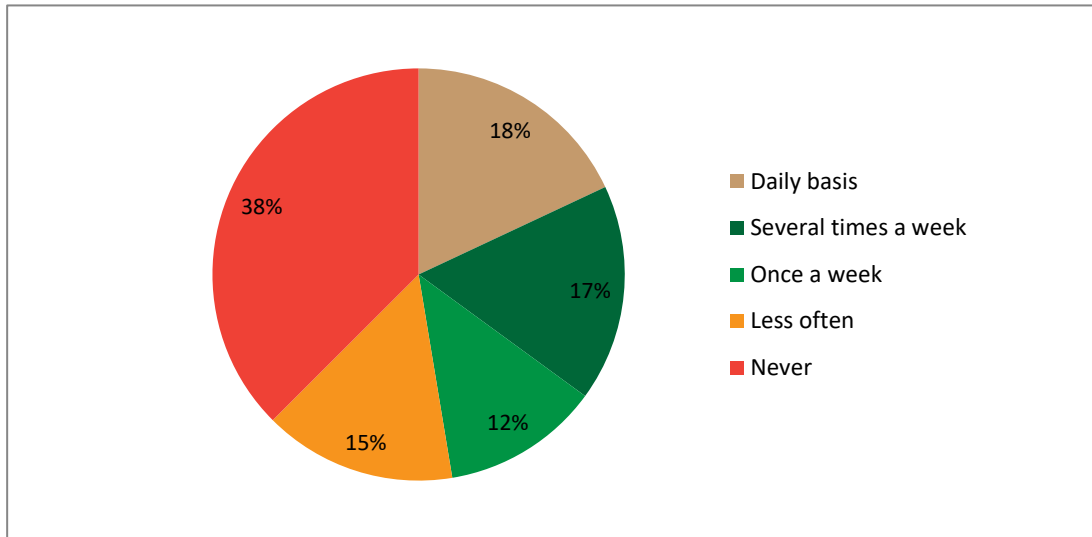
28% of female entrepreneurs could only count on themselves with the caring duties, while 44% of the respondents did the domestic work on their own. Female entrepreneurs raising children also had to take on the caregiving tasks to a proportionately higher extent. Based on these results we can state that the tasks of taking care of children and other relatives had been primarily the burden of women.

46. figure, The share of responsibilities in domestic work and caring in different groups (N=1534)

