

Leaving A No-Risk 36 Percent Return On The Table: Supply Chain Finance Opportunities Managing Payables Discounts

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ABSTRACT

Supply chain management has traditionally emphasized managing the physical flow of parts and finished goods. The next natural evolutionary step is developing the management of supply chain finance across multiple trading partners. One of these opportunities requires investigation of managing payment discounts.

Traditionally, suppliers offer a discount to buyers to encourage earlier payment. Terms such as 2/10 n/30 allow for a 2% discount if the entire purchase is paid in full within the 10-day discount period instead of the customary 30 days. This 2% payment reduction translates into the equivalent of an annual return of 36%, resulting in the traditional rule of thumb to take the discount whenever possible. For a variety of reasons, only a small percentage of buyers actually are capturing these high returns.

There is a disconnect between trading partners for using discounts for managing working capital across the supply chain. This paper explores the beneficial impact of participating in early payment discount programs, potential reasons for failing to capture discounts and possible solutions and offers research questions to guide future research to aid in improving this supply chain finance opportunity.

Keywords: Accounts Payable; Accounts Receivable; Discount, Supply Chain Finance; Working Capital Management; Cash Conversion Cycle

Data Availability: Data are available from the public sources cited in the text.

INTRODUCTION

 Supply chain management has traditionally emphasized managing the physical flow of parts and finished goods. The next natural evolutionary step is developing the management of supply chain finance across multiple trading partners. One of these opportunities requires investigation of managing payment discounts.

Traditionally suppliers offer a discount to buyers to encourage earlier payment. Terms such as 2/10 n/30 allow for a 2% discount if the entire purchase is paid in full within the 10-day discount period instead of the customary 30 days. Mathematically, a 2% payment reduction translates into the equivalent of an annual return of 36% $[(360 \text{ days} / 20 \text{ days}) \times 2\%]$ so the traditional rule of thumb for buyers is, if possible, always take the discount. For a variety of reasons, only a small percentage of buyers actually are taking advantage of the discount and capturing these high returns.

There is a disconnect between trading partner for using discounts for managing working capital across the supply chain even though they are potentially mutually beneficial for both trading partners. This paper explores the beneficial impact of participation in early payment discount programs, potential reasons for the failure to capture the discount, considers potential solutions, and offers research questions to guide future research to aid in improving this supply chain finance opportunity.

DEFINING SUPPLY CHAIN FINANCE

Supply chain finance is not necessarily a new phenomenon. From the earliest offer of discount terms to encourage early payment of an invoice, companies have considered the financial implications of trade. Aberdeen (2011b) suggests that although the terms *supply chain finance* and *financial supply chain* appear quite similar, they are not necessarily interchangeable. Traditionally, *financial supply chain* refers to transactions between business partners, such as the purchase of, and payment for, goods and services. *Supply chain finance*, however, has focused on providing liquidity to suppliers through pre-shipment, post-shipment, and post-acceptance financing, with or without a facilitating technology. With the increasing maturity of technology, the ability of organizations to process invoices and pay them much more quickly has influenced the overall view of supply chain finance.

Attempting to define *supply chain finance*, Aberdeen (2011b) surveyed 145 finance executives to determine how they perceived *supply chain finance*. The results shown in Table 1 reflect the percentage of respondent who felt the listed element was required for their definition of supply chain finance (SCF). Topping the list are early payment discount programs suggesting this may be the first opportunity firms seek in their supply chain finance efforts.

Table 1. Elements of Supply Chain Finance

Attribute	End Users	Providers
Early payment discount programs	63%	51%
Financing of domestic transactions	60%	55%
Financing of international transactions	51%	61%
Trade financing (letters of credit, open accounts, etc.)	44%	61%
Financing triggers based on events in the physical supply chain	31%	49%
Use of intermediary financial institutions	29%	51%
Factoring	16%	45%
Reverse factoring / forfeiting	14%	53%

Source: Aberdeen (2011b). *Supply Chain Finance*.

