White Rose Research Online

eprints@whiterose.ac.uk
https://eprints.whiterose.ac.uk
Universities of Leeds, Sheffield and York

Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:
https://eprints.whiterose.ac.uk/id/eprint/163163/

Version: Published Version

Monograph:
Baker, A., Haslam, C., Leaver, A. et al. (2020) Against hollow firms : repurposing the corporation for a more resilient economy. Report. Centre for Research on Accounting and Finance in Context (CRAFiC), University of Sheffield

---

© 2020 The Author(s). For re-use permissions, please contact the Author(s).

Reuse
Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown
If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

UNIVERSITY OF LEEDS
University of Sheffield
UNIVERSITY of York

Against Hollow Firms

Repurposing The Corporation For A More Resilient Economy

A post-Covid 19 report by:

The Centre for Research on Accounting and Finance in Context (CRAFiC)

Authors:
Andrew Baker, University of Sheffield
Colin Haslam, Queen Mary, University of London
Adam Leaver, University of Sheffield
Richard Murphy, Corporate Accountability Network/University of Sheffield
Leonard Seabrooke, Copenhagen Business School
Saila Stausholm, Copenhagen Business School
Duncan Wigan, Copenhagen Business School

Contact Author:
Professor Adam Leaver, Director of CRAFiC
Email: a.leaver@sheffield.ac.uk

Executive Summary

The Covid-19 pandemic is revealing latent weaknesses at large, well-established companies who may now require state support. This report argues that those weaknesses pre-date the current pandemic and are a consequence of excesses in the non-financial corporate sector during the post-2008 economy. Those excesses include: i) historically high levels of dividends and buybacks which, in many cases, exceeded earnings and hollowed out reserves ii) the growth of low-prime debt, which risks being downgraded to junk in the current crisis and iii) a build-up of 'fair valued' assets, often intangible assets such as goodwill, which are vulnerable to write downs that could push firms into negative shareholder equity.

On excessive dividends and buybacks:

- The **S&P 500 distributed an average of 87% of their net income as dividends and buybacks between 2009 and Sept. 2019** - well above the historical norm going back to the 1970s; **Eurostoxx 600 firms distributed 72% between 2010-2018.**
- Within that aggregate a number of extraordinarily high distributing firms paid out more than their profits after interest and tax: **37% of S&P 500 firms distributed more via dividends and share buybacks than they generated in group net income in the last available accounting year**; the figures for the **FTSE 100 and S&P Europe 350 were 28% and 29%** respectively**.**
- As of January 2019 **US companies distributed 126.8% of their free cash flow compared with 78.9% for European companies.**

On risky debt:

- The value of U.S. investment-grade **nonfinancial corporate bonds grew from approximately $1.5 trillion in 2008 to $4.5 trillion at year-end 2018**
- The quality of that debt was low: **BBB-rated bonds grew** from approximately **$0.8 trillion in 2008 to $2.7 trillion** by year-end 2018. The amount of non-financial high-yield/non-investment grade bonds outstanding grew from approximately $0.7 trillion in 2008 to $1.1 trillion by year-end 2018.

On intangibility:

- **37.5% of S&P 500 firms and 40.7% of Eurostoxx 600 firms have goodwill in excess of their retained earnings**, which implies **a full impairment would eat into their legal capital.**
- **Around 20% of S&P 500 and 16% of Eurostoxx 600 companies have both net income distribution above 80% and goodwill to retained earnings over 100%.**

The report argues that:

- These outcomes reflect management's desire to maximise short term shareholder payouts by increasing a firm's 'distributable reserves' - the legal limit on what a firm can pay out to shareholders.
- The drive to increase distributable reserves encouraged companies to play with the temporalities of financial reporting - to bring forward income and push back costs and contingencies to maximise distributable reserves within the reporting year.
- In so doing, firms assumed portal-like qualities, moving income and costs through time and space. This stored up future risks, which are now emerging.
- Companies face the prospect of realising fair value impairments on top of their losses on operations; whilst also trying to find liquidity from the capital markets just as company credit ratings fall and equity markets dry up.

- This will make recessions deeper, the costs to governments larger, and extend the need for central bank intervention into non-financial corporate markets, just as they did financial markets in 2008.
- These processes were encouraged by skewed boardroom incentives, and enabled by the vagaries of the fair value accounting regime and post-2008 policy interventions.
- Their effects were to accelerate the uneven societal distribution of income and risk. They produced winners in the boardroom but left many workers with an insecure subsistence stake in organisations whose survival is now moot.
- This raises fundamental questions about social justice: in a minimally just society there must be some level of protection for its citizenry who, through no fault of their own, bear much of the risk of firm fragility and a declining return on firm proceeds.
- That protection should begin with a repurposing of the corporation to promote the 'just economy', improving economic resilience and social wellbeing. Citizens can reasonably expect regulatory authorities to offer protections from vulnerabilities by safeguarding companies on precautionary grounds, setting limits to, and regulating, the kind of excessive distributions firms paid from earnings of uncertain provenance seen in the post-2008 period.

To do that we recommend a series of 'maintenances' for restoring system resilience:

1. **Capital Maintenance:** *Repurposing the corporation* through a stronger recognition in company law and accounting rules that management's core obligation is to protect the capital base of the company so that it may withstand shocks and serve the needs of multiple stakeholders. Capital maintenance should be recognised as the superordinate legal duty of directors; accounting rules and practices should be subordinate to that rule. We advocate a range of accounting reforms to protect capital.

2. **Measurement Maintenance**: *Repurposing accounting rules* to increase the provenance of asset valuations so that they are based on actual transactions rather than subjective estimations of future cashflows, which fuel both excess distributions and procyclicality.

3. **Diversity Maintenance**: *Ensuring a balanced, mixed ecology of firms*, consisting of more diverse ownership and financial strategies, avoiding correlated exposures in foundational activities which are essential in stable societies.

Introduction: Procyclicality and the Crisis of Large Caps

As we write, governments across the world are involved in interventions, the scale of which are unprecedented in peacetime, to stabilise an economy turned upside down by the COVID-19 outbreak. The immediate effects of the COVID-19 lockdown have been felt by small firms vulnerable to quick collapse because of their hand-to-mouth reliance on cashflow. Government relief efforts have provided direct payments or loan guarantees to keep these small businesses going and have used 'furloughing' to prevent runaway unemployment.

Those radical interventions have, to an extent, diverted attention from the emerging problem of fragility in the large cap sector. Within weeks of the lockdown many large household names initiated administration proceedings.[1] Many others are now on the brink of collapse and require the life-support of government bailouts. A raft of other interventions have been introduced to stabilise large firms and mitigate the effects of COVID-19 on their solvency.[2] The total fiscal support for the crisis now stands at an estimated $9 trillion, a total that already dwarfs the total committed during the 2008 crisis.[3]

At first glance the COVID-19 pandemic could be understood as a classical 'exogenous shock': an event from outside the economic system that causes economic disruption and breakdown. This report shows that understanding is partial. We argue that the crisis should be understood as an interaction between this event and pre-existing financial and corporate fragilities that have built up within the economic system in the post-2008 period. In economic parlance these fragilities are 'endogenous' - they involve the accumulated collective priorities, decisions, behaviours, risk perceptions and reporting practices of market participants which, individually and at the aggregate produce balance sheet frailties that cause economic instability.[4] These accumulations *amplify* the impact of 'shocks' and events when they occur, making their effects less containable. They are, in other words, ***procyclical***.

This pro-cyclicality reflects the migration of capital market-like logics into the non-financial sector and the reporting liberties afforded to management under a fair value accounting regime. Its effects are more acute under a shareholder value-led system of corporate governance which have incentivised managers to run their balance sheets 'hot' to trigger bonus clauses and increase the value of their share options. This has been aided and abetted by the consulting arms of the Big Four accounting firms who advise managers on how best to to maximise shareholder distributions using a variety of creative accounting techniques and the alchemy of Mergers & Acquisitions (M&A). Firms

---

[1] In the UK they include Laura Ashley, Debenhams, Carluccios, Flybe and a host of others

[2] This includes the UK government's temporarily suspending wrongful trading provisions (https://www.gov.uk/government/news/regulations-temporarily-suspended-to-fast-track-supplies-of-ppe-to-nhs-staff-and-protect-companies-hit-by-covid-19) and the FCA, FRC and PRA announcement that the filing of company accounts can be delayed.

[3] Battersby, B., W. R. Lam, and E. Ture. 2020. 'Tracking the $9 Trillion Global Fiscal Support to Fight COVID-19'. IMF Blog. Retrieved 21 May 2020 (https://blogs.imf.org/2020/05/20/tracking-the-9-trillion-global-fiscal-support-to-fight-covid-19/).

[4] The Bank for International Settlements (BIS) refers to those basic insights as the 'endogeneity school of risk' (Borio, 2003, p.8). Our approach in this report draws on what might be broadly called an endogenous understanding of financial risks and instabilities. Borio, C. (2003). Towards a macroprudential framework for financial supervision and regulation?. *CESifo Economic Studies*, *49*(2), 181-215. Danıelsson, J., Shin, H. S., & Zigrand, J. P. (2004). The impact of risk regulation on price dynamics. *Journal of Banking & Finance*, 28(5), 1069-1087. Brunnemeier, M Crockett, A, Goodhart, C. Persaud, A. Shin, H (2009) The Fundamental Principles of Financial Regulation. *Geneva Report on the World Economy 11*, Geneva: International Centre for Monetary and Banking Studies, London: Centre for Economic Policy Research. Minsky, H. P. (1995). "Financial factors in the economics of capitalism." Journal of Financial Services Research, 9, pp.197-208. Ferri, P., & Minsky, H. P. (1992). Market processes and thwarting systems. *Structural Change and Economic Dynamics*, *3*(1), 79-91.

are consequently left with too much debt financing too many assets measured on a fair value basis, which are now prone to impairment. Impairments to these often speculatively valued assets threaten to blow holes in firm balance sheets if they are thinly capitalised, just as they begin to realise losses on their operations. This double-hit creates a procyclical dynamic.

Large cap firms may protest that, unlike the banks in 2008, they did not cause this crisis and so bailouts are justified. But that complaint is only partially true. The seriousness of the coronavirus effect should not be downplayed, but the bailouts are needed partly because firms were run in ways that exposed them to procyclical risks in downturns. As we move from the fear phase to the anger phase of this crisis, questions will inevitably be asked about why so many large firms were so vulnerable to the economic effects of the virus; why their distributions of earnings to their members were so high before it happened and their resilience to shocks so low; why they were so dependent on debt; and why the stewards of those entities were paid so much whilst leaving them so vulnerable to such a shock?

Based on this diagnosis we argue that we cannot afford to make the mistakes we made in 2008 when our governing classes believed the answer to our problems was to try to return to 2006. The crisis in our non-financial sector shows how easily the idiosyncratic causes of the last crisis become the generalised blueprint for the next if certain systems of thought and behaviour aren't reformed or broken up. We argue the need for a new social and economic contract; but it has to be one that places the corporation at the heart of the reform programme. It must attempt to increase companies' counter-cyclical buffers to absorb shocks, enabling them to work more effectively for a wider, more inclusive range of stakeholders. Approaching corporations as a series of interdependencies, we recommend a series of 'maintenances' to build resilience across the corporate economy. Rethinking, re-designing and repurposing the firm is central to this effort.

We will now explore the character of the malaise in detail, before exploring its causes and what we can do to avoid similar disasters in the future.

Section 1: Procyclicality, Systemic Risk & The Large Cap Problem

Procyclicality and Systemic Risk

Many large firms confront a demand and supply side shock simultaneously: end consumers have reined in their spending and suppliers are struggling to fulfil orders due to logistics dislocations, pricing volatility and potentially even solvency issues of their own. These problems are not easily solved. They will affect not only companies' immediate profitability, but will create cashflow problems for the foreseeable future. This introduces immediate liquidity issues and asset impairments which may lead to firm insolvency.

Many assets, including those of an intangible nature like goodwill, are assigned valuations on the basis of their expected *future* cashflow generating capacity. And when expectations of those future cashflow adjust downwards, as they now must do, contemporary accounting rules then require that those asset values be impaired. This is an important problem facing many firms: they must book losses once as their operating performance weakens and at the same time book losses again through asset impairments as expectations of future cashflows deteriorate. The extent of that impairment risk depends on the volume of assets held which are valued on a fair value basis and the quality of those assets.

This may introduce problems of procyclicality. Procyclicality was one of the primary diagnoses of the 2008 financial crisis.[5] It refers to the financial accelerator effect which drives asset prices higher in market upswings and lower in downswings.[6] It also relates to the *time dimension of risk*: short time-horizons produce extrapolations of current conditions into the future, resulting in misperceptions of risk which encourage the overpayment for assets and excessive risk taking. The potential for such temporal misalignments has long been associated with the cycle of optimism and pessimism in financial markets: optimism generates an appetite for leverage and debt in the upswing to amplify returns on rising asset prices,[7] but when events cause a reassessment of future earnings, the cycle reverses: leverage amplifies losses, leading to rapid contractions in investment, lower volumes of trading, asset price falls and liquidity spirals as firms fire sell assets to meet creditor calls, leading to a self-reinforcing cycle of decline.