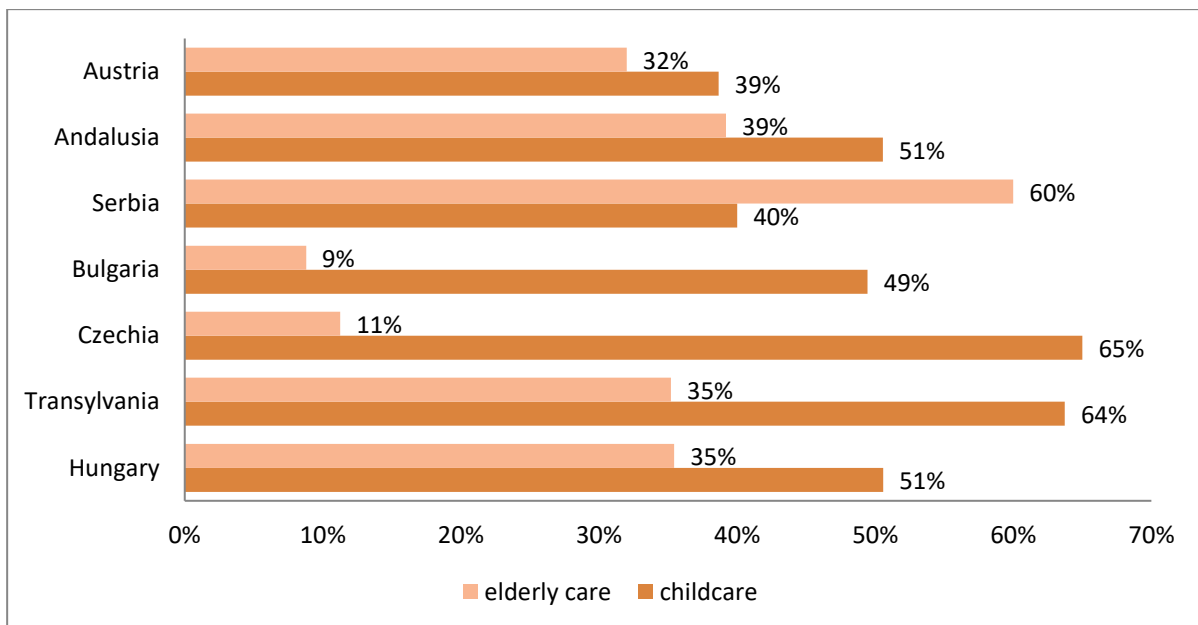


Not only caring for children, but also looking after the elderly or disabled relatives was present in the life of responding female entrepreneurs during the pandemic. Approximately half of them looked after an elderly relative or a relative living with disability who needed their assistance at least once a week, but 15% of these female entrepreneurs had such caring tasks every day, 16% of them had to do it several times a week and 14% had to look after someone once a week during the pandemic.

47. figure, How frequently have you taken care for an elderly or disabled family member, neighbour or friend during the pandemic? (N=1587)



48. figure, The rate of care responsibilities in the different countries

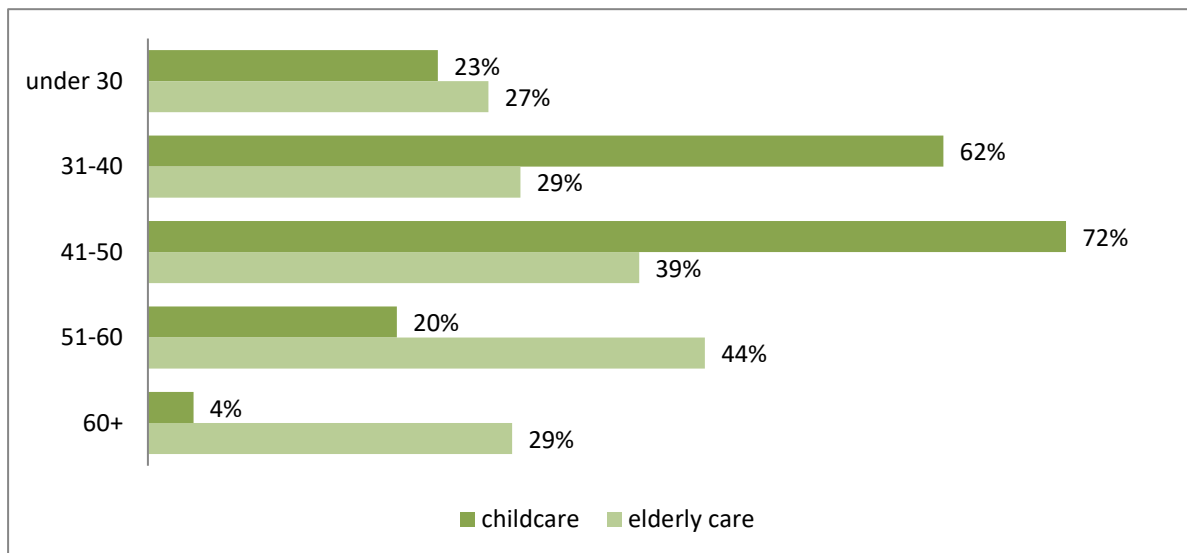


* Respondents caring for an elderly, sick or disabled family member or friend at least several occasions a week

A higher rate of the older respondents had the elderly care responsibility, too (44% of female entrepreneurs between 51-60 years old had caregiving tasks several times a week, and 23% of them had caregiving tasks on a daily basis). This means that as the caring tasks for children decreased with aging the need for elderly care increased. The female entrepreneurs in their 40s were in the most

difficult situation because they reported the highest share of childcare duties (72%) but they also reported a high share of regular elderly care (39%).

