

Firm responses to the pandemic crisis: sticky capabilities and widespread restructuring

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Outline

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Italy is growing like never before!

Ursula von der Leyen, 19 of December, 2021

- Macroeconomic statistics should tell a story of a **V**-shaped and fast recovery from the pandemic, at least this was the initial perception (Sharma et al., 2021).
- Expectations of a **V**-shaped recovery at the macroeconomic level are prevalent (Caracciolo et al., 2021).
- But, potential long-lasting impacts on the industrial system are still hidden, mainly due to the absence of firm-level evidence in terms of economic performance, exits and closures.

The existing literature

- The literature has partially addressed firm-level effects of the COVID-19 making use of **selected questionnaires, mainly conducted in real-time** to monitor the status of the system.
- Other evidence relies on **sectoral** level dynamics, the dynamics of **vacancies and employment rates**.
- However, a systematic picture on how firms behaved during the COVID-19 crisis and their future prospects is still absent.

This paper

- How Italian firms have reacted to the COVID-19 crisis in terms of actions and responses put in place?
 - Which **reorganizational** and **strategic** choices have been adopted?
- How their pre-existing capabilities structure has mediated responses to the crisis?
 - Did their **pre-crisis** attributes influence their **in-crisis** responses?

Meta (theoretical) questions - Capability Based Theory of the Firms

How do firms *behave* in normal times? How do they *behave* in pandemic times?

How to operationalize these questions?

- Integrated firm-level dataset - ISTAT

- FRAME SBS - Business register

- *Indagine Multiscopo del Censimento Permanente delle Imprese* (IMCPI/2019 - unique wave)

- *Situazione e Prospettive delle Imprese nell'Emergenza Sanitaria COVID-19* (SPIESC-19/2020 - two waves)

IMCPI/2019 - unique wave

- A sample of about 280 thousand firms with 3 or more engaged persons, representing a universe of over 1 million units, corresponding to the 24.0% of total Italian firms, which, however, accounts for 84.4% of national value added, employs 76.7% of workers (12.7 millions) and 91.3% of employees.

Nine macro-sections (2016-2018)

- 1) Ownership, control, management; 2) Human resources; 3) Relations between companies and other organizations;
- 4) Market; 5) Technology, digitalisation and new professions; 6) Finance;
- 7) Production internationalisation; 8) New trajectories of development; 9) Environmental sustainability, social responsibility and workplace security.

SPIESC-19 (2020) - two waves (II wave - November 2020)

- It is based on a sub-sample of the IMCPI. It covers a sample of over 90 thousand companies with at least 3 persons engaged.

Six macro-sections (June - October 2020)

- 1) Impact of COVID-19; 2) Precautionary procedures and countering COVID-19 spread; 3) Human Resources management and policies;
- 4) Finance; 5) Digitalization and Technology; 6) Effects, critical issues and strategic orientations.

Questions under scrutiny - SPIESC-19 (2020)

Selection out of 25 questions:

Section 3 *From June 2020 to date, what human resource management measures has the firm taken as a result of the COVID-19 emergency?*

Section 4 *From June 2020 to date, what instruments has the firm used to meet the liquidity needs caused by the COVID-19 emergency?*

Section 6 *What effects do you expect the COVID-19 emergency to have on the firm up until June 2021?*

Section 6 *For which reasons?*

Section 6 *What strategies has the company already adopted or is considering to adopt up to June 2021?*

Section 6 *For which reasons?*

Methodology - Multilevel analysis

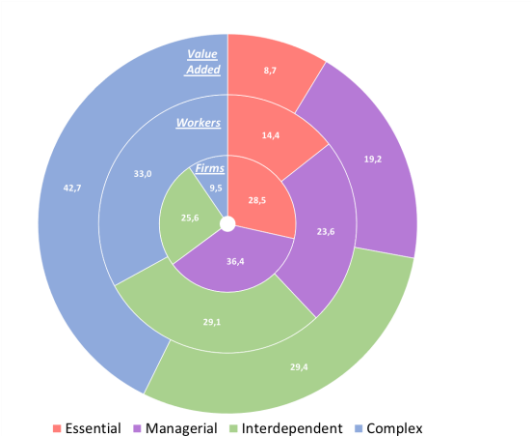
- 1 Factor analysis on the IMCPI
⇒ Three factors characterizing different sets of technological and organizational capabilities
- 2 Cluster analysis - IMPCI and FRAME-SBS
⇒ Four clusters of firms, from less to more complex ones
- 3 Analysis of co-occurrences - IMCPI
⇒ Identification of the bundle of practices characterizing firm clusters (pre-crisis)
- 4 Analysis of co-occurrences - SPIESC-19
⇒ Identification of the bundle of practices characterizing firm clusters (in pandemic crisis)

Factors and cluster of firms in pre-crisis

Table: Firm clusters and organisational-strategic profiles (units with at least 10 workers).

