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Overcoming the Covid-19 Crisis: The Slovenian Business view

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Macro policies for building resilience

- 7 corona packages of instruments
- State aid oriented into keeping jobs
- 85% of foreign affiliates used state aid
- Multiannual Financial Framework 2021-2027 and the recovery instrument NextGenerationEU - Slovenia negotiated for EUR 10.2 billion by 2029
- National recovery & resilience plan → green & digital



Policy innovation to overcome Covid-19 in 2020 → tourist voucher



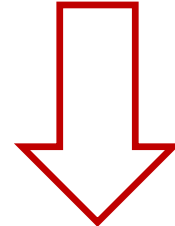
I FEEL SLOVENIA





Motivation

- *»Bad companies are destroyed by crises. Good companies survive them. Great companies are improved by them.«*
 - Andrew Grove, former Intel CEO
- Crises are the new normal



- Importance of **organisational resilience**
- How are companies building resilience in the Post-Pandemic Era?
(Koleša & Burger & Jaklič, forthcoming 2021)



Defining organisational resilience

- “/An organisation`s/ ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalise on disruptive surprises that potentially threaten organisation survival” (Lengnick-Hall et al., 2011, pp. 244).



Resilience aiming strategies

- Multiple typologies, but none that would address:
 - Determinants of strategy choice
 - Organisational processes that need to change for successful implementation of organisational resilience by strategy type
 - Outcomes of resilience by strategy type



Research questions

- What types of organisational resilience strategies do firms employ during crises?
- How important is digitalisation, how important are responses in other areas?
- What is the association between firms' strategic orientation and their business performance?



Data & methodology

Data

- 2 surveys developed by the Centre of International Relations and:
 - the Chamber of Commerce and Industry of Slovenia (May-June 2020)
 - Public Agency for Entrepreneurship, Internationalization, Foreign Investments and Technology – SPIRIT Slovenia (Sep-Oct 2020)
- Both included questions on:
 - the impact of the Covid-19 pandemic on business performance and internationalisation,
 - business responses to Covid-19 (including investments in digitalisation and automation, employee development and process, product, and service innovations, market spread)
- Linked with AJPES annual balance sheet and income statement data

Empirical methods

- Agglomerative hierarchical clustering
 - several different linkage algorithms
 - Caliński–Harabasz pseudo-F stopping-rule
 - Duda–Hart stopping rule
 - dendrograms
 - clustergrams (Schonlau, 2002)
- k-means clustering: 3 and 4 groups based on 6 clust. variables
- Logistic regression and ordered logit model:
 - Y=expected increase of firm revenue in 2020 (0/1 and decrease/no change/increase)
 - firm strategy + several firm-level control variables



Measures of strategic orientation and performance

Survey question	Decrease	No change	Increase
<i>Strategic orientation</i>			
1. What will be the impact of Covid-19 on your firm performance in 2020 in terms of employment?	101 (36.2%)	130 (46.6%)	48 (17.2%)
2. State your firm's response to Covid-19 in terms of the number of export markets:	55 (18.1%)	230 (75.7%)	19 (6.3%)
3. State your firm's response to Covid-19 in terms of the number of export products:	56 (18.7%)	196 (65.3%)	48 (16.0%)
4. State your firm's response to Covid-19 in terms of the number of foreign suppliers:	55 (16.7%)	256 (77.6%)	19 (5.8%)
5. State your firm's response to Covid-19 in terms of introducing new technological solutions (digitalization, automation):	45 (13.7%)	158 (48.0%)	126 (38.3%)
6. State your firm's response to Covid-19 in terms of employee training/development:	58 (17.0%)	214 (62.8%)	69 (20.2%)
<i>Performance</i>			
What will be the impact of Covid-19 on your firm performance in terms of total revenue for 2020?	247 (69.2%)	59 (16.5%)	51 (14.3%)