49. figure, Caring tasks during the pandemic (N=1591)



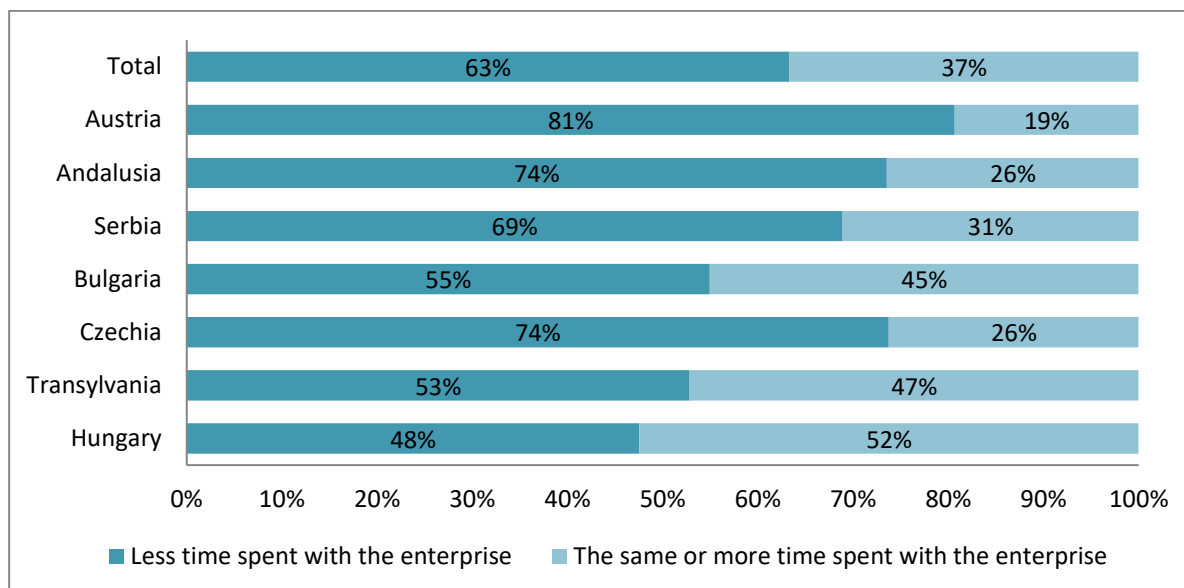
* Respondents caring for an elderly, sick or disabled family member or friend at least several occasions a week

7.2. Varying time schedule

We also asked the respondents of the questionnaire to estimate how much time they spent with their enterprises, domestic work, and caring tasks on an average weekday before the pandemic and after the restrictions had been introduced. When representing the results of the answers, it is important to note that the longer period of time during which the questionnaire was open might have affected the answers to these questions. In the course of time the rate of missing answers increased (as the respondents were more distanced from the restrictions introduced in the first wave of the pandemic) and also the rate of those giving not applicable answers. (We excluded those respondents from the analysis who reported to spend more than 36 hours a day with all these activities). Therefore, in analysing the change of time schedule we only had 1181 answers to examine.

The majority of female entrepreneurs (63%) spent less time with their enterprises during the first wave of the pandemic. The highest rate of those spending less time with their enterprises were among the Austrian, Andalusian and Czech respondents.

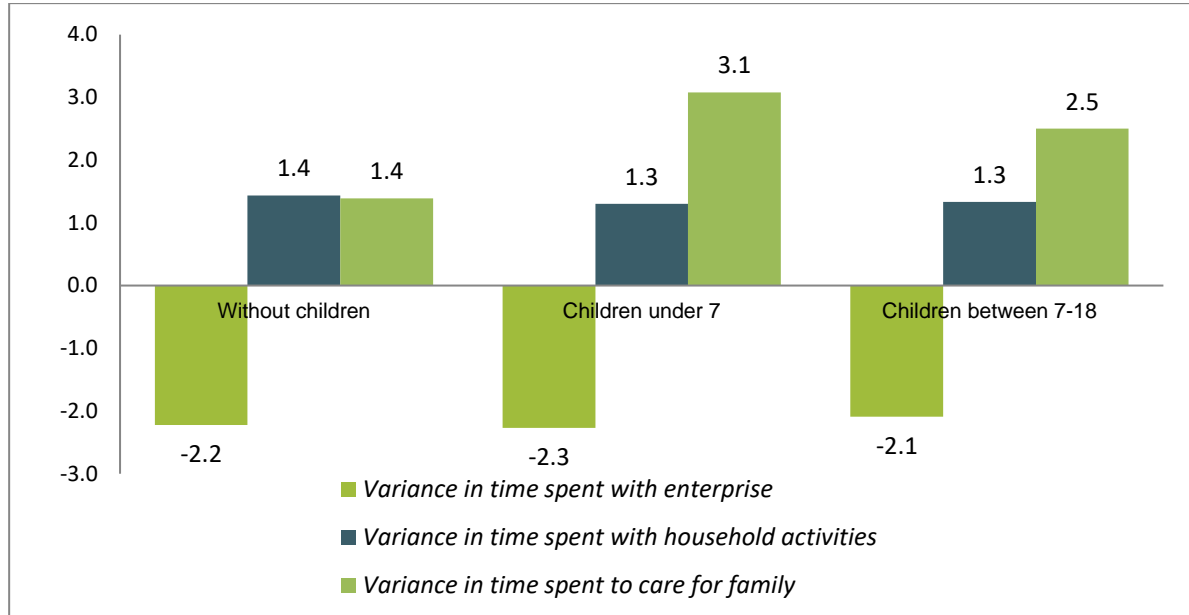
50. figure, The change of time spent with the enterprise



