

## **Financialization in the American Pharmaceutical Industry: A Veblenian Approach**

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**Abstract:** Thorstein Veblen's theory of the business enterprise is one in which business interests come to dominate industrial interests, with pecuniary returns being the dominant mindset under which economic activity is conducted. Under money manager capitalism, this is reflected in the increasing importance of profits from financial channels and the accumulation of intangible rent-generating assets to serve as the basis for capitalization – a process known as financialization. This paper examines this process of intangible asset accumulation within the context of the American pharmaceutical industry using Veblen's theory of the business enterprise as a lens. As will be shown, intangible assets have come to dominate productive capital on pharmaceutical enterprise balance sheets, implying that pharmaceutical profits are accumulated through rent-seeking channels rather than productive ones, in line with Veblen's theory, and provide evidence of the financialization of this industry.

**JEL Codes:** B52, D43, L21

**Keywords:** Veblen, Financialization, Business Enterprise, Intangible Assets, Pharmaceutical Industry

In this paper, I argue that Veblen's theory of the business enterprise within the modern credit economy – in which financial motives increasingly come to dominate industrial ones – can be applied to the experience of the American pharmaceutical industry. Using the stages of capitalism analysis developed by Hyman Minsky (1996) and the concepts of the New Economy Business Model and the Transnational Corporation from Lazonick (2005; 2010) and Serfati (2008), I argue that the most dominant corporations in the American pharmaceutical industry have taken on an intangible characteristic, emphasizing profits through the accumulation of rent-generating intangible assets rather than the production of serviceable output. Such a tactic is not abnormal but falls within the stated goal of the business enterprise under Veblen's theory and in the New Economy to maximize shareholder value rather than the production of serviceable output (Veblen, 1904; Lazonick and O'Sullivan 2000).

The paper is divided into two main sections. First, an understanding of how intangible assets become the basis for financialization is required in order to understand the issues surrounding financialization and the modern enterprise in general. To do this, I outline Veblen's theory of intangible assets and their role in the institutionalist theory of the business enterprise. Of particular importance is the way in which intangible assets are used to reproduce the enterprise as a going concern as the nature of the enterprise changes from small, handicraft production under commercial capitalism through to the modern joint-stock corporation under finance and money manager capitalism. While Veblen views intangible assets as rent-generating assets, the way in which such rent-generating assets are used takes on different characteristics as the enterprise progresses through the different stages of capitalism. The second section examines the experience of the American pharmaceutical industry, emphasizing the companies that make up the core of the industry; such companies, due to their size and position in networks of

production and distribution, have the ability to exert influence over the direction and performance of the industry<sup>1</sup>. Data regarding rates of return and the balance sheet structure of dominant American pharmaceutical enterprises will be used to show the importance of intangible assets in maintaining pharmaceutical corporations as going enterprises, in line with heterodox theories of the business enterprise (Dean 2013).

### **Intangible Assets and the Business Enterprise**

Veblen discussed the creation of intangible assets in two papers published in 1908 (Veblen, 1908a; Veblen, 1908b). In these, he distinguished between tangible assets and intangible assets. In a footnote, he describes tangible assets as “serviceable capital goods considered as valuable possessions yielding income to their owner.” (Veblen 1908a, 539 *fn* 1) Tangible assets may be thought of as having a dual nature: a use-value in their ability to provide socially necessary goods and services, and an income stream for the asset’s owner. Intangible assets – such as patents, goodwill, brand names, copyrights, and trademarks – do not, on their own, produce socially necessary goods and services. Rather, they are seen as ownership rights that increase the income stream already generated by the tangible asset. In this way, they may be seen as rent-generating assets, rather than productive assets (Veblen 1908b; Dean 2013). In the early stages of the business enterprise – during the period of “commercial capitalism” (Minsky, 1996) – tangible assets are bound up within the “going plant”, or the locus of production within capitalist economies. For the going plant to survive in this early stage, it must engage in ongoing monetary transactions, creating the need for intangible assets (Veblen 1904; Dean 2013).

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<sup>1</sup> The concept of the pharmaceutical industry core is developed in full by Alfred Chandler (2005) and expanded upon by Marc-Andre Gagnon (2009).

