

# HOW STATE AID DURING THE PANDEMIC AFFECTED BUSINESSES – ENTREPRENEURIAL VIEWS FROM GREECE

Prodromos-Ioannis PRODROMIDIS<sup>1</sup>

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## ABSTRACT

State aid programs employed in several countries to support businesses during the recent coronavirus disease pandemic are coming under examination with an eye to understand if they worked well or not. The paper analyzes the views and assessments of entrepreneurs about the actions of the state aid program put in place in Greece (the program consisted of 28 actions) with respect to: (a) the preservation of jobs, (b) the creation of new jobs, (c) the adjustment of businesses to the pandemic conditions, (d) business continuity during the pandemic, and (e) business resilience. In particular, the paper econometrically estimates the impact of sectoral, regional and other factors and reports the results. It finds that a number of state aid actions are thought to have affected some of the aspects under items (a)-(e) more than other actions did, so perhaps they ought to be considered and employed if similar business support plans are needed in the future.

**Keywords:** State aid; Strategies for increasing business resilience; Business views; CoViD-2019 pandemic; Greece.

## ACKNOWLEDGMENT, DISCLAIMER

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## INTRODUCTION

The recent corona virus disease (CoViD-19) pandemic led many governments to temporarily close major parts of their economies,<sup>2</sup> and to support households, businesses, and individuals adversely affected by the lockdowns and the disruption of the global value chains. These state aid programs have come and are coming under examination with an eye to see which worked well, and which did not work as well, in order to learn more, and use or not use them in case a similar need arises in the future. E.g. by Chaves-Maza and Martel, 2020; Groenewegen et al. 2021; Ambroziak, 2022; Bertschek et al., 2024; and the sources cited therein.

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<sup>1</sup> Centre for Planning and Economic Research - KEPE

<sup>2</sup> Thus, they delayed the spread of the pandemic and alleviated its impact on healthcare systems and public health while vaccines were developed.

The paper contributes to this fledging literature by analyzing the views of business owners and managers in Greece about the impact of 28 government initiatives intended to support entrepreneurship during the pandemic on:

- I. the preservation of jobs,
- II. the creation of jobs (i.e., new jobs),
- III. the adjustment of firms to the pandemic conditions (i.e., to the restrictions that were put in place to deal with the pandemic, to the new habits of customers or the requirements of suppliers etc.),
- IV. business continuity during the pandemic, and
- V. business resilience (i.e., the smooth transition of firms to the post-pandemic era, and their preparation for future challenges, such as hazard controls, lockdowns etc.).

It is organized as follows: Section 2 engages in a brief literature review. Section 3 acquaints the reader with the state actions employed to support entrepreneurship during the pandemic in Greece. Section 4 provides the research methodology. Section 5 describes the survey and the sample. Section 6 presents the empirical results. Section 7 provides the conclusions.

## **LITERATURE REVIEW**

The international literature explores the impact of state support toward businesses during the pandemic by focusing on different aspects and also using existing (available) or new statistical datasets. For instance, Granja et al. (2022) analyze available US business data and find that the firm-based fiscal policy program set up by the government to prevent job losses in order to provide liquidity to small and medium sized enterprises (SMEs) produced relatively small short- and medium-term employment effects compared to the program's size. Belghitar et al. (2022) analyze available UK data regarding SMEs and find that the government support scheme reduced the number of SMEs with negative earnings, extended the residual life of SMEs with negative earnings, and reduced the number of jobs at risk. Jansen and Radulescu (2022) analyze World Bank data regarding businesses in a number of southern and eastern European countries and find that state aid in the form of deferral of payments was associated fewer layoffs per firm in the surveyed enterprises compared to other types of support. Block et al. (2022) solicit micro-business and self-employed information via an online-survey, compare the cases of those who applied for and received state aid in Germany, and find that the subjective survival probability of the recipients increased modestly.

## **STATE AID ACTIONS**

In the case of Greece the state aid actions carried out were funded by the EU, were in line with EU state aid rules, and consisted of:

- Refundable cash advances, i.e., tax-free aid granted to private companies (regardless of sector) that were financially affected by the outbreak and spread of the pandemic. The advances were repaid, in whole or in part, under specific terms and conditions, and were not offset against any debt.
- Actions taken via the country's thirteen regional programs, namely, for Attica, Central Greece, Central Macedonia, Crete, East Macedonia and Western Thrace, Epiros, the Ionian islands, the North Aegean islands, the South Aegean islands, the south, central, and eastern (SCE) Peloponnese, Thessaly, Western Greece, and West Macedonia.
- Eight sectoral actions, in the form of subsidies to retail businesses; subsidies to existing gym and playground businesses; subsidies to entertainment businesses, event and

exhibition or event catering businesses or gym and dance school services; subsidies to self-employed lawyers; liquidity support subsidies to tourism firms; liquidity support subsidies to catering firms; working capital loans to construction firms; measures taken in the context of the programs for fisheries and the sea.

- Six other actions regarding interest payment subsidies on existing loans; working capital loans with interest rate subsidies for up to two years; business loan guarantees; initiatives of the micro-small-and-medium size enterprises fund; support for start-ups; measures taken in the context of the program for human resource development, education and lifelong learning.

Several of these were repeated, i.e., were carried out in two or more cycles.

## **RESEARCH METHODOLOGY**

While each of the five aspects mentioned in the Introduction may be proxied and analyzed in a number of ways, a straightforward way is through the views of business people. The absence of available data creates the need to: (a) conduct a survey in which businessmen and businesswomen's views are solicited via easy to quantify, structured interviews and questionnaires, and (b) econometrically analyze these views in order to estimate the impact of the various factors involved. The most widely used approach to scale responses in research surveys is the Likert scale; and if the views regarding each of the five aspects of state aid actions (I-V) are expressed on a Likert scale, then the Ordered Probit (OP) model provides an appropriate setting to empirically analyze these views as it preserves the ordering of the responses, while making no assumptions of the interval distances between them (Liddell and Kruschke, 2018).

## **THE SURVEY, THE SAMPLE AND THE INTERVIEWS**

The views analyzed hereinafter regarding actions I-V were solicited from a sample of 3,526 entrepreneurs (business owners or managers) across Greece from all sorts of organizations (mostly businesses, see Table 1) and industries (see Table 2) via a field survey that was carried out in the spring and summer of 2023 by the Patras-based *Data Consultants* for the Greek Ministry of the National Economy and Finance. The survey reached businesses whose applications for government support were accepted, businesses whose applications were rejected, businesses with both successful and unsuccessful applications, and businesses that did not apply for government support.

