

The Economic Benefits of Reducing Supplier Working Capital Costs

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Introduction

Large firms depend on suppliers for most of their value-added. Many suppliers are small and their viability is closely tied to their ability to access and manage working capital. The Obama Administration's SupplierPay initiative was developed to bring companies together to address the working capital challenges facing small firms (See Box 1). This paper explores the potential economic benefits -- throughout the supply chain -- of reducing suppliers' working capital costs.

For manufacturing as a whole, value added comprised 36 percent of total shipments in 2013. 98 percent of manufacturing firms have less than 500 employees, and 44 percent of all manufacturing employment is concentrated in small and medium-sized establishments.²

As we show below, working capital costs rose during the financial crisis and remain elevated. There are three types of problems related to supplier working capital costs, each of which is magnified for smaller suppliers:

1. Lack of access to loans for working capital;
2. Higher interest rates for small firms; and,
3. Extended payment terms, meaning that buyer firms are paying suppliers more slowly.

At first glance, these problems appear to disadvantage only the small firms that bear the brunt of these higher working capital costs. In fact, however, because both the smaller and larger firms are linked through the supply chain, the situation represents a more general market failure that affects every firm in the chain. With less working capital, suppliers' ability to innovate or invest in their workers is inhibited, leading to lower quality goods and services. They may recoup the shortfall by raising prices, but this is not necessarily an option if they are competing with other suppliers. In the worst case scenario, they may exit the market, leaving a hole in the supply chain. Thus, an increase in suppliers' working capital costs may ultimately accrue to the large buyer, in the form of lower quality goods and services, less stable suppliers that create risk for the buyer, and/or higher prices because of less productive suppliers.

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² Estimates were calculated by the Economics and Statistics Administration (ESA) using data from the Census Bureau's 2011 Statistics of U.S. Businesses, available at: <http://www.census.gov/econ/susb/>. Estimates exclude firms with 0-4 reported paid employees in an attempt to remove nonemployer firms that are unlikely to be supplier firms.

There are potential solutions to this market failure. Many original equipment manufacturers (OEMs) are adopting policies to pay their suppliers earlier or using financing arrangement to accelerate payments. This paper lays out the economic case for why OEMs should help reduce their suppliers' working capital costs and summarizes some of the working capital financing solutions that are appearing in the market.

Box 1: SupplierPay

On July 11, 2014, President Obama announced SupplierPay, a new partnership with the private sector to strengthen small businesses by increasing their working capital, so they can grow and hire more workers. To launch SupplierPay, the President brought together 26 companies—both large and small. The larger companies that join the initiative are demonstrating their recognition that a healthy supply chain is good for business.

SupplierPay builds on the success of the Federal Government's QuickPay initiative, which President Obama launched in 2011. QuickPay requires federal agencies to expedite payments to small business contractors with the goal of paying within 15 days. As a result of QuickPay, there has been well over \$1 billion in cost savings for small businesses, leading to greater investment and job creation.

Large businesses are encouraged to take the SupplierPay Pledge as a commitment to providing their suppliers a working capital solution that causes minimal administrative and operational burden. Additionally, the businesses pledge to share their successes and best practices with the larger business community to encourage wider support for the initiative.

Source: White House, Office of the Press Secretary, July 11, 2014, Available at: <http://www.whitehouse.gov/the-press-office/2014/07/11/president-obama-announces-new-partnership-private-sector-strengthen-amer>.

Finance problems facing small firms in large supply chains

The importance of working capital for small suppliers

Working capital is equal to current assets (cash or assets that can be easily converted to cash) less current liabilities (obligations that due within one year).³ A company might have trouble paying creditors in the short term if its current assets do not exceed its current liabilities and lack of working capital can make these firms appear risky to potential investors or lending institutions. Edging out fears of escalating costs and maintaining margins, securing reliable working capital in sufficient quantities is the number one business challenge today for companies with revenues of \$2–200 million.⁴

³ See Small Business Administration for definition of working capital available at: <http://www.sba.gov/content/working-capital>.