As Veblen pointed out, intangible assets are ownership rights whose primary purpose is to grant a differential advantage through a “locking out” process (Veblen 1904; 1908b)<sup>2</sup>. Intangible assets, then, serve two primary purposes in this early stage of business activity. First, monopoly rights, such as patents, organize the economy into its producing and consuming elements by acting as “market equities”, or the right to access a market (Hamilton 1941). Consumers must engage in ongoing monetary transactions with limited producers, thereby allowing the going plant to remain a viable concern. Second, as Commons explained, intangible assets in the form of goodwill help reduce uncertainty for both consumers and producers (Commons [1924] 2007)<sup>3</sup>. Those enterprises with goodwill, then, have a higher likelihood of maintaining themselves as a going concern due to their stable consumer base willing to engage in ongoing monetary transactions.

As the enterprise grows from the commercial enterprise to the industrial one, the role of intangible assets as market equities plays a larger role in Veblen’s theory of the business enterprise<sup>4</sup>. As industrial production grows and the ability to produce enough output to satisfy the market is no longer in question, the business enterprise becomes focused on price maintenance – or that the price paid for output is sufficient to maintain the enterprise as a viable concern. “Under the old régime of handicraft and petty trade, dearth (high prices) meant privation and might mean famine and pestilence; under the new régime low prices commonly

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<sup>2</sup> By this, I mean that those with monopoly-type intangible assets are able to prevent those without intangible assets from accessing the system of social provisioning prior to getting permission from the owners. In other words, intangible assets might be seen as a tollbooth, with the owners acting as the tollbooth operator (Heller & Eisenberg, 1998).

<sup>3</sup> Goodwill is defined here simply as the customary relations between buyers and sellers.

<sup>4</sup> Marked by the shift from what Minsky terms commercial capitalism to industrial capitalism (Minsky, 1996).

mean privation and may on occasion mean famine.” (Veblen 1904, 87) Intangible assets – in particular, the monopoly rights in the form of patents – limit the number of producers in a given market, granting the enterprise the control over the price system necessary to maintain it at a profitable level.

Under the regime of commercial capitalism and industrial capitalism, intangible assets perform a locking out function, ensuring the existence of the necessary monetary transactions at a going concern price. As the enterprise continues to grow, however, it begins to finance investment through the sale of ownership shares, creating a separation between the ownership of the concern and the controllers of the concern (Veblen 1904; Veblen [1923] 2009). In finance and money manager capitalism, associated with the New Economy Business Model, return to shareholders has become the guiding light by which enterprises are governed (Lazonick and O’Sullivan 2000; Lazonick 2005; Jo and Henry 2015). Such a mode of corporate governance requires an increase in the valuation of the enterprise, regardless of an increase in the productive capacity, which has had negative effects on the rate of productive innovation in the American economy (Lazonick 2016). As both Veblen (1904) and Hilferding ([1910] 1981) show, this results from the creation of a new circuit of finance in the form of sales of stock. When this circuit is added to the standard  $M - C - M'$  circuit of capital, the production of serviceable output becomes the by-product by which returns to shareholders are generated; if greater returns to shareholders can be generated *without* producing output, then less output will be produced and investments in productive capacity will decline. Hake expands upon this concept, showing how in Veblen’s theory, intangible assets that generate an income stream due to rent can come to be capitalized upon through stock and debt issuances, further increasing the valuation of the company. “Once this new class of financial assets is legitimately added to the balance sheet, it

changes our understanding of the amount of income that can be received by financial agents, managers, or owners.” (Hake 2007, 33)

The process described here, whereby intangible assets are used to generate pecuniary returns to satisfy financial motives is part of the process of financialization. In general, financialization refers to “a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production.” (Krippner 2005, 174). Under money manager capitalism, financialization is seen in what Serfati refers to as the Transnational Corporation, which is “a functional process through which money becomes capital for its owner thanks to its advance as property claims and loans. In contemporary capitalism, this functional opportunity. . . is offered to industrial groups through the holding of financial assets or other rent-generating assets. . .” (Serfati 2008, 40) Under this form of enterprise, “intangible assets are now said to have supplanted tangible assets as the key value drivers in the economy.” (Serfati 2008, 45) The primary reason for this is because the differential advantage conferred by such assets through their rent-generated income streams may be capitalized upon in the form of stock and debt issuances. In other words, what is being capitalized upon under money manager capitalism is not the earning capacity of the enterprise due to tangible asset determined productivity, but the earning capacity of the enterprise due to its ability to control access to markets *via* ownership of intangible assets. Mazzucato (2016) refers to this as value extraction, rather than value creation; so long as these intangible assets are valued and re-valued at higher rates, shareholder value will continue to increase, even without any advancement in productive

capacity<sup>5</sup>. The implication is that the acquisition and maintenance of the corporation's rent-generating assets takes primary focus over its productive assets.