The responses (the views) were expressed on a Likert scale as follows: disagree (1), rather disagree (2), neither disagree nor agree (3), rather agree (4), agree (5) that the action in question (each and every aid the organization applied for):

- contributed to the achievement of this or that objective, namely, of aspects I-V (in the cases that the aid was approved) and
- would have contributed to the achievement of this or that objective, namely, of aspects I-V (in the remaining cases).

Of the sample's 3,526 businesses:

- 791 applied for support only once: either in a single-cycle action or in one cycle of a multi-cycle action. The applications were approved, and each owner or manager reported in the field survey his or her view about the impact of the specific support on his or her business.

- 1,049 applied for support in two or more cases (single-cycle actions or cycles of multi-cycle actions) via 3,179 applications. The applications were approved, and each owner or manager reported in the field survey his or her view about the impact of each support on his or her business.

**Table 1:** Composition of the sampled organizations

Domestic owned	99.5%	Autonomous	97.9%
Foreign owned	0.5%	Other (financially partnered, linked)	2.1%
		Operating w. franchise agreement	16.9%
Unincorporated personal businesses	52.6%	Established less than a year ago	0.1%
General partnerships	18.8%	Established 1-10 years ago	29.8%
Public limited companies	10.3%	Established 11-20 years ago	24.3%
Private companies	7.5 %	Established 21-30 years ago	20.9%
Limited partnerships	5.7 %	Established 31-40 years ago	15.5%
Limited liability companies	3.3 %	Established 41-50 years ago	5.5%
Non-profit organizations	0.5 %	Established 51-60 years ago	1.8%
Other organizations *	1.3 %	Established 61-70 years ago	1.3%
		Established 71 or more years ago	0.8%
Located in Attica	21.9%	Located in East Macedonia and Western Thrace	6.3%
Located in Central Macedonia	11.4%	Located in Western Greece	6.0%
Located in Crete	7.7%	Located in the South Aegean islands	5,0%
Located in Central Greece	7.7%	Located in Epiros	4.5%
Located in West Macedonia	7.6%	Located in the Ionian islands	4.0%
Located in the south, central, and eastern Peloponnese	7.4%	Located in the North Aegean islands	3.4%
Located in Thessaly	7.2%		

\* Cooperatives, joint ventures, social cooperative enterprises, legal entities established under private law, associations of persons, law firms, shipping companies for recreational craft, unions, institutes, societies, endowments etc.

- 66 applied for support only once. The applications were not approved, and each owner or manager reported in the field survey his or her view regarding the impact the support would have on his or her business.

**Table 2:** The taxonomy of 20 sectors and 85 sub-sectors (industries) of economic activity (NACE Rev. 2)

- A. Agriculture, forestry & fishing:** Crop & animal production, hunting, related service activities (01). Forestry & logging (02). Fishing & aquaculture (03).
- B. Mining & quarrying:** Mining of coal & lignite (05). Extraction of crude petroleum & natural gas (06). Mining of metal ores (07). Other mining & quarrying (08). Mining support service activities (09).
- C. Manufacturing:** Manufacture of food products (10). Manufacture of beverages (11). Manufacture of tobacco products (12). Manufacture of textiles (13). Manufacture of wearing apparel (14). Manufacture of leather & related products (15). Manufacture of wood, products of wood & cork (except furniture), articles of straw, plaiting materials (16). Manufacture of paper & paper products (17). Printing & reproduction of recorded media (18). Manufacture of coke & refined petroleum products (19). Manufacture of chemicals & chemical products (20). Manufacture of basic pharmaceutical products & pharmaceutical preparations (21). Manufacture of rubber & plastic products (22). Manufacture of other non-metallic mineral products (23). Manufacture of basic metals (24). Manufacture of fabricated metal products, except machinery & equipment (25). Manufacture of computer, electronic & optical products (26). Manufacture of electrical equipment (27). Manufacture of machinery & equipment not elsewhere classified (28). Manufacture of motor vehicles, trailers & semitrailers (29). Manufacture of other transport equipment (30). Manufacture of furniture (31). Other manufacturing (32). Repair & installation of machinery & equipment (33).
- D. Electricity, gas, steam & air conditioning supply:** (35).
- E. Water supply, sewerage, waste management & remediation activities:** Water collection, treatment & supply (36). Sewerage (37). Waste collection, treatment & disposal activities, recovery of materials (38). Remediation activities & other waste management services (39).
- F. Construction:** Construction of buildings (41). Civil engineering (42). Specialized construction activities (43).
- G. Wholesale, retail trade & repair of motor vehicles & motorcycles:** Wholesale, retail trade & repair of motor vehicles & motorcycles (45). Wholesale trade, except of motor vehicles & motorcycles (46). Retail trade, except of motor vehicles & motorcycles (47).
- H. Transportation & storage:** Land transport & transport via pipelines (49). Water transport (50). Air transport (51). Warehousing & support activities for transportation (52). Postal & courier activities (53).
- I. Accommodation and food service activities:** Accommodation (55). Food & beverage service activities (56).
- J. Information & communication:** Publishing activities (58). Motion picture, video and television program production, sound recording and music publishing activities (59). Broadcasting programming & activities (60). Telecommunications (61). Computer programming, consultancy & related activities (62). Information service activities (63).
- K. Financial & insurance activities:** Financial service activities, except insurance & pension funding (64). Insurance, reinsurance & pension funding, except compulsory social security (65). Activities auxiliary to financial services & insurance activities (66).
- L. Real estate activities:** (68).
- M. Professional, scientific & technical activities:** Legal & accounting activities (69). Activities of head offices, management consultancy activities (70). Architectural & engineering activities, technical testing & analysis (71). Scientific research & development (72). Advertising & market research (73). Other professional, scientific & technical activities (74). Veterinary activities (75).

Table 2 (continued)

N. Administrative & support service activities: Rental & leasing activities (77). Employment activities (78). Travel agency, tour operator reservation service & related activities (79). Security & investigation activities (80). Services to buildings & landscape activities (81). Office administrative, office support & other business support activities (82).

O. Public administration & defense, compulsory social security: (84).

P. Education: (85).

Q. Human health & social work activities: Human health activities (86). Residential care activities (87). Social work activities without accommodation (88).

R. Arts, entertainment & recreation: Creative, arts & entertainment activities (90). Libraries, archives, museums, other cultural activities (91). Gambling & betting activities (92). Sports activities & amusement & recreation activities (93).

S. Other service activities: Activities of membership organizations (94). Repair of computers & personal and household goods (95). Other personal service activities (96).