WHY SUPPLY CHAIN FINANCE IS THE NEXT LOW HANGING FRUIT

Early payment discount programs speed up cash flow to the seller while offering a price reduction to the buyer. Many empirical studies have investigated the potential benefits of supply chain finance. For example, Soenen (1993) suggested that a decrease in cycle time increases present values of net cash flows generated by the underlying assets, which ultimately increases firm value. Schilling (1996) proposed “working capital management is about establishing an optimum liquidity position by effectively managing the resources invested in the day-to-day operations of the business” (p.7). This requires that the cash conversion cycle be kept as short as possible but maintained at a length which is both consistent with the current level of business activity yet flexible enough to allow for the achievement of overall corporate business goals as they adjust to changes in the marketplace.

This proposition is supported by the work of Jose, Lancaster, and Stevens (1996), Shin and Soenen (1998), Cote and Claire (1999), as well as Ward (2004). These studies consistently showed an association between a company’s profitability and the improvement of working capital measures, such as return on assets (ROA) or return on equity (ROE). Other working capital measures provide additional support, including the net liquidity balance (Shulman & Cox 1985), the cash conversion cycle (Gentry, Vaidyanathan, & Lee, 1990; Richards & Laughlin, 1980), the comprehensive liquidity index (Scherr, 1989), and the net trade cycle (Shin & Soenen, 2000).

Shin and Soenen (1998) examined the relationship between a company’s net trade cycle and its profitability. Utilizing a large sample of U.S. firms from 1975-1994, the authors noted a strong negative correlation between the length of the firm's net trade cycle and its profitability, measured in terms of operating profits and stock returns. Uyar (2009) investigated a sample of 166 merchandisers and manufacturers in Turkey and found that company size and cash conversion cycle are negatively correlated. Thus, the larger the company, the shorter its cash conversion cycle, or conversely, the smaller the company, the longer its cash conversion cycle. Additionally, companies with shorter cash conversion cycles were more likely to be profitable than companies with longer cash conversion cycles (Uyar, 2009).

Optimizing Financial Resources And Performance Within Networks

Recent research points to a lack of understanding challenges related to performance management within supply chain networks (Busi & Bititci, 2006). Efforts to evaluate supply chain management (SCM) performance have primarily been inward-looking as firms consider their own performance with little regard to that of their trading partners. The literature suggests that as the supply chain evolves it will extend managerial focus to include consideration for both suppliers and customers. Gomm (2010) points out that optimized logistics and supply chain management can greatly impact profitability for both trading partners. Specifically, SCM can increase sales while decreasing cost of sales and lower the cost of capital, thereby improving profitability and shareholder value (Gomm, 2010).

A particular challenge evaluating SCM performance is that current working capital measures fall short in capturing an inter-organizational [supply chain] understanding. Treated as a SCM metric, working capital measures may focus on changes in shareholder value (Hofmann & Kotzab, 2010). Few studies have focused on "partnership financing" (Akhtar, 1997) or "cooperative finance" (Van Sickle & Ladd, 1983). While few companies have sufficient coordination mechanisms available to optimize their SCM, they recognize a need to eliminate sub-optimization within their supply chain networks in order to improve financial performance in a collaborative way (Fugate, Sahin & Mentzer, 2006; Simatupang & Sridharan, 2005). The development of supply chain finance is ripe for development and offers the promise of returns to reduce cost and increase profitability throughout the supply chain.

Supply chain management, as Blois (1972) suggested, should follow an approach where one treats the supply chain as one corporate quasi-entity. Yet, in reality, this approach is just beginning to evolve. Rafuse (1996) described creditor management as a Darwinian situation, in which only the strongest companies survive. Large companies use the dependency of smaller supplier firms to enforce desired payment terms. In turn, these smaller firms then enforce their payment terms with those smaller yet (Howorth & Westhead, 2003). At the bottom of the supply chain are the small firms who face carrying the cost of providing funding to their powerful customers to secure sales and survival of the company. This dependency on their larger customer generally prevents small and powerless firms to aggressively collecting outstanding payments from their larger supply chain members. Yet, larger firms, which are better positioned to demand timely payments from customers, can transfer resources from smaller supply chain members to larger ones. This interplay of dependency and power suggests that smaller supply chain member firms may be pushed to finance the working capital for their larger supply chain counterparts (Munson, Rosenblatt, & Rosenblatt, 1999). Hofmann and Kotzab (2010) suggest that analyzing the impact of cash flow management across the supply chain would show how individual industries and corporations utilize their powerful standing to improve their cash flow cycles at both their supplier's and customer's expense.

