

# Outlasting the Pandemic: Corporate Payout and Financing Decisions During Covid-19

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- 1 Introduction
- 2 Data
- 3 Empirical Results
- 4 Conclusion

# Introduction: Pandemic was a Massive Cash Flow Shock

- The Covid-19 pandemic, lockdowns and social distancing measures had unprecedented effects on economic activity and financial markets
- Massive increase in firms' cash flow risks and uncertainty about
  - virus trajectory (medical risks)
  - responses of governments and central banks (policy risks)
  - household spending, savings, and risk aversion (behavioral risks)
  - firm behavior: sectoral trend shifts (business risks)
  - access to credit markets (financial market risks)
- Pandemic duration risk has made **firms' capital budgeting difficult**

# “As Long as it Takes”

- **“Whatever it takes.”** — July 26, 2012  
*President of the European Central Bank Mario Draghi, expressing the ECB's commitment to the Euro.*
- **“As long as it takes.”** — March 22, 2021  
*Federal Reserve Chairman Jay Powell, pledging continued support*

# Research Questions

- How were firms' payout and financing choices affected by the Covid-19 pandemic?
- How did the pandemic affect firms' decisions to suspend dividends and buybacks, or raise new bonds and equity?
  - Cutting or suspending dividends preserves short-term capital
  - Raising new funds through loans, bonds and equity issues provide longer-term financing
- Which firm characteristics affected the propensity to suspend dividends and buybacks, or raise new bonds and equity?
- How did the stock market react to changes in firms' dividend and buyback policies?

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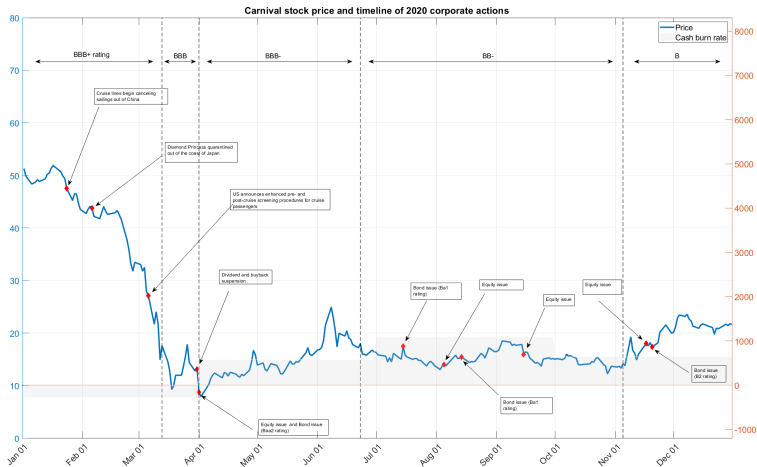
## Motivating Example

- *“Some of the biggest borrowers during the pandemic, according to figures from financial-data provider FactSet, have been those hurt most by it. Carnival Corp. (CCL), the world’s largest cruise operator, had around \$33 billion of total debt as of Feb. 28, almost triple what it had near the end of 2019. Boeing Co. (BA)’s total debt more than doubled during the pandemic, to \$64 billion, while Delta Air Lines Inc.’s doubled to around \$35 billion.” – WSJ - June 14th 2021*
- Boeing (BA) suspended dividends on March 20th, 2020
- Delta Air Lines (DAL) suspended dividends and buybacks on March 20th, 2020
- Carnival (CCL) suspended dividends and buybacks on March 31 2020
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# Motivating Example: Carnival



# Contributions

- Study the “joint dynamics”, e.g., the timing and magnitude, of firms’ capital choices during Covid-19: dividends, buybacks, bonds and equity
  - Focus on *changes* in corporate payout policies during Covid-19, e.g., dividend and buyback suspensions
- Testing a “high-frequency” version of the Myers and Majluf (1984) pecking order theory
  - Most recent Covid-19 papers focus on only one aspect of the firms’ capital budgeting decision (e.g., bonds or equity)
  - First time in modern history where many firms suspended dividends and buybacks and changed their payout policy in such a short period of time
  - Several firms undertook a chain of consecutive actions
- Understand the drivers of firms’ decisions to suspend dividends and buybacks, and to issue new bonds and equity
- Analyze the market reaction to these corporate actions (event studies)