T. Activities of households as employers of domestic personnel: (97).

- 64 applied for support in two or more cases via 206 applications. The applications were not approved, and each owner or manager reported in the field survey his or her view regarding the impact each support would have on his or her business.
- 214 applied for support in two or more cases via 852 applications. Some applications were approved while others were not approved, and each owner or manager reported in the field survey his or her view regarding both the impact that each type received support had on his or her business, and the impact that each type of unreceived support would have on his or her business.
- 1,342 did not apply for support. However, the owners or managers of 1,088 of these businesses reported in the field survey their views regarding the overall impact of the government's program that aimed to support entrepreneurship.

Most of the (791+3,179 + 66 + 206 + 852 + 1088 =) 6,182 responses feature no omission in all five aspects under consideration (I-V), so the analysis may be performed with 6,154, 6,159, 6,146, 6,139, and 6,131 observations, respectively. And if the sample is weighted at the regional and sectoral level in order to accurately represent the population as per the Statistical Business Register of the Hellenic Statistical Authority at the beginning of the pandemic,<sup>3</sup> then an alternative analysis may be performed with 6,151, 6,156, 6,142, 6,135, and 6,127 observations, respectively.<sup>4</sup>

In the course of the interviews, a number of respondents did not know (or did not relate) the number of workers employed and/or the company turnover; and/or mentioned but could not tell with certainty whether their business had been involved (approved or rejected) in other

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<sup>3</sup> The distribution in terms of sectors is 37.9% in sector A, 16.3% in sector G, 9.8% in sector M, 7.8% in sector I, 4.4% in sector F, 4.3% in sector H, 4.1% in each sector C and Q equally, 2.9% in sector S, 1.5% in each sector N, P, R, equally,

1.2% in each sector J and K, equally, 1.2% in sector K, 0.7% in sector L, 0.6% in sector D, 0.1% in sector E, 0.0% in sector B; and in terms of regions 25.0% in Attica, 16.5% in Central Macedonia, 9.7% in Crete, 8.0% in the south, central, and eastern Peloponnese, 7.9% in Thessaly, 6.9% in Western Greece, 6.1% in East Macedonia and Western Thrace, 5.3% in Central Greece, 3.5% in the North Aegean islands, 3.2% in Epiros, 2.7% equally in the Ionian islands and in West Macedonia, and 2.4% in the South Aegean islands.

<sup>4</sup> Two responders, one wholesaler located in the monastic community of Mount Athos (an autonomous region with its own sovereignty within Greece and the European Union) who filed no application, along with a household not engaging in market-oriented production that filed three applications were not weighted and excluded.

programs.<sup>5</sup> So, in the analysis that follows an attempt is made to add these heterogeneity features so as to isolate their impact from the overall evaluation of government policy.

## EMPIRICAL ANALYSIS AND FINDINGS

The empirical analysis involves 184 explanatory variables in the case of the unweighted sample and 121 explanatory variables in the case of the weighted sample,<sup>6</sup> so the observations-to-regressors ratio ranges between 1.9 and 3.0%. The econometric regression results are provided in the Appendix.<sup>7</sup>

The positive or negative results associated with coefficients that are statistically significantly different from zero with a probability of error (p-value) less than 1% reveal:

- Positive effects (capturing mostly positive entrepreneurial views) in industries 07, 38-39, 45-46, 53, 55, 58, 61, 69, and sectors G, M and S, and a negative effect (capturing mostly negative entrepreneurial views) in industry 12 regarding the role of state aid in the preservations of jobs (aspect I). Positive effects in industries 07, 47, 69, 71, 97, and a negative effect in industry 12 regarding the role of state aid in the creation of jobs (aspect II). Positive effects in industries 07, 46-47, 55, 62, 69, 71, 74, 77, 95, and sectors G, M, S, and negative effects in industry 12 and sector E regarding the role of state aid in firm adjustment to the pandemic conditions (aspect III). Positive effects in industries 03, 07, 39, 80, and negative effects in industry 97 and sector L regarding the role of state aid in business continuity during the pandemic (aspect IV). Positive effects in industries 07, 53, 80, and a negative effect in industry 03 regarding the role of state aid in business resilience (V).
- A number of additional effects in both the weighted and unweighted OP analysis listed in Table 3.<sup>8</sup> These are discussed below.

Under *item A*, the first line relates the impact of a subsidy paid to a retail business. The negative sign in the first column suggests that, on average, entrepreneurs who received the particular type of support were less likely than the rest to view the support as something that contributed to the preservation of jobs. The second line relates the impact of support supplied via the regional program for the South Aegean islands, and via the program for fisheries and the sea. The positive sign in the first column suggests that, on average, entrepreneurs who received the particular types of support were more likely than the rest to view the support as something that contributed to the preservation of jobs. Likewise, the next five lines suggest that, on average, entrepreneurs who received: (a) A refundable cash advance were less likely than the rest to view the particular support as something that contributed to the creation of new jobs. (b) Support via the regional program for Attica and/or liquidity support for their tourism business were more likely than the rest to view the particular support as something that contributed to

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<sup>5</sup> Programs involving accounting services subsidies, interest rate subsidies, special purpose indemnities, loan guarantees, support for digitalization, support to purchase equipment, support to improve competitiveness or some other aspect.

<sup>6</sup> As the number of sectors is smaller than the number of industries.

<sup>7</sup> A linear variant of the specification, namely an ordinary least squares (OLS) regression, is run in order to provide a measure that proxies the widely used measure of a model's fitness: The R<sup>2</sup> ranges between 8.2 and 13.1%. Even though the two approaches are not expected to yield identical results in terms of coefficients and p-values, we report that all coefficients that are statistically significant (featuring a p-value < 1%) in the OP analysis share the same sign in the OLS analysis.

<sup>8</sup> The age, domestic/foreign ownership, autonomy/dependence and franchise effects are not among them.

business continuity during the pandemic. (c) An interest payment subsidy on existing loans were less likely than the rest to view the particular support as something that contributed to business continuity during the pandemic. (d) A subsidy for their personal law firm were more likely than the rest to view the particular support as something that contributed to the firm's adjustment to the pandemic conditions and to its resilience. (e) Support for their start-up were more likely than the rest to view the particular support as something that contributed to the preservation of jobs, to business continuity during the pandemic and resilience, and were less likely than the rest to view the particular support as something that contributed to the creation of new jobs and to the firm's adjustment to the pandemic conditions.

