

24<sup>TH</sup> APRIL 2019

## DOES FINANCE BENEFIT SOCIETY?

PROFESSOR ALEX EDMANS

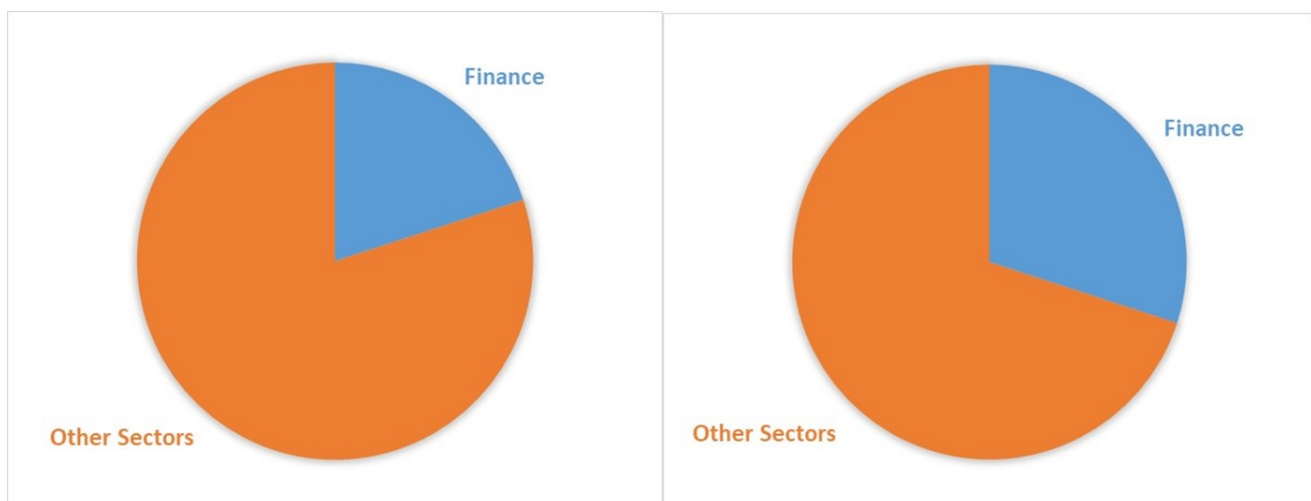
### The Concerns

The value of the UK financial services sector was £119 billion in 2017, three times as large as in France or Germany. The industry attracts some of the nation's top talent, with average starting salaries for an entry-level investment banker of £72,000, rising to £329,000 in ten years.<sup>1</sup>

These staggering numbers seem a significant cause for concern. The financial industry produces no goods, such as medicines, food, or clothing, that directly contribute to citizens' welfare. While it does provide services, such as retail banking (bank accounts and mortgages) that benefit citizens, the highest salaries are earned in industries such as investment banking, hedge funds, private equity, and venture capital, which do not directly serve consumers. If some of the country's smartest people – plus substantial physical resources such as real estate and computing power – are being drawn into finance, this takes them away from other industries that seem to have a much greater societal benefit.

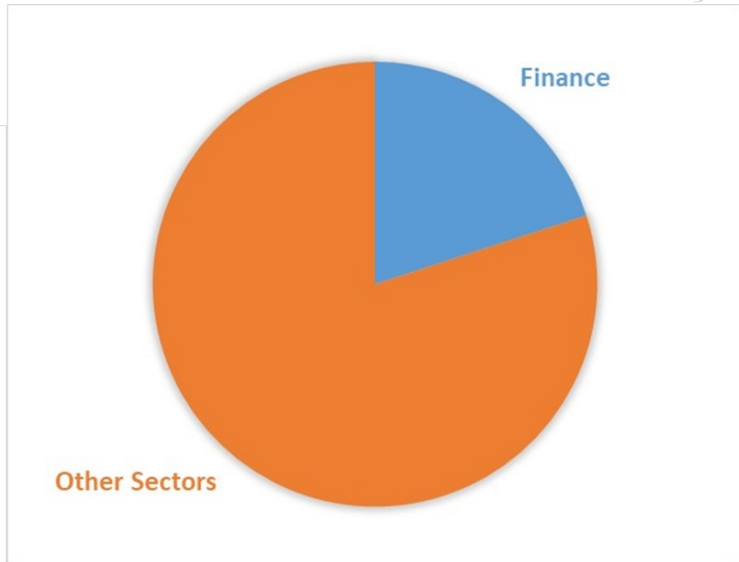
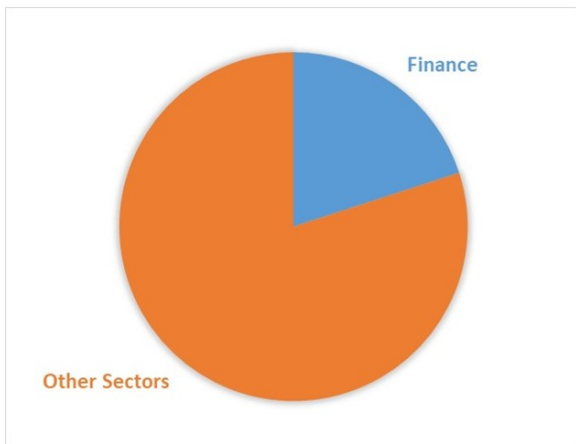
However, as is a theme throughout this lecture series, we must first ask whether the sheer size of the finance industry results from pie-splitting (drawing resources away from other sectors) or pie-growing (its profits being a by-product of helping other sectors).