Rafuse (1996) notes that no "net system benefits" emerge from such asymmetric dependencies. As a result, smaller and less powerful supply chain members are increasingly challenged to deal with increased borrowing and administrative costs. The loss in profitability frequently forces these smaller firms to exit the market if they are unsuccessful in their attempts to increasing market share and resulting negotiation power.

Strategic Benefits

Joint efforts across the supply chain are beginning to incorporate supply chain finance. Financial institutions and other creditors have become interested in utilizing SCF techniques to address asymmetric dependencies and resulting tensions in the supply chain. By supplying funding, they allow large corporations to conserve cash and maintain or even shorten payment cycles for key suppliers, all secured against the corporation's outstanding invoices. Furthermore, focusing on particular coordination mechanism can mutually benefit supply chain partners. Fugate et al. (2006) suggest that companies prefer flow coordination mechanisms, such as sharing of information, over price and non-price coordination mechanisms, such as discounts, promotional allowances, and return policies. Additionally, supply chain partners can benefit from certain flow coordination mechanisms and strengthen their relationships across their supply chains without heavily investing in technology, committing capital, or generating large production or sales volumes.

For example, Hutchison, Farris, and Fleischman (2009) as well as Randall and Farris (2009) suggest how the supply chain may be strengthened by strategically utilizing the inherent advantages from their cash flow variables which may be shared with their supply chain trading partners. For example, one firm may offer lower inventory carrying costs

where strategically shifting inventories may result in lower inventory carrying costs for the entire supply chain. Shifting payment terms to take advantage of one firm's lower WACC costs is another opportunity gained from integrated SCM between trading partners.

Although it may not be possible to fully implement flow coordination mechanisms with all supply chain partners, a wide variety of coordination mechanisms are widely applied in supply chains and contribute to reducing and even eliminating supply chain sub-optimization (Stern, El-Ansary, & Coughlan, 1996). Therefore, joint efforts across the supply chain potentially increase performance outcomes throughout the supply chain (Fugate, Sahin, & Mentzer, 2006; Kumar & Seth, 1998). SCM is slowly evolving to Blois's corporate quasi-entity.

HISTORICAL IMPROVEMENTS OVER TIME- PAYABLES AND RECEIVABLES

Payables and receivables have changed over time through technological improvements as the payment process is improving over time. In order to evaluate changes in payment processing over the last three decades, an analysis was conducted using data from the Compustat database (i.e., Capital IQ, North America, Fundamentals Annual) on April 13, 2017 for all firms in the database from January 1, 1985 to December 31, 2016. The key variables obtained were Sales (Revenues), Cost of Goods Sold, Net Income, Accounts Receivable, and Accounts Payable. Initially, the dataset had 385,638 company years (or lines) for the 32 years to be examined. While the completeness of the data has improved since 1985, the authors needed to cleanse the data. To allow calculations and comparability, lines with values reported with blanks, negative values, or zero values for Sales (Revenues), Cost of Goods Sold, Inventory, Accounts Receivable, and Accounts Payable were deleted. This reduced the data to 172,485 (-213,153 lines or 55%). Then authors standardized the data by calculating Accounts Receivable Days and Accounts Payable Days using the following formulas in Figure 1.