# Preview of Results

- 215 (259) firms suspended dividends (share repurchases) over March-December 2020
- **Dividends.** Between March and December of 2020, US firms saved \$29bn through dividend suspensions and another \$56.5bn by reducing dividends.
- **Buybacks.** Savings from buyback suspensions amount to \$140bn in 2020 (conservative estimate)
- **Bonds.** Market froze end of February, early March. \$60-\$80bn per week in mid-March-April,  $\leq$  \$40bn afterwards, only for investment-grade bonds. From May 2020, 30% of new bond issues are below investment-grade.
- **Equity.** Almost no issues until April, a few afterwards.
- **Interpretation:** Precautionary motives (troubled firms), cheap funding/lower cost of capital (robust firms). Bond market far more relevant than equity market for raising new funds.

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# Preview of Results

- **Drivers of dividend/buyback suspensions:** profitability and revenue growth. Firms' short-term stock market returns and idiosyncratic volatility are strong predictors of all four corporate actions. **Direction of causality unclear**
- **Chain of corporate actions:** most troubled firms' actions are consistent with a pecking-order theory (use internal funds first by suspending dividends/buybacks)
- **Event studies.** Firms suspended dividends and buybacks after large negative returns (e.g., -8% in the week preceding the announcement), bouncing back afterwards. Payout suspensions were seen by markets as prudent actions that helped reduce cash flow risk. No CAR effect on bond issues.

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# Dividend Signaling During the Pandemic

- Firms' dividend payment behavior during the pandemic provides unique insights into the trade-off theory for dividend policies
- Cost of paying dividends went up:
  - Premium on access to cash rose sharply - cash hoarding due to massive uncertainty
  - Higher default risk due to lack of short-term capital
- Cost of suspensions went down
  - Reducing dividends seen as a prudent action
  - Dividend suspensions expected (mandated) in certain industries

# Existing Literature

- **COVID-19: Bonds and Equity**

- Acharya and Steffen (2020), Albuquerque et al. (2020), Becker and Benmelech (2021), Ding et al (2020), Fahlenbrach et al. (2020), Halling et al. (2020), Hotchkiss et al. (2020), Pagano et al. (2020), Ramelli and Wagner (2020)

- **COVID-19: Macroeconomic Impact**

- Atkeson (2020), Eichenbaum et al. (2020), Gourinchas (2020), Ludvigson et al. (2020)

- **Dividend Suspensions**

- Fama and French (2001), Hoberg and Prabhala (2008)

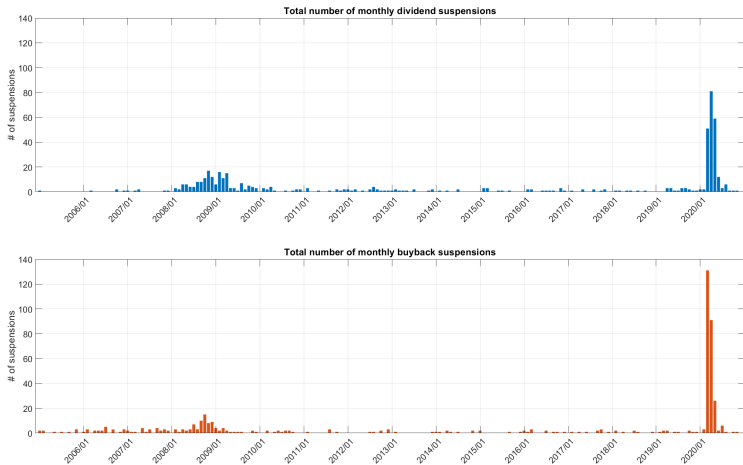
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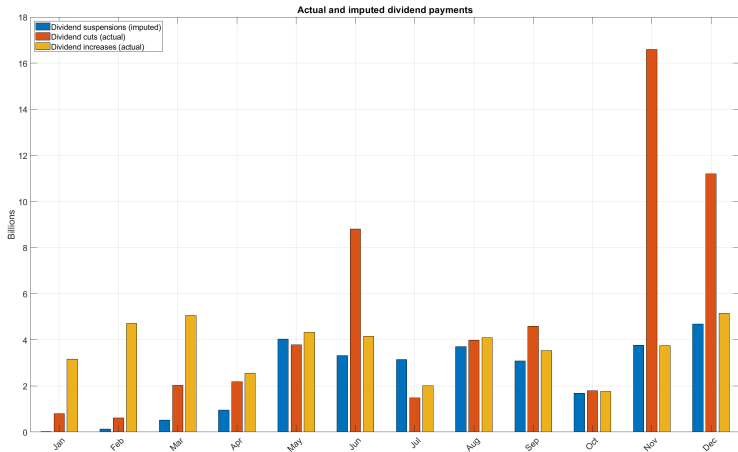
# Data Sources