The respondents in total **spent 2 hours less with their enterprise and 2 hours more with caring tasks on an average weekday**. The closure of the nurseries/kindergartens have obviously increased the amount of care responsibilities in case of female entrepreneurs raising a child or children under 18. **On an average weekday the respondents raising also children under 7 years old spent extra 3 hours with taking care of the children compared to an average weekday before the pandemic and they also spent additional 1,5 hours with domestic work. The female entrepreneurs raising children between 7-18 years old spent extra 2,5 hours with childcare.**

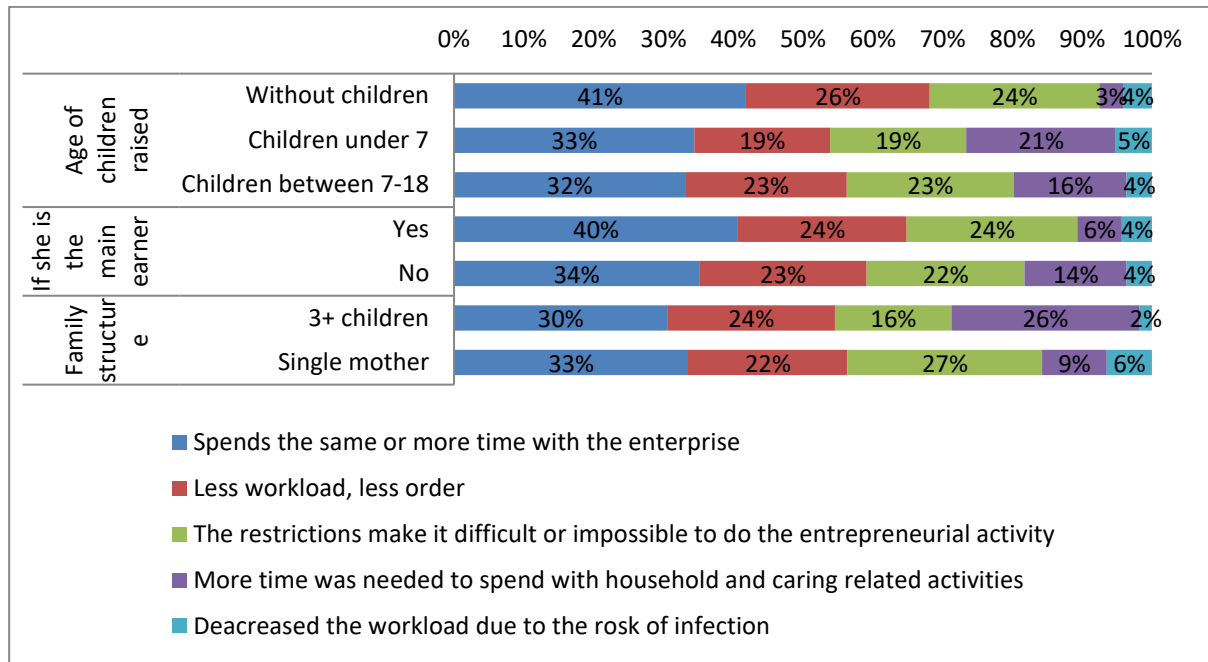
The female entrepreneurs raising children have not necessarily decreased the time spent with their enterprises to a greater extent than their childless counterparts, but they definitely spent more time with household chores and caring activities. **Therefore, the female entrepreneurs with no children under 18 could have used their extra free time to do the domestic work instead of the tasks in the enterprise (caused by the decrease of its operation), whereas the female entrepreneurs raising children under 18 have spent 1,5 hours more time on average with all three activities (which means they had less free time).**