These effects are embedded in 'fair value', 'market-based' or 'mark-to-market' accounting techniques ('fair value' hereafter) which record asset prices at current market values and amplify price movements in a 'procyclical' fashion.[8] Indeed in some cases market and reporting processes can feed off each other to produce feedback loops and amplification effects that are systemically disruptive. To date *procyclicality* and *systemic risk* have largely been associated with financial and banking systems, but now many non-financial assets are valued on the basis of capital-market-like valuations through the fair value accounting regime. The next section provides an account of the procyclical dynamics that we believe are about to unwind in a significant minority of S&P 500 and Eurostoxx 600 companies. We develop this argument over a series of steps. First, we examine the extent to which managers have increased distributions rather than building up capital buffers that would have added resilience to company balance sheets; second, we explore the extent to which those distributions in non-financial corporations have been partly financed by debt, specifically 'mid-' and 'low-prime' bonds which now create refinancing problems; third we examine how the growth of goodwill and other assets whose value relies on discretionary estimations of future states of the world create impairment risks and raise procyclical challenges.

Point 1: Many firms have distributed more to shareholders than they've generated in profit since the 2008 crisis.

The post-2008 economy was characterised by a ratcheting up of shareholder distribution norms at most large cap firms. When the crisis hit, many companies were distributing virtually all of their profits to shareholders. And in a sizeable minority of large firms, managers were distributing more to shareholders than their firms were generating in profit after interest and tax. The ratios vary by source, but the overall picture is the same. Table 1 shows that firms listed on the S&P 500 distributed an average of 87% of their net income between 2009 and September 2019, whilst Eusostoxx 600 firms distributed a lower proportion - 72% between 2010-2018. Nathan & Groman estimate an even higher figure for the S&P 500 of 90% between 2009-18 (figure 1); which is

[5] Report of the Financial Stability Forum into Addressing Procyclicality in the Financial System, 2009 https://www.fsb.org/wp-content/uploads/r_0904a.pdf

[6] Borio, C, Furfine, C and Lowe, P (2001), Borio, C. (2003). Crockett, A (2000) "Marrying the micro and macroprudential dimensions of financial stability," *BIS speeches*, 21 September

[7] Keynes, J. M. (1936). *The general theory of interest, employment and money*. London: Macmillan. Minsky, H (1967) "Suggestions for a Cash Flow Oriented Bank Examination." Paper 175. Minsky Archive.

[8] Joint FSF-CGFS Working Group, (2009) "The role of valuation and leverage in procyclicality" https://www.fsb.org/wp-content/uploads/r_0904h.pdf?page_moved=1 Sole, J., Scarlata, J., & Novoa, A. (2010). Financial stability, fair value accounting, and procyclicality. *Journal of Financial Transformation*, *28*, 61-75. Brunnemeier et al (2009). Warwick Commission. (2009). *The Warwick Commission on international financial reform: in praise of unlevel playing fields. Coventry: University of Warwick.*

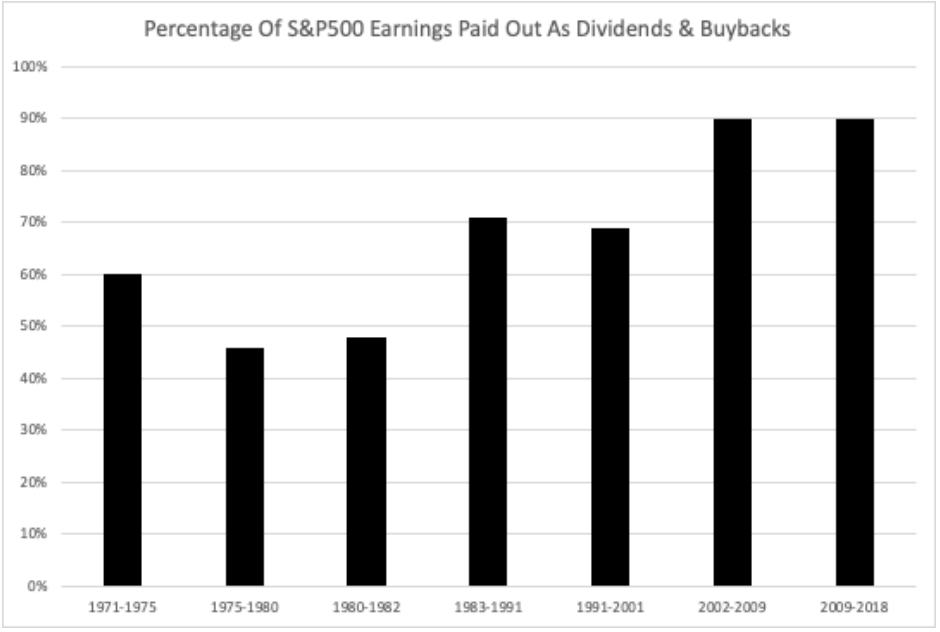
unprecedented in the last 50 years.[9] In years like 2015 and 2016, S&P 500 firms in the aggregate distributed more in dividends and share buybacks than they created in terms of net income. Eurostoxx 600 firms distributions are generally lower, but still in years like 2015 they paid out virtually all net income to shareholders.

Table 1: Distributions As A Percentage Of Net Income S&P500 and Eurostoxx600

S&P 500	Dividends as a share of operating income	Dividends and buybacks as a share of net operating earnings	EuroStoxx 600	Dividends as a share of operating income	Dividends and buybacks as a share of net operating earnings
	%	%		%	%
12 Mo Sep,'19	38	98			
12 Mo Sep,'18	35	91			
2018	36	99	2018	65	78
2017	39	88	2017	50	54
2016	43	101	2016	83	87
2015	43	108	2015	92	98
2014	35	90	2014	69	78
2013	33	82	2013	55	57
2012	32	78	2012	74	79
2011	27	74	2011	55	71
2010	27	67	2010	44	45
2009	39	66			
Average	36	87	Average	65	72

Source for S&P 500: S&P Global Indices Source for EuroStoxx 600: Osiris Datasets
Note: Data is for all companies listed in S&P 500 and operating earnings are net income
Note: the analysis covers all companies listed in the EuroStoxx 600 with data for both dividends and share buybacks.
Note: Operating earnings are net income after tax.
Note: S&P 500 average is for the period 2009 to September 2019; EuroStoxx600 average is for 2010 to 2018

Figure 1: S&P500 Distributions During Periods Of Expansion



Source: Nathan & Groman (2019), Robert Shiller, NBER, S&P, Goldman Sachs Global Investment Research
Note: bars represent periods of US economic expansion

[9] As Nathan & Groman note, there were periods in the early 20th century when distributions were higher, but that took place in a context where dividends were rewards to equity providers who were the primary source of funding; presently firms are net buyers rather than issuers of capital.

Most of the FTSE100 is captured in the Eurostoxx600 index but it is also possible to isolate FTSE100 performance to show that UK distribution rate norms are much closer to US distribution rates, even if the mechanism for distributing to shareholders differs. Dividends account for a much higher share of total shareholder distributions than buybacks in the UK and Europe relative to the US. This reflects, amongst other things, the tax advantages of share repurchases over dividends in the US,[10] but also the preference for remunerating CEOs in stock options in the US, which incentivises buybacks. Nevertheless, between 2009 and 2018 the aggregate net income (profit after interest and tax) of FTSE 100 companies was £898bn, dividends were £571bn and share buy-backs £167bn. UK large cap firms were, in other words, distributing 82% of total net income to shareholders - marginally less than S&P500 firms, but more than the average for the Eurostoxx600 (Table 2).

However, aggregate figures disguise different company distribution norms within these indexes. By breaking aggregates into bands, it possible to isolate a significant minority of firms who make distributions to shareholders in excess of profits: *28 percent of the FTSE 100, 29 percent of the S&P Europe 350 and 37 percent of the S&P500 distributed more to shareholders via dividends and share buybacks than they generated in net income in 2019* (Figure 2). 2019 was not an exceptional year. For example, on average between 2009-2018 25 per cent of the FTSE 100 paid out more in shareholder returns than they generated in net income. The payment of dividends and buybacks in excess of profit is one of the key reasons large firms lack the capital buffers to absorb losses in downturns. In the long run, this increases risk and damages firm resilience, meaning the state has to play a larger role when the economy enters a downturn.

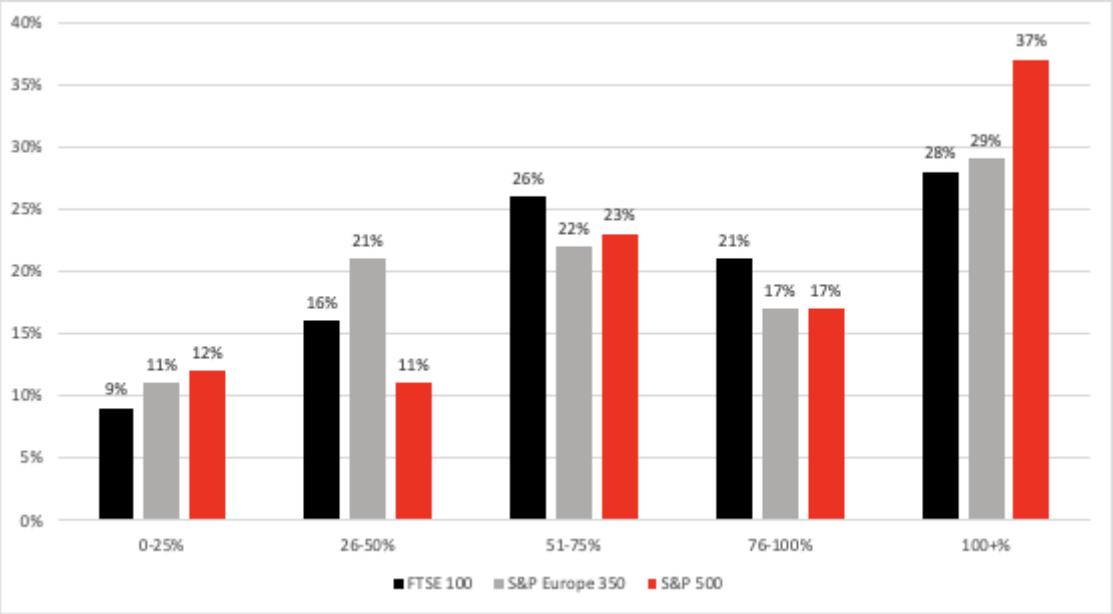
Table 2: Dividends, share buy-backs as a share of net income in EuroStoxx 600, S&P 500, FTSE100 (Average for period 2009 to 2018)

	Dividends	Share buy-backs	Total
	%	%	%
EuroStoxx 600	65	7	72
S&P 500	36	51	87
FTSE 100	64	19	83

Source: Thomson Eikon datasets. Company data is as reported in each year
Notes: we have computed the total net income, dividends and share buy-backs for the whole period and then taken the average of dividends and share buybacks out of total net income after tax.

[10] Dittmar, A.K., 2000. Why Do Firms Repurchase Stock. *The Journal of Business* 73, 331–355. https://doi.org/10.1086/209646

Figure 2: Proportion of FTSE100, S&P Europe 350 and S&P500 Companies by Different 'Shareholder Distributions to Net Income' Bands (0-25%, 26-50%, 51-75%, 76-100%, 100+%); in 2019/latest financial year



Source: Thomson Reuters Eikon datasets, latest financial year
Notes: Equity is total shareholder equity. Goodwill is the outstanding net balance. Debt is long-term debt outstanding. Debt to equity ratio adjusted reduces the equity of a company by goodwill to simulate a total impairment impact. Net income distributed: bands are share of net income distributed as dividends and share buy-backs in 2019. Goodwill to Equity is the goodwill as a percentage of equity split into bandings for year ended 2019. Debt to equity ratio is total long-term debt divided by total shareholder equity for year ended 2019. Debt to equity ratio adjusted is debt divided by total shareholder equity minus goodwill for year ended 2019

A Focus On S&P500 Buybacks

The preference for buybacks over dividends shaped the form of US capitalism during the post-2008 boom. US companies have been able to conduct open market buybacks without any practical limits since the SEC introduced Rule 10b-18 of the Securities Exchange Act.[11] As noted above, the US preference for stock repurchases should be understood alongside the tendency to award a larger proportion of US CEO pay in stock or stock options. This can incentivise management to lever the company balance sheet to buy back shares which boost the value of those options. That was the conclusion of a recent study[12] on McDonald's, Caterpillar, Boeing and 3M - which showed how those four companies, when combined, issued a record amount of debt to buy back stock in large quantities, even as sales growth fell. These companies each spent an average of $200 million per year on issuance of options to top management. Those managers then collectively exercised options and sold shares in the open market to the value of over *half a billion dollars* in a four-year period. When senior management are given share options with a low strike price *and* have the discretion to lever up the firm's balance sheet to buy back shares on the open market which drive up their price, then there are real risks that firms become run for insiders.

The data on equity purchases presents a picture of corporate America effectively eating itself: US non-financial corporations are not only the largest net purchaser of US shares, they are practically the only net purchaser of equity of note (Table 3). Between 2010-2018, US firms bought back

[11] Lazonick, W., 2014. Profits Without Prosperity. *Harvard Business Review* September 2014, pp.4-11
[12] The Felder Report, 2020. The Fate Of The Fantastic Four (Of Financial Engineering) URL https://thefelderreport.com/2020/03/25/the-fate-of-the-fantastic-four-of-financial-engineering/.