- **Dividends and Buybacks.** CRSP data on daily stock prices and dividend (positive) announcements. No information on dividend suspensions or buybacks announcements/suspensions
- Combine information from Capital IQ and textual data sources using an automated text scraper:
  - 8-K SEC forms (EDGAR)
  - Company press releases from NASDAQ news platform
  - Manual reviews of each case
- 498 (497) dividend (buyback) suspensions from 2005 to 2020 which we merge with price and accounting data from Compustat
- **Bonds and Equity.** SDC Platinum: convertible and non-convertible bonds, MTN programs. Bond ratings from Moody's. Equity includes new issues of common/preferred shares, and equity rights

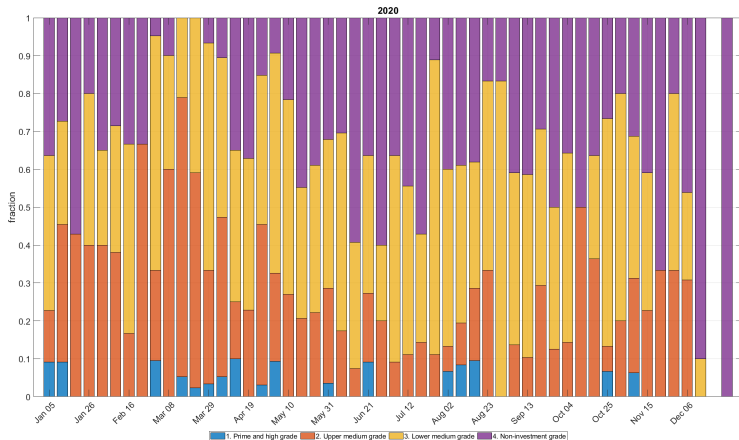
# Dividend and Buyback Suspensions



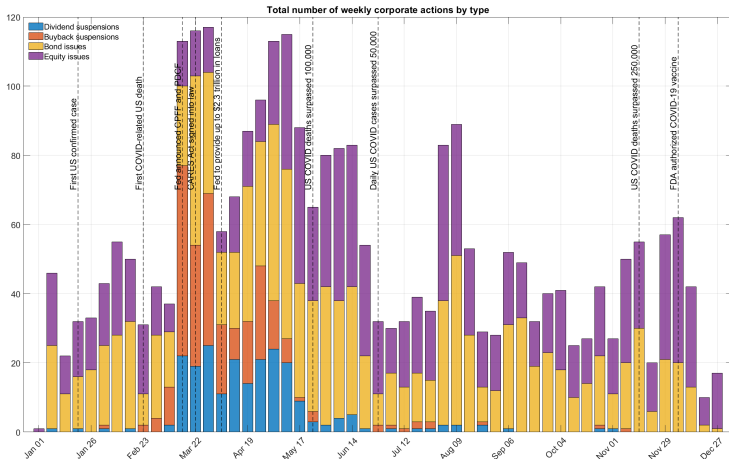
# Dividends by Category (2020)