51. figure, The change of time schedule of female entrepreneurs in consequence of the COVID-19 pandemic (N=1184)



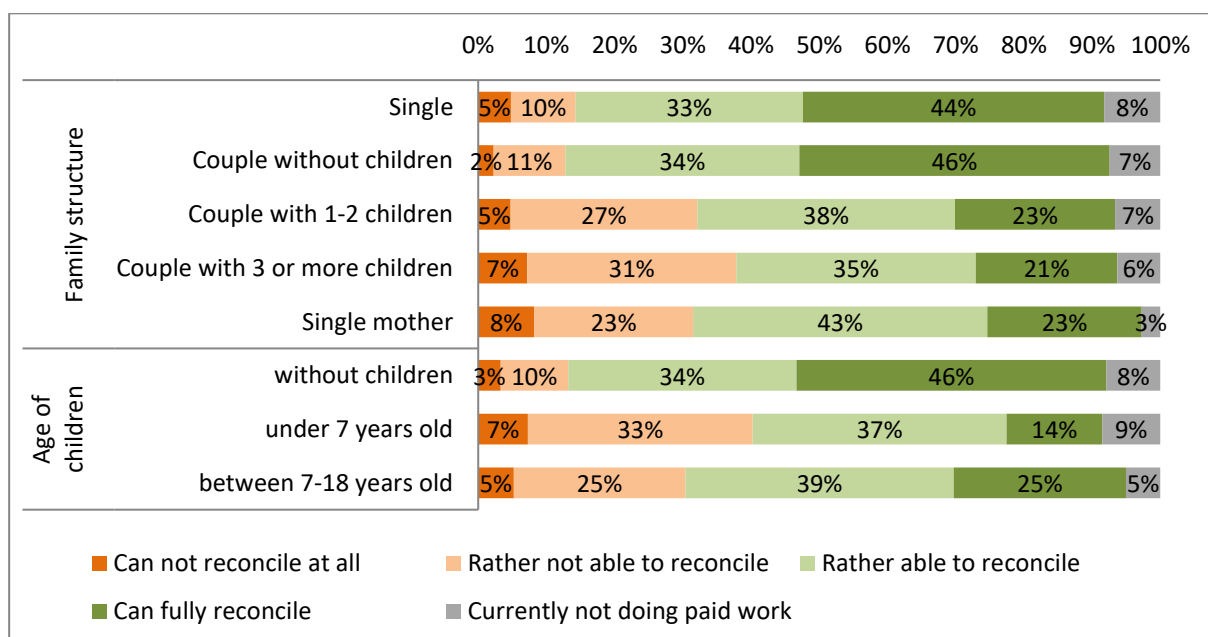
Women raising no children under 18 and those who were main earners were less likely to decrease the time spent with enterprise-related activities. **The main reasons for decreasing the working hours were mainly related to the operation of the enterprise**, 24% of respondents experienced the decline in work load and assignments and 23% of them could not continue their business activities due to the restrictions. **But the female entrepreneurs raising children (also) under 7 years old were seven times more likely to sacrifice their time spent with business related activities in order to care for children and other family members.** Those female entrepreneurs whose partner was the main earner before the pandemic responded twice as often that they did not have enough time for their enterprise due to the caring responsibilities than those who had been the main earner in their household. **Based on these we can state that the female entrepreneurs raising children under 18 and who were not main earners in their household were more likely to put caring responsibilities over their enterprise during the first wave of the pandemic.**

52. figure, What is the main reason for spending less time with the enterprise, if so? (N=1579)



The reconciliation of work and family life, just like prior to the pandemic, was a significant challenge for the female entrepreneurs, but the majority of them (70%) reported that more or less they can manage it. The balancing of the responsibilities of work and family life was the easiest for the couples without children under 18 and the single-person households. On the contrary, it was the hardest for couples with children and those raising children under 18 years old to reconcile the duties and tasks of work and family life.