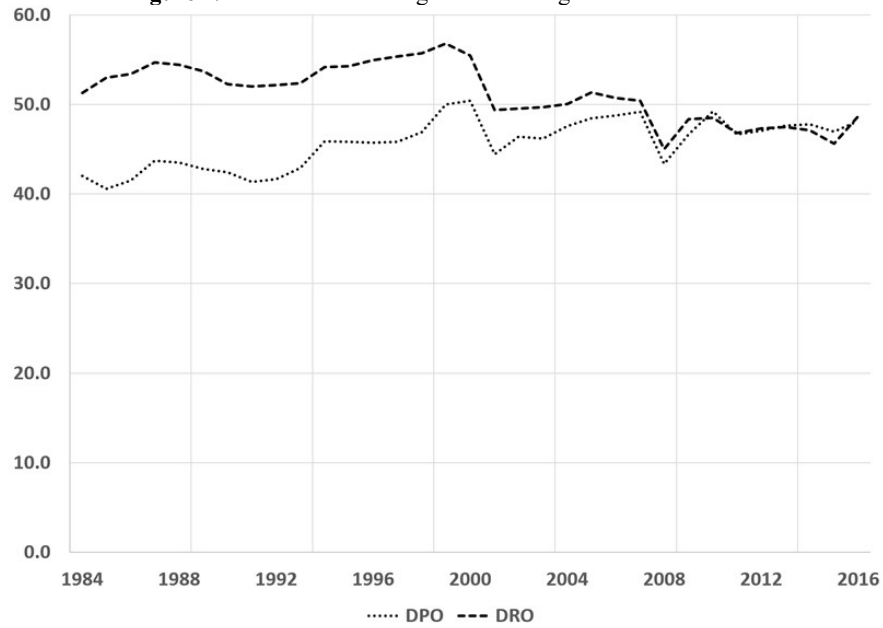
Figure 1. Calculating DRO and DPO

- (1)
$$\frac{\text{Days of Receivables}_{(DRO)}}{\text{Accounts Receivable (\$)} \times 365 \text{ Net Sales (\$)}}$$
- (2)
$$\frac{\text{Days of Payables}_{(DPO)}}{\text{Accounts Payable (\$)} \times 365 \text{ Cost of Goods Sold (\%)}}$$

To remove the undue influence of outliers, the authors elected to use 3 times the Median Absolute Deviation (MAD) by 4-digit SIC for Inventory Days, Accounts Receivable Days, and Accounts Payable Days (Leys, Klein, Bernard, & Licata, 2013). Miller (1991) suggested that MAD times 3 should be considered "very conservative" for setting negative and positive data limits. This resulted in a final dataset of 135,828 company lines for this study. This is an average of 4,381 companies per year.

Overall, payables and receivables have changed over time as graphically shown in Figure Two. Payables are getting longer and receivables are getting shorter. This is likely due to increased focus on and technological improvements in the payment process. There remains significant opportunity for trading partners to work together to impact the flow of working capital. In particular, the authors suggest this may occur through improved management of discount terms.

Figure 2. DPO and DRO Longitudinal Changes for All Industries



	DPO	DRO
1984	42.0	51.3
1985	40.6	53.0
1986	41.5	53.4
1987	43.7	54.7
1988	43.5	54.4
1989	42.8	53.7
1990	42.4	52.3
1991	41.4	52.0
1992	41.7	52.2
1993	42.9	52.4
1994	45.9	54.2
1995	45.8	54.3
1996	45.7	55.0
1997	45.8	55.4
1998	46.9	55.7
1999	50.0	56.8
2000	50.4	55.5
2001	44.4	49.4
2002	46.4	49.6
2003	46.2	49.7
2004	47.6	50.1
2005	48.5	51.4
2006	48.7	50.7
2007	49.2	50.4
2008	43.4	45.0
2009	46.6	48.3
2010	49.2	48.5
2011	46.7	46.8
2012	47.1	47.3
2013	47.6	47.5
2014	47.8	47.1
2015	47.0	45.6
2016	48.1	48.6

There is a trend of utilizing electronic payment once the invoice gets into the payor's system. As shown in Table 2, shifting payment methods offers advantages in both speed and in cost to process. Some card-based systems offer the possibility of rebates for additional savings however one must remember this change may impose additional costs on suppliers (Aberdeen, 2012).