		Organisational-strategic profiles		
		Technological-organisational capabilities	Managerial strategies	Relations
Cl_1	Essential	14,2	69,8	62,5
Cl_1	Managerial	25,6	75,5	64,5
Cl_3	Interdependent	36,3	73,1	64,3
Cl_4	Complex	49,4	65,8	61,5
Total		27,4	72,4	63,6

Characteristics of firm clusters - Units with at least 10 employees - Pre-pandemic times

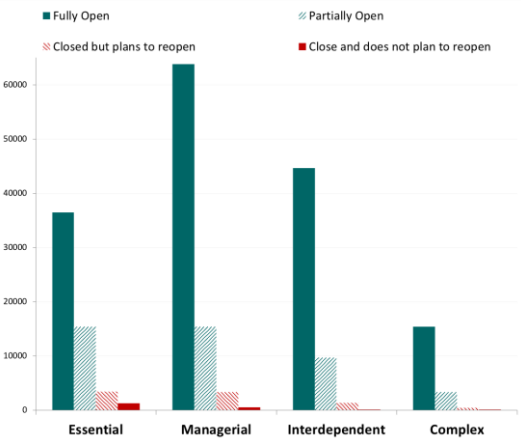


(a) Share of firms, workers and total value added by firm cluster

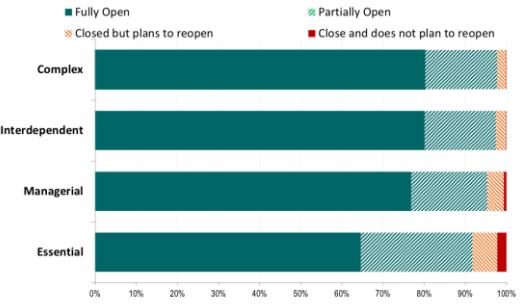


(b) Wage and productivity levels by firm cluster

Distribution by firm cluster and closure/openness status - Units with at least 10 employees - Pandemic times



(c) Number of firms by cluster



(d) Share of firms by cluster

Co-occurrences of firms' strategies in the Essential Cluster - Pre-pandemic and Pandemic times



(e) Pre-pandemic times



(f) Pandemic times

Co-occurrences of firms' strategies in the Managerial Cluster - Pre-pandemic and Pandemic times



(g) Pre-pandemic times



(h) Pandemic times

Co-occurrences of firms' strategies in the Complex Cluster - Pre-pandemic and Pandemic times



(k) Pre-pandemic times



(l) Pandemic times

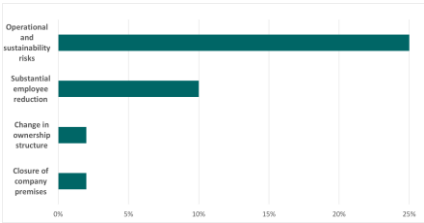
Restructuring processes

- *Operational and sustainability risks*
- *Substantial employee reduction*
- *Change in ownership structure*
- *Closure of company premises*

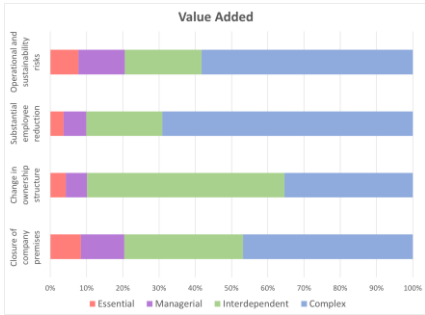
Table: Co-occurrences of replies on corporate crises.