53. figure, Currently how can you reconcile your work with your family responsibilities? (N=1594)



8. References

- ADAMECZ-VÖLGYI A., SZABÓ-MORVAI Á. (2020):** Kik dolgoznak a frontvonalban? URL: <https://www.mtakti.hu/koronavirus/kik-dolgoznak-a-frontvonalban/13090/>
- ALDRICH, H.E. & FIOLE, C.M. (1994)** Fools rush in? The institutional context of industry creation. *Academy of Management Review*, 19, 645-670.
- BOBÁK F., GEAMBASU R., RADNAI ZS., ZSÁR V. (2017):** Female entrepreneurs – women in enterprises: Motivation, work-life balance, challenges. *HÉTFA Műhelytanulmányok*, 2017/27.
- BUDIG, M. J. (2006).** Gender, Self-Employment, and Earnings: The Interlocking Structures of Family and Professional Status. *Gender & Society*, 20(6), 725-753.
- BULLOUGH A., RENKO M., MYATT T. (2014):** Danger zone entrepreneurs: the importance of resilience and self-efficacy for entrepreneurial intentions. *Enterpren. Theor. Pract.* 2014;38:473–499.
- BURATTI A., CESARONI F., SENTUTI A. (2018):** “Does Gender Matter in Strategies Adopted to Face the Economic Crisis? A Comparison Between Men and Women Entrepreneurs Provisional chapter Does Gender Matter in Strategies Adopted to Face the Economic Crisis? A Comparison Between Men and Women Entrepreneurs”, in Mura, L. (ed.), *Entrepreneurship - Development Tendencies and Empirical Approach*, InTech, Rijeka, <http://dx.doi.org/10.5772/intechopen.70292>.
- COLEMAN, S. (2007).** The Role of Human and Financial Capital in the Profitability and Growth of Women-Owned Small Firms. *Journal of Small Business Management*, 45(3), 303-319.
- De GRUYTER:** We asked 3,000+ Academics how they are coping with COVID-19: This is what we found. URL: https://blog.degruyter.com/we-asked-3000-academics-how-theyre-coping-with-covid-19-this-is-what-we-found/?utm_source=dg_newsletter&utm_medium=email&utm_campaign=cross_authorsurvey_acad_ww&utm_term=AK&utm_content=market_research, 2020. 06.17.
- DE VRIES, N., LIEBREGTS, W. & VAN STEL, A. (2019)** Explaining entrepreneurial performance of solo self-employed from a motivational perspective, *Small Business Economics* <https://link.springer.com/article/10.1007%2Fs11187-019-00244-8>.
- DOERN R., WILLIAMS N., VORLEY T. (2019):** Special issue on entrepreneurship and crises: business as usual? An introduction and review of the literature. *Enterpren. Reg. Dev.* 2019;31:400–412.
- DUBERLEY, J., & CARRIGAN, M. (2012).** The career identities of ‘mumpreneurs’: Women’s experiences of combining enterprise and motherhood. *International Small Business Journal*
- EKINSMYTH, C. (2011).** Challenging the boundaries of entrepreneurship: The spatialities and practices of UK ‘Mumpreneurs’. *Geoforum*, 42(1), 104-114.
- EUROPEAN COMMISSION (2014):** Country Fiche, Women Entrepreneurs in Europe, Hungary. Luxembourg: Publication Office of the European Union, 2014.
- EUROPEAN COMMISSION (2020):** Innovation Finance Advisory: Funding women entrepreneurs - How to empower growth, European Commission 2020