$3.8trillion of their own shares[13] - a figure that exceeds the Federal Reserve's bond-buying purchases over the same period as part of quantitative easing[14]

The share buyback boom in the US produces second order outcomes. Central banks' pursuit of a low interest rate environment provides a strong tailwind for an uplift in stock prices, but the ability to exert downward pressure is limited when there is a smaller pool of shares to sell down into a crowded market where trading volumes are thinner. Average daily trading volume in the S&P 500 in the three months prior to October 2019 days fell to 7% of total market capitalization - a 10 year low - compared with the 21% average volume between 2010 and 2013.[15] This effect may be amplified by the dominance of passive investment funds who simply buy an index which can reduce selling pressures based on underlying fundamentals of individual constituents.[16]

Table 3: Net US Equity Demand ($US bn)

Category	2014	2015	2016	2017	2018
Corporations	442	508	697	296	509
Households	95	-138	-151	226	191
Life Insurance	-5	31	98	-45	-18
Foreign Investors	114	-191	-188	125	-94
Mutual Funds	95	58	-112	-134	-124
Pension Funds	-272	-7	-217	-162	-243
Other	12	-7	-12	-17	9
less					
Foreign equities by US	432	197	22	167	128
Credit ETFs	50	57	96	123	100

Source: Nathan & Groman (2019), Robert Shiller, NBER, S&P, Goldman Sachs Global Investment Research

There is longstanding concern that buybacks stifle wage growth[17] and investment,[18] leading to inequality and a slowdown in productivity and accumulation. If buybacks keep share prices artificially high and also encourage a slowdown in investment, this may lead to a growing dislocation between share prices and the earnings creating capacity they are supposed to signal, and so share prices may lose some of their informational purpose. One measure of this is the Price/Earnings (P/E) ratio, which was higher just before the Covid-19 outbreak than it was at the pre-2008 peak; and was approaching 1929 levels of frothiness (Figure 4). Buybacks may explain a large part of the sharp differences between the S&P500 and other leading share indexes (Figure 5), and its unusual resilience during this crisis, at a time when US unemployment has hit a post-war high of close to 15%.[19]

[13] Useem, J., 2019. The Stock-Buyback Swindle [WWW Document]. *The Atlantic*. URL https://www.theatlantic.com/magazine/archive/2019/08/the-stock-buyback-swindle/592774/

[14] The Felder Report, 2019. If This Isn't Stock Manipulation, I Don't Know What Is – The Felder Report. URL https://thefelderreport.com/2019/02/07/if-this-isnt-stock-manipulation-i-dont-know-what-is/

[15] Matthews, Chris. 2019. 'How an "Astonishing" Decline in S&P 500 Trading Volume Could Pose Risks for Investors'. MarketWatch. Retrieved 11 May 2020 (https://www.marketwatch.com/story/as-stock-market-trading-volumes-decline-liquidity-concerns-rise-2019-10-21).

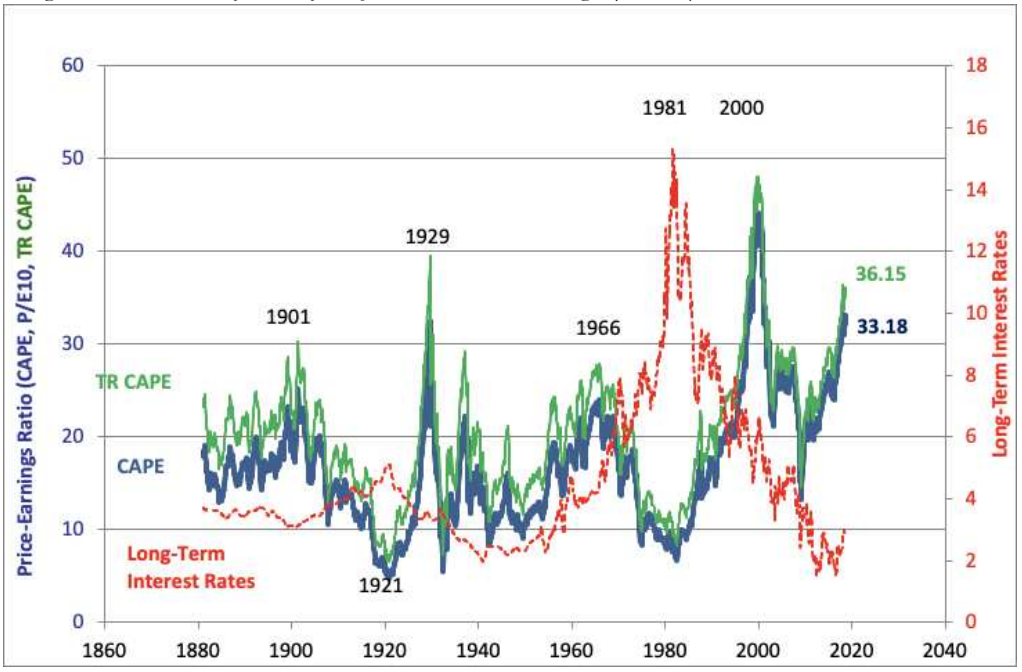
[16] Fichtner, Jan, Eelke M. Heemskerk, and Adam Leaver. 2018. 'If This Is Capitalism, Where Are the Price Signals?: The Glacial Effects of Passive Investment'. SPERI. Retrieved 11 May 2020 (http://speri.dept.shef.ac.uk/2018/09/03/if-this-is-capitalism-where-are-the-price-signals-the-glacial-effects-of-passive-investment/).

[17] Lazonick, W., O'Sullivan, M., 2000. Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society* 29, 13–35. https://doi.org/10.1080/030851400360541

[18] Stockhammer, E., 2004. Financialisation and the slowdown of accumulation. Cambridge J Econ 28, 719–741. https://doi.org/10.1093/cje/beh032; see also International Monetary Fund, 2019. Global Financial Stability Report, October 2019: Lower for Longer.

[19] Politi, James, Colby Smith, and Mamta Badkar. 2020. 'US Unemployment Hits Postwar High of 14.7%'. Retrieved 10 May 2020 (https://www.ft.com/content/2a297508-c8d0-4736-8c2f-9f4d16822f57).

Figure 4: S&P500 Cyclically Adjusted Price/Earnings (CAPE) Ratio and Total Return CAPE Ratio



Source: Shiller P/E Index, http://www.econ.yale.edu/~shiller/data.htm

Figure 5: Stock Market Indexes (S&P500, FTSE100, CAC40, DAX30) Jan 2009-present

Source: S&P Global Market Intelligence
Note: data rebased, Jan 1st 2009 = zero.

Point 2: Distributions have been Part-Financed by Debt

A closer inspection of distributions from the perspective of cash rather than profit reveals one role of non-financial corporate debt in the post-2008 conjuncture. As Table 4 shows, US firms (i.e. all firms, not just the S&P500) pay out 1.68 times their net operating cash as distributions. Much of the shortfall is made up from financing - i.e. debt. It is reported that US firms finance roughly half of

their buybacks from debt.[20] Since 2017, firms with lower credit quality have used more debt to make shareholder payments.[21]

The allure of debt is high when interest rates are low. In 2019 the US average industry cost of debt was estimated at 2.75% after tax compared to an equity average cost of 8.2%. In Western Europe the figures were 3.3% and 8.4% respectively. Debt is also tax subsidised - interest payments suppress taxable profits in a way the costs of equity do not. By substituting debt for equity, there is an automatic improvement in the Weighted Average Cost of Capital (WACC) which reduces discount rates. Given that discount rates include a weighted average cost of capital component, substituting debt for equity will not only boost share prices but, by lowering the discount rate, it will increase the net present value of assets held on the balance sheet at fair value. If assets are marked to market, this boost gives further justification for rising share prices. When income from, for example, contracts are also calculated on a fair value basis, the reduction in WACC will also boost earnings and thus the EPS ratio which management bonuses are often linked to. The substitution of debt for equity, via levered share repurchases, are thus part of a recursive self-reinforcing mechanism which goes towards boosting share prices and the value of share options. However, it can come at a price if it leads to over-leveraging and exposes the company to liquidity spirals and procyclicality.

Table 4: Dividends and share buy-backs as a share of free cash flow for all US and European companies, as of January 2019 (US$bn)

$ bn	US Companies	European Companies
Net Income (NI)	1113.6	733.4
Free cash flow before debt financing (FCF)	854.1	579.1
Dividends and Share Buy-backs (DIV & SBB)	1082.6	456.7
DIV and SBB as share of NI %	97.2	62.3
DIV and SBB as share of FCF %	126.8	78.9
Share of Sectors distributing above FCF (%)	54	31

Source: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/dataarchived.html
Note Free cash flow is cash before external financing
Net income is income after tax
Sectors are industrials classified into 94 industrial sectors

Debt has also driven M&A activity. M&A might be thought of as a speculative bet on the future cashflow generating capacity of another entity - firms borrow or issue equity at a certain cost and buy corporate assets which, they hope, will generate a risk-adjusted return over and above those acquisition costs. In the context of low interest rates and abundant liquidity described above, that may push up the price of corporate assets and encourage speculation. US M&A deals surpassed their 2007/8 peak in 2019. On the private equity side, leveraged loans also grew apace, with roughly 60% of all leveraged buyouts (LBOs) in 2019 over 6x levered.[22] Speculation often took the form of 'add-backs' - i.e. adjustments made to 'earnings before interest, tax, depreciation and amortisation' (EBITDA) or expected future cashflows on the basis of projected cost savings and synergies a company expects to make, to justify elevated amounts borrowed.[23] Add-backs are a sign of risk because they add additional layers of speculation and variability to the expected future cashflows

[20] Light, Larry. 2019. 'More than Half of All Stock Buybacks Are Now Financed by Debt. Here's Why That's a Problem'. Fortune. Retrieved 5 May 2020 (https://fortune.com/2019/08/20/stock-buybacks-debt-financed/).
[21] International Monetary Fund, 2019. Global Financial Stability Report, October 2019: Lower for Longer.
[22] International Monetary Fund, 2019. Global Financial Stability Report, October 2019: Lower for Longer
[23] Ibid.

against which the fixed obligations of debt are taken on. Prior to the coronavirus outbreak, add-backs were at record highs. It is likely that many of those savings and synergies will now no longer materialise, leading to goodwill impairments (see Point 3, below).

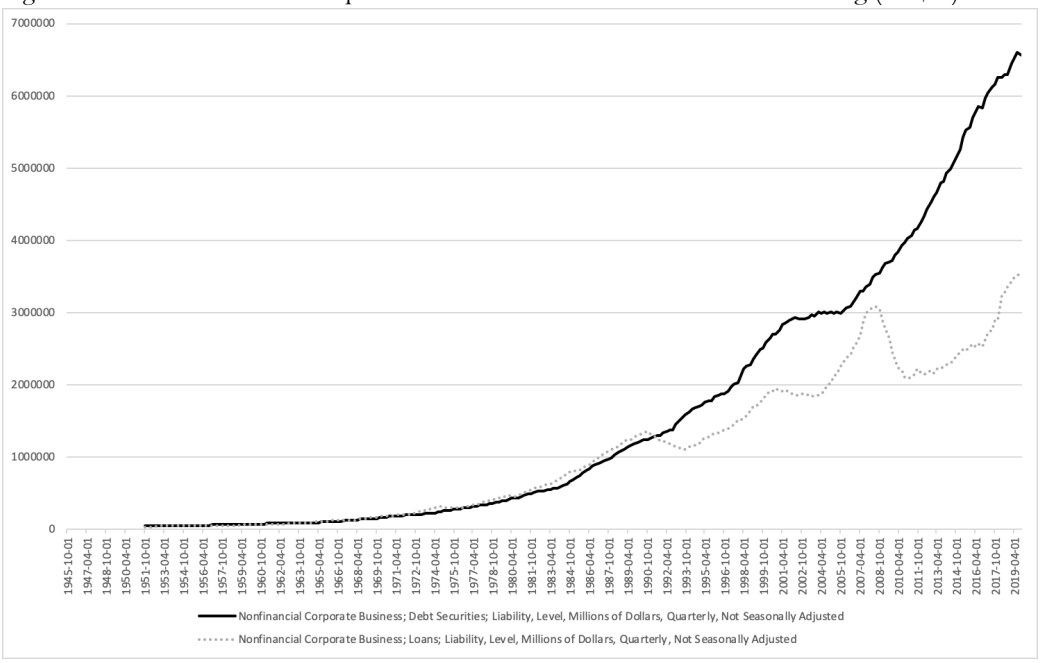
The Growth Of Corporate Mid- and Low-Prime Bonds

Debt has been a central feature of the last decade, but borrowing has taken a very particular form. Nonfinancial corporate debt consists primarily of bonds and loans (commercial paper is less than 5 percent of the total in the US). The growth of corporate debt was driven largely by corporate bonds, which became the financing instrument of choice as large cap firms realised they could access cheaper funding by bypassing banks and levering their own balance sheets (Figure 5). Nonfinancial corporate bonds outstanding in the U.S. grew from approximately $3.5 trillion in Q3 of 2008 when the great financial crisis struck to approximately $6.6 trillion at year-end 2019 (Figure 6). This in itself was a consequence of post-crisis central bank interventions such as QE which flattened the yield curve and so lowered the price of long term debt securities.[24] By 2019 US non-financial corporate debt to GDP exceeded the pre-2008 crisis peak by a distance.

The bulk of new corporate bond issuance concentrated in the investment-grade sector. The amount of outstanding U.S. investment-grade nonfinancial corporate bonds grew from approximately $1.5 trillion in 2008 to $4.5 trillion at year-end 2018 (figure 6). However, within that sector there was a notable deterioration in quality: the largest driver of growth was in A and BBB grade bonds (the lowest level of investment-grade debt) (figure 7). BBB bonds grew from approximately $0.8 trillion in 2008 to $2.7 trillion by year-end 2018. In addition, the amount of high-yield (less than investment grade) nonfinancial corporate bonds outstanding grew from approximately $0.7 trillion in 2008 to $1.1 trillion by year-end 2018. European debt levels are equally as worrisome and have followed a similar trend. The growth of 'low-prime' bond issuance is prevalent in Europe too:: lower-rated bonds (i.e. 'BBB's) account for the largest share of investment grade bonds outstanding in the EU. [25] European companies also had a debt-to-EBITDA multiple of 3.8x in 2019, compared with 3.3x in 2009; whilst speculative-grade debt levels reached new highs just as profit margins began to dwindle pre-COVID.[26] At the aggregate, the substantial growth in BBB and lower-rated bonds is indicative of a weakening in corporate credit quality.