The findings under *item B* suggest that entrepreneurs whose applications for support was rejected, on average, had the view that the particular support: (i) Supplied via the program for human resource development etc. could had contributed to the preservation of jobs. (ii) Supplied via the regional program for Western Greece could had contributed to the creation of jobs. (iii) Supplied via the regional program for Western Macedonia could had contributed to both the preservation and creation of jobs. (iv) Supplied via the regional program for the South Aegean islands could had contributed to the preservation and creation of jobs and the adjustment and continuity of business during the pandemic. (v) In the form of a subsidy to entrainment businesses etc. could had contributed to business resilience. (vi) Supplied via the regional programs for Central Greece and the Ionian islands, as well as in the form of a subsidy to their personal law firm could had contributed to all five aspects. (vii) In the form of a liquidity support subsidy to their catering business could had contributed to the preservation and creation of jobs, and to business continuity during the pandemic, but would not had contributed to business resilience. (viii) In the form of a working capital loan with an interest rate subsidy up to two years could had contributed to their firm's adjustment to the pandemic conditions, continuity during the pandemic and to its resilience, but would not had contributed to the preservation and creation of jobs. (ix) In the form of a business loan guarantee would not had contributed to business adjustment and continuity during the pandemic. (x) In the form of support to their start-up would not had contributed towards all five aspects.<sup>9</sup> On the other hand, the findings under items (i)-(vi) suggest that if more resources were available and directed via the said actions to people whose applications were rejected, they might had been beneficial. Interestingly, the people who benefited from a subsidy to their personal law firm or from the regional program for the South Aegean generally found the support useful in fewer aspects compared to applicants who applied for but did not receive the said support.

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<sup>9</sup> This begs the question is which other aspect they thought the particular support (a support they applied for) would help.

**Table 3:** Factors that appear to exert a positive or negative effect on the business views solicited in 2023 regarding the impact of state aid on the preservation of jobs (I), the creation of jobs (II), the adjustment of firms to the pandemic conditions (III), business continuity during the pandemic (IV), and business resilience (V) as per the statistically significant results (p-values < 1%) of both the unweighted and the weighted ordered probit analyses

The responder's organization	I	II	III	IV	V
<i>Did not apply for support</i> (reference)					
<i>A. Received support via</i>					
1. A subsidy to a retail business	–				
2. The regional program for the S. Aegean; The program for fisheries etc.	+				
3. A refundable cash advance		–			
4. The regional program for Attica; A liquidity support subsidy to a tour. firm				+	
5. An interest payment subsidy on existing loans				–	
6. A subsidy to a self-employed lawyer			+		+
7. A support for a start-up	+	–	–	+	+
<i>B. Was refused support via</i>					
1. The program for human resources etc.	+				
2. The regional program for Western Greece		+			
3. The regional program for Western Macedonia	+	+			
4. The regional program for the South Aegean islands	+	+	+	+	
5. A subsidy to an entertainment or an event business etc.					+
6. The regional programs for C. Greece and the Ionian islands; A subsidy to a self-employed lawyer	+	+	+	+	+
7. A liquidity support subsidy to a catering firm	+	+		+	–
8. A working capital loan with an interest rate subsidy up to two years	–	–	+	+	+
9. A business loan guarantee			–	–	
10. A support for a start-up	–	–	–	–	–
<i>C. Also received support via a number of</i>					
1. Refundable cash advances	+	–			
2. Sectoral and other actions (not via the regional programs)			+	+	
<i>D. Was also refused support via a number of</i>					
Regional program actions				–	
<i>E. Type of business</i>					
1. Unincorporated personal business (reference)					
2. General partnership; Limited partnership; Private capital company	+				
3. Public limited company	+			+	+
4. Union			–		
5. Law firm					–
6. Association of persons	–	–	+	+	–
7. Society	–			–	–
8. Endowment	–	–	–	–	–
<i>F. Respondent heterogeneity: The respondent reports little about additional aid</i>					
1. Regarding loan guarantees	+		+		+
2. Regarding an interest rate subsidy					–
3. Regarding equipment purchases	–	–			–

**Source:** Appendix.

The findings under *item C* capture a supplementary impact that the various types of support were viewed to have on other types of state aid. Indeed, it turns out that businesspeople who: (a) Received multiple refundable cash advances at different cycles, on average were more likely

to view another aid discussed in the interview as contributing to the preservation of jobs, and less likely to view another aid discussed in the interview as contributing to the creation of jobs. (b) Received multiple support from other, non-regional programs were more likely to view another aid discussed in the interview as contributing to the firm's adjustment to the pandemic conditions and continuity during the pandemic. By contrast, the finding under *item D* suggests that businesspeople who received multiple support rejections from the regional programs on average were more likely to view another aid discussed in the interview as not contributing to business continuity during the pandemic.

The findings under *item E* suggest that, on average, entrepreneurs in: (i) General and limited partnerships and private capital companies were of the opinion more than others that state aid advanced the preservation of jobs. (ii) Public limited companies were of the opinion more than others that state aid advanced the preservation of jobs, business continuity during the pandemic and business resilience. (iii) Unions were of the opinion more than others that state aid did not advance their organizations' adjustment to the pandemic conditions. (iv) Personal law firms were of the opinion more than others that state aid did not advance their resilience. (v) An association of persons were of the opinion that state aid advanced their firm's adjustment to the pandemic conditions and continuity during the pandemic but did not advance the preservation and creation of jobs and business resilience in the post pandemic era. (The association applied and received support.) (vi) A society were of the opinion that state aid did not advance the preservation of jobs, business continuity during the pandemic, and resilience in the post-pandemic era. (The society had applied and received support.) (vii) An endowment were of the opinion that state aid did not advance either of the five aspects. (Quite consistently, the organization did not apply for support.)

The findings under *item F* suggest that entrepreneurs who seemed to relate little about what happened to their: (a) Loan guarantee applications were more likely than the rest to view state aid as contributing to the preservation of jobs and to the firm's adjustment to the pandemic conditions and resilience. (b) Interest rate subsidy applications were less likely than the rest to view state aid as contributing to business resilience. (c) Equipment purchase applications were less likely than the rest to view state aid as contributing to the preservation and creation of jobs and to business resilience.

## CONCLUSIONS

The paper empirically analyzes the views of entrepreneurs that were solicited via a survey during 2023 in Greece, about the impact of certain governmental actions aimed to support entrepreneurship in the course of the CoViD-19 pandemic. In particular, it looks into the responses of entrepreneurs who benefited from state aid and the responses of entrepreneurs who did not benefit from state aid; and considers the impact of the various state aid actions, as well as the impact of regional, and other features. It finds statistically significant variation depending on: (a) the sector or industry and the type (legal form) of the organization, (b) whether a business was supported by particular forms of state aid or not, and (c) depending on whether the business was supported by other (additional) state aid. Thus, the paper provides interesting insights that may be useful in the formulation of a theory or a policy-toolkit on the effectiveness or perceived effectiveness of measures aiming to support entrepreneurship at times of crisis.