Table 2. Cost and Time of Payment Processes

Payment Method	Processing Cost	Processing Time
Checks	\$7.00	8.9 days
Automated Clearing House (ACH)	\$4.78	6.6 days
Commercial Cards	\$3.91	6.9 days
Wire Transfers	\$10.33	5.6 days

Aberdeen (2012). *Optimizing Your Payables and Receivables*.

Early Efforts In Quantifying Supply Chain Performance

To gain a perspective of supply chain performance consider Aberdeen's attempt to quantify supply chain finance performance as shown in Table 3 which suggests company emphasis on supply chain finance offers significant returns (combined from Aberdeen 2011a, 2011b "Supply Chain Finance" and "E-Payables 2011"). Based on performance, the top 20% of firms were categorized as "Best in class." These firms were 3.8 times more likely than their industry peers to pre-negotiate fixed early payment discounts, 2.6 times more likely to automatically alert managers when attempted payments exceed pre-defined thresholds, and 1.4 times more likely to identify suitable suppliers for electronic payment (Aberdeen, 2011a).

Table 3. Quantifying Supply Chain Finance Performance

	Mean Class Performance
Best of class: Top 20%	• 5.3 days to process an invoice from receipt to settlement • 60% of invoices were paid in time to capture early payment discounts • 57.4 Days Payable Outstanding (DPO) • \$7.78 average cost to process an invoice from receipt to settlement • 6.5% decrease in average purchasing costs
Industry Average: Middle 50%	• 10.2 days to process an invoice from receipt to settlement • 9% of invoices were paid in time to capture early payment discounts • 41.8 Days Payable Outstanding (DPO) • \$12.05 average cost to process an invoice from receipt to settlement • 2.5% decrease in average purchasing costs
Laggard: Bottom 30%	• 24.5 days to process an invoice from receipt to settlement • 2% of invoices were paid in time to capture early payment discounts • 34.8 Days Payable Outstanding (DPO) • \$37.45 average cost to process an invoice from receipt to settlement • 8.4% increase in average purchasing costs

Combined from Aberdeen (2011a, 2011b) *Supply Chain Finance* and *E-Payables 2011*

Potential For Improvement: Better Management Of Discounts

A popular method to encourage early payment of invoices is the use of discount terms. From a buyer's perspective, it is a simple calculation. An invoice with 2/10 net 30 terms, on the assumption the company can pay exactly on the 10th day, yields a 36% annualized return (2% savings times the number of 20-day periods in a 360 day year). Unless the buyer has an alternative use which can yield a higher near-risk-free return, early payment is desired. On the other hand, the merit of early payment of discounts is less clear-cut. Can the seller invest the discounted amount received on day 10 and earn a greater return (such as 2.04% over 20 days = 36.7% annualized return)? This provides a reason to view such discounts as quasi-penalties, where the 10-day discounted price is the true price and the purchased (invoiced) price is artificially inflated (Aberdeen, 2012).

Firms should analyze how they handle financial exchanges with each trading partner. Keeping in mind that all trading partners are not created equal, the use of Pareto analysis is recommended to identify the highest return leverage points. Considering that one firm's payables are another firm's receivables, a good starting point is provided by identifying trading partners, which represent the greatest source of expenses and revenues. An emphasis on improving process efficiency beneficial to both parties will avoid a win-lose scenario while achieving buy-in on various levels throughout the supply chain.

In order to further improve SFC, implementing technology plays an important role to facilitate management focus. Aberdeen (2006) suggests the continued need for enhanced visibility, which is improving over time. Morris (2011) points to the use of enterprise resource planning (ERP) systems to automate payment processing. An ERP system can be defined as "a packaged business software system that lets a company automate and integrate the majority of its business processes, share common data and practices across the enterprise, and produce and access information in a real-time environment" (Zhen, Yen, & Tarn, 2000). As such, ERP systems counter gaps in the source-to-pay life cycle processes by collecting critical information, centrally integrating and organizing data for reporting spend analysis, decision-making, and business intelligence. Additionally, ERP systems typically include built-in controls for matching purchase orders, receiving documents, and invoices (Morris, 2011), which improves process efficiency, reduces transaction costs and invoice deficiencies (Aberdeen, 2016), and allows for significant improvements in entity wide and account-level controls (Morris, 2011). Finally, the benefits of integrating and coordinating supply chain partners on a national and global level have been well recognized in many industries (Cheng, Law, Bjornsson, Jones, & Sriram, 2010; Davenport & Brooks, 2004), which can further strengthen strategic cooperation among firms on a national and global level.