### **Financialization of the American Pharmaceutical Industry**

Turning our attention to the case of the American pharmaceutical industry, we can see this process of financialization occur. Much attention has been paid to the high prices of pharmaceuticals in the United States, in particular the activities of Mylan and Turing Pharmaceuticals<sup>6</sup> (Lorenzetti 2015; Willingham 2016). A recent study in the Journal of the American Medical Association found that the primary factor in these high prices was the market exclusivity offered to pharmaceutical companies by patents (Kesselheim, Avorn, and Sarpatwari, 2016). Less attention, however, has been paid to the balance sheet effects of these intangible assets. In other words, while research has examined the increase in prices charged for pharmaceutical products, it has not paid as much attention to the increasing reliance on intangible assets to maintain themselves as going concerns. This section aims to fill that gap by showing how dominant American pharmaceutical enterprises have taken on more intangible assets than tangible assets, a defining characteristic of the financialization of the business enterprise.

Data for this section are collected from company financial reports for the pharmaceutical enterprises listed in the Fortune 1000 between 2002 and 2014<sup>7</sup>. Of interest are two main

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<sup>5</sup> Though the topic is not discussed here, mergers and acquisitions become an important part of this accumulation process. For more, see Medlin (2003), and Hake (2004)

<sup>6</sup> Turing Pharmaceuticals, upon acquiring rights to the drug Daraprim, increased its price by 5,000%. Mylan, meanwhile, has increased the price of EpiPen by 400% since 2009.

<sup>7</sup> Company financial data comes from the Wharton Research Data Service database, with 2002 chosen as the start year due to changes in accounting rules surrounding intangible assets in the wake of the Enron scandal (FASB 2001; Hake,2005). As mentioned earlier in

categories: First is the structure of the industry's balance sheet. Of importance here are the ratio of intangible assets to productive capital and the industry's net tangible assets, discussed in more detail below. Second is the industry's profit rate, calculated in four ways: return on revenue (ROR), return on assets (ROA), return on equity (ROE), and earnings per share (EPS). Table 1 below shows the data regarding intangible assets, productive capital, and net physical assets<sup>8</sup>. In line with previous research conducted by Hake and King (2002) regarding intangible assets in the meatpacking industry, we may consider both intangible assets and productive capital in two categories. First, intangible assets represent goodwill and other intangible assets – consisting of patents, trademarks, copyrights, and brands. Second, productive capital may be considered as cash and net physical assets. Using these categories, I calculate three ratios to gauge the change in the structure of the pharmaceutical industry's assets.

[Insert Table 1]

The first ratio consists of total intangible assets to total productive capital. In money manager capitalism with the dominant form of enterprise as the Transnational Corporation, this ratio should be increasing due to the elevated importance of intangible assets as the key component to capitalization. Indeed, in the pharmaceutical industry, this is the experience: in 2002, the ratio of intangible assets to productive capital was .74, but by 2014, had increased to 2.70, or by 265%. This is in-line with Veblen's theory of the business enterprise, where

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the paper, enterprise's were chosen due to their position in the "core" of the industry, so to speak, meaning they have the ability to direct the course and direction of the industry (Chandler 2005; Gagnon 2009). Finally, data for the industry is calculated as a weighted averages, using the percentage of industry assets as the weight; in this way, differences in enterprise size were taken into account.

<sup>8</sup> Net physical assets are not to be confused with net tangible assets. Net physical assets refer to property, plant, and equipment less depreciation, while net tangible assets refer to total assets, less total liabilities and total intangible assets.



perceived corporate value is derived increasingly from intangible assets, as observed on the balance sheet. The second and third ratios show the ratio of goodwill to net physical assets and non-goodwill intangible assets to net physical assets. This is to show the relationship between rent generating assets and productive capacity in the industry. Like the first ratio, both increase greatly over the time period: the ratio of goodwill to net physical assets increased by 239%, from .64 to 2.17; while the ratio of other intangible assets to net physical assets increased by 406% from .47 to 2.38. The implication, then, is that the valuation of pharmaceutical enterprises is dependent primarily on the intangible assets it has accumulated, rather than its ability to produce output.