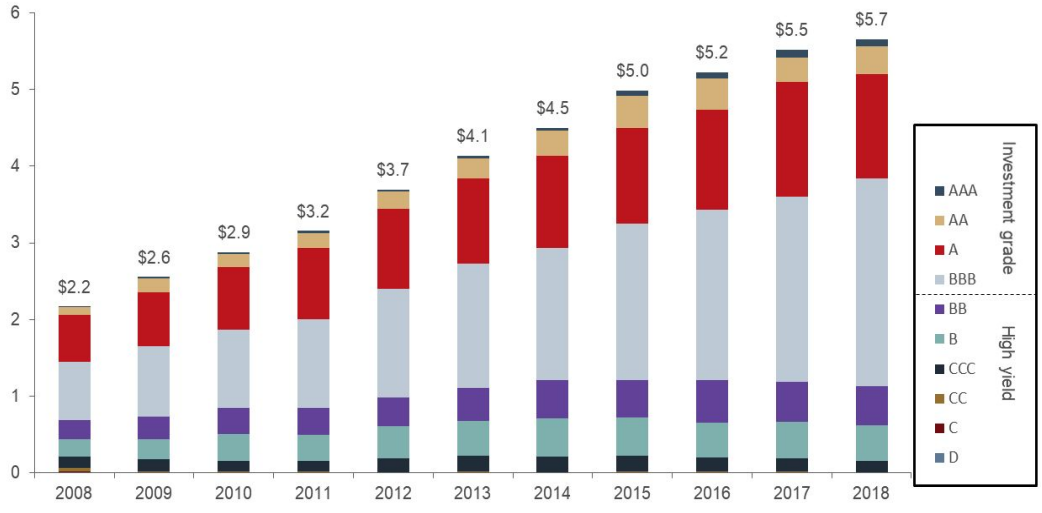
[24] Light, Larry. 2019. 'More than Half of All Stock Buybacks Are Now Financed by Debt. Here's Why That's a Problem'. *Fortune*. Retrieved 5 May 2020 (https://fortune.com/2019/08/20/stock-buybacks-debt-financed/).
[25] European Securities and Markets Authority, 2019. Trends Risks and Vulnerabilities: 28 February 2019..
[26] S&P Global Ratings, 2020. European Corporate Credit Outlook 2020.

Figure 6: US Non-Financial Corporations' Debt Securities & Loans Outstanding (US$m) 1945-2019



Source: US Federal Reserve Flow of Funds, Table Z.1

Figure 7: US Non-Financial Corporate Debt By Credit Rating ($ trillion)



Source: Kaplan (2019)

The growth of 'mid- or low-prime' investment grade debt poses several risks. The first is default risk - that the effects of the coronavirus downturn mean that companies begin to default on their loans as cashflows seize up. The second is a downgrade risk: a credit rating downgrade may mean some corporate debt moves from investment grade to high-yield/junk. That could set in train a series of amplifying effects - for example some mutual funds and government-run pension funds won't allow investment in non-investment grade corporate bonds. This may trigger a firesale of bonds, driving prices down and yields up, putting pressure on firms in their next funding round. Third, and relatedly, this may introduce a maturity or rollover risk if much of their debt needs to be refinanced in the near term if their credit rating falls below BBB. This is a material problem for many large caps: whilst there is just $86.8 billion of speculative-grade debt (loans and bonds) due to be refinanced in 2020, the figure is over $600bn for investment grade paper (Brennan/S&P Global Ratings 2020). Finally if firms are using third-party funding for secured loans or repo-like arrangements, this may lead to fire sales if those third parties refuse to accept the collateral as

security. In all these situations, firms may confront significant liquidity problems if they need to access cash to stay afloat, whilst their credit ratings decline and the future cashflows against which they might borrow, dry up. This will inevitably lead to calls for more state and central bank intervention.

Point 3: Futurity risks arising from the growth of goodwill and impairment shocks act as procyclical amplification mechanisms

The growth of debt on the liability side pushed up the value of assets on non-financial corporate balance sheets, either because its affordability encouraged firms to acquire corporate assets at elevated values or through the effect of low interest rates on discount rates which inflates the present value of assets held at fair value. Just as in financial markets, when short-time horizons produce extrapolations of current conditions into the future leading to misperceptions of risk, so, during the post-2008 conjuncture, non-financial companies were willing to pay increasing amounts for corporate assets, or revalue their own in the anticipation of a benign future and strong forecasted cash flows.

However that anticipated future may no longer materialise. The pandemic threatens to introduce a perfect storm: there is likely to be both a traditional recession with commercial losses charged to shareholder equity funds, but also an impairment crisis as a range of items, valued upwards during the boom, are now written down as future cashflow expectations collapse. Items valued in this way include property (under certain conditions), financial instruments, even contract profits. But one under-acknowledged threat comes from goodwill impairments.

Goodwill arises when a corporation acquires another corporation or business. It is therefore linked to questions of debt and M&A discussed above. It is valued as the difference between the sum paid for the acquired entity and the value of the 'identifiable assets' less 'liabilities assumed' of the entity that has been acquired. It is supposed to be a measure of the acquirer's perception of the excess profit earning potential within the acquired entity over and above its net asset worth.

Prior to 2001 under FASB and 2004 under International Financial Reporting Standards (IFRS), it was a requirement that goodwill be amortised over a maximum of 40 years. This valuation method changed to a fair value method - the market's best estimate of the discounted future cashflows that arise from intangible things like brands, consumer loyalty etc. The accounting rules FAS142 and IAS36 abolished amortisation and instead made goodwill subject to an annual impairment assessment: goodwill is now only impaired when the higher of its fair value (less costs of disposal) or value in use is deemed to be less than its carrying value.

The growth of goodwill during the post-2008 period is significant and has led to major changes in the balance sheet profile of the non-financial corporate sector. According to the Hong Kong Institute of Certified Public Accountants[27] the stock of goodwill on S&P500 balance sheets increased 45% between 2014-2018 and 26% for S&P Europe 350 companies. The combined value of goodwill on the balance sheets of those 850 firms was $5.05 trillion. Our own data (which draws on the S&P500 and the Eurostoxx 600) shows the unevenness of the distribution of goodwill - with a significant minority of firms holding large stocks of goodwill relative to their retained earnings and shareholder equity. As table 5 shows, 37.5% of the US S&P 500 and 40.7% of Eurostoxx 600 firms have goodwill assets which exceed their retained earnings. Table 6 shows that 27.9% of S&P500 firms and 15.2% of Eurostoxx 600 firms would be completely wiped out in the event of a large goodwill impairment.

[27] HKICPA, 2020. Goodwill:Improvements to Subsequent Accounting and an Update of the Quantitative Study.

Table 5: Goodwill to retained earnings for US and European companies

Companies goodwill to retained earnings ratio % range						
	0-25	*26-50*	*51-75*	*76-100*	*100+*	***Total***
USA	*87*	*53*	*26*	*24*	*140*	*330*
% Share	*23.3*	*14.2*	*7.0*	*6.4*	*37.5*	*100*
Europe	*99*	*61*	*48*	*18*	*176*	*402*
% Share	*22.9*	*14.1*	*11.1*	*4.2*	*40.7*	*100*

Source: Thomson Eikon and Osiris Datasets
Notes: In the case of the S&P 500 we have 330 companies where we have matched data for goodwill and retained earnings. For the Eurostoxx 600 we have 402 companies with matched data for goodwill and retained earnings.

Table 6: Goodwill to shareholder equity for US and European companies

Companies goodwill to shareholder equity ratio % range						
	0-25	*26-50*	*51-75*	*76-100*	*100+*	***Total***
USA	*96*	*77*	*47*	*49*	*104*	*373*
% Share	*25.7*	*20.6*	*12.6*	*13.1*	*27.9*	*100*
Europe	*144*	*88*	*79*	*61*	*60*	*432*
% Share	*34.2*	*18.8*	*18.1*	*13.8*	*15.2*	*100*

Source: Thomson Eikon and Osiris Datasets
Notes: In the case of the S&P 500 we have 373 companies where we have matched data for goodwill and shareholder equity. For the Eurostoxx 600 we have 442 companies with matched data for goodwill and retained earnings

The valuation of goodwill on acquisition is open to some creative accounting treatment. Management might be incentivised to underestimate the value of the net assets acquired in order to realise a larger amount of goodwill, because the former normally attracts a future depreciation charge whilst goodwill does not. Goodwill is carried at cost and impairment is only required if it can be shown that its holding value is worth more than its 'value in use" i.e. the net present value of its discounted future cash flows. Impairments may be avoided or at least delayed because managers do exercise some discretion and auditor judgement is not always as robust as it could be; whilst the average weighted cost of capital can be lowered by swapping debt for equity (as described above), boosting present assessments of goodwill value. This may discourage prudence when pricing an acquisition. According to Bloomberg, in 2018 S&P500 firms paid a median of 12.4 times their EBITDA for their acquisitions – a higher multiple than at the peak of the last crisis.

There is arguably an even more oblique process for impairing the holding value of subsidiaries on the parent balance sheet, which we will discuss later. But the salient point on goodwill is that it can allow firms to enjoy their best possible future in the present, providing the appearance of security which justifies elevated distributions. The appearance of security can reverse quickly however. Risks arise in one of three situations. The first is the disposal of the asset at a loss. The second is that support for the goodwill valuation is no longer viable due to diminished cash flows. The third is liquidation.

The current crisis is unlikely to give rise to many asset sales (unless it is part of a fire sale during a liquidity spiral), but the second and third options are real: when corporations are having to secure government-backed loan funding in many jurisdictions the likelihood that activity in loss making subsidiaries will be curtailed or even stopped, thus requiring goodwill impairment is very high. This is when procyclical processes emerge: the cost of borrowing will rise, which will feed through into discount rate calculations on the value of assets held, which will lead to impairment losses on the accounting basis that IFRS endorses. A procyclical, and deeply destructive accounting cycle has, then, been produced that results in multiple loss recognitions, and the unwinding of gains embodied in company reserves.

An additional risk is that the same pro-cyclical accounting logic will also affect other assets booked on a fair value basis at the same time, amplifying the effects. Some companies, for example, hold their property in a kind of intra-group REIT or property investment company and mark their property assets to market. Those values may be impaired. Contract profits booked on a stage of completion basis, also contain discount rate assumptions and so are also vulnerable to writedowns. Impairments may therefore cascade just as a company books operating losses, compounding failure.

Summary

The features above tell a story about the excesses of the post-2008 economy. Managers, incentivised by stock options and other shareholder value linked bonuses, made distributions often in excess of profits. Those profits were themselves often partly the reflection of paper gains from asset revaluations driven up during a decade-long bull market. Debt was often used to supplement shareholder returns when company profits would just not suffice. Firms were consequently loaded with increasingly low quality debt, which hollowed-out the 'cushions of safety' on firm balance sheets. The assets acquired were increasingly intangible, and likely to lose much, if not all, value in an insolvency situation.

Firms entered the COVID-19 period with balance sheets full of low-grade debt which was used to finance assets of an increasingly speculative and intangible nature, whose values rest on an economic future that will no longer arrive.These excesses are likely to be exposed by the COVID-19 crisis and governments are now under pressure to step in to prevent mass insolvencies and spiralling unemployment. The European Central Bank (ECB), has already extended its collateral rules to accept an estimated $275bn of 'fallen angel' non-financial corporate bonds - bonds which were rated as investment grade but were then downgraded to junk.[28] The Federal Reserve has gone further, accepting junk-rated corporate bonds as part of its asset-repurchase programme. Its reported stimulus plan involves it accessing $454bn in equity from the US Treasury to extend loans and buy debt from companies and local authorities during the crisis, which can be levered up to $4tn[29]. In

[28] Arnold, M., Platt, E., Martin, K., 2020. ECB loosens collateral rules to accept 'fallen angel' bonds [WWW Document]. URL https://www.ft.com/content/4012aedd-dbfa-4d12-92ce-2e087a8c353d (accessed 4.28.20).
[29] Politi, J., 2020. Fed caught in political crosshairs over bailout role [WWW Document]. URL https://www.ft.com/content/832107f4-e6d3-4dc4-adfa-c9c7338be7e3 (accessed 4.28.20).

scale, these interventions already exceed those of the 2008 crisis[30]: the total estimated fiscal support given is estimated to be an unprecedented $9 trillion.[31]

How was this allowed to happen?

Section 2: Explaining the Crisis

Understanding the Financialized Firm

Although pandemics of this nature are rare, the processes described above are entirely familiar: the levering up of balance sheets, extracting distributions in the present on optimistic estimates of future income, and the inevitable government bail-outs that follow when that future does not materialize, are the same processes evident in the 2008 crisis. Crises are often seen as a discrete problem of one dysfunctional asset class or market. A more informed approach might be to view these problems as a generalised one inside capitalism's most central institution - the firm.

Over the last two decades the firm, and how it accounts for its activity, has become increasingly financialized:[32] Financialization is commonly thought of in linear temporal terms, located in a conventional market setting: firms sell goods and services in a market, which generate an income stream over which different stakeholders compete, leading to a zero sum contest between shareholders and workers or shareholders and investment. But firms are also reporting entities bound by accounting rules and conventions about how income, assets and other items are recorded. After financialization, firms also exist as a kind of transformational space which aggregates and homologizes income from different sources through different mechanisms, pulling earnings forward in time and pushing costs back with the goal of maximising what is distributable in the present.