### *Pie-Splitting*



### *Pie-Growing*

<sup>1</sup> <https://news.efinancialcareers.com/uk-en/277526/banking-salaries-and-bonuses>.



Without finance – without a source of funds – the other industries would barely exist. Finance is what allows a penniless entrepreneur, with little beyond a dream and a vision, to embed this idea into a startup. Otherwise, only those blessed with family money would be able to found a company. Finance also helps an established company fund an expansion, moving from a national leader into an international leader. Without finance, the UK would have few truly great companies, able to compete on the global stage.

That sounds all well and good, but – as is a mantra throughout this series – let’s look at the evidence. And the evidence seems to suggest that this rosy view of finance is simply not borne out in reality. An apparently “smoking gun” is the fact that companies pay out as much money to investors, in the form of share repurchases, as they raise from investors by issuing new shares. In some years, the net amount of financing provided by the stock market is actually negative.



### Share Buybacks – The Concerns

Critics argue that share repurchases are a way in which the finance industry extracts funds from companies – rather than providing funds to companies. The money spent on buybacks could have otherwise been invested, paid out in higher wages, or used to reduce a company’s carbon emissions. Moreover, CEOs may have personal incentives to engage in share repurchases. Many CEOs have EPS (earnings per share) targets in their bonus schemes. Earnings per share is earnings divided by the number of shares. A share repurchase reduces the number



of shares, thus artificially increasing EPS and allowing the CEO to hit his target – even if he hasn't improved the company's actual performance.

As a result, share buybacks seem a prime example of pie-splitting. They enrich CEOs and investors at the expense of society. As Senator Elizabeth Warren argued, “stock buybacks create a sugar high for the corporations. It boosts prices in the short run, but the real way to boost the value of a corporation is to invest in the future, and they are not doing that.” Economist William Lazonick pointed out that, in the US, 91% of a company's net income goes to buybacks and dividends. As he claimed, “That left very little for investments in productive capabilities or higher incomes for employees.” As a result of these concerns, Warren and other US Senators have proposed regulations to prohibit buybacks, and the UK government last year commissioned a study into the effects of buybacks on executive pay and investment. Thus, even though buybacks are only one aspect of “finance”, I will focus a large part of this lecture to them, given current controversies.

Both statements seem damning critiques of buybacks, but both are actually illogical. First, it is not actually true that “the real way to boost the value of a corporation is to invest in the future.” This violates a basic idea in Finance 101. An investment only boosts the value of a company if the returns on the funds invested are higher than the funds could have earned elsewhere. Instead of investing, a company could pay out cash to shareholders, who could then invest it in start-up firms with substantial growth potential. As an analogy, home improvement only creates value up to a point. Perhaps a new conservatory and a loft conversion increases the value of a home more than the cost, and so are worth it. But further investments yield less value than other uses for the homeowner's – sending her children to summer camp, or paying down her mortgage (the analogy of a share buyback).

While CEOs may have personal incentives to engage in buybacks (to hit EPS targets), they also have personal incentive to invest even if doing so does not generate value. CEO pay is strongly correlated with firm size, and so CEOs can boost their pay by growing the firm. CEOs of larger firms also receive significantly more prestige and status – the CEO of the industry leader is more likely to keynote at industry conferences. Responsible CEOs do not invest willy-nilly; they invest when opportunities are good, and show restraint when opportunities are bad. Buybacks may be a sign of such restraint, similar to a citizen paying down a credit card rather than continuing to spend.

Second, the argument that allocating 91% of net income to dividends and buybacks left “very little for investments in productive capabilities or higher incomes for employees” is nonsensical. Net income is calculated after having already subtracted employee wages and many investments (such as R&D and advertising). It is as nonsensical as saying “the kids can't have had much to eat because their plates are empty.” Their plates are empty because they have already eaten off them. But, due to confirmation bias, people accept such arguments, even if clearly flawed, because they are consistent with public perception of finance.

