The Covid-19 policy response in Croatia – a story of two leverages

Joint Vienna Institute:
“Policy Responses During and After Covid-19:
Dealing with Corporate Insolvencies, Debt Overhang and Loan Guarantee Schemes”
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Agenda

1. Introduction - COVID-19 and policy reaction
2. Loan moratoria (Financial leverage)
3. Employee support (Operating leverage)
4. Conclusion
1. Introduction - COVID-19 and policy reaction
Sizeable support package implemented to mitigate fall in economic activity

Corporate sales decreased strongly (as expected)

Note: 2021 F depicts the HNB forecast from 9/21.
Source: FINA, HNB

Croatia implemented a sizable support package (primarily for the corporate sector)

Source: FINA, HNB, HBOR, Ministry of Finance, Croatian Employment Service
Corporate performance in 2020 – better than expected

The support allowed the corporate sector to record only a slight loss of profitability...

Note: The simulation for 2020 was performed based on calculated fixed costs share and actual sales decrease without support or adjustment. Analysis is performed on all non-financial corporates that report to Financial Agency (around 133,000 companies in 2020)

Source: FINA, HNB (Authors` calculation)
Significant changes in the corporate demography during the pandemic

Corporate entry / exit slowed down during the pandemic

With voluntary exits accelerating in 2021

Note: Data for 2021 refers to the annualised first three quarters.
Source: Court registry, HNB (Authors’ calculation)

Source: Court registry
Why investigate this further?

• The support package was broad-based and unprecedented – there are some strong indicators that it was effective (in the short run):
  • Economic growth rebounded strongly in 2021,
  • Production capacities were preserved.

• Several open questions regarding the effectiveness in the medium-term:
  • Corporate demography slowed down (the quality of an average company on the market might have deteriorated),
  • Measures were designed when the pandemic was expected to last „months”, not „years”.
2. Loan moratoria (Financial leverage)
Moratoria intended to mitigate uncertainty and liquidity concerns

Croatian banks reported a high share of NFC loans under moratorium by international comparison

Moratoria particularly important in the early phases of the pandemic

Note: As of June 2020.
Source: EBA

Note: Aggregate reporting for moratoria to legal entities until June 2021, then reporting for individual non-financial corporations.
Source: FINA, HNB
Moratoria on average used by more affected and vulnerable firms

Results/ marginal effects from probit regression of firm characteristics on moratoria dummy for Croatian firms:

**Probability of using the moratorium higher for firms:**

- more affected by the pandemic (larger drops in sales, most affected sectors)
- more financially vulnerable according to pre-pandemic indicators (higher debt ratio and implicit interest rate, lower profitability and liquidity buffers)
- using an investment loan
- with stage 2 exposures at end-2019
- Was there a Bank effect in moratoria?

**Source:** FINA, HNB
No distribution risks were observed in moratoria loans – the importance of criteria

Stage 3 exposures are not much higher among moratorium exposures than in the aggregate portfolio

Distribution of clients in moratoria – skewed towards smaller companies

Note: As of June 2021.
Source: FINA, HNB

Note: O-SII institutions marked in red.
Source: FINA, HNB
However, moratoria have a limited scope

Only a subset of companies have debt towards banks

Overall moderate increases in liabilities in 2020, increases mostly in liabilities with other creditors

Source: FINA, HNB
3. Employee support (Operating leverage)
Debt overhang? What about fixed costs overhang?

Operating leverage increased while financial leverage decreased

- **Op. Leverage**
- **Fin. Leverage**

Note: Operating leverage is the share of fixed costs in total costs. Financial leverage is the ratio of debt over total assets. Source: FINA, HNB (Authors` calculation)

The importance of fixed costs is often understated

Corporate sector Gross earnings formation, as % of Sales

- Interest (debt servicing)
- Fixed costs
- Variable costs
- Gross earnings

Note: Fixed costs are approximated with Staff and Depreciation costs, which have the lowest responsiveness to drops in sales in Croatia. Data refer to 2019. Source: FINA, HNB (Authors` calculation)
Operating leverage - dangerous during „sudden-stops”

**Certain cost types don't react to output volumes**

![Bar chart showing elasticity of cost types to output](chart.png)

- Cost of goods sold
- External supplies and services
- Staff costs
- Other expenses
- Depreciation
- Interest on financial debts

**Corporate operating leverage in Croatia (empirical)**

![Graph showing elasticity of EBIT to change in Sales](graph.png)

- Low FC
- High FC


Source: Allinger, Huljak (forthcoming): „The other leverage”

Note: Linear prediction of change in sales on change in EBIT (both scaled with average assets) for firms in different operating leverage terciles

Source: Allinger, Huljak (forthcoming): „The other leverage”
Employee support – a vital element of corporate capacities and profitability preservation

Note: Price of labor is imputed by the total wage costs over total employees.
Source: FINA, HNB (Authors’ calculation)

Smaller firms and ones from activities requiring more physical contact received more employee support

Small firms benefitted more (due to larger sales decreases and higher labour intensity)

Tourism was the main beneficiary of employee support due to the strong negative effect of Covid-19 containment measures

Source: FINA, Croatian Employment Service, HNB (Authors’ calculation)
Bankruptcy gap? What about the efficiency gap?

**Efficiency gap widens – normal finding for 2020/2021**

- Labour coverage 2020 (% of labour cost)
- Labour coverage H1 2021 (% of labour cost)
- Tech. Efficiency 2019
- Tech. Efficiency 2020
- Number of firms 2020 (rhs)

**Share of employment support to non-viable companies higher than their share in employment or sales**

- Share of zombie firms in total,%
- Sales
- Employees
- Employee support


Source: FINA, HNB (Authors’ calculation)

Note: Non-viable companies are identified according to Interest coverage criteria (not being able to cover for imputed 5% interest for three years in a row). Data for 2020 is depicted.

Source: FINA, HNB (Authors’ calculation)
4. Conclusion
Support measures effectiveness – too early to make an assessment?

Corporate revenue recovered strongly in 2021 – preservation of capacities surely helped

NFC Loan portfolio quality remained stable

Note: The graphs shows the amount of fiscal receipts – historically a good proxy of corporate Sales.
Source: Ministry of Finance (Fiscal receipts)

Note: Stage 3 loans are corrected for NPL sales.
Source: HNB (Authors’ calculation)
Conclusion

• Developments from 2020-2021 exposed the sensitivity of the corporate sector to a sudden stop in business activity. The support package helped in the preservation of capacities and liquidity; however, it is still early for the assessment of effectiveness in the medium term.

• Shocks from climate events or supply chains disruptions would generate effects on corporates similar to the pandemic effects (more than the financial shocks). Therefore, monitoring the operating leverage (the burden of fixed costs) is important.

• Identifying best practices among the various designs of policy support across countries usually takes time and effort. However, we should learn faster!!!
Thank you for your attention !!!

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