The amount a firm can pay out to shareholders is not limited by the profit it makes within a year, but by its 'distributable reserves'. According to company law[33] distributable reserves are defined by prevailing accounting rules which provide complex guidance on which practices are allowed before earnings can be classified as realisable and thus distributable. Crucially distributable reserves are determined at company rather than group level, which is unusual insofar as most disclosure concentrates on the group as a consolidated entity, not the parent company. In fact, there is no legal requirement to disclose what is 'distributable' at all.

Generally, distributable reserves are determined by two elements: the previous year's retained earnings of *the parent company* within a group, plus the net income received by the parent within the current accounting year. Distributable reserves therefore have a balance sheet and profit and loss components. The retained earnings are calculated as a residual on the parent balance sheet, adding assets - the majority of which are normally the holding value of the subsidiaries - and subtracting a variety of liabilities (see illustration in figure 8 below). The net income, on the other hand, is normally the dividends paid to the parent by the parent company subsidiaries, minus costs (Figure 9

[30] Smith, C., Politi, J., 2020. Fed under pressure to be clearer on coronavirus outlook [WWW Document]. URL https://www.ft.com/content/65ea6d43-13a6-4aa2-bff2-2ccba358ce74 (accessed 4.28.20).
[31] Battersby, B., W. R. Lam, and E. Ture. 2020. 'Tracking the $9 Trillion Global Fiscal Support to Fight COVID-19'. IMF Blog. Retrieved 21 May 2020
[32] For a comprehensive overview, see Davis, Leila. 2014. 'The Financialization of the Nonfinancial Corporation in the Post-1970 U.S. Economy'. Doctoral Dissertations, UMASS, .https://scholarworks.umass.edu/dissertations_2/175/
[33] According to the 2006 Companies Act s853, the practice of defining what is realisable and thus distributable is determined by generally accepted accounting practice; and that practice was outlined most recently in ICAEW (2017) 'Guidance on Realised and Distributable Profits Under the Companies Act 2006', https://www.icaew.com/-/media/corporate/files/technical/technical-releases/legal-and-regulatory/tech-02-17-bl-guidance-on-realised-and-distributable-profits-under-the-companies-act-2006.ashx

- NB this is an extreme example to make the general point). Some parent companies have distributable reserves by that measure, but no cash[34] - in which case it is possible to borrow and pay out cash in that way. Two implications follow, which suggest a more enlarged role for financial engineering than is otherwise supposed.

First, the amount of retained earnings realised depends fundamentally on the holding values of the fixed assets/company subsidiaries and the distinctions between distributable and undistributable reserves (merger reserve, share premium, revaluation reserve etc). This may incentivize companies to devise reporting strategies which seek to inflate - or minimise impairments to - the parent's fixed assets, or to 'release' funds from undistributable to distributable reserves.

Second, it is usual that some subsidiaries are very profitable whilst others are loss making. Under some circumstances the successful subsidiaries may distribute all of their profits to the parent, but loss making subsidiaries cannot, by definition, distribute negative dividends. This means the parent takes more of the upside than the downside on the performance of its assets, which can lead to divergences between the retained earnings of the parent company accounts and the consolidated group accounts.

In figure 9 we illustrate this discrepancy: the consolidated group retained earnings reflect the losses that have accumulated in its subsidiaries, but the parent company balance sheet only reflects an upside view of sums distributed by those parts of the group that are profitable. This can lead to the kind of outcomes described in our empirical section where distributions made by the parent company significantly exceed group net income or operating cash; and can occur even when the group reports negative retained earnings. We would note, however, some inter-relation between figures 8 and 9 - that excessive dividends may reduce the asset value of the subsidiary company for the parent (although this adjustment is unlikely to be perfect when subsidiaries are held at cost).

This discrepancy between parent and group reporting however may create arbitrage opportunities aimed at exploiting differences in valuation methods and the objects valued. For example, some parent companies choose to value their subsidiaries on a 'cost plus provisions for impairment' basis (which is akin to a historical cost method) but book assets such as financial instruments on a fair value basis. The 'cost plus provisions' approach might (if not adequately audited) then protect parents from impairments to loss-making subsidiaries because they are booked at cost rather than fair value. It is unclear without further research how widespread these practices are, but if they were found to be routine, we suspect that many of the elaborate corporate structures and transactions between subsidiaries that we see, may be for the purpose of income recognition rather than tax avoidance, as is often supposed.

[34] See KPMG (2020) 'Capital Maintenance: Let's Tackle The Difficult Questions', for discussion.

Figure 8: Simplified Illustration of How Parent Distributable Reserves are Calculated, Part A

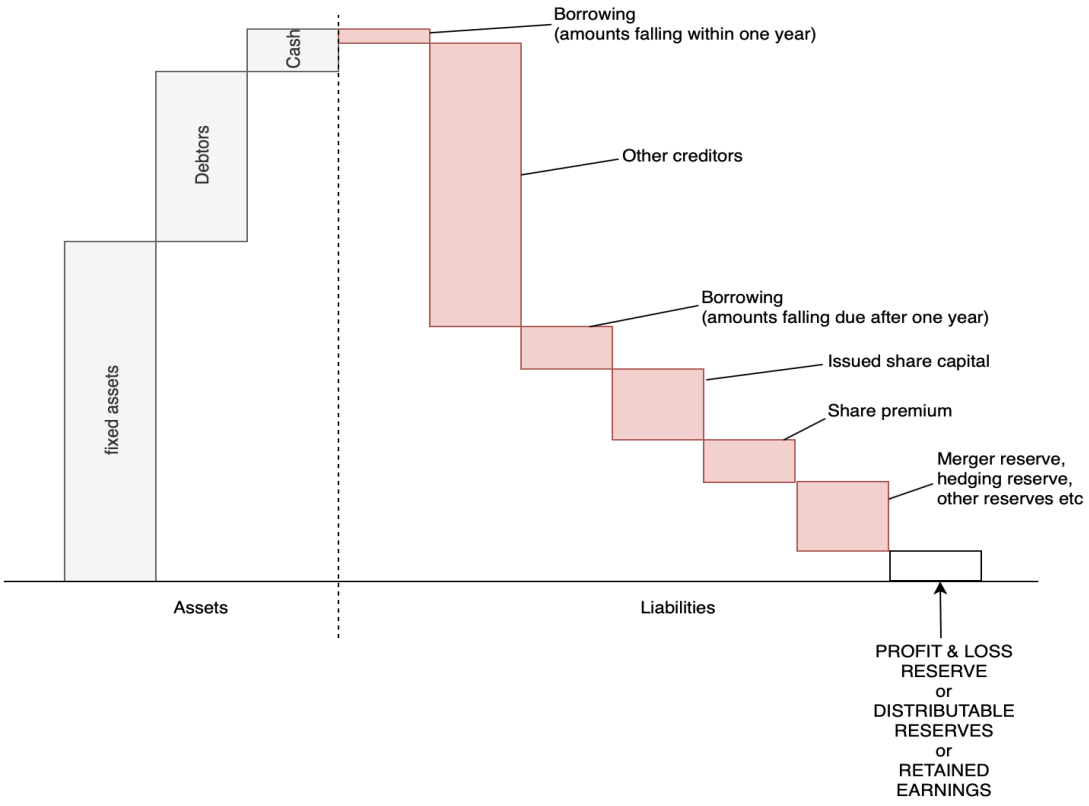
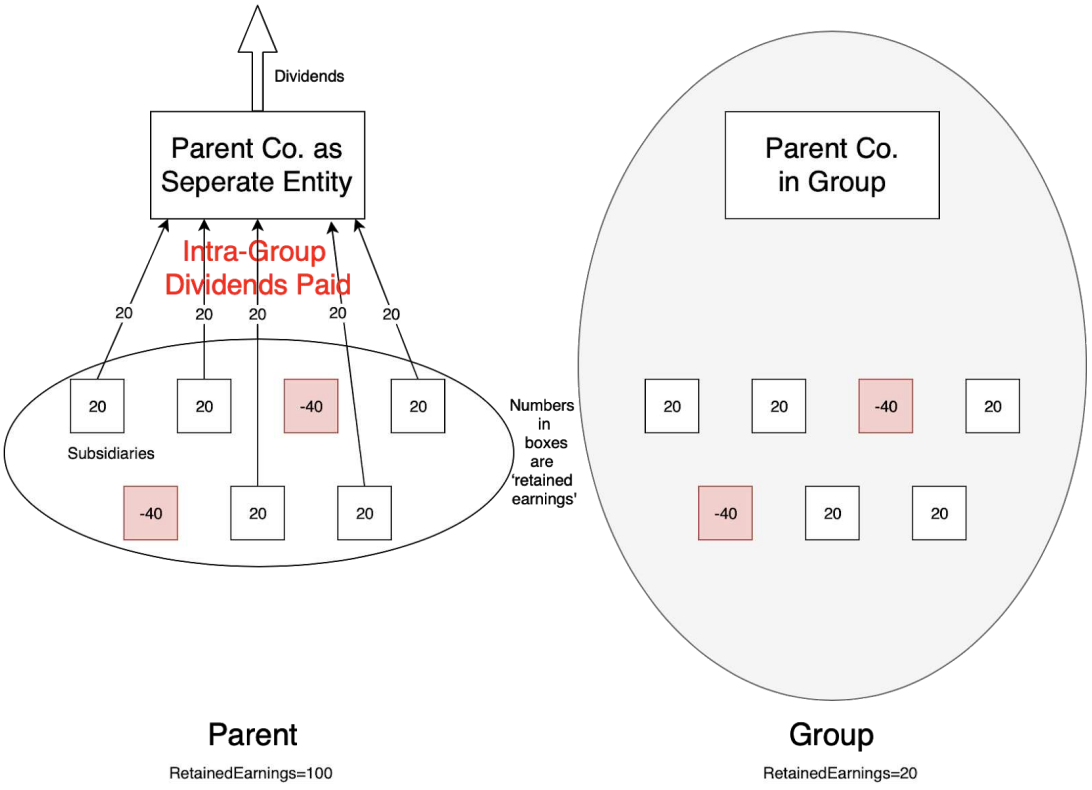


Figure 9: Simplified Illustration of How Parent Distributable Reserves are Calculated, Part B



Accounting and Time

All forms of accounting involve decisions about time. The value of an asset, for example, depends on whether it is valued at the price paid (i.e its 'historic cost', based on an actual transaction) or its current market price (i.e. its 'fair value' which reflects the market's best estimate of the net present value of its future cashflows). The particular temporality of the reporting regime opens up or closes down particular reporting strategies for management, and so plays a key role in shaping the distributable reserves available, as our discussion above has outlined. Accounting is therefore not a passive, technical, descriptive activity, it actively inscribes a particular economic reality and creates incentives for particular forms of social action.

The transformation of the firm into a space for inter-temporal transformation cannot be separated from the extension of the fair value accounting regime which allows companies to mix up capital gains and current profits. The principle of fair value is that asset valuations should be based on current market values not historic transaction prices, and this pivots the whole accounting regime towards the future in terms of anticipated cashflows and discount rates in order (notionally at least) to produce accounts that are 'decision-useful' for investors.

This change has brought with it a number of consequences. The concept of 'realisation' has become increasingly sidelined as definitions of value are now less grounded in verifiable transactions and are instead aligned with capital market valuations where changing 'expectations of future cashflows' become the basis for recording gains and losses in the present.[35] Fair value accounting therefore jumbles up operating income from the present with capital gains based on future expectations.[36] It is around this more diluted notion of what is and is not 'realised' that problems can arise. Asset values are now more speculative and prone to change. Yet distributions in the form of dividends and buybacks can be timed to take advantage of fleeting moments of market optimism.

Ironically this future-oriented regime 'managerializes' the process of valuation, despite the justification that it is market-based and is in the shareholder interest.[37] Fair value introduces greater subjectivity into valuation decisions, providing managers with some leeway to 'represent the market' and their view of the future in their fair value assessments. This also increases demand for the services of outsiders like Big Four global professional service firms who aid managers in devising and implementing reporting processes and strategies which may improve the presentation of accounts. In a context where managers receive stock and stock options as payment and are given greater discretion over the pricing of items which may boost those stock prices, they have both the incentive and means to take an optimistic view of firm performance in the absence of strong oversight by shareholders, auditors and other stakeholders.