It turns out that according to the said views, state aid supplied during the pandemic via the regional program for the South Aegean islands, the program for fisheries and the sea, and for start-ups, may have affected (or is perceived as having affected) the preservation of jobs more than other state aid actions did. (To some extent the finding may be in line with both the small

employment effects of the government support program reported in the case of the US, and the reduction in the number of jobs at risk affected by the government's support schemes found in the case of the UK. However, it highlights that some support schemes may have been more effective than others.)

Likewise, the subsidy to self-employed lawyers may have affected the adjustment of their businesses to the pandemic conditions more than other state aid actions did. State aid supplied via the regional program for Attica, and for start-ups, along with the liquidity support subsidy to the tourism sector, may have affected firm continuity during the pandemic more than other state aid actions did. And the subsidy to self-employed lawyers along with the support for start-ups may have affected business resilience more than other state aid actions did. (These findings are in line with the extension of business lives affected by the government's support schemes reported in the UK, and the modest increase in the subjective survival probability of the state aid recipients reported in Germany. However, they also suggest that some support schemes may have been more effective than others.) To the extent they were perceived as more suited to the said aspects, their contents and features ought to be considered and employed in future business support programs in case of need (e.g., natural disasters).

One also notes that state aid actions may have had secondary effects through their impact on other state aid actions; and the rejected support applicants thought that the support of (a) the regional programs for Central Greece, Western Greece, Western Macedonia, the South Aegean and the Ionian islands, (b) the program for human resource development and education and lifelong learning, (c) the subsidies programs (especially, entertainment businesses and event and exhibition or event catering businesses, gym and dance school services, self-employed professionals, such as lawyers) would have helped their businesses.

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## Appendix

The unweighted (U) and the weighted (W) ordered probit analyses regarding the impact of state aid on the preservation of jobs (I), the creation of jobs (II), the adjustment of firms to the pandemic conditions (III), business continuity during the pandemic (IV), and business resilience (IV) as per the views of businesspeople in Greece expressed on a Likert scale – disagree (1), rather disagree (2), neither disagree nor agree (3), rather agree (4), agree (5) – in the spring and summer of 2023

The respondent's organization	I		II		III		IV		V	
	U	W	U	W	U	W	U	W	U	W
Did not apply for support (reference)										
Received support via										
A refundable cash advance	0.02	-0.02	-0.54	-0.45	-0.14	-0.21	0.14	-0.07	-0.07	-0.22
The regional program for Attica	0.76	0.93	0.19	-0.12	0.58	0.44	1.23	1.22	0.69	0.29
The regional program for C.Greece	0.23	0.17	-0.15	-0.13	0.09	0.06	0.13	-0.56	-0.10	-0.62
The regional program for C.Macedonia	0.44	0.72	0.04	0.30	-0.04	-0.42	0.52	0.65	0.13	-0.17
The regional program for Crete	0.62	0.61	0.18	0.26	0.17	-0.14	1.42	1.04	0.92	0.81
The reg. program for E.Macedonia-W.Thrace	-0.13	0.53	-0.45	-0.46	-0.21	0.10	0.17	0.48	0.07	0.54
The regional program for Epiros	0.46	0.39	-0.51	-0.51	-0.10	-0.40	0.52	0.07	0.37	0.14
The regional program for the Ionian islands	0.32	-0.68	0.54	-0.57	-0.56	-1.72	0.40	-0.45	-0.05	0.40
The regional program for the N.Aegean islands	0.71	0.70	0.69	0.41	-0.09	-0.04	0.52	1.05	0.66	1.08
The regional program for the S.Aegean islands	4.72	5.74	-0.56	-0.45	-0.09	-0.54	0.10	-0.45	0.37	0.30
The regional program for the SCE Peloponnese	0.79	0.16	0.39	-0.29	0.26	-0.77	0.49	-0.06	0.47	-0.88
The regional program for Thessaly	-0.05	0.28	-0.14	0.10	-0.60	-0.64	0.58	0.81	0.44	0.62
The regional program for W.Greece	-0.09	-0.19	-0.35	-0.38	-0.33	-0.40	0.06	-0.21	-0.12	-0.59
The regional program for W. Macedonia	0.09	0.34	-0.38	-0.14	-0.02	0.08	0.62	1.26	0.30	0.10
A subsidy to a retail business	-0.53	-0.56	-0.55	-0.32	0.37	0.27	-0.19	-0.31	0.17	-0.12
A subsidy to a self-employed lawyer	-0.16	0.01	-0.29	-0.14	0.64	0.75	0.14	0.18	0.63	0.74
A subsidy to an entertainment business etc.	-0.22	-0.24	0.38	0.44	-0.02	-0.04	-0.53	-0.84	-0.17	-0.36
A subsidy to an existing gym or a playground	-0.47	-0.74	0.05	0.24	-0.22	-0.23	-0.25	-0.72	-0.67	-0.88
A liquidity support subsidy to a tourism firm	0.21	0.84	-0.42	-0.20	-0.28	-0.17	4.56	6.02	-0.76	-0.34
A liquidity support subsidy to a catering firm	0.40	0.56	-0.10	-0.05	-0.17	-0.11	1.07	0.65	0.03	-0.01
A working capital loan to a construction firm	0.65	0.32	0.39	0.67	0.19	0.41	0.82	0.02	0.59	0.10
An interest payment subsid. on existing loans	-0.74	-0.39	-0.66	-0.35	-0.25	-0.02	-0.71	-0.64	-0.41	-0.13
A working capital loan w. interest rate subsidy	-0.05	0.40	-0.04	0.46	0.12	0.47	0.04	0.27	-0.20	0.02
A business loan guarantee	0.08	0.19	0.14	-0.11	-0.08	0.07	-0.07	0.33	0.22	0.05
Support for a start-up	4.54	5.63	-6.53	-7.20	-5.77	-6.88	4.76	5.92	5.09	5.72
The micro-small-medium size enterpr. fund	0.22	0.46	-0.22	-0.29	-0.34	-0.90	0.24	0.28	-0.14	0.07
The program for fisheries & the sea	4.63	6.51	0.80	1.80	0.98	0.77	0.22	6.14	0.71	0.29
Was refused support via										
A refundable cash advance	-0.06	0.13	-0.02	0.10	0.06	0.08	0.14	0.17	0.16	0.20
The regional program for Attica	-0.06	-0.32	0.30	0.27	0.37	0.15	0.41	0.12	0.27	-0.08
The regional program for C.Greece	5.70	6.23	5.37	6.13	5.21	5.75	5.54	6.13	5.68	6.04
The regional program for C.Macedonia	-0.04	0.01	0.29	0.49	0.50	0.78	0.23	0.32	0.54	0.57
The regional program for Crete	0.98	0.96	1.00	1.20	0.79	0.78	0.83	0.77	0.91	0.95
The reg. program for E.Macedonia-W.Thrace	-1.05	-1.29	-0.86	0.13	0.08	0.98	-0.36	0.24	-0.52	0.56
The regional program for Epiros	0.35	-0.11	0.51	0.48	0.66	-0.01	0.26	0.16	0.61	-0.24
The regional program for the Ionian islands	4.91	5.34	5.42	6.45	5.23	5.61	5.03	5.60	5.05	5.34
The regional program for the N.Aegean islands	0.55	0.44	0.42	0.16	0.92	1.69	0.63	1.44	0.25	1.23
The regional program for the S.Aegean islands	4.51	5.66	5.72	6.22	4.98	5.53	4.96	5.77	4.78	5.44
The regional program for the SCE Peloponnese	0.26	-0.31	0.52	0.13	-0.05	-0.56	-0.49	-1.25	-0.47	-1.10
The regional program for Thessaly	0.19	0.38	-0.15	-0.61	0.19	-0.17	-0.04	0.19	0.44	0.16
The regional program for W.Greece	0.96	0.31	6.05	6.85	0.83	0.15	1.14	-0.18	1.06	-0.14
The regional program for W. Macedonia	0.89	1.16	0.70	0.99	0.46	0.33	1.05	0.88	0.90	0.94
A subsidy to a retail business	0.46	0.08	0.59	0.75	0.78	1.63	0.07	-0.36	0.37	1.06
A subsidy to a self-employed lawyer	5.05	6.23	5.36	6.42	4.88	5.77	5.09	5.96	5.10	5.78
A subsidy to an entertainment business etc.	-0.31	0.20	0.02	0.43	-0.08	0.43	-0.34	-0.19	5.64	5.60
A liquidity support subsidy to a catering firm	5.18	5.93	5.25	6.23	-0.53	-0.52	5.05	5.69	-6.08	-6.90
A working capital loan to a construction firm	-0.09	-0.04	0.04	-0.62	-0.45	-0.71	-0.67	-1.01	-0.42	-1.04
A working capital loan w. interest rate subsidy	-6.39	-7.19	-5.87	-6.38	5.08	6.03	4.63	5.71	4.83	5.62