Aberdeen (2006) estimates that the inability to maximize cash flow by timing payments to take advantage of cash discounts adds 1% to 5% to the transaction cost. A key contributor is the limited visibility of spending caused by time-consuming paper invoice processing. For example, in 2006, only 4% of the enterprises benchmarked had real-time visibility and 69% reported had no visibility or limited visibility of spending (Aberdeen, 2006). In contrast, by 2017 enterprises reported increased visibility into cash flow and expenditures due to improved technological AP execution capabilities (Table 4).

Table 4. Technological AP Execution Capabilities

	2017 Best-in-Class	2017 All Others
AP systems fully integrated with ERP or financial solutions	85%	30%
Automated reminders for outstanding items awaiting approval	73%	40%
Automated notification of errors, exceptions, or other items requiring management review	73%	35%
Dashboard summarizing current AP status and performance	69%	23%

Source: Aberdeen (2017). *Capture Discounts and Keep Suppliers Smiling*.

There has been a gradual conversion away from paper invoices. In 2014, paper invoices accounted for 55% of all invoices compared to approximately 83% in 2006 (Aberdeen, 2006, 2014). With paper, critical information is difficult to access in a timely fashion because entry of invoices may be a slow process. For example, as seen in Table 5, in 2006 invoice processing time was on average 27.6 compared to 5.95 days in 2016 for top performers and 17.83 days for followers (Aberdeen, 2006, 2016). Ironically, while implementation has been slow, the case for implementing AP automation is attractive. Automated AP offers faster cycle times at a lower cost to process invoices, more discounts captured, and anecdotally, better supplier relationships.

Table 5. Technological AP Execution Benefits

	2006 Average	2016 Top Performers	2016 Followers
Invoice processing time	27.6 days	5.95 days	17.83 days
Invoice processing cost	\$8.36	\$5.13	\$10.55
On-Time payment rate	59%	90%	65%

Source: Combined from Aberdeen (2006, 2016). *Accounts Payable Transformation and Reap the Benefits of Invoice Excellence with AP Automation*.

THE DISCOUNT DILEMMA

Use of payment discount programs may be beneficial to both the buyer and the seller. Increased use of payment discount programs may be one of the early applications of supply chain finance evolution. The “Discount Dilemma” is that payment discount programs are not more widely used.

Payment discount programs offer improved liquidity beneficial to the supplier as reflected in the research cited previously. In fact, 35% of all suppliers surveyed would take early payment all of the time while 65% of all suppliers would take early payment some of the time (Moran, 2011). Essentially, suppliers are willing to participate.

Buyers benefit from reduce cost and a high return on the early payment compared to investing the funds elsewhere. According to a study conducted by Paystream (2015), 34% of buyers always capture the discount, 50% capture the discount some of the time, 15% never capture the discount, and 1% of respondents did not know. Missing or incorrect information on invoices may be to blame. However, it is estimated that only 12% to 14% of billing is incorrect (Paystream, 2015) which suggests that at least 86% of invoices may be processed without delay. Additional reasons may include lengthy approval times, manual routing, and uses of paper invoices. As discussed previously, prolonged invoice processing time virtually eliminates the chance for a firm to capture a discount by paying in 10 days. Best in class companies as defined by Aberdeen (2011a, 2011b) take only 7 days and “laggards” take 49 days.

Internationally, initiatives such as the EU Late Payment Directive force buyers to reduce the number of late payments in commercial transactions to protect smaller market players. The amended EU legislation simplifies debt collection processes across the European Union, reducing the number of late payments and associated debt collecting costs while making timely payments the norm. “Under the new rules, debtors will be forced to pay interest and reimburse the reasonable recovery costs of the creditor, if they do not pay for goods and services on time (60 days for business and 30 days for public authorities)” (Directive 11/7/EU). Enforcement of the EU Late Payment Directive for all companies dealing in the European Union increases the necessity for firms to review how to optimize their payments.

