

The Applicability of The Pecking Order Theory in The Digital Economy

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Abstract. The Peck Order Theory (POT), proposed by Myers and Majluf in 1984, posits that firms prioritize their sources of financing based on the principle of least resistance, starting with internal financing, followed by debt, and ending with equity as a last resort. In the context of the digital economy—which is defined by new finance mechanisms and technical advancements like big data, blockchain, crowdsourcing, and artificial intelligence (AI)—this study investigates the applicability and relevance of POT. This study investigates how these contemporary tools impact conventional financing behaviors and preferences through an extensive literature review. The findings suggest that while POT remains a powerful framework, its application in the digital age needs to be modified to account for the reduced information asymmetry and increased efficiency brought about by digital innovations.

Keywords: The Pecking Order Theory; digital economy; crowdfunding; big data; artificial intelligence (AI); blockchain technology.

1. Introduction

The Peck Order Theory (POT) proposed by Myers and Majluf in 1984 proposes that firms prioritize their sources of financing (from inner financing to equity) on the premise of the guideline of slightest exertion or slightest resistance, inclining toward raising equity as a final resort. Given the emergence of the digital economy and the creation of previously untapped funding sources, it is important to revisit and reevaluate POT's applicability in the current context. In order to understand POT's position in the digital economy, this writing survey summarizes the most recent research conducted over the previous ten years.

The digital economy has presented unused financing strategies, such as crowdfunding and digital monetary standards, which were not far-reaching when POT was, to begin with proposed [1]. The part of crowdfunding in lessening information asymmetry and expanding the victory rate of start-up financing is talked about. Their analysis suggests that the transparency and simplicity promoted by crowdfunding stages may disrupt traditional subsidized systems of command [2]. Effective analysis of SMEs' capital structures reveals that POT continues to be a major factor in explaining how SMEs finance themselves. In any case, they moreover point out that digital innovations make inside financing and debt more alluring than equity financing, as businesses aim to maintain control and minimize divulgence. The advancement of fintech has altogether affected the financing choices of ventures.

The survey shows that equity crowdfunding allows new companies to bypass traditional budget middlemen, providing a modern path that will change the process of subsidies proposed by POT [3]. This suggests that while debt and internal finance are still preferred, traditional subsidizing inclinations are shifting due to the availability of access to equity through contemporary stages.

2. Crowdfunding and Digital Platforms

Crowdfunding has ended up being a progressive way for new companies and little businesses to get to subsidizing. The conventional financing strategies that POT depends on regularly require companies to go through mediators such as banks or wander capitalists, leading to noteworthy



information asymmetry and outside financing costs. Crowdfunding stages, on the other hand, give a more straightforward and open course to financing [3]. Crowdfunding phases allow organizations to circumvent traditional budgetary intermediaries, providing an underutilized avenue for financing that appears to modify the POT level of finance. The ability to directly reach a large number of possible speculators reduces information asymmetry, which could be a major factor in POT's assumptions when they suggest tall non-equity for debt and internal financing.

Crowdfunding decreases information asymmetry and increases the victory rate of new companies. This straightforwardness and openness undermine the conventional inclination for inner and debt financing, as equity can presently raise capital more productively and straightforwardly from a wide speculator base, challenging the see that equity may be a final resort. Digital platforms have greatly enhanced firms' ability to obtain financing, particularly through the use of financial technologies (financial tech). These phases promote a variety of financing methods, such as equity crowdfunding, peer-to-peer lending, and digital lending, all of which influence the trend away from traditional financing.

Digital stages make the method of obtaining financing more productive and available [2]. It was found that whereas POT still generally explains the financing conduct of SMEs, digital innovations make inner financing and debt more alluring than equity. However, the ease with which equity can be obtained through digital channels suggests that traditional funding patterns are evolving, especially for startups or tech-related businesses.

A few considers have examined the effect of digital stages on corporate financing inclinations. Several studies have examined the impact of the digital phase on firms' propensity to raise funds [4]. The use of advanced information analysis and the straightforwardness of monetary announcements by companies in the digital economy to demonstrate their quality to speculators is highlighted. This approach makes a difference in decreasing the toll of outside financing by relieving the issue of ominous choice, in this manner making equity more appealing and open.