Appendix – Table A (continued)

	I		II		III		IV		V	
	U	W	U	W	U	W	U	W	U	W
Was refused support via										
A business loan guarantee	-0.30	-0.22	0.10	0.42	-0.63	-0.90	-1.09	-1.49	-0.32	-0.46
Support for a start-up	-6.71	-7.19	-6.05	-6.65	-5.50	-6.00	-6.53	-7.56	-6.56	-6.79
The micro-small etc. enterprises fund	-0.24	0.90	0.55	1.59	1.19	1.78	0.40	1.27	0.38	1.34
The program for human resources etc.	5.53	6.33	0.05	0.24	-0.34	-0.53	5.33	5.94	0.19	-0.16
Also received aid via a number of										
• Refundable cash advances	0.08	0.10	-0.07	-0.09	-0.01	-0.01	0.06	0.13	0.03	0.07
• Regional program actions	0.31	0.27	0.35	0.18	0.13	0.04	0.47	0.36	0.36	0.27
• Sectoral programs or other actions	0.12	0.16	0.13	0.12	0.25	0.33	0.22	0.32	0.02	0.01
Was also refused support via a number of										
• Refundable cash advances	0.06	0.02	0.01	0.01	0.08	0.10	0.04	0.12	0.03	0.03
• Regional program actions	-0.03	-0.15	0.02	-0.10	0.00	-0.02	-0.17	-0.26	-0.14	-0.17
• Sectoral programs or other actions	0.14	0.08	-0.05	-0.06	-0.13	-0.11	0.04	0.03	-0.07	-0.15
Industry										
01 Crop, animal production etc. (refer.)										
02 Forestry & logging	0.33		0.30		0.31		0.44		-0.30	
03 Fishing & aquaculture	1.05		-0.05		-0.18		4.97		-1.07	
05 Mining of coal & lignite	-0.55		-0.28		-0.32		-1.11		-0.91	
07 Mining of metal ores	5.54		5.52		5.56		5.25		5.57	
08 Other mining & quarrying	0.31		0.15		0.07		0.38		0.25	
10 Manufacture of food products	0.17		0.05		0.24		-0.15		-0.07	
11 Manufacture of beverages	0.44		0.52		0.33		-0.17		-0.15	
12 Manufacture of tobacco products	-6.05		-5.35		-5.17		-0.52		-0.36	
13 Manufacture of textiles	0.54		0.27		0.53		0.08		0.40	
14 Manufacture of wearing apparel	0.26		0.12		0.23		-0.04		0.16	
15 Manufacture of leather etc.	0.16		0.16		0.59		0.20		0.56	
16 Manufacture of wood etc.	0.42		0.44		0.42		-0.23		-0.23	
17 Manufacture of paper etc.	-0.15		0.11		0.33		-0.06		-0.02	
18 Printing-reprod. of recorded media	0.03		-0.04		0.23		0.07		0.15	
20 Manufacture of chemicals etc.	0.36		0.30		-0.04		-0.27		-0.68	
21 Manufacture of pharmaceuticals	0.60		0.08		0.15		-0.20		-0.01	
22 Manufacture of rubber-plastic pr.	0.35		0.00		0.37		0.29		-0.11	
23 Man. of other non-metallic minerals	0.11		0.32		-0.03		-0.18		-0.10	
24 Manufacture of basic metals	-0.96		-0.28		-0.47		-1.03		-0.63	
25 Manuf. of fabricated metal prod.	0.45		0.12		0.11		-0.26		-0.17	
26 Manuf. of computer, electronics etc.	-0.11		0.32		0.16		-0.18		-0.41	
27 Manuf. of electrical equipment	0.42		0.82		0.70		0.31		0.03	
28 Manuf. of machinery, other equip.	0.07		-0.02		-0.15		-0.55		-0.36	
29 Manufacture of motor vehicles etc.	0.07		-0.25		-0.12		-0.52		-0.53	
30 Manufac. of other transport equip.	0.11		0.45		0.43		-0.34		-0.03	
31 Manufacture of furniture	0.43		0.36		0.49		0.38		0.39	
32 Other manufacturing	0.22		0.17		0.55		-0.03		0.00	
33 Repair-install. of machinery etc.	0.55		0.26		0.27		0.04		-0.04	
35 Electricity, gas, steam & air cond.	-0.30		0.08		0.07		-0.51		-0.66	
36 Water collection, treatment etc.	-0.36		0.13		-0.02		0.07		0.31	
37 Sewerage	-0.32		0.39		-0.99		0.13		-0.19	
38 Waste collection, treatment etc.	0.44		0.38		0.37		0.10		0.15	
39 Remediation activities etc.	0.86		0.65		-0.24		0.81		-0.88	
41 Construction of buildings	-0.02		0.25		0.07		-0.16		-0.21	
42 Civil engineering	0.41		-0.05		0.68		0.19		-0.10	
43 Specialized construction etc.	0.41		0.55		0.39		0.10		-0.19	
45 Sales & repairs of motor vehicles	0.46		-0.17		0.31		0.02		0.21	
46 Wholesale trade, except vehicles	0.42		0.25		0.66		-0.01		0.10	
47 Retail trade, except vehicles	0.20		0.35		0.44		-0.04		0.09	
49 Land transport & via pipelines	-0.06		-0.24		0.04		0.25		0.54	