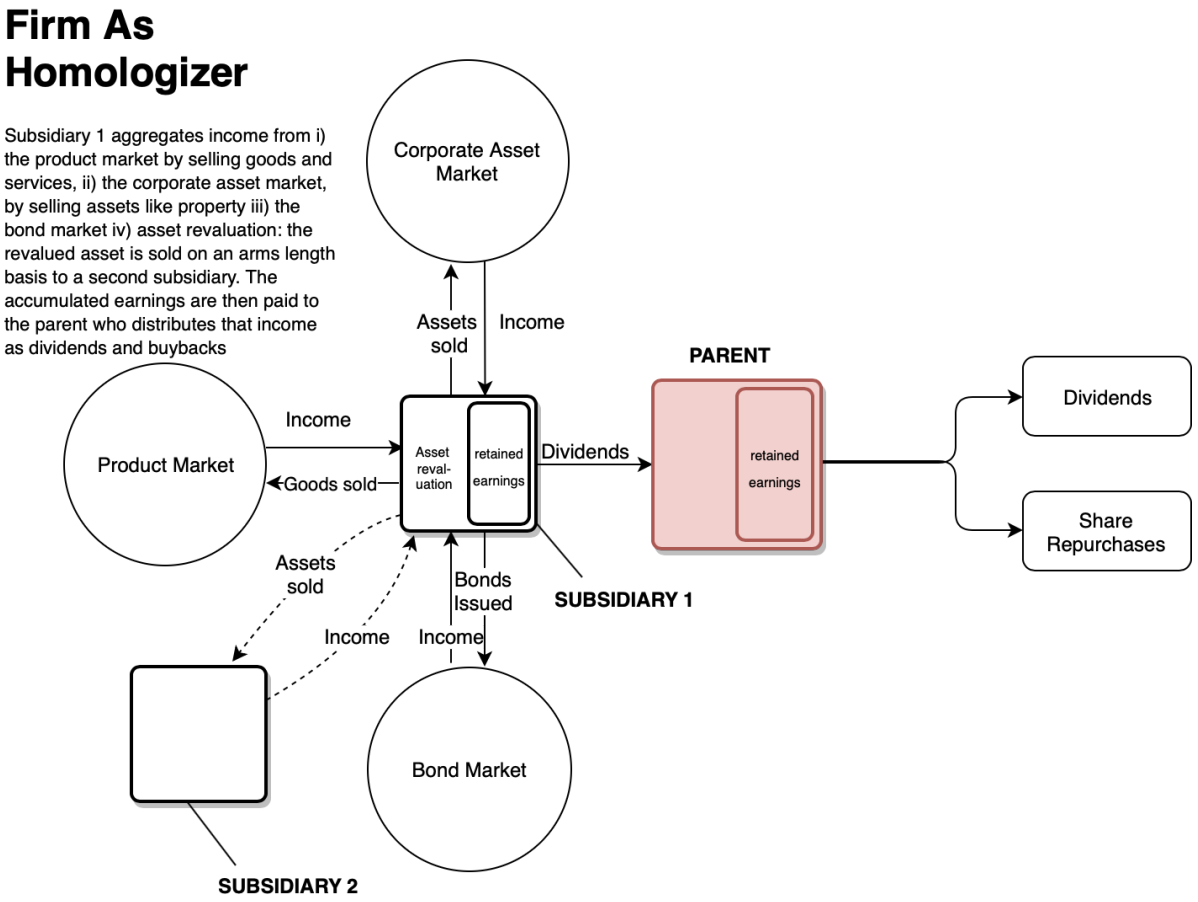
These processes have a profound effect on the nature of the firm and the uses to which it is put. The more present value is shaped by subjective determinations of some imagined future state, the more 'virtual' economic representations become - disconnects between what is reported and underlying economic activity may grow.[38] But that does not prevent real extractions in the present, despite this growing virtualism.

---

[35] Power, Michael. 2010. 'Fair Value Accounting, Financial Economics and the Transformation of Reliability'. *Accounting and Business Research* 40(3):197–210.
[36] Boyer, Robert. 2007. 'Assessing the Impact of Fair Value upon Financial Crises'. *Socio-Economic Review* 5(4):779–807.
[37] Mennicken, A. and Millo, Y. (2013). Testing Values: Financialization, Organization and the Emergence of Impairment Rules. Working Paper. London School of Economics and Political Science
[38] Bougen, Philip D., and Joni J. Young. 2012. 'Fair Value Accounting: Simulacra and Simulation'. Critical Perspectives on Accounting 23(4–5):390–402; Macintosh, Norman B., Teri Shearer, Daniel B. Thornton, and Michael Welker. 2000. 'Accounting as Simulacrum and Hyperreality: Perspectives on Income and Capital'. *Accounting, Organizations and Society* 25(1):13–50.

We illustrate this schematically in Figure 10 below, the retained earnings of a parent company[39] include dividends paid by its subsidiaries, which are financed by income from operations, asset sales, bond issues and revaluation gains realised by trading with another subsidiary in the group; yet each become indistinguishable as they are assimilated into the retained earnings of the parent[40]. The network of companies that comprise a corporation act as a kind of conversion machine geared towards funnelling income to the parent company through a variety of mechanisms. The precise asset forms, jurisdictional contexts, and processes of valuation and numeration may change, but they remain part of a singular strategy: to de- and re-materialise income and costs in order to maximise distributions paid out in the present.

Figure 10: Schematic Representation of Aggregation & Homologization



These sources of income are not only different in form, they embody different temporalities. The time-shifting of income and costs plays a role to a greater or lesser extent in all four income sources outlined in figure 10. For example, a bond issue is an intertemporal transfer insofar as it is the

[39] Note - we distinguish here between the 'company' and the 'group'. The 2006 Companies Act is clear that the legal limits on dividend distributions are the retained earnings of the parent *company*.

[40] The realisation of a gain from an asset revaluation would normally be booked to a revaluation reserve. However if the asset is sold for cash, the profit would become 'realised' and thus distributable. The profit will also become realised when a loss is recognised on the scrapping or disposal of the related asset or from the write-down for depreciation, amortisation, diminution in value or impairment of the related asset. By our reading of the ICAEW rules, if a revalued asset is also sold between companies within the same group, that can also count as a realised gain - provided it is sold at fair value, with third party funding on an arms-length basis (ICAEW 2015).

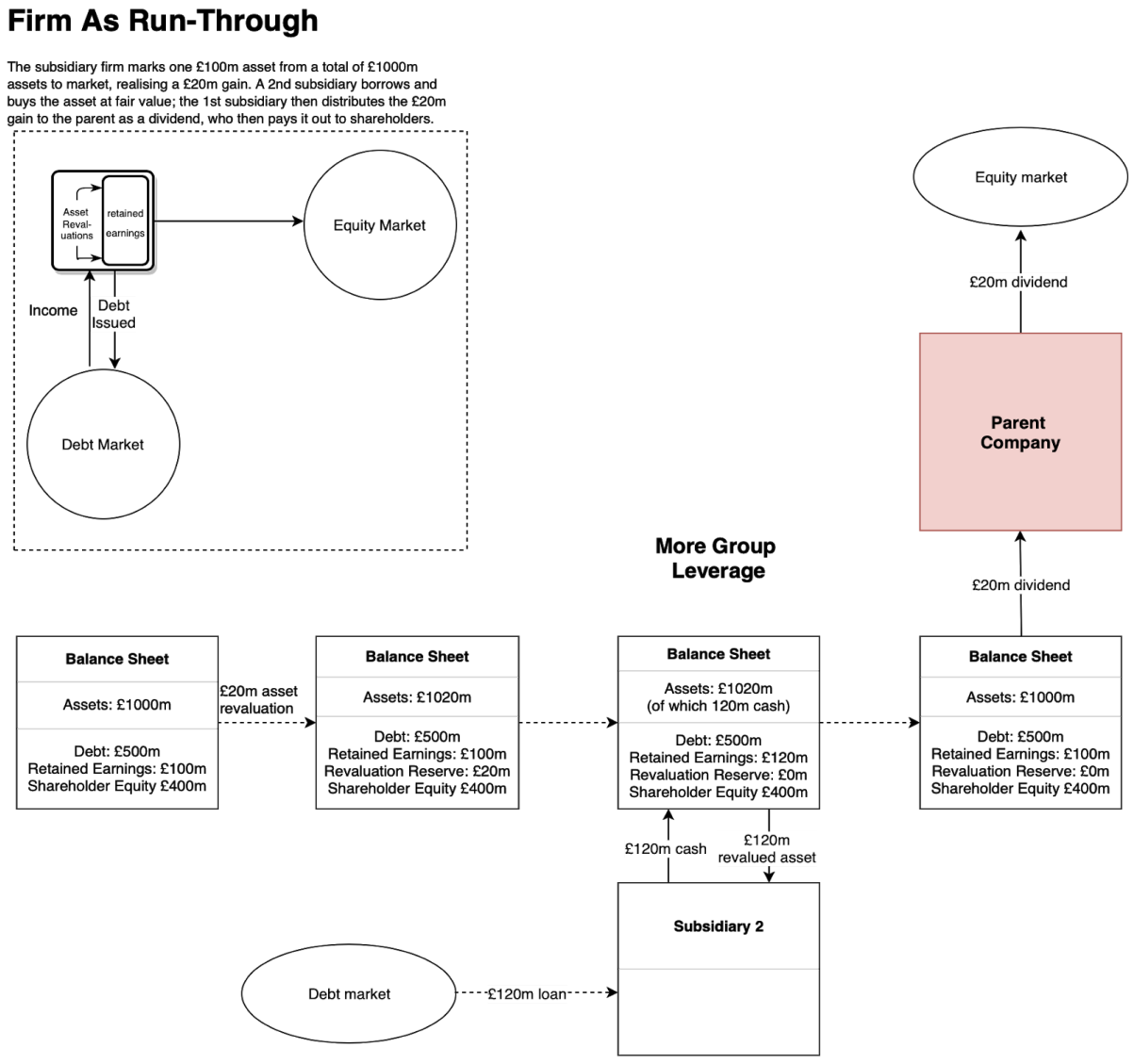
acceptance of a future obligation to repay principal plus interest in exchange for the receipt of cash in the present. Similarly, if the income received from operations was contract income, annual profits could be booked according to a 'stage of completion' method in which management must make forward projections about the total estimated income and costs of an entire project, with income 'realised' on the basis of costs incurred. Asset revaluations are booked on a fair value basis - the market's best estimate of the present value of the discounted future cashflows that accrue to the asset in question. And so on. Again - although the futures embodied in these reporting items are by no means certain and are subject to change, they can still be distributed, provided the amount distributed does not exceed the distributable reserves.

By intervening in these temporalities, management can convert the firm into a kind of conduit or run through. We present an illustrative example in figure 11 to show the valuation mechanisms which construct these outcomes. This figure attempts to show how companies engage in financialized manoeuvres designed to convert asset revaluations into 'realisable' profits. The rules here are complex and arcane - and indeed this ambiguity is part of the problem we are trying to address. By our reading of the ICAEW's guidance[41], one permissible method includes the selling of those revalued assets on an arms-length basis at fair value using third party finance to other subsidiary companies within the group.

In figure 11, a fair value revaluation of a subsidiary company's £100m asset (out of a total of £1000m) leads to a £20m revaluation gain. A second subsidiary borrows £120m from a third party and then purchases the asset from the other subsidiary, wiping out the first subsidiary's non-distributable revaluation reserve, leaving it with £120m in distributable retained earnings. The subsidiary then pays out £20m in dividends to the parent, who distributes this to its shareholders. This is, at the same time, an inter-temporal transfer - the putative future cashflows capitalised/embodied in the revalued asset are effectively pulled forward via the cash received by the debt issue, realising their value in the present so that it can be distributed.

[41] ICAEW, 2015. UK DISTRIBUTABLE PROFITS: UK Regulation Factsheet.

Figure 11: Schematic representation of 'Firm As Run-Through'



After financialization firms have thus assumed a portal-like quality, moving income through time and space, blending and converting apparently different income items realised through different channels and mechanisms. This use of debt and securitisation, which allow firms to sell securities backed by future income streams to raise funds in the present, are mainstays of the financial services sector.[42] But these practices have become commonplace in the non-financial sector. Time-shifting income can also be achieved by combining creative accounting for capital gains with the avoidance of impairments on troubled assets - pushing costs effectively into the future to - again - maximise what can be distributed in the present.

This practice also has a jurisdictional context. The subsidiarisation and global dispersion of firm subsidiaries have altered the geographical space within which revenues, costs, assets and liabilities are recognised.[43] Using devices such as transfer payments, special dividends, inter-company loans it

[42] For a fascinating reading of how bonus incentives drove securitization's capacity to pull forward income into the present see, MacKenzie, Donald, and Taylor Spears. 2014. '"A Device for Being Able to Book P&L": The Organizational Embedding of the Gaussian Copula'. *Social Studies of Science* 44(3):418–40.
[43] Seabrooke, Leonard, and Duncan Wigan. 2017. 'The Governance of Global Wealth Chains'. *Review of International Political Economy* 24(1):1–29.

is possible to materialise income, costs and assets in jurisdictions far removed from where actual economic activity takes place. For example, for a company like Google, it is (or at least was) possible to report and claim its UK sales in Ireland, and then for the Irish company to pay most of that turnover and fees to an entity in Bermuda to reduce its tax burden and maximise its distributable profits.[44] This capacity of the firm to teleport revenues and assets to any part of the world through any route to minimize costs, is part of this drive to maximise the distributable funds in the present. The consequences of this practice is that tax - a fund which sustains a particular future - the long-term social and economic fabric of the countries in which companies trade - is eroded.

Category-transformations are also possible, as discussed above in the conversion of revaluation reserves into retained earnings. Other techniques include the effective movement of amortisable intangibles into non-amortisable goodwill during M&A deals or restructuring, which means one less charge to the profit and loss account. Or it can be achieved through the movement of funds from a merger reserve to a profit and loss reserve, shifting non-distributable reserves into distributable reserves.[45] Merger and acquisition activity is a particular catalyst for these moments of re-categorisation. Undervaluing book assets at the point of acquisition means that a greater share of the new assets acquired is recorded as un-amortisable goodwill, again removing a fixed charge and introducing some subjectivism over impairment from the profit and loss account which would otherwise depress earnings.[46]

This generalised process of inter-temporal transfer has redistributive consequences. Members of the board who cash in their options after driving up the share price with debt-fuelled share buybacks benefit. Private equity partners who recover their investment stakes from debt-funded special dividends, giving them a free put option on the remaining assets of the company benefit. Big Four partners who generate high fees from the consulting services that facilitate these inter-temporal transfers benefit.

In contrast many ordinary households hold simply a subsistence stake in an organisation whose own existence is put at risk by these inter-temporal transfers which load up balance sheets with speculative intangibles and low-grade debt that leave them exposed to downturns.

The drive to rob the future to pay for the present is ultimately regressive and cascades precarity to other stakeholders - workers, suppliers, consumers and responsible, long-term investors - who all in different ways have an interest in the long-term security of the firm.