Looking at net tangible assets, calculated by subtracting total liabilities and total intangible assets from total assets, supports the view that intangible assets have become more important on the enterprise's balance sheet. From 2002 to 2014, the industry reduced its net tangible assets from \$10 billion to approximately \$4 billion, but this alone does not tell the story. From 2005 to 2008, net tangible assets collapsed, from \$11.6 billion down to -\$1.5 billion, implying that in 2008, the industry was only solvent because of its intangible assets. While net tangible assets have turned positive since, they are still far from their pre-crisis levels, and actually decreased from 2013 to 2014.

When combined with profit rate data, the connection to Veblen's theory becomes clear. As shown in Table 2, there has been no negative impact of the increased importance of intangible assets on profit rates. Return on revenue, or the profits generated from sales, has increased slightly during this period, which is likely due to an increase in the price of pharmaceutical output. Return on assets, or the profits generated from the enterprise's assets decreased slightly, but on the whole remained relatively unchanged, implying that intangible

assets are just as good at generating returns as physical capital. Finally, the two measures showing return to shareholders tell a similar story. Return on equity, or the enterprise's profits generated from stockholder's equity, was more volatile than return on assets, but on the whole remained between 17% and 21%. Earnings per share, meanwhile, increased fairly steadily, from \$1.58 to \$2.82, or by 78%. It is also worth mentioning that the two years in which net tangible assets were lowest – 2008 and 2009 – there was a spike in earnings per share of 88%, from \$1.46 in 2007 up to \$2.75 in 2009, reflecting the importance of intangible assets in generating returns to shareholders.

[Insert Table 2]

### **Conclusion**

The purpose of this paper was to apply a Veblenian analysis to the American pharmaceutical industry, emphasizing the importance of acquiring intangible assets under the regime of money manager capitalism. In line with Lazonick's theory of the New Economy Business Model and Serfati's theory of the Transnational Corporation, dominant American pharmaceutical enterprises have taken on an intangible position, shown by the increasing ratio of intangible assets to productive capital and cash (Serfati 2008; Lazonick 2010). The implication of this is that pharmaceutical enterprises are coming to rely to a greater degree on the rent-generating assets to maintain their profit rates as opposed to their productive capacity, which accounts for Lazonick's observation of a lack of innovation by American enterprises (Lazonick 2016). Using Veblen's theory, I have shown here that this has created a situation in which pharmaceutical companies seek to *extract* value, rather than *create* it (Veblen 1923; Mazzucato 2016). While public policy makers have focused on the pricing behavior of pharmaceutical

enterprise, more attention must be paid to the structural issue of intangible assets coming to dominate pharmaceutical enterprise balance sheet and the effects on economic activity.

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## Tables

Year	Intangible Assets/Productive Capital	Goodwill/Net Physical Assets	Non-Goodwill Intangible Assets/Net Physical Assets	Net Tangible Assets (2002 Dollars)
2002	0.73	0.64	0.47	\$10,015.31
2003	1.64	0.86	1.09	\$8,106.77
2004	1.46	0.88	0.92	\$10,151.68
2005	1.33	0.87	0.86	\$11,689.77
2006	1.54	0.98	0.91	\$11,302.76
2007	1.43	1.04	0.91	\$10,106.69
2008	1.36	1.09	0.86	\$8,786.29
2009	2.40	1.34	1.90	-\$1,516.27
2010	2.47	1.52	1.86	\$1,535.93
2011	2.30	1.75	1.96	\$1,743.80
2012	2.24	1.88	2.26	\$2,317.48
2013	2.99	2.10	2.66	\$4,605.55
2014	2.70	2.17	2.38	\$4,181.75

Table 1: Ratios of Intangible Assets and Productive Capital (WRDS, 2016)

Year	Return on Revenue	Return on Assets	Return on Equity	Earnings Per Share (2002 Dollars)
2002	12.02%	13.86%	27.39%	\$1.58
2003	8.14%	11.17%	17.27%	\$1.25
2004	9.68%	17.52%	18.96%	\$1.65
2005	10.05%	17.39%	18.57%	\$1.70
2006	11.14%	21.66%	20.55%	\$1.94
2007	7.73%	12.57%	14.54%	\$1.46
2008	10.16%	17.58%	20.55%	\$1.96
2009	10.26%	25.62%	20.98%	\$2.75
2010	7.29%	14.35%	15.01%	\$1.88
2011	7.57%	15.65%	16.66%	\$1.99
2012	7.82%	18.07%	17.07%	\$2.20
2013	8.74%	22.59%	17.90%	\$2.38
2014	9.70%	20.71%	24.16%	\$2.82

Table 2: Profit Rates of Pharmaceutical Industry (WRDS, 2016)