- FODOR É., GREGOR A., KOLTAI J., KOVÁTS E. (2020):** A gyerekek és az idősek gondozása a korona idején. URL: <https://tk.mta.hu/a-gyerekek-es-az-idosek-gondozasa-a-korona-idejen>, 2020. április 29.
- FORBES:** How Women Entrepreneurs Are Navigating The Effects Of COVID-19, <https://www.forbes.com/sites/brittanychambers/2020/03/26/how-women-entrepreneurs-are-navigating-the-effects-of-covid-19/>, 2020. március 26.
- GRACE S WALSH, JAMES A CUNNINGHAM:** Business Failure and Entrepreneurship: Emergence, Evolution and Future Research, Foundations and Trends•R in Entrepreneurship, 2016
- GREGOR A., KOVÁTS E. (2018):** NŐÜGYEK 2018 Társadalmi problémák és megoldási stratégiák, Friedrich-Ebert-Stiftung Budapest, 2018.
- GYARMATI A. (2015):** Nagyszülők és unokák, A nagyszülőktől az unokák felé irányuló gondozási transzferek jellege és változása, Budapesti Corvinus Egyetem Szociológia és Társadalompolitika Intézet Budapest, 2015.
- HELEN LEWIS (2020):** The Coronavirus Is a Disaster for Feminism – The Atlantic. URL: <https://www.theatlantic.com/international/archive/2020/03/feminism-womens-rights-coronavirus-covid19/608302/> 2020. március 19.
- HÉTFA KUTATÓINTÉZET (2019):** VÁLLALKOZÓ CSALÁDANYÁK <http://hetfa.hu/2020/02/05/szakmai-javaslat-a-csaladanyak-vallalkozasalapitasanak-tamogatasara/>
<https://www.bcg.com/press/6june2018-why-women-owned-startups-are-a-better-bet>
- HYYTINEN, A. & RUSKANEN, O.P. (2007)** Time use of the self-employed. *Kyklos*, 60 (1), 105-122.
- ILO MONITOR No.4. (2020):** COVID-19 and the world of work. Fourth edition, Updated estimates and analysis, 17. May 2020.
- JENNINGS, J. E., BRUSH, C. G. (2013):** Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature? *The Academy of Management Annals*, 7(1): 663-715.
- KUCKERTS, A., BRÄNDLE, L., GAUDIG, A., HINDERER, S., REYES, C.A.M., PROCHOTTA, A., STEINBRINK, K.M. & BERGER, E.S.C. (2020)** Startups in time of crisis- A rapid response to the COVID- 19 pandemic. *Journal of Business Venturing Insights*, 13.
- MALLAK L. (1998)** Putting organizational resilience to work. *Ind. Manag.* 1998;40:8–13.
- MASTERCARD (2019):** Mastercard index for women entrepreneurs, 2019.
- MCGOWAN, P., REDEKER, C. L., COOPER, S. Y., & GREENAN, K. (2011).** Female entrepreneurship and the management of business and domestic roles: Motivations, expectations and realities. *Entrepreneurship & Regional Development*, 24(1-2), 53-72.
- MCKINSEY & COMPANY (2018):** Delivering Through Diversity, 2018
- MNB:** A koronavírus vállalati szektorra gyakorolt hatásai. Az mnb vállalati felmérésének eredményei. URL: <https://www.mnb.hu/koronavirus/hirek/az-mnb-koronavirus-jarvany-gazdasagi-hatasait-vizsgalo-vallalati-felmeresenek-eredmenyei>, 2020- április 24.

OECD (2012): Closing the Gender Gap: Act Now, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264179370-en>.

OECD (2020): Women at the core of the fight against COVID-19 crisis, 2020

OECD DEVELOPMENT CENTRE. (2019) Gender, Institutions and Development database (GID-DB) 2019).

OECD/EUROPEAN UNION. (2019) The missing Entrepreneurs 2019: Policies for Inclusive Entrepreneurship, OECD Publishing Paris, <https://dx.doi.org/10.1787/3ed84801-en>.

QUENTIN WODON AND BENEDICTE DE LA BRIERE (2018): The Cost Of Gender Inequality unrealized Potential: The High Cost Of Gender Inequality In Earnings, World Bank 2018

SINGH, R. P., & LUCAS, L. M. (2005). Not Just Domestic Engineers: An Exploratory Study of Homemaker Entrepreneurs. *Entrepreneurship Theory and Practice*, 29(1), 79-90.

SMALLBONE D., DEAKINS D., BATTISTI M., KITCHING J. (2012): Small business responses to a major economic downturn: empirical perspectives from New Zealand and the United Kingdom. *Int. Small Bus. J.* 2012;30:754–777.

SPILLAN J., HOUGH M.(2003): Crisis planning in small businesses: importance, impetus and indifference. *Eur. Manag. J.* 2003;21:398–407.

WILLIAMS T.A., GRUBER D.A., SUTCLIFFE K.M., SHEPHERD D.A., ZHAO E.Y. (2017): Organizational response to adversity: fusing crisis management and resilience research streams. *Acad. Manag. Ann.* 2017;11:733–769.

WOMEN ENTREPRENEURSHIP KNOWLEDGE HUB (2020): The Impact of COVID-19 on Women Entrepreneurs, 2020.

WORLD BANK (2020): Gender dimensions of COVID-19 pandemic, Policy Note, April 2020.

ZIMMERMANN, M.A. & ZEITZ, G.J. (2002) Beyond survival: achieving new venture growth by building legitimacy. *Academy of Management Review*, 27, 414-431.