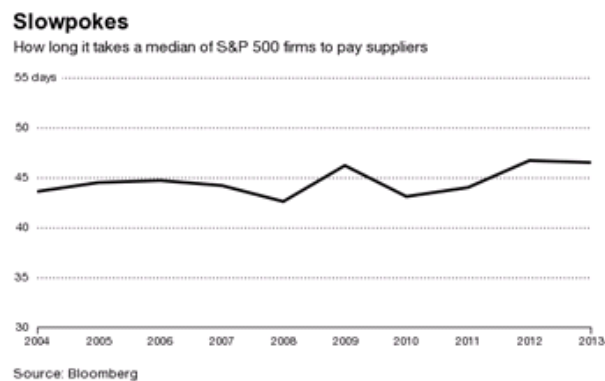
⁴ *Cash Flow Constraints: Challenges and Opportunities for 2012*. The Receivables Exchange. June 2, 2012. Available for download at: http://www.cfo.com/whitepapers/index.cfm/displaywhitepaper/14642736?topic_id=10240193.

In addition to positive working capital balances, it is also important that firms manage their working capital efficiently. For example, if working capital is tied up in accounts receivables for an extended period of time, then these funds are not available for other productive uses. Receiving quick payment for accounts receivables is, therefore, an important part of managing working capital efficiently. In recent years, large firms have begun paying their smaller suppliers more slowly. Coupled with the lack of access to good financing options, this inhibits a small firm's ability to manage its working capital efficiently and creates a structural disadvantage for these entities. Working capital constriction for this group of companies is a significant problem for the economy as a whole. According to Census data, small- and medium-sized businesses accounted for almost half of all private sector workers in 2011.⁵ However, only around 1 percent of businesses with less than \$25 million in revenue are able to access debt and equity markets in contrast to over 90 percent of firms with over \$1 billion in revenue.⁶

Customers are paying their small firms more slowly

Charles Mulford, director of the Georgia Tech Financial Analysis Lab, says that corporate payables have increased from an average of 35 days in March 2009 to 46 days in July 2014.⁷ REL's 2013 survey of working capital performance found that companies increased their payable days by an average of 0.2 percent between 2012 and 2013.⁸ According to Bloomberg, the median S&P 500 company paid suppliers in 46.5 days in 2013, up from 44 in 2004 and 43 in 2008 (See Figure 1).⁹ Finally, a study by Experian found that businesses were paying bills an average of 7.6 days past due in spring 2012, a 14.1 percent increase from the same period in 2011.¹⁰ All of these statistics point to increased difficulty in suppliers', or small businesses', ability to manage working capital efficiently.

Figure 1.



The recent REL 2013 Working Capital Survey concluded that the top 1000 U.S. companies could squeeze an additional \$266 billion out of payables and \$331 billion out of receivables, further tying up small

⁵ Economics and Statistics Administration calculations using data from the Census Bureau, Statistics of U.S. Businesses, 2011, Available at: <http://www.census.gov/econ/susb/data/susb2011.html>.

⁶ Pierre Mitchell, *Reducing Costs by Optimizing the Financial Supply Chain*, Spend Matters, September 30, 2014.

⁷ David M. Katz, Company Payables Jump to 46 Days, CFO.com, July 21, 2014, Available at: <http://ww2.cfo.com/supply-chain/2014/07/company-payables-jump-46-days/>.

⁸ *2013 US Working Capital Survey*, REL Consultancy, Available at: <http://www.relconsultancy.com/working-capital/2013-US-Working-Capital-Survey.pdf> and Edward Teach, Running in Place, CFO.com, July 22, 2014, Available at: <http://ww2.cfo.com/cash-flow/2014/07/running-in-place-working-capital/>.

⁹ Patrick Clark, *Corporations Promise Obama They'll Pay Small Businesses Faster*, Bloomberg Businessweek, July 11, 2014, Available at: <http://www.businessweek.com/articles/2014-07-11/corporations-promise-obama-theyll-pay-small-businesses-faster>.