As a result of diminished information asymmetry, companies with progressed information capabilities tend to have superior get to to debt and equity markets. This proposes a conceivable move in conventional financing inclinations, as companies with solid information capabilities can more effortlessly get to outside financing, counting equity.

The rise of crowdfunding and digital platforms has drastically impacted the relevance of POT arrange Theory in the online world. These financing strategies lead to disruptions to the agreed-upon chain of financial preferences given by POTs, as they not only lessen information asymmetry and boost productivity but also facilitate more coordinated access to finance. Even though businesses still mostly rely on debt and internal funding, the availability of stock through digital media is creating new opportunities for capital raising. Continued research into the trends is critical for both establishing finance theory and keeping it relevant to real-world applications.

3. Big data and artificial intelligence (AI)

Advances in big data and artificial intelligence are dramatically changing the way businesses work and their financing options. According to the Peck order Theory (POT), companies should give internal funding first priority before moving on to debt and equity financing. In any event, the traditional pecking order theory has been altered by the deployment of big data and artificial intelligence innovation, which has given undertakings an advantage in processing data and making decisions.

One of the central suspicions of the pecking order theory is that there's an information asymmetry between inner administration and outside financial specialists. Big data technology, by collecting and analyzing expansive sums of advertising and operational information, empowers companies to display their monetary well-being and trade prospects more straightforwardly [4]. It is well known that businesses may effectively communicate data to investors, reduce adverse decision problems,

and lower the cost of outside funding when they make use of advanced information analytics and transparency in budgetary reporting. This strategy maintains the POT's signaling component while simultaneously increasing the appeal of equity funding.

Companies with progressed information analytics capabilities tend to be more compelling in getting to debt and equity markets. Big data innovation has increased the speed at which firms can respond to changes in advertisements and subsidy opportunities, enabling them to obtain funds at the most advantageous moment. Because of this competitive advantage, businesses are now able to make more flexible financing decisions, which has partially eliminated the need for POT for internal debt funding.

Artificial intelligence (AI) innovation makes a difference companies more precisely survey the dangers and rewards of financing choices through machine learning and prescient analytics. AI can prepare complex information sets to supply exact forecasting and choice back to assist businesses optimize their capital structure [5]. It is famous that companies with AI capabilities can way better adjust dangers and harvest rewards in financing choices, making their choices more rational and compelling.

The application of big data and artificial intelligence innovation has significantly affected how ventures execute the pecking arrange Theory. These advances reduce information asymmetry, improve financing efficiency, and enable organizations to be more adaptable and diverse in their financing choices by increasing data openness, as well as enhancing risk management. The fundamentals of POT remain the same, but developments in artificial intelligence and huge data are changing how businesses fund themselves. There is a need for more research on the content-focused implications of these features to framing theory and practice because many digital firms are experiencing financial difficulties.

4. Blockchain and Decentralized Finance

Technological breakthroughs in Blockchain and Decentralized Finance (DeFi) have introduced disruptive improvements to financial transactions, putting traditional corporate finance techniques to the test. The Peck Order Theory (POT) holds that a corporation should use internal financing first, then debt, and finally equity. In any case, the rise of blockchain and DeFi calls into question the further relevance of POT.

Blockchain technology encourages the adoption of unexplored types of equity financing: security-based token offerings (STOs). Originally developed as a kind of equity financing, digital tokens are built on the blockchain and provide an open source means of raising capital by symbolizing ownership stakes in the business. This easy access to equity is in contrast to the POT model, which frequently concludes development without the need for a patient equity financing portion that has been underwritten. Blockchain can help companies raise equity more efficiently and gain the trust of more financial professionals.

The DeFi platform uses blockchain technology to build decentralized peer-to-peer lending solutions that reduce reliance on traditional financial intermediaries. Thanks to this innovation, companies can now obtain debt financing directly from financial institutions, without the costly fees and burdensome regulations that banks impose. Debt finance is more attractive and accessible because to the decline of mediators and associated fees. Without the need for mediators, DeFi stages automate and enforce the parameters of budgetary understandings using clever contracts. These agreements simplify debt and equity financing, increase efficacy, and lower exchange costs. This computerization and effectiveness challenge the conventional financing progression of POT, making outside financing more available and cost-effective.