# Bond Issues by Ratings (2020)



# Corporate Actions (2020)



# Drivers of Dividend Suspensions

Probit of dividend suspenders										
	2008-2009					2020				
	(1)	(2)	(3)	(4)	$\Delta Pr$	(5)	(6)	(7)	(8)	$\Delta Pr$
Firm size	-0.350** [-2.78]	-0.492*** [-3.45]	-0.397** [-3.28]	-0.539*** [-3.93]	-2.00%	0.0174 [0.20]	-0.0619 [-0.68]	-0.110 [-1.40]	-0.184* [-2.25]	-1.67%
Leverage	0.734*** [3.88]	0.793*** [3.86]	0.748*** [4.08]	0.802*** [4.05]	1.11%	0.113 [0.85]	0.125 [0.93]	0.134 [1.12]	0.142 [1.18]	2.16%
Cash	-0.383 [-1.85]	-0.442 [-1.81]	-0.362 [-1.82]	-0.414 [-1.78]	-0.64%	0.0923 [0.83]	0.101 [0.87]	0.0619 [0.60]	0.0685 [0.63]	1.92%
ROA	-1.913*** [-3.77]	-1.830** [-3.26]	-2.063*** [-4.11]	-2.008*** [-3.66]	-0.52%	-0.609* [-2.11]	-0.552 [-1.91]	-0.788** [-2.71]	-0.744* [-2.53]	-3.04%
$\Delta$ revenues	-0.555*** [-4.15]	-0.645*** [-4.43]	-0.564*** [-4.32]	-0.638*** [-4.56]	-0.72%	-0.697*** [-5.77]	-0.673*** [-5.58]	-0.798*** [-6.81]	-0.769*** [-6.63]	-13.40%
30-days idiosyncratic vol	1.009*** [5.18]	1.081*** [4.91]			1.96%	1.780*** [11.57]	1.738*** [11.15]			49.38%
30-days cumulative idiosyncratic returns			-0.576*** [-4.61]	-0.593*** [-4.33]	-0.97%			-0.961*** [-9.14]	-0.918*** [-8.72]	-21.89%
Prior corporate action dummy		0.983*** [3.65]		0.904*** [3.55]			0.830*** [3.29]		0.879*** [3.73]	
Industry FE	Y	Y	Y	Y		Y	Y	Y	Y	
Pseudo $R^2$	60.44%	63.97%	58.51%	61.79%		62.14%	63.59%	53.56%	55.50%	
Observations	756	756	756	756		901	901	901	901	

# Drivers of Buyback Suspensions

Probit of buyback suspenders										
	2008-2009					2020				
	(1)	(2)	(3)	(4)	$\Delta Pr$	(5)	(6)	(7)	(8)	$\Delta Pr$
Firm size	0.726*** [4.72]	0.705*** [3.93]	0.606*** [4.17]	0.631*** [3.62]	4.68%	0.664*** [8.50]	0.504*** [3.61]	0.492*** [6.99]	0.396** [2.98]	1.60%
Leverage	-0.0878 [3.88]	-0.0640 [3.86]	-0.0583 [4.08]	-0.0403 [4.05]	-0.11%	-0.150 [0.85]	-0.234 [0.93]	-0.0672 [1.12]	-0.180 [1.18]	-0.36%
Cash	-0.321* [-2.27]	-0.154 [-1.02]	-0.298* [-2.14]	-0.138 [-0.92]	-0.90%	-0.0906 [-1.21]	0.216 [1.66]	-0.0633 [-0.89]	0.216 [1.69]	0.43%
ROA	-0.970** [-2.80]	-1.457*** [-3.51]	-0.975** [-2.82]	-1.486*** [-3.57]	-1.44%	0.258 [1.44]	-0.716* [-2.16]	0.253 [1.44]	-0.704* [-2.16]	-0.35%
$\Delta$ revenues	-0.443*** [-3.60]	-0.369** [-2.63]	-0.471*** [-3.94]	-0.393** [-2.86]	-1.27%	-0.641*** [-6.21]	-0.594*** [-3.59]	-0.662*** [-6.68]	-0.598*** [-3.63]	-0.89%
30-days idiosyncratic vol	0.929*** [5.04]	0.656** [3.06]			2.38%	1.898*** [13.50]	1.378*** [5.57]			3.39%
30-days cumulative idiosyncratic returns			-0.484*** [-4.01]	-0.335* [-2.33]	-0.90%			-1.257*** [-10.91]	-0.868*** [-4.52]	-1.26%
Prior corporate action dummy		1.410*** [6.12]		1.473*** [6.50]			3.634*** [10.49]		3.695*** [11.26]	
Industry FE	Y	Y	Y	Y		Y	Y	Y	Y	
Pseudo $R^2$	27.27%	41.45%	23.77%	40.10%		43.42%	80.57%	33.85%	79.09%	
Observations	657	657	657	657		1,176	1,176	1,176	1,176	