	Operational and sustainability risks	Closure of company premises	Substantial emp. reduction	Change in ownership structure
Operational and sustainability risks	53734	2584	14297	1781
Closure of company premises	2584	4094	1283	372
Substantial emp. reduction	14297	1283	22493	1349
Change in ownership structure	1781	372	1349	4829

Restructuring processes - Distribution of positive answers

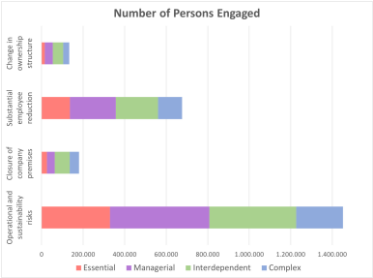


(m) Distribution of positive answers

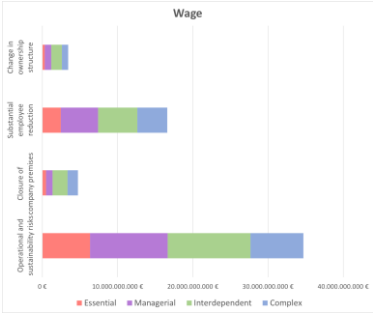


(n) Distribution of value added by firm cluster

Restructuring processes - Number of persons and wage involved

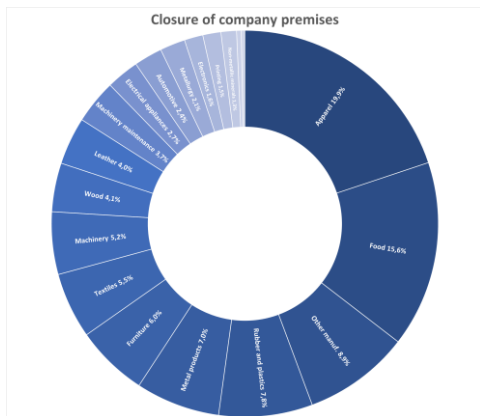


(o) Number of persons engaged

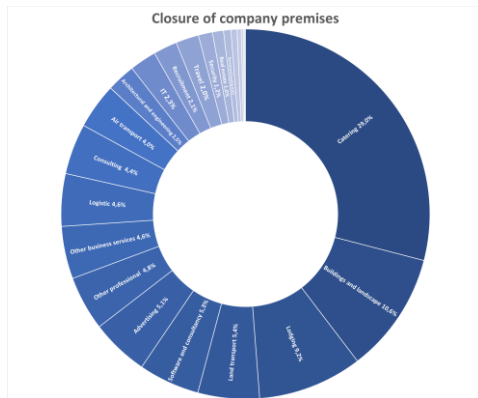


(p) Total wages

Restructuring processes - Distribution by sector - closure of company premises



(q) Manufacturing



(r) Service

Evidence of a widespread restructuring process

- No cleansing?
⇒ The pandemic crisis is also impinging on more advanced and structured business activities, belonging to the Interdependent and Complex clusters.
- Long lasting crisis/Hysteresis?
⇒ Expectations of a fast and **V**-shaped recovery are hardly conceivable, whenever accounting for the unfolding of the micro-level effects.

Wrap up

- This paper is meant to address the status of the Italian productive system in the wake of the most severe crisis economies are facing since WWII.
- We rely on the combination of two high quality level dataset informing about **firm behavioural traits** (Costa et al., 2021)
 - The IMCPI (2019), collected information on organizational capabilities, practices, attitudes toward innovation, business models and strategies during the period 2016-2018, in so called usual times
 - The SPIESC-19 (2020) was able to monitor firm responses to the pandemic crisis, collecting information in the period June - October 2020.
 - The sample design of the two questionnaires was as such that the second is defined as a subset of the first, therefore allowing complete comparability.

BoNom lines

- *Sticky capabilities:*
 - ⇒ There is strong stickiness and (adaptive) persistence between the behavioural attitudes of the firms in their “business as usual” and “emergency” status
- *Widespread restructuring:*
 - ⇒ The pandemic-induced crisis will hardly represent an opportunity to reshape the industrial structure toward a high-productivity path since diverse, from more to less intense forms of corporate risks are at work and such risks are not only targeting low-productivity, Essential firms.

Where to find our papers

- "Firm responses to the pandemic crisis: sticky capabilities and widespread restructuring": <http://www.lem.sssup.it/WPLem/files/2021-48.pdf>
- "From organizational capabilities to corporate performances: at the roots of productivity slowdown": <http://www.lem.sssup.it/WPLem/files/2021-21.pdf>