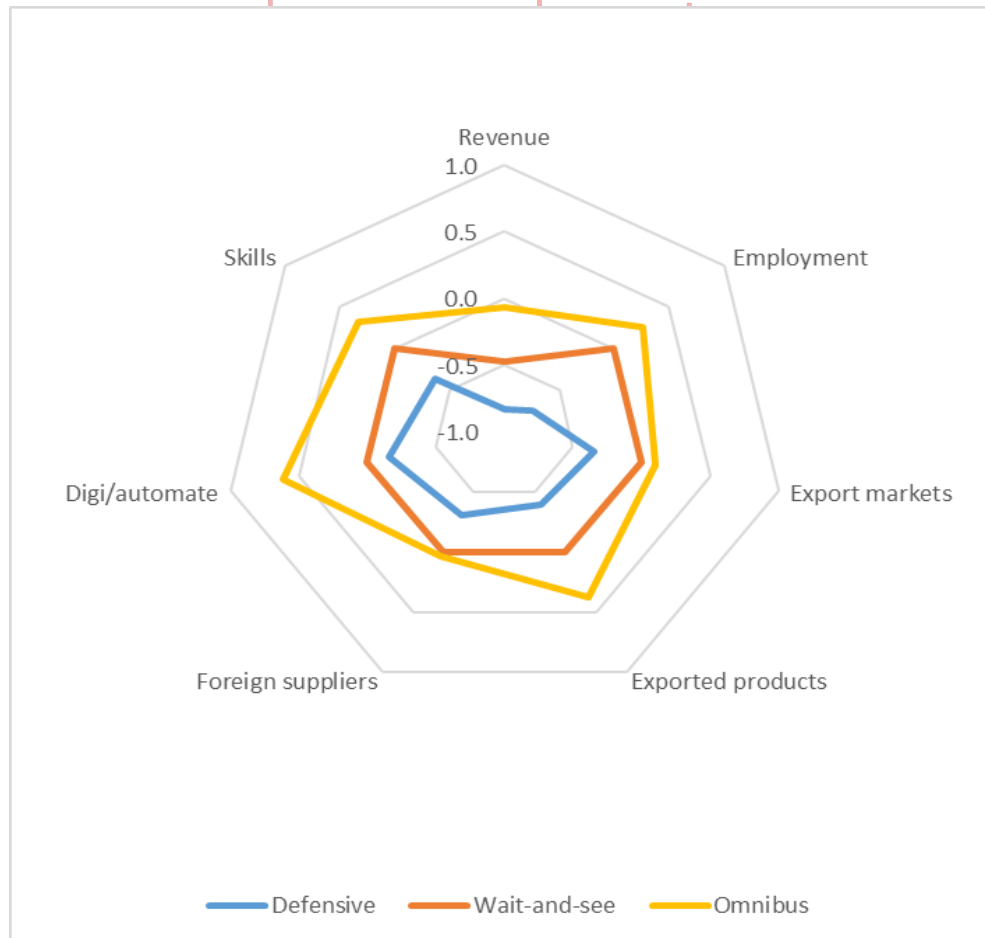
Main findings

- We identify 4 groups of businesses based on the different strategies they use to confront the economic downturn:
 - defensive,
 - wait-and-see,
 - omnibus,
 - innovation-oriented firms.
- Wait-and-see and innovation-oriented strategies raise the probability of stable revenue during crises.
- Omnibus strategy also implies future growth of firm revenue.