If we apply our discontinuous temporal frame to the state bailouts, we should think of this flow as the temporally staggered state subvention of executive reward. This turns the usual tropes about pay for performance and shareholders as residual claimants on its head: the seniority of claims have effectively been reversed - returns to corporate control and market speculation are high and hold seniority because they rely on discretionary payments from income pulled forward in time, leaving risk with the firm and the stakeholders who are claimants upon its long term future.

'Impairment shocks'

The risks of this inter-temporal movement of earnings are obvious. Asset values can move up or down, and management only has so much discretion in this process before overly inflated values become untenable, auditors intervene and assets are written down. Under such circumstances there may be an 'impairment shock' - *an unexpected, exceptionally large impairment or restatement which significantly destabilises a firm or pushes it towards bankruptcy.* The risk of impairment shocks are

[44] Sikka, Prem. 2015. 'No Accounting for Tax Avoidance'. *The Political Quarterly* 86(3):427–33.
[45] This was the case with UK holiday firm, Thomas Cook.
[46] This was the case with UK construction firm Carillion.

particularly acute for firms that have been acquisitive and so have a large bank of goodwill on their balance sheets as well as a rising debt to equity ratio - ie those firms described above who finance assets of an intangible and speculative nature, with debt of declining quality.

Figure 12: Impairment Shock Hypothetical

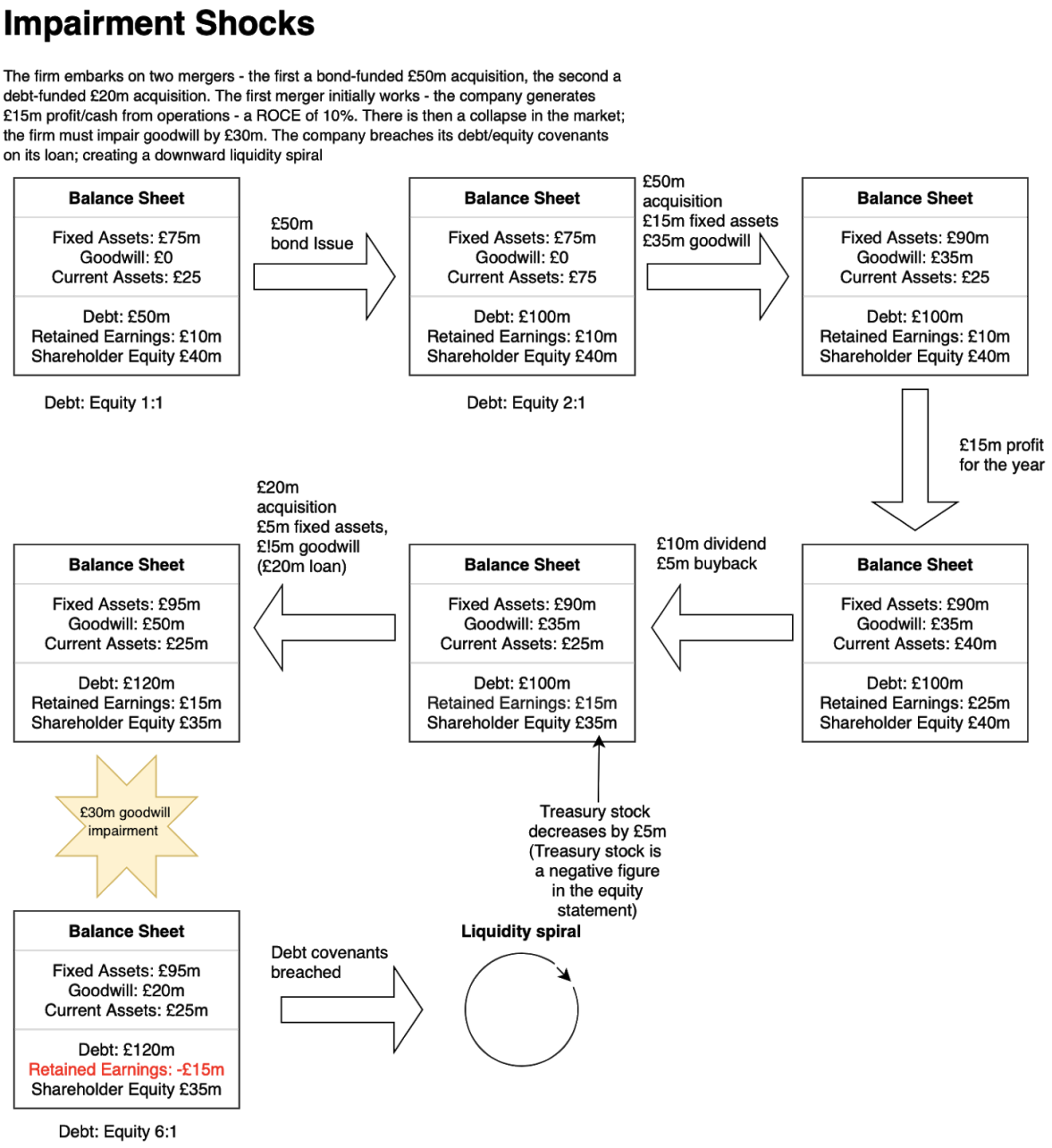


Figure 12 presents a simplified, hypothetical example which illustrates the risk of impairment shocks which are invisible in the good years. The hypothetical illustrates how the fair value regime may expose the non-financial sector to many of the risks normally associated with the financial sector. It shows a 'pro-cyclical' process - that capital gains and operating income accrue in the upswing, but costs compound on the downswing.

Goodwill is particularly prone to impairments in these circumstances. Firms have been paying higher multiples of annual earnings for firms, using lower grade debt. So there is now a lot of risky debt on company balance sheets financing assets of an often intangible and speculative nature. Large

impairments may lead companies to breach their debt covenants, and this may trigger the familiar liquidity spirals seen in the banking sector during the 2007/8 crisis: losses may lead to credit rating downgrades, which force either collateral calls or refinancing arrangements which raise costs, pushing firms closer to insolvency, leading to another downgrade. In this context aggressive, debt-funded earnings distribution can hollow out retained earnings reserves held in shareholder equity, which weakens the capacity of companies to absorb losses.

Current goodwill rules are procyclical and distort managerial incentives. Goodwill is attractive because it is one of only a handful of assets which does not attract depreciation or amortisation. Holding a larger share of assets as goodwill therefore has a year by year cost benefit. lt may even create incentives for managers to engage in the merger and acquisition for reasons of financial engineering because goodwill is accretive and 'internally generated goodwill' is not recognised[47]. Given the subjectivity around its ongoing valuation, it may also create incentives for managers to avoid taking impairments on those balances once booked. For example, it is estimated that at current rates of impairment, it would take the average S&P500 firm 122 years to fully write down the value of its acquired goodwill, and 78 years for the average firm in the S&P Europe 350[48]. This contrasts with the maximum 40 year period allowed under the previous amortization regime. Writedowns, when they do come, tend to be large and lumpy because the avoidance of impairments over successive years cannot be sustained indefinitely, and do accumulate. Yet if equity buffers have been hollowed out by shareholder distributions, these larger one-off writedowns can raise immediate going concern issues if firms lack the reserves to prevent the firm moving into negative net asset territory.

The threat of impairment shocks should be understood in the current COVID-19 context. Falling revenues will lead to operating losses and those operating losses will lead to goodwill impairment tests. If the recoverable value of acquired 'Cash Generating Unit' assets are deemed to be lower than their carrying amount, that should lead to an impairment charge at the same time as firms realise operating losses, compounding problems in a procyclical way. If firms have been active acquirers and are highly geared, there may be inadequate equity buffers to accommodate the combination of operating and impairment losses; or, firms will be forced to recapitalise through share issue at precisely the point that the market doesn't want to buy shares. Firms may even be reluctant to impair their goodwill, despite weakening economic performance – incentivising accounting fraud.

The Post-2008 Conjuncture

Strategies such as these do not emerge in a vacuum; they are always partly shaped by the conjuncture. And the last 12 years have been shaped by state and central bank interventions made to stabilise the economic system in 2008. While post-2008 interventions (asset purchases, bailouts, quantitative easing) were necessary to immediately stabilise a global financial market in freefall, little thought was put into how those interventions might shape the character of the economic conjuncture to follow. Those interventions were often made without corresponding obligations (senior management resignations, clawbacks on bonuses, restrictions on distributions, equity stakes, pay caps etc) on the part of those organisations receiving government support. In the upswing this removed some of the normal fears that preoccupy boardroom decision making, cultivating a sense of invulnerability at board level. Firms took on more leverage and greater risk, in order to pay out the high distributions that would trigger their bonuses and increase the value of their stock options. The resulting economic system removed 'system-redundancies' - buffers or circuit breakers that could act as a cushion against shocks or firewall their effects. We consequently entered the COVID-19 period

[47] see HKICPA, 2020. Goodwill:Improvements to Subsequent Accounting and an Update of the Quantitative Study.
[48] HKICPA, 2020. Goodwill:Improvements to Subsequent Accounting and an Update of the Quantitative Study.

with a corporate sector already fatigued by a decade of excessive distributions that would have struggled to navigate even a modest downturn, let alone a trigger event of this magnitude.

This was amplified by an ongoing commitment to re-establishing a growth model built around the wealth effects of asset price increases to lift economies out of the crisis. The zero interest rate policy (ZIRP) environment was central to that, which helped drive up the value of assets by lowering discount rates, and thus increasing the ease by which managers could generate shareholder value through revaluation gains and speculation in corporate assets, described above. The loosening of credit markets - again because of the affordability of debt due to ZIRP - also fuelled the corporate bond boom and the re-establishment of securitisation markets for leverage loans. This, combined with growing sophistication of law and accounting expertise and the reporting discretions afforded under fair value, created incredibly benign conditions for shareholder value creation. This may have 'crowded out' responsible, investment-led, productivity-enhancing behaviour that could have left firms more resilient to a COVID-led recession.

When it becomes too easy for firms to make distributions out of forms of financial engineering and creative accounting, then managers will satisfice and it will lead to a sub-optimal allocation of capital. The post-2008 period could be characterised as one where it became too easy for boards to make the kind of returns to investors from minimal operating effort, simply by engaging in financial engineering, creative accounting and legal arbitrage. The reality of post-2008 financialization is that it did not corral management to yield to a disciplinary capital market; but rather that it feather-bedded mediocrity in the boardroom, instilling a culture of permissiveness which increased returns to control rather more than ownership.

Section Three: Building System-Resilience

Systemic Risk and Social Justice: A Precautionary Approach[49]

After the financial crisis of 2008, one central banker referred to a 'great sucking sound' in which 'monies were drawn into banking' in a 'financial vacuum cleaner effect.' The analogy addressed misallocations of capital and their negative effects on investment, growth and productivity[50]. In this report, we identify similar processes. Excessive bonus-driven payout practices which use financial engineering and creative accounting have crowded out more productive and sustainable business models, hollowing out company reserves. The ensuing corporate fragility, and corresponding threats to employment and livelihoods that result, raises fundamental ethical questions about fairness and justice.

Most conceptions of justice involve individuals bearing the consequences of their actions and decisions[51]. In civic republican theory, for example, a minimally just society is based on the principle of 'non-domination' - in which individuals should be protected from a state of 'domination', defined

[49] The ideas in this section are being developed in the following project Schupert, F and Baker, A "The Need for a Normative Theory of Systemic Risk: Practical Applications and a New Social Contract?" ESRC grant Ref: ES/R00787X/1 Rebuilding Macroeconomics Initiative administered by National Institute for Economic and Social Research.

[50] Haldane, A "A Leaf Being Turned," Speech to Occupy Economics, London, 29 October 2012, p.4, https://www.bankofengland.co.uk/-/media/boe/files/speech/2012/a-leaf-being-turned.pdf?la=en&hash=9D64DA9F3CCB9EDE938683E205F7686D072B1F5E Shaxson, N. (2018). *The Finance Curse: How global finance is making us all poorer.* London: Random House. Christensen, J., Shaxson, N., & Wigan, D. (2016). The finance curse: Britain and the world economy. *The British Journal of Politics and International Relations, 18*(1), 255-269. Baker, A., Epstein, G., & Montecino, J. (2018). The UK's finance curse? Costs and processes. *SPERI report.* http://speri.dept.shef.ac.uk/2018/10/05/uk-finance-curse-report/

[51] Knight, C., & Stemplowska, Z. (Eds.). (2011). *Responsibility and distributive justice.* Oxford University Press.

as arbitrary interferences perpetrated by an actor, or systemic forces, that detrimentally affect the life chances of those agents in ways which are unrelated to, and disconnected from, the individual choices made. Domination implies a loss of control, evident in limited agency to make choices affecting life prospects. In a case where economic contraction produces not only job losses, but fewer future job opportunities due to a diminished number of viable firms, and does so for a prolonged period, we can say that a breach of the principle of 'non-domination' has occurred.[52] This applies even when the harm is unintentional indicating that systemic forces and risks can be a source of unjust domination.[53]

Under conditions of systemic risk individuals bear the consequences for events for which they have no responsibility. When risks are systemic, often nobody in particular is wholly to blame.[54] The question of what can be done therefore, should focus on the protections required to minimize the risk of 'domination' and 'arbitrary interference' to qualify as minimally just. Our reform recommendations are therefore informed by a precautionary philosophical logic - that it is necessary to create a collective responsibility of due care, based on a precautionary stance in public policy, that seeks to produce greater degrees of systemic resilience as a form of precautionary protection. That logic implies that it is still unjust and wrong for society collectively to expose individuals to systemic risks even where the associated harm never materialises, largely due to good fortune.[55]

Reforms must therefore seek to enhance corporate, sectoral and systemic resilience. A broad precautionary approach should therefore focus on a series of 'maintenances' to reduce risks and create cushions or buffers in anticipation of rare events, to protect firms in their wider societal role as employers and creators of economic value.