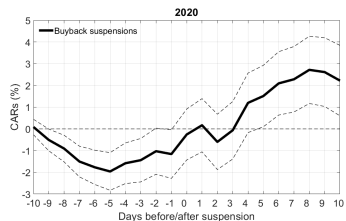
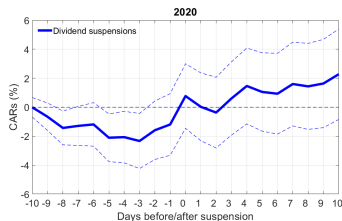
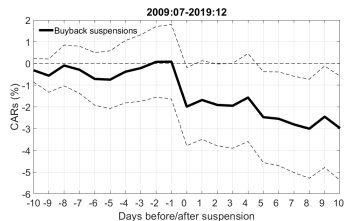
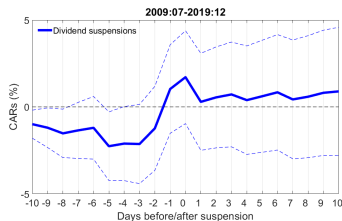
# Pecking Order Theory: Consistent Firms

Panel A: 2020

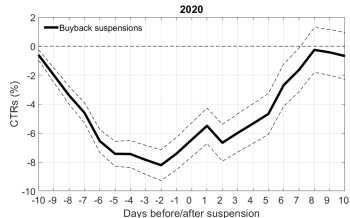
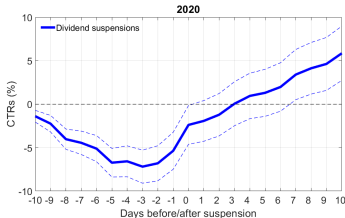
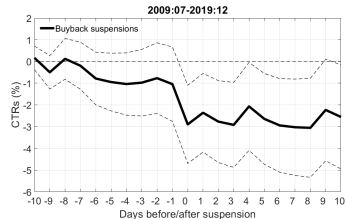
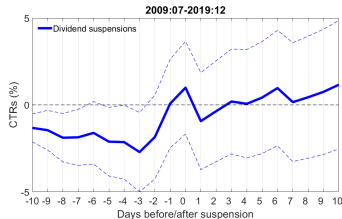
Company	Industry	Buyback stop date	Dividend stop date	Bond issue date	Equity issue date
Gap Inc	Retail Stores	12-Mar-2020	26-Mar-2020	23-Apr-2020	
Expedia Inc	Other	13-Mar-2020	23-Apr-2020	23-Apr-2020	07-Jul-2020
Alaska Air Group Inc	Transportation	16-Mar-2020	25-Mar-2020	23-Jun-2020	
Texas Roadhouse Inc	Retail Stores	17-Mar-2020	24-Mar-2020		
Hawaiian Holdings Inc	Transportation	18-Mar-2020	20-Apr-2020		
Ford Motor Co	Automobiles	19-Mar-2020	19-Mar-2020	07-Aug-2020	01-Dec-2020
Emerald Expositions Events Inc	Other	20-Mar-2020	20-Mar-2020	17-Apr-2020	
SYNNEX Corp	Other	24-Mar-2020	24-Mar-2020		
Marriott Vacations Worldwide	Banks, Insurance Companies, and Other Financials	24-Mar-2020	06-May-2020		
Cracker Barrel Old Country Store	Retail Stores	25-Mar-2020	25-Mar-2020		
Dick's Sporting Goods	Retail Stores	25-Mar-2020	14-Apr-2020		
Teres Corp	Other	25-Mar-2020	23-Apr-2020		
Carter's Inc	Retail Stores	26-Mar-2020	05-May-2020		
Abercrombie & Fitch Co	Retail Stores	26-Mar-2020	21-May-2020	18-Jun-2020	
La-Z-Boy Incorporated	Consumer Durables	29-Mar-2020	29-Mar-2020		
Herman Miller Inc	Other	30-Mar-2020	03-Apr-2020		
Kohl's Corp	Retail Stores	30-Mar-2020	17-Apr-2020	27-Apr-2020	
Palo Ralph Lauren Corp	Textiles, Apparel & Footwear	31-Mar-2020	27-May-2020	01-Jun-2020	
Phillips-Van Heusen Corp	Textiles, Apparel & Footwear	01-Apr-2020	01-Apr-2020	21-Apr-2020	06-Jul-2020
Bed Bath & Beyond Inc	Retail Stores	02-Apr-2020	02-Apr-2020		
Group 1 Automotive Inc	Automobiles	07-Apr-2020	07-Apr-2020	03-Aug-2020	
National Oilwell Varco Inc	Machinery and Business Equipment	09-Apr-2020	20-May-2020		
Jack In The Box	Retail Stores	15-Apr-2020	13-May-2020		
DineEquity Inc	Retail Stores	16-Apr-2020	29-Apr-2020		