## Share Buybacks – The Evidence

The above arguments are hypothetical. *If* a CEO has taken all value-creating investments, buybacks are a legitimate alternative use. But that's a big “if” – is this actually the case? Again, let's look at the evidence. Senator Warren is correct that a buyback “boosts prices in the short run”, but she is incorrect that it creates a “sugar high” that is only temporary. In fact, the gains are even higher in the long-run. A seminal study found that firms that buy back stock subsequently beat their peers by 12.1% over the next four years.<sup>2</sup> While that paper analysed US companies in the 1980s, a recent analysis studies 31 other countries with much more recent data and found that the results generally hold – including in the UK.<sup>3</sup>

---

<sup>2</sup> Ikenberry, David, Josef Lakonishok and Theo Vermaelen (1995): “Market Underreaction to Open Market Share Repurchases.” *Journal of Financial Economics* 39, 181-208.

<sup>3</sup> Alberto Manconi, Urs Peyer and Theo Vermaelen (2018): “Are Buybacks Good for Long-Term Shareholder Value? Evidence From Buybacks Around the World.” *Journal of Financial and Quantitative Analysis*, forthcoming.



Other studies find that CEOs repurchase more stock when growth opportunities are poor<sup>4</sup>, and when they have excess capital.<sup>5</sup> Thus, even if we observed a negative correlation between buybacks and investment, this may not be causation. It seems that it is low investment opportunities that lead to buybacks, rather than buybacks leading to low investment. A highly-respected survey of nearly 400 Chief Financial Officers to drill down into how they actually make investment and repurchase decisions confirms this interpretation.<sup>6</sup> They reported that they make investment decisions first and only repurchase shares using money left over – as the study found, “repurchases are made out of the residual cash flow after investment spending.” Now there is an obvious concern – might the CFOs lie? But the same CFOs freely admitted that they do cut investment to maintain dividend levels. So CEOs do admit to short-termist pressures, but buybacks are not a source of such pressure. Similarly, recall that in Lecture 2 (Executive Pay: What’s Right, What’s Wrong, and What’s Fixable) we saw evidence that CEOs cut R&D to meet EPS targets in their bonus schemes.<sup>7</sup> However, the same study showed that they do not engage in buybacks to hit EPS targets. Again, CEOs do indeed take myopic actions, but buybacks are not one of them.

The title of this lecture series is How Business Can Better Serve Society. Thus, our lens should be society rather than just the firm in question. This is another benefit of buybacks: the funds that are returned to investors can be invested elsewhere – and they are. One study follows the money and shows that, when a company pays out dividends or engages in a buyback, the cash is reallocated to other stocks held by its investors.<sup>8</sup> This reallocation increases the prices of these stocks and makes them more likely to issue equity in the future.

This is a very important point, and means that assessments of the value of the financial sector based on “net financing” are misleading. The goal of the financial sector is to take funds from cash-rich, investment-poor companies and reallocate them to cash-poor, investment-rich ones. This is fully consistent with net financing being zero – some firms are issuing shares and others are buying back shares. By analogy, it would be nonsensical to argue that a company is not engaging in international trade because its net trade balance is zero. A net trade balance of zero is consistent with the country importing a lot and exporting a lot.

However, the evidence is not all one way. Research shows that buybacks that allow a company to just beat analyst earnings forecasts, when it would have missed them otherwise, lead to cuts in employment and investment.<sup>9</sup> But the problem here is not so much the buyback, but pay schemes that make the CEO concerned with the short-term stock price (which falls if analyst forecasts are missed). In Lecture 2 I mentioned one of my own studies which showed that CEOs cut investment when their equity is about to vest.<sup>10</sup> In a new paper my coauthors and I found that vesting equity also causes CEOs to engage in buybacks, and reduces the long-term returns to these buybacks.<sup>11</sup> Again, buybacks are only a symptom of the problem. The root cause of the problem is short-term equity, which leads to other symptoms such as investment cuts (as found by the earlier study).

Overall, the evidence suggests that, in general, buybacks do create value for society. However, some buybacks – those motivated by short-term concerns – may shrink the pie. The solution here is not to restrict buybacks, or shrink the financial sector, but reduce the short-term concerns through the executive pay reforms discussed in Lecture 2.

---

<sup>4</sup> Grullon, Gustavo and Roni Michaely (2004): “The Information Content of Share Repurchase Programs” *Journal of Finance* 59, 651-680.

<sup>5</sup> Dittmar, Amy K. (2000): “Why Do Firms Repurchase Stock?” *Journal of Business* 73, 331-355.

<sup>6</sup> Brav, Alon, John R. Graham, Campbell R. Harvey, and Roni Michaely (2005): “Payout Policy in the 21<sup>st</sup> Century.” *Journal of Financial Economics* 77, 483-527.

<sup>7</sup> Bennett, Benjamin, J. Carr Bettis, Radhakrishnan Gopalan and Todd Milbourn (2017): “Compensation Goals and Firm Performance.” *Journal of Financial Economics* 124, 307-330.