The early evolution of supply chain finance as well as the discount dilemma – it is desirable for both trading parties to participate in the discount when it is offered but do not – suggests more information can help shape supply chain finance evolution.

KEY RESEARCH QUESTIONS

Improvement of payables and receivables are beneficial for both trading partners. More research is needed to determine how to improve cash flow between trading partners. We offer the following questions to help guide future research to aid in improving development of this supply chain finance opportunity:

1. How has DPO and DRO changed longitudinally (over time) by industry?
2. Does type of industry impact DRO or DPO performance? For example, is there a difference in performance between service industries and manufacturing industries? What are the key characteristics that influence success or barriers to improvement?
3. Which industries have improved their DRO or DPO longitudinally at a faster or slower rate? What are the key characteristics that influence success or barriers to improvement?
4. Do some industries perform their DRO or DPO process better? What are the reasons for their success or barriers to improvement?
5. Does firm size impact DRO or DPO performance? Is there a difference in performance between small, medium and large firms? What are the reasons for their success or barriers to improvement?
6. How should DRO and DPO performance be benchmarked to serve as a guide for firms to use when seeking improvement?
7. How has the overall macro financial supply chain changed longitudinally for key macro areas such as Manufacturing, Transportation, and Channels of Distribution? Why?
8. Is it possible to graphically map the financial supply chain to offer overall supply chain visibility leading to potential macro-management?
9. How does cross-enterprise integration benefit working capital needs, resource planning solutions,

- and development of strategic partnerships?
10. What are the impacts of automating AP and AR processes to support real-time reporting, internal controls, and continuous monitoring?
 11. Is there a relationship between DPO and profitability or other key financial performance measures?
 12. Is there a relationship between DRO and profitability or other key financial performance measures?
 13. What are the key guidelines a firm should use when implementing an early payment discount programs with customers?
 14. What are the key supplier management guidelines a professional buyer should use to help them implement discount capture with their suppliers?
 15. What are the pros and cons of dynamic discounting?
 16. How should dynamic discounting be structured to affect greater participation in the payment process to benefit both trading partners.
 17. How do companies determine what discount terms to offer? Is it buyer or supplier driven? Which discount terms are most common and why?
 18. What are the key technological solutions available to improve early payment discount programs?
 19. What are the next opportunities for improvement or change for early payment discount programs?
 20. Are there win-win business models utilizing FinTech firms to add value to the process?
 21. Does currency exchange fluctuation influence DRO and DPO and if so, how has DRO and DPO changed longitudinally by country? Does the increase in global sourcing impact DRO and DPO performance since international exchange is more difficult and different?
 22. How does consideration of DRO and DPO impact global sourcing, transfer pricing, and tax-planning strategies?

IMPLICATIONS TO ACADEMIA AND PRACTITIONERS

The development of early payment discount programs, implementation of payment automation, and the evolution of creative financial interactions between trading partners may offer beneficial opportunities for firms engaging in supply chain finance. For the practitioner, this article offers awareness of the concept and supports implementation, improvement, and active participation in an early payment discount program that may derive mutual benefits for both trading partners. For the academic, a significant gap in the research has been identified which needs to be filled to assist the evolution of the supply chain finance. Numerous research questions have been offered to guide this effort.

CONCLUSION

Supply chain finance is in an exciting early stage of evolution, which will further supply chain performance. Focused management of financial flows throughout the supply chain may offer significant improvements by tapping into the inherent advantages of each trading partner in a synergistic approach. Those embracing a quasi-entity corporate approach will find they are members of a stronger, more profitable supply chain.

There is a lack of trading partner relationships utilizing discounts to manage working capital across the supply chain even though they are potentially mutually beneficial for both trading partners. This paper explored the beneficial impact of participation in early payment discount programs, potential reasons for the failure to capture the discount, considers potential solutions, and offers research questions to guide future research to aid in improving this supply chain finance opportunity.

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