¹⁰ Angus Loten, *Small Firms' Big Customers Are Slow to Pay*, Wall Street Journal, June 6, 2012, Available at: <http://online.wsj.com/news/articles/SB10001424052702303296604577450561434496668>.

firms' working capital.¹¹ The survey also found that companies in the upper quartile of their industries pay their suppliers on average in 35.8 days, almost 11 days slower than companies at the median.

Smalls firms face challenges in obtaining bank financing

One way firms help to cover expenses in the face of slower payments is through lines of credit or other financing. Although the data on the small business credit gap is limited, it suggests ongoing, and perhaps worsening, problems.¹² There are two potential issues: price, particularly because small firms' loan costs are significantly higher than large firms', and availability of credit.

While some banks say that there is a lack of demand and of qualified borrowers, small business owners say that although they are creditworthy, banks are wary or unwilling to lend to them. Data from the National Federation of Independent Businesses suggests that small businesses feel credit access is tighter today than in the previous economic recovery.¹³ The available, but limited, data indicate that financing flows to small businesses slowed during the financial crisis and the recession and that these flows have not fully recovered.¹⁴ For most banks, lending to small businesses, is costly and risky, driving up the interest rates these banks must charge in order to insure their investment. According to data compiled by PayNet, the effective interest cost for investment grade corporate bonds ranged from 1.6 percent to 2.4 percent in 2013. For non-investment-grade corporations, the rate increased to 6.1 percent. For small businesses, the rate jumped up to 10.3 percent.¹⁵

Regional survey data from the Federal Reserve Bank of New York shows that about 37 percent of all small businesses applied for credit in the fall of 2013, while 45 percent did not apply because they did not need credit. Another 18 percent did not apply because they were discouraged from doing so, either because they felt that they would not qualify or because they thought the process would be too arduous to justify the time commitment. Of businesses that did apply, over 40 percent either received no capital at all or received less than the amount they requested.¹⁶ When small businesses were asked how the lack of credit affects them, 42 percent said "limited business expansion."¹⁷ Other data from the Kauffman Firm Survey found that about a third of businesses surveyed do not get all or any of the capital requested.¹⁸ Overall, according to the Federal Deposit Insurance Lending Corporation, as of June 2012 lending to small firms was down about 20 percent since 2008, while lending to larger firms was up 4 percent since its low in 2011.¹⁹

¹¹ REL Consultancy and Edward Teach.

¹² Karen Gordon Mills and Brayden McCarthy, *The State of Small Business Lending: Credit Access during the Recovery and How Technology May Change the Game*, Harvard Business School Working Paper 15-004, July 22, 2014, Available at: http://www.hbs.edu/faculty/Publication%20Files/15-004_09b1bf8b-eb2a-4e63-9c4e-0374f770856f.pdf.

¹³ Mills and McCarthy, page 21.

¹⁴ Ibid., page 23.

¹⁵ Data on business credit costs provided by William Phelan, President of PayNet, Inc.

¹⁶ Mills and McCarthy, page 23.

¹⁷ Ibid., page 26.

¹⁸ Ibid.

¹⁹ Ibid., page 24.

According to the Receivables Exchange study, 70 percent of the companies surveyed had access to a bank line of credit, but less than 50 percent of these companies felt it satisfied their demand for credit.²⁰

Several cyclical factors are preventing small firms from getting the bank financing they need::

- 1) Sales – decreased sales as a result of the recession makes small firms less qualified for bank credit;
- 2) Collateral – the financial crisis hit some sources of collateral for small business, especially real estate, particularly hard;
- 3) Risk-averse lenders – banks were also hit in the recession and are more careful in their lending practices, which disproportionately hurt small businesses because, by nature, they are riskier debtors. There have also been fewer new bank starts; and,
- 4) Regulatory overhang – banks are now