A few considerations have illustrated the impact of blockchain and DeFi on corporate financing [6]. Blockchain innovation has been found to be a great stride in the straightforwardness and trustworthiness of currency-related exchanges, reducing reliance on traditional internal funding and

debt in this way. Companies are inclined toward investigating equity alternatives encouraged by the secure and straightforward nature of blockchain.

Pecking order theory is no longer relevant for advanced projects due to blockchain and decentralized funding. These developments improve transparency, lessen information asymmetry, and provide new avenues for debt and equity financing. POT's traditional subsidizing progression is challenged by blockchain and DeFi, which promote more efficient and accessible financing options. Whereas companies may still organize inside and debt financing, the ease of equity getting through these innovative platforms is reshaping traditional methods of financing.

5. Market Environment and Flexibility

The Pecking Order Theory (POT) contends that firms prioritize their sources of financing, from inside financing to debt and at last equity. This theory acknowledges a stable and predictable marketplace. However, in the modern economy, which is marked by quick changes and increased market volatility, POT's rigid financing process might not always be the best option. This seminar will explore the ways in which dynamic business conditions and the need for flexibility impact the use of POT in corporate financing decisions.

In today's financial climate, businesses confront critical market volatility and uncertainty. Quick innovative progressions, globalization, and changing buyer inclinations require companies to remain spry and responsive [7]. It was contended that such an energetic advertising environment required an adaptable approach to financing, in some cases going astray from the strict pecking order proposed by POT. Businesses must be able to rapidly alter their financing procedures to capture showcase openings or relieve dangers.

Conventional financing levels may not continuously give the essential adaptability required by cutting-edge businesses. For case, in times of subsidence or showcase disturbance, depending exclusively on inner financing or debt may not be doable. In this case, the trade may ought to raise equity more effectively than proposed by POT. This adaptability is fundamental for companies working in quickly changing digital markets where speed and flexibility are basic.

There is experimental evidence that suggests businesses operating in volatile markets often deviate from traditional funding hierarchies. For example, during the 2008 financial crisis, many businesses needed to rely on equity financing, even if POT preferred debt and internal capital. In times of uneconomic certainty, this deviation is fundamental to maintaining liquidity and operational steadiness.

A survey of the relationship between capital structure and firm performance in India found that POT was established in explaining how firms prioritize financing [8]. In any case, they are moreover famous that within the setting of digital change, firms increasingly rely on inside stores and debt sometimes recently picking for equity, adjusting with POT's expectations. However, in profoundly energetic and competitive markets, the requirement for a quick get to capital can lead firms to bypass the conventional progression and look for equity financing more habitually.

Pecking order theory is highly relevant in today's endeavors because of the dynamic nature of advertising and the need for flexibility. Although POT provides a robust framework for comprehending traditional financing practices, organizations often need to deviate from traditional financing chains of command because to rapidly evolving showcase conditions and the need for adaptability. Businesses must be able to rapidly alter their financing techniques to reply to advertise openings and mitigate chance.

6. Revisiting Pecking Order Theory in the Digital Economy

The digital economy has presented modern financing strategies, such as crowdfunding and digital monetary standards, which were not far-reaching when POT was to begin with proposed [1]. The part

of crowdfunding in lessening information asymmetry and expanding the victory rate of start-up financing is talked about. Their inquiry proposes that conventional financing pecking orders can be disturbed by the accessibility and straightforwardness advertised by crowdfunding stages [2]. An efficient survey of the capital structure of SMEs shows that POT still generally explains the financing behavior of SMEs. However, they also note that as companies want to retain control and limit disclosure, internal financing and debt are more alluring than equity funding due to digital advancements. The development of fintech has had a big impact on how projects are financed. According to research, equity crowdfunding gives emerging companies the ability to avoid traditional financial intermediaries, providing a contemporary route that will change the funding hierarchy suggested by POT [3]. This slant recommends that whereas inside and debt financing remain favored, the ease of getting to equity through unused stages is changing conventional financing inclinations.

Despite mechanical progress, information asymmetry remains a key issue in financing choices [4]. One consideration highlighted that within the digital economy, businesses utilize advanced data analytics and straightforwardness in budgetary detailing to illustrate their quality to financial specialists, which is reliable with the flag component of POT. This approach makes a difference to ease the issue of ominous determination, in this manner making a difference to decrease the toll of outside financing [8]. After examining the connection between capital structure and firm performance in India, POT was discovered to be able to explain the financing priorities of businesses. They emphasized how, in the context of digital transformation, companies are increasingly reliant on internal financing and debt, with equity just lately being chosen. This is consistent with POT's expectations [5]. The application of big data and artificial intelligence in corporate financing is considered. They found that these advances can decrease financing costs and increment effectiveness, potentially reshaping the conventional financing inclinations laid out by POT. As a result of diminished information asymmetry, companies with progressed information capabilities tend to have better access to debt and equity markets.