New Maintenances for Systemic Resilience

Citizens can reasonably expect regulatory authorities to offer protections from vulnerabilities by safeguarding companies on precautionary grounds, establishing rules which constrain the payment of excessive distributions from earnings of uncertain provenance, which hollow out firm capital. Those protections should begin with a repurposing of the corporation to promote the 'just economy', improving economic resilience and social wellbeing.

Such an end will require a combination of firm and system level interventions. Firm resilience is the ability of an organisation to survive an unanticipated shock that impacts some or all of its activities. But it is the fallacy of composition to presume that systems become resilient solely by the individual strengthening of their parts. System resilience views corporations as a network of interdependencies which support society in the long term. Idiosyncratic resilience requires that individual firms are prepared for downturns. Systemic resilience requires that the organization of the corporate economy in aggregate ensures that even when individual firms collapse, the effects of this do not cascade.

Systemic resilience requires us to think about a *series of maintenances* - capital, measurement and diversity - to redress the sources of corporate fragility this report has identified. Capital maintenance increases buffers within individual corporations and mitigates the threats to going concern that are now emerging. Measurement maintenance ensures that financial reports provide a prudent representation of firm performance and reduce opportunities for the exercise of management

[52] Pettit, P. (2003). Agency-freedom and option-freedom. *Journal of Theoretical Politics, 15*(4), 387-403.
[53] Pettit, P. (2011). The instability of freedom as noninterference: The case of Isaiah Berlin. *Ethics, 121*(4), 693-716. Schuppert, F. (2015). Non-domination, non-alienation and social equality: towards a republican understanding of equality. *Critical Review of International Social and Political Philosophy, 18*(4), 440-455.
[54] James, A. (2017). The distinctive significance of systemic risk. *Ratio Juris, 30*(3), 239-258.
[55] James (2017)

discretion to increase unsustainable distributions. Diversity in financial structure, ownership, stakeholder priority and corporate purpose generates multiple strategies and strengths, mitigating systemic correlation. These maintenances, and the means to realize them, reinforce each other.

Capital Maintenance

When corporations fail, society suffers. Investors lose money, employees lose jobs, customers lose supply of goods and services, contractors lose business and governments lose tax income. All stakeholders are therefore invested in ensuring that companies are resilient. Repurposing the corporation through a stronger recognition in company law and accounting rules that management's core obligation is to protect the capital base of the company is essential. Capital maintenance should be recognised as the superordinate legal duty of directors; accounting rules should affirm that duty and auditors should be empowered to better police it.

Capital maintenance is the foundation for all stakeholder claims, but it can be weakened by aggressive attempts to maximize distributable reserves which load firms with future risks. A revisitation of the definitions of distributable reserves and rules around income 'realisation' are overdue. In our view, these issues pertain to matters of economic stability and social justice - they are not merely technical issues - and so should be taken out of the remit of the accounting standards bodies and placed under the responsibility of the regulator, which in the UK case would be the FRC or the new ARGA.[56]

We also make the following corresponding recommendations:

- Companies should be obliged to report their 'distributable reserves' and to account for how they were calculated; this should separate income arising from trading and those arising through other sources.
- Distributable reserves should be determined at group rather than parent company level, to avoid the gaming whereby parents take the dividends on their profitable subsidiaries and avoid impairments on their loss making subsidiaries, so that the retained earnings of the parent vastly exceed the retained earnings of the group.
- Amounts distributed should not exceed the net income of the group in any one accounting year, without member authorisation.
- The tax deductibility of interest payments should be revisited - it is an incentive for firms to build capital structures that put capital maintenance at risk
- A return to goodwill amortisation should be considered, to gradually decrease the holding value of intangibles and thus avoid procyclical 'impairment shocks' – large, unexpected writedowns which coincide with declining profits from trading.
- More robust going concern assessments should be mandated, which examine the effects of distributions on capital maintenance, both within the accounting year and beyond.

Certain corporations also have more systemic importance. This might include financial services firms, but could also include large foundational[57] firms who provide universal and essential goods and services, or non-financial companies with long dependent supply chains which sustain thousands of jobs - such as large outsourcing firms who rely on government contracts. Here, forms of dynamic provisioning could be introduced to mitigate problems of procyclicality to ensure that the core of any economy is resilient to downturns.

[56] This is not particularly controversial - oversight of 'distributable reserves' by the FRC/ARGA is already recommended in KPMG (2020) 'Capital Maintenance: Let's Tackle The Difficult Questions'
[57] See https://foundationaleconomy.com/

Dynamic capital requirements or dynamic provisioning would mean companies would take a charge on their profits, which would be placed in a separate 'statistical' account. Those accumulated profits could be drawn down during recessions. Such proposals would need to be developed and tested, including the indicators most suited to guiding targeted build ups, and the so-called release phase in periods of distress. As with the banking sector, the target for building capital cushions would be suspended in bad times for a pre-announced period, with firms allowed to use the additional capital built up in good times, through a prompt and sizeable release of the buffer to service obligations, including a blanket restriction applied to dividend payments for the period of the suspension of the target.[58]

We would already note that the auditing process already considers risks to corporations, characterizing them as a "going concern" if the entity is able to realise their assets and liabilities within the 'normal course of its business'. 'Normal' is, however, highly subjective and applies only to the relatively short period of one year. Stress tests can be designed in such a way so as to allow for a range of developments to be factored into scenario planning, forcing consideration of a range of negative outcomes, and a longer time horizon.

Measurement Maintenance

The fair value regime embeds accounting logics that lead to correlations of reporting practice and company behaviours which are destabilising for all firms because they encourage procyclicality and act as a cascade for system risks. Fair value also enables distributions from capital gains, where those gains are subject to reversal. We would also note the tendency for fair value regimes to remain stable in the upswing but come apart in the downswing as rules are waived to avoid catastrophic writedowns.[59] To minimize the possibilities for balance sheet manipulation and 'heads I win, tails you lose' logics, changes must be made to the accounting regime.

The repurposing of the corporation for systemic resilience requires an accounting system which returns more certainty and provenance to the booking of earnings and asset values to avoid the risks of constructing an unrealistic picture of firm economics. We are supportive of attempts to return our accounting regime to one which values assets in productive use based on historic costs that can be verified, rather than speculative expectations about value in exchange that incentivises optimism and amplifies volatility. However, we would note that some of the more problematic practices identified in our empirical section take place when elements of both fair value and historic cost are present - for example fair valuing financial instruments whilst effectively historic costing your subsidiary values. Goodwill accounting, and the rules around impairment could also be seen as containing elements of the two regimes.[60] A more dynamic and forensic approach to identifying such loopholes within the regulatory bodies is therefore also required.

Beyond that, we advocate the urgent need for a broader discussion about the purpose of accounting in a context where the existential threat of climate change looms. A systemically resilient corporate sector must also be a sustainable one. Accounting has never been just a technical, descriptive exercise - it constructs economic worlds and produces incentives for action. A deeper conversation is therefore needed about precisely what we want to measure, the audiences for whom we produce accounting information and the responses we want to encourage from the stewards of our

[58] Drehmann, M., Borio, C. E., Gambacorta, L., Jimenez, G., & Trucharte, C. (2010). Countercyclical capital buffers: exploring options. BIS Working Paper No. 317, July

[59] see Ford, J., 2020. Bank accounting an early casualty of Covid-19 [WWW Document]. URL https://www.ft.com/content/d8320acd-da83-4d3a-aa42-2360d3ca073c

[60] See Mennicken, A., Power, M., 2015. Accounting and the Plasticity of Valuation, in: Antal, A.B., Hutter, M., Stark, D. (Eds.), *Moments of Valuation.* Oxford University Press, pp. 208–228.

enterprises. We need, in other words, new accounting standards which not only reduce the opportunity space for manipulation, but repurpose reporting to incentivise forms of social action that will allow us to tackle more existential threats ahead. We advocate a form of sustainable cost accounting that makes these existential threats more visible on firm balance sheets in order to make their effects more actionable.[61]

Diversity Maintenance

Our empirics show that these practices are not isolated - there are a significant minority of firms in our largest indexes engaged in distribution practices that are, by any reasonable measure, excessive. This may indicate a collective action problem - if firms compete over distribution rates within their sector, it makes it difficult for any one firm to protect their capital base without that action affecting their share price. This practice may spill over if firms are benchmarked against a more general index. This can create homogenisation and a lemons problem[62] - the bad distribution practices drive out the good.

Embedding diversity in the corporate network may introduce the necessary redundancies, firewalls or buffers needed to prevent correlated collapses. A sustainable corporate economy should also include a range of ownership and funding models that support different social purposes and act as circuit breakers. It should also include a mix of global and local coordination, particularly around the provision of foundational activities[63]. Strategic diversity acts as a buffer and system redundancy that stops correlated and systemic risks cascading through relations that are interdependent.
Diversity, or at least plurality, is also important at the level of governance. It is a matter of dispute whether shareholders are in law the owners of the firm.[64] But it is unquestionable that the corporation comprises a community that hosts networks of relations within and outside its organizational boundaries. The list of stakeholders affected by corporate wellbeing go far beyond shareholders to include suppliers of debt capital, trading partners, employees, regulators, tax authorities, consumers and civil society. Stakeholder models of governance are not a compromise or diminution of rights of ownership but a reflection of the real relations hosted in the corporate form.

The management of firm assets then should be deployed in the service of the communities comprising both the corporation and the network of relations the corporation co-constitutes. Broadening the range of stakeholders represented in governance processes also potentially increases the checks and balances on egregious and self-serving management action. Shareholders, with notable and worthy exceptions, have not been the heroic disciplinary force often presumed in market-based understanding of corporate governance, so a broader spread of voices and checks will constrain insider capture of corporations. This renewed corporate purpose could even be stated in the company constitution. Until 2006, in UK company law (which is precedent for much company law around the world) a company had to state what its purpose was. The requirement for a defined purpose has however effectively been replaced by a simple profit motive. Requiring corporations to state a purpose beyond profit redirects them toward addressing the needs of different stakeholders. But this change is not limited to adjustments to corporate law. The task is to create the conditions for a rebalancing of interests within the corporation and its governance mechanisms.

---

[61] Murphy, R. (2019) 'Sustainable Cost Accounting: The case for building climate reporting into financial reporting', Corporate Accountability Network, http://www.corporateaccountabilitynet.work/wp-content/uploads/2019/12/SCANov2019.pdf.
[62] Akerlof, G.A., 1970. The Market for "Lemons": Quality Uncertainty and the Market Mechanism. The Quarterly Journal of Economics 84, 488–500.
[63] See The Foundational Economy Collective, 2020. What Comes after the Pandemic? A Ten-Point Platform for Foundational Renewal. https://foundationaleconomycom.files.wordpress.com/2020/03/what-comes-after-the-pandemic-fe-manifesto-005.pdf
[64] Ireland, P. (1999) 'Company Law and the Myth of Shareholder Ownership' *Modern Law Review*, 62(1), 32-57.

Conclusion

This report demonstrates that the financialisation of the non-financial sector has had a negative impact on those entities that dominate markets. Our report found that in a significant minority of cases, firms paid out more in dividends and share buy backs than they generated in net income. Many also paid out more than they generated in free cash flow from trading operations. Some of the same firms embarked on acquisition sprees, overpaying for corporate assets with borrowed money whose values are now moot. This has left many firms over leveraged, under capitalised, overly-intangible and strapped for cash. The financialised firm was already hollowed out and exhausted before the COVID-19 outbreak. The exogenous shock of the global pandemic met a corporate economy with low levels of resilience due to endogenous weaknesses. In consequence, the deleterious economic impact of COVID-19 is, and will continue to be, far larger than it might have been.

This report recommends reform. The need for a new social contract is now demanded from many corners - politicians[65], think tanks[66] and the broadsheet press.[67] But that new social contract has to place the corporation at the heart of the reform programme. We noted at the beginning of our report, the tendency for the idiosyncrasies of the last crisis to become the generalised problem of the next. As we write, employers are using the crisis as a means of shattering what collective bargaining strength the workforce has left: British Airways threat to 'fire and rehire' the majority of its 43,000 workforce effectively attempts to tear up its social contract with its workers. Private equity firms who kept their powder dry are eyeing up takeover opportunities at distressed corporations for more leveraged returns. This is a rare moment of reconstructive opportunity and politicians must now decide what kind of future they want to build. An emasculated, gig economy workforce and a debt-fuelled takeover boom will not resolve the fundamental structural problems that this crisis exposes. It is also, arguably, unsustainable politically.

A new relation or contract between the workforce, employers, investors and the state is needed, and it is one that must put the moral and social purpose of the firm centre stage. As we move towards climate-led volatility and disruption, we must think seriously about the compacts that must be forged and the sacrifices that must be made in order to build social and economic resilience to shocks, and enable our firms to work more effectively for a wider, more inclusive range of stakeholders.

[65] Pickard, J., Agyemang, E., 2020. UK needs new social contract, shadow chancellor says [WWW Document]. URL https://www.ft.com/content/cc295795-62cc-4062-9faa-02dfaf215a8d.
[66] Social Market Foundation, 2020. Returning the favour: a new social contract for business.
[67] Financial Times Editorial Board, T. editorial, 2020. Virus lays bare the frailty of the social contract [WWW Document]. URL https://www.ft.com/content/7eff769a-74dd-11ea-95fe-fcd274e920ca (accessed 6.8.20).