<sup>8</sup> Chen, Huaizhi (2018): “Capital Redeployment in the Equity Market.” Working Paper, Harvard Business School.

<sup>9</sup> Almeida, Heitor, Vyacheslav Fos and Mathias Kronlund (2016): “The Real Effects of Share Repurchases.” *Journal of Financial Economics* 119, 168-185.

<sup>10</sup> Edmans, Alex, Vivian W. Fang and Katharina Lewellen (2017): “Equity Vesting and Investment.” *Review of Financial Studies* 30, 2229-2271.

<sup>11</sup> Edmans, Alex, Vivian W. Fang, and Allen H. Huang (2019): “The Long-Term Consequences of Short-Term Incentives.” Working paper, London Business School.



## Secondary Financial Markets

The above discussion has concerned *primary financial markets* – companies raising new funds or returning funds that have previously been raised. But the vast majority of activity occurs in *secondary financial markets*, where no new funds are being raised. When investors trade, they're exchanging second-hand stocks and bonds that have already been issued. No new money flows to or from firms, so such activity doesn't finance a company's expansion nor allow surplus cash to be reinvested elsewhere. Instead, secondary trading appears to be a zero-sum game. If one investor gains from a trade, another investor has to lose.

However, there are two key channels through which even secondary trading can benefit society.<sup>12</sup> The first is incentives. Managers' shares, options, and reputation all depend on the stock price. Thus, their incentives to take real actions depend on the extent to which those actions will be reflected in the stock price. If the financial market is inefficient, because unsophisticated traders value a firm based on short-term profit rather than long-term value, then the stock price will reflect the former, and so managers will focus on the former. However, an active financial sector, where investors are critically analysing a firm's purpose, strategy, and stakeholder relationships, will ensure that prices more closely reflect the firm's long-term prospects – in turn encouraging the manager to think long-term. I referred to this as the stewardship mechanism of “monitoring” or “exit” in Lecture 4, The Stewardship Role of Investors.

The second is learning. Many of the key drivers of a firm's long-run value, such as its strategic positioning, are difficult to measure objectively. Like an efficient polling system, the stock price aggregates the information of millions of investors, each with their different viewpoints, and summarises them into a single number which can be used by anyone for free. This idea was first captured by the Nobel prize-winning economist Friedrich von Hayek. For example, a bank deciding whether to lend, a worker choosing which company to join, and a customer or supplier deciding whether to enter into a long-term relationship, can use the stock price (in addition to other measures) to guide them.

Most importantly, it can be used by the company's management itself. Many key decisions are enhanced by managers supplementing their own internal information with external perspectives. While consultants cost millions, the stock price is a freely available signal of the quality of a firm's decisions. Indeed, studies have shown that a CEO's likelihood of completing an M&A deal depends on the initial stock price reaction to its announcement.<sup>13</sup> For example, Carly Fiorina, the former CEO of Hewlett-Packard, dropped her bid for the consulting arm of PricewaterhouseCoopers because investors “simply voted with their positions in the stock . . . I realise [they] made some valid points.” More broadly, CEOs increase real investment when their stock price is high, as this signals favourable growth opportunities – and the effect is stronger where the price is more informative.<sup>14</sup> When a country enforces insider trading regulations, this makes stock prices more informative (because outsiders are less worried about trading against insiders) and so investment becomes more closely linked to prices.<sup>15</sup>

Of course, a larger financial sector is not necessarily a more efficient financial sector, and not all trading is good. Stock prices may be manipulated, reducing rather than enhancing the amount of information in prices. But, the benefits of an efficient financial sector for the real economy are clear. The challenge for policymakers is to harness

---

<sup>12</sup> Bond, Philip, Alex Edmans and Itay Goldstein (2012): “The Real Effects of Financial Markets.” *Annual Review of Financial Economics* 4, 339-360.

<sup>13</sup> Luo, Yuanzhi (2005): “Do Insiders Learn From Outsiders? Evidence From Mergers and Acquisitions.” *Journal of Finance* 60, 1951-1982.

<sup>14</sup> Chen, Qi, Itay Goldstein, and Wei Jiang (2007): “Price Informativeness and Investment Sensitivity to Stock Price.” *Review of Financial Studies* 20, 619–650.

<sup>15</sup> Edmans, Alex, Sudarshan Jayaraman, and Jan Schneemeier (2017): “The Source of Information in Prices and Investment-Price Sensitivity” *Journal of Financial Economics* 126, 74-96.



the financial sector's vast resources to increase the informativeness of market prices. As discussed in Lecture 4, one channel may be to encourage investors to take large stakes, to ensure that they have sufficient incentives to gather intangible information, rather than relying on freely-available earnings figures. When stock prices reflect long-term value, not short-term numbers, managers' decisions will too.

© Professor Alex Edmans, 2019