HCA Inc	Other	21-Apr-2020	21-Apr-2020		
Yum China Holdings	Retail Stores	28-Apr-2020	28-Apr-2020		
Standard Motor Products Inc	Automobiles	29-Apr-2020	29-Apr-2020		
Dunkin Brands Group Inc	Other	30-Apr-2020	30-Apr-2020		
Foot Locker	Retail Stores	03-May-2020	22-May-2020		
Marathon Oil Corp	Oil and Petroleum Products	06-May-2020	06-May-2020		
Domtar Corporation	Other	08-May-2020	08-May-2020		
Twin River Worldwide Holdings	Other	11-May-2020	13-May-2020	06-Oct-2020	
Viad Corp	Other	14-May-2020	14-May-2020		
Maxim Integrated Products Inc	Machinery and Business Equipment	13-Jul-2020	28-Jul-2020		
Park Hotels & Resorts Inc	Other		16-Mar-2020	15-Sep-2020	
Triumph Group Inc	Transportation		19-Mar-2020	05-Aug-2020	
Macy's Inc	Retail Stores		20-Mar-2020	27-May-2020	
Boyd Gaming Corp	Other		25-Mar-2020	13-May-2020	
Vail Resorts Inc	Other		01-Apr-2020	29-Apr-2020	
Arconic Corporation	Steel Works Etc		06-Apr-2020	29-Apr-2020	
Continental Resources Inc	Oil and Petroleum Products		07-Apr-2020	10-Nov-2020	
Meredith Corp	Other		20-Apr-2020	25-Jun-2020	
Designer Brands	Retail Stores		01-May-2020	08-May-2020	04-Sep-2020
KAR Auction Services Inc	Automobiles		07-May-2020	26-May-2020	
Penske Automotive Group Inc	Automobiles		13-May-2020	04-Aug-2020	
Townsquare Media Inc	Other		15-Jun-2020	16-Dec-2020	



# CARs - Dividend and Buyback Suspensions



# CTRs - Dividend and Buyback Suspensions



# Conclusion

- Firms' payout policies were greatly affected by the Covid-19 pandemic
  - Cutting or suspending dividends and buybacks to preserve short-term capital was seen as the prudent action for firms hit by large revenue shocks.
- Investment-grade, solid firms issued large amount of (cheap) debt to lower their cost of capital
- Revenue growth and profitability were key drivers of the propensity to suspend dividends, while size was important for buyback suspensions. Short-term market performance and volatility are relevant for both decisions
- The stock market anticipated changes in firms' dividend and buyback policies
  - Direction of causality unclear