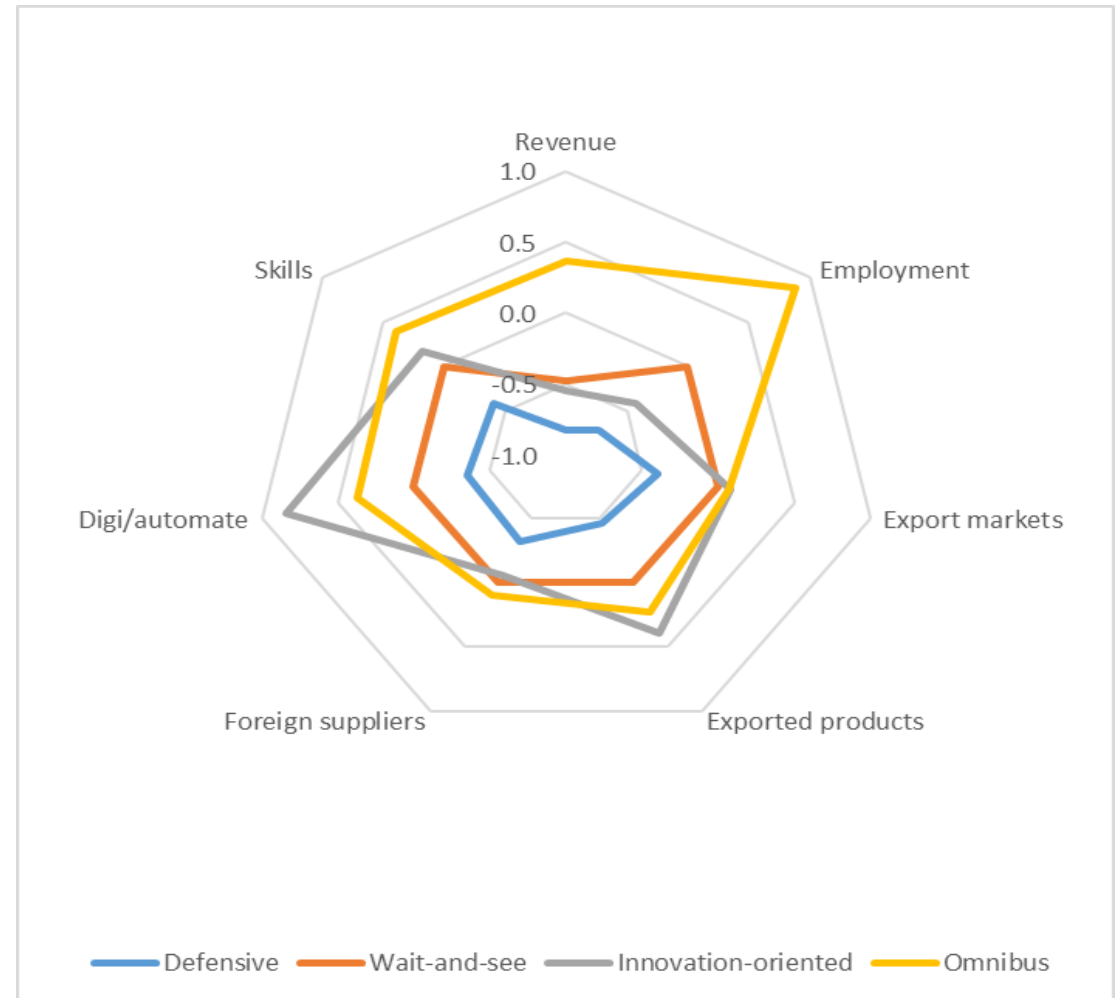


Strategic profiles and performance scores

3-group k-means clustering



4-group k-means clustering





Key performance and strategy characteristics of the four clusters

	Cluster 1 Defensive	Cluster 2 Wait-and-see	Cluster 3 Innovation-oriented	Cluster 4 Omnibus
N	73	42	62	43
<i>Demographic and performance characteristics (2019)</i>				
Age	18.5 ^a	15.5 ^{a,d}	18.6 ^d	17.3
Employment	191.5 ^{a,c}	49.5 ^a	251.6	97.5 ^c
Total revenue	23.29 ^a	10.68 ^{a,d}	72.85 ^d	68.39
Value added/emp	37,289 ^{a,b,c}	59,515 ^{a,e}	62,574 ^b	49,445 ^{c,e}
ROA	-1.3% ^{a,b,c}	8.6% ^a	7.4% ^b	8.2% ^c
ROE	12.8% ^c	10.5% ^e	10.6%	27.3% ^{c,e}
Export intensity	60.4% ^b	52.9%	46.6% ^b	55.5%
Non-EU exports %	9.2% ^a	18.0% ^a	12.4%	10.5%
<i>Strategic orientation questionnaire scores (2020)</i>				
Employment	-0.73 ^{a,b,c}	0.00 ^{a,d,e}	-0.42 ^{b,d,f}	0.88 ^{c,e,f}
Export markets	-0.40 ^{a,b,c}	0.00 ^a	0.08 ^b	0.07 ^c
Export products	-0.47 ^{a,b,c}	0.00 ^{a,d,e}	0.39 ^{b,d}	0.23 ^{c,e}
Foreign suppliers	-0.33 ^{a,b,c}	0.00 ^a	-0.06 ^{b,f}	0.09 ^{c,f}
Digi/automate	-0.36 ^{a,b,c}	0.00 ^{a,d,e}	0.84 ^{b,d,f}	0.37 ^{c,e,f}
Skills	-0.41 ^{a,b,c}	0.00 ^{a,d,e}	0.18 ^{b,d,f}	0.40 ^{c,e,f}
<i>Performance questionnaire scores (2020)</i>				
Revenue	-0.82 ^{a,b,c}	-0.48 ^{a,e}	-0.55 ^{b,f}	0.37 ^{c,e,f}



Results from the ordered logit and logistic regression

- Wait-and-see and innovation-oriented strategies raises the probability of stable revenue in the crisis period.
- Omnibus strategy also correlates positively with foreseen growth of firm revenue.



Building resilience in layers

employee development

investments in digitalisation and automation

process, product and service innovations

foreign market spread



Conclusions

- Our exploratory study provides a process-based typology of organisational resilience in the context of a severe crisis.
- The results support the hypothesis that **proactive multifaceted business strategies have a positive impact** on business performance during the economic downturn.
- The most resilient firms take a dynamic, innovative and proactive approach in managing risks internally (especially in the areas of **employee development, digitalisation and automation**), externally (in collaboration with **suppliers and buyers**, as well as in terms of **market development**), and combined (through **product and service innovation**).