Appendix (continued)

Industry	I		II		III		IV		V	
	U	W	U	W	U	U	W	U	W	U
50 Water transport	0.18		-0.41		-0.28		-0.13		0.05	
51 Air transport	1.08		1.59		1.20		0.78		0.69	
52 Warehousing & support	0.10		0.19		-0.01		-0.16		-0.31	
53 Postal & courier activities	1.10		0.47		-0.60		0.55		0.99	
55 Accommodation	0.43		0.37		0.43		0.16		0.32	
56 Food & beverage service activities	0.12		0.22		0.26		-0.22		-0.09	
58 Publishing activities	0.85		0.55		0.57		0.28		0.26	
59 Motion pictures, video productions etc.	-0.07		-0.43		0.24		-0.06		0.08	
60 Broadcasting programming etc.	0.45		0.46		0.35		0.07		-0.29	
61 Telecommunications	0.96		-0.06		1.03		0.04		0.33	
62 Computer programming etc.	0.45		0.16		0.56		-0.04		0.11	
63 Information service activities	0.53		0.31		0.47		0.18		0.36	
64 Financial service activities	0.82		0.11		0.60		0.06		0.26	
65 Insurance, reinsurance, pension fund.	0.38		0.60		0.56		0.28		-0.24	
66 Activities auxiliary to activities 64-65	-0.02		0.15		0.16		-0.07		0.17	
68 Real estate activities	-0.08		0.18		-0.03		-0.63		-0.56	
69 Legal & accounting activities	0.39		0.37		0.75		0.12		0.27	
70 Activities of head offices etc.	0.31		0.06		0.19		0.21		0.01	
71 Architectural-engineering activ. etc.	0.15		0.48		0.53		-0.01		-0.15	
72 Scientific research & development	0.26		-0.06		0.69		0.11		0.05	
73 Advertising & market research	0.11		0.40		0.31		-0.10		0.07	
74 Other professional-scientific-technical	0.24		0.07		0.68		0.22		-0.05	
75 Veterinary activities	0.41		-0.18		0.32		0.31		0.34	
77 Rental & leasing activities	-0.36		0.41		0.70		-0.08		0.23	
78 Employment activities	-0.66		0.13		-0.24		-0.80		-0.67	
79 Travel agency, related activities	0.50		0.33		0.31		0.83		0.37	
80 Security & investigation activities	0.50		0.45		0.63		1.09		1.48	
81 Services to buildings-landscape activ.	0.52		0.41		0.12		0.14		0.10	
82 Admin.-support-other office activities	0.25		-0.28		-0.33		0.52		0.03	
85 Education	0.18		-0.42		0.17		-0.39		-0.17	
86 Human health activities	0.47		0.18		0.23		-0.02		-0.11	
87 Residential care activities	0.82		-0.08		-0.68		0.57		0.89	
88 Social work activities without accom.	0.72		-0.22		0.19		0.29		0.23	
90 Creative, arts, entertainment activities	-0.09		-0.30		0.33		0.19		0.00	
91 Libraries, archives, museums etc.	0.32		0.74		0.10		0.14		0.47	
92 Gambling & betting activities	0.64		0.30		0.37		0.29		0.36	
93 Sports activities, amusement etc.	-0.02		0.00		0.45		-0.21		0.05	
94 Activities of membership organizat.	0.03		-0.62		0.16		-1.16		0.89	
95 Repair of computers-household goods	0.63		0.28		0.78		0.34		0.19	
96 Other personal service activities	0.26		0.17		0.27		0.07		-0.15	
97 Activities of households as employers	0.10		0.88		0.32		-0.48		-0.06	
Sector										
A Agriculture-forestry-fishing (reference)										
B Mining & quarrying		0.23		0.14		0.00		0.33		0.12
C Manufacturing		0.19		0.05		0.17		-0.06		0.05
D Electricity, gas, steam & air condition		0.20		0.12		-0.13		-0.30		-0.67
E Water supply, sewerage, waste, etc.		-0.25		-0.09		-0.56		-0.30		-0.39
F Construction		0.23		0.24		0.17		0.02		0.02
G Sales, repair of motor vehicles etc.		0.33		0.13		0.41		0.04		0.20
H Transportation & storage		0.03		-0.09		-0.22		-0.01		0.17
I Accommodation, food services		0.21		0.19		0.22		-0.04		0.08
J Information & communication		0.38		0.01		0.18		-0.07		0.08
K Financial & insurance activities		0.31		0.23		-0.11		0.13		0.13
L Real estate activities		-0.56		-0.24		-0.36		-1.01		-0.83
M Professional, scientific, techn. activ.		0.33		0.19		0.51		0.11		0.19
N Administrative & support services		0.26		0.25		0.17		0.29		0.25

Appendix (continued)