Researchers analyzed how showcase conditions within the digital economy affect corporate financing choices [7]. The energetic showcase environment necessitates funding that can occasionally deviate, such as from POT's more rigid development proposal. Businesses need to be able to adapt in the ever-evolving digital economy. Blockchain is a flexible element of contemporary corporate finance. According to POT, the study also found that blockchain increases transparency and trust in financial transactions, which may lessen dependency on other forms of conventional internal financing or debt [6]. Businesses feel more at ease examining stock options in this way because of the transparency and security of the blockchain. Raising new financing methods like as crowdsourcing and blockchain, as well as future development with big data risk management and even artificial intelligence, is pressing for a rethinking of existing financing tiers. Future study should focus on incorporating technological improvements into the POT framework to present a more comprehensive picture of corporate behavior.

7. Impacts and threats between new types of financing and traditional financing

In the era of big data, a new type of financing has emerged, and equity crowdfunding (ECF) is a financing method [9]. Considering that investment opportunities are open to a wide range of investors through internet platforms, so that they can directly invest in the startups or small businesses and share the proceeds of the business when it succeeds, is more suitable for the digital era under the SME development.

According to the conventional theory of POT, companies will give internal funds priority over debt and equity funding, in that order. But as a new financing technique, equity crowdsourcing (ECF) financing has the potential to defy this hierarchy and, in certain circumstances, overtake other financing options as the method of choice for business owners. This is due to the fact that ECF can provide additional strategic value, such as market validation information and decentralized resources, which are not easily available in traditional investments and venture capital.

ECF has some impacts on Peck Order Theory in the digital age, the first one is the adequacy of surplus cash flow, if a firm's surplus cash flow is very adequate, then according to the Peck Order Theory, the firm will prioritize the use of these internal funds for investment and operation. This may reduce the reliance on external financing, thereby reducing the problems associated with financing costs and information asymmetry. On the contrary, if the surplus cash flow is insufficient and the firm still needs to rely on external financing, then the applicability of the Peck Order Theory still exists, but the specific financing choices may be affected [10].

The second is coordinating funding requirements with investment prospects. The POT would seem to be easy to apply if a company had enough excess cash flow to cover all of its investment requirements. But many businesses, particularly expanding ones, frequently need to resort on outside funding because their internal cash flow cannot keep up with their investment needs. In these cases, the POT continues to be a key factor in their financing choices.

Finally, there is flexibility in financial strategy, as some firms may choose to maintain a certain level of surplus cash flow as a safety cushion rather than using it all for investment. This strategy may affect the strict application of the POT. In addition, some firms may choose to advance external financing in order to maintain financial flexibility, even if internal cash flow is sufficient, a situation that may deviate from the expectations of POT.

To obtain the best capital structure and the lowest financing costs, businesses should therefore weigh their options for internal and external financing in light of their unique situation. Excess cash flow is not a total threat, but it can have an impact on how POT is applied. On the contrary, enterprises can flexibly apply POT in practice to realize their financial objectives through rational management of cash flow and financing strategies.

8. Conclusion

The digital economy requires considerable modifications to Peck Order Theory (POT) in order to make it applicable. This is because new funding sources and technologies are developed. To the maximum extent feasible, information asymmetry in financial transactions will be eliminated by combining crowdfunding, big data, blockchain, and artificial intelligence (AI). This will also increase transaction efficiency and transparency. Digital innovation is carving out a growing area within POT's traditional hierarchy of funding preferences, which is common in equity finance.

In order to replace the rigid hierarchy architecture of the POT with more flexible financing alternatives, the rapidly evolving digital economy demands flexibility. To have a better understanding of current corporate finance behavior, future open systems research should examine how these technological elements have been incorporated into the POT framework. Adaptation is critical in further refining financing theories and their applicability on a functional level, with the main goal of organizations better functioning throughout today's digital ecosystem.

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