Sector	I		II		III		IV		V	
	U	W	U	W	U	U	W	U	W	U
P. Education		0.38		-0.29		0.40		0.00		0.18
Q Human health & social work activities		0.29		-0.10		0.05		0.03		0.05
R Arts, entertainment & recreation.		0.00		-0.12		0.12		-0.15		0.06
S Other service activities		0.43		0.21		0.50		0.06		0.05
Situated in										
Central Macedonia (reference)	0.09	-0.06	0.08	-0.05	-0.01	-0.07	-0.02	-0.02	0.08	0.00
Attica	0.09	-0.06	0.08	-0.05	-0.01	-0.07	-0.02	-0.02	0.08	0.00
Central Greece	0.00	0.14	0.23	0.19	0.12	0.11	-0.07	0.19	0.10	0.14
Crete	0.11	0.13	0.15	0.02	0.27	0.36	0.01	0.19	0.05	0.25
East Macedonia & Western Thrace	0.11	-0.36	-0.01	-0.31	-0.20	-0.47	-0.16	-0.30	-0.07	-0.49
Epiros	0.00	-0.07	0.07	-0.16	0.07	-0.06	-0.14	-0.12	-0.06	-0.15
The Ionian islands	0.09	0.21	0.38	0.24	-0.08	0.07	0.19	0.18	0.14	0.10
The North Aegean islands	0.14	-0.05	0.05	-0.05	0.28	0.08	0.15	0.04	0.18	0.16
The South Aegean islands	0.47	0.28	0.35	0.17	0.18	0.06	0.17	0.14	0.36	0.29
The south, central, and eastern Peloponnese	-0.05	0.00	0.10	-0.07	0.01	-0.03	0.02	0.20	0.09	0.23
Thessaly	0.19	-0.35	0.07	-0.11	0.11	-0.09	0.03	-0.35	-0.03	-0.21
West Macedonia	-0.06	-0.23	0.11	-0.26	-0.06	-0.22	-0.02	0.07	-0.08	-0.09
Western Greece	-0.07	0.12	0.07	0.10	0.05	0.25	0.00	0.21	0.03	0.20
Type of business										
Unincorporated personal business (reference)										
Association of persons	-6.24	-6.97	-5.57	-5.92	5.52	6.60	4.96	6.30	-5.84	-6.61
Cooperative	0.28	0.02	-0.36	0.15	0.17	0.32	-0.71	-0.34	-0.68	-0.16
Endowment	-5.72	-6.48	-6.21	-6.11	-5.32	-6.30	-6.14	-7.00	-6.37	-6.72
General partnership	0.27	0.34	0.05	0.17	0.08	0.19	0.17	0.23	0.19	0.17
Institution	-0.65	0.29	0.37	0.75	-0.56	-1.04	-0.66	0.14	-0.81	0.44
Joint venture	0.58	0.97	0.10	0.41	0.43	0.91	0.57	0.77	0.41	0.69
Law firm	0.13	0.03	-0.18	-0.11	-0.08	-0.14	-0.25	-0.14	-0.66	-0.47
Legal entity under private law	1.25	1.03	0.09	0.21	1.07	0.14	0.75	0.54	0.66	0.73
Limited partnership	0.30	0.51	-0.03	0.33	-0.03	0.11	0.20	0.21	0.06	0.18
Limited liability company	0.54	0.50	0.23	0.05	-0.05	-0.34	0.24	0.18	0.19	0.19
Non-profit organization	0.75	0.80	0.37	0.54	0.65	0.75	0.92	0.51	0.05	0.73
Pleasure boat shipping company	0.40	1.01	0.78	1.56	0.55	0.87	0.13	0.57	-0.23	0.54
Private capital company	0.40	0.47	0.19	0.62	0.09	0.45	0.22	0.34	0.12	0.26
Public limited company	0.48	0.58	0.09	0.25	0.09	0.26	0.36	0.30	0.39	0.32
Social cooperative enterprise	1.20	1.45	0.39	0.80	-0.12	-0.42	0.15	0.21	0.00	-0.53
Society	-1.88	-1.87	-1.07	-1.18	-0.27	-0.06	-1.28	-1.04	-1.46	-1.12
Union	0.00	0.15	0.07	-0.11	-1.23	-1.73	0.45	0.18	-0.63	-0.70
Other	-0.20	-0.08	0.18	0.20	-0.23	0.11	0.02	-0.12	-0.09	0.31
Foreign owned	0.49	0.39	0.37	0.49	0.02	-0.05	0.33	0.09	0.08	0.03
Not autonomous: financially partnered, linked	0.18	0.06	0.00	-0.13	0.04	-0.06	0.19	0.21	0.24	0.14
Operates with a franchise agreement	-0.33	0.00	0.10	0.22	-0.12	0.00	-0.25	-0.10	-0.20	0.04
Age (i.e., years of business operation)	0.00	0.00	0.00	-0.01	0.00	-0.01	0.00	-0.01	0.00	0.00
Age squared	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Responder heterogeneity: The responder										
Reports the number of employees & turnover	-0.13	-0.06	-0.28	-0.27	-0.33	-0.28	0.08	0.16	0.08	0.18
Reports number of employees, not turnover	-0.12	0.02	-0.49	-0.31	-0.21	-0.22	-0.05	-0.13	-0.11	-0.08
Reports turnover, not number of employees	0.00	0.00	-0.24	-0.23	-0.01	0.05	0.03	0.00	0.06	0.05
Reports little about additional aid regarding										
• A special purpose compensation	0.68	0.74	-0.21	-0.58	-0.18	-0.42	0.58	0.54	0.62	0.44
• An accounting services subsidy	-0.15	0.04	0.12	0.21	-0.11	0.13	-0.19	0.01	-0.10	0.10
• An interest rate subsidy	-0.73	-0.34	-0.24	0.20	0.33	0.67	-0.48	-0.26	-0.71	-0.94
• Competitiveness	-0.88	-0.19	-0.15	-0.48	-0.64	0.14	-0.44	-0.26	-0.21	-0.13
• Digital transformation	0.49	0.26	-0.17	-0.33	0.33	-0.05	0.16	-0.18	0.30	-0.04
• Equipment purchases	-2.17	-2.77	-5.87	-6.05	-0.78	-1.23	-0.84	0.05	-1.47	-2.13
• Loan guarantees	1.07	1.09	0.32	0.06	1.33	1.52	0.90	0.76	1.16	1.15
• Other aspects	0.03	-0.24	0.38	0.10	0.41	-0.05	-0.01	-0.44	0.25	-0.01

Appendix – Table A (continued)

	I		II		III		IV		V	
	U	W	U	W	U	U	W	U	W	U
Descriptives										
Observations	6154	6151	6159	6156	6146	6142	6139	6135	6131	6127
Pseudo-R <sup>2</sup>	5.4%	4.9%	5.0%	4.3%	4.7%	4.9%	4.5%	3.6%	4.0%	3.1%
R <sup>2</sup> of the OLS regressions	12.3%	12.6%	12.8%	11.7%	13.0%	13.1%	8.9%	8.3%	9.7%	8.2%

Notes: The analysis is carried under the assumption of independence between clusters (respondents). The results associated with p-value < 1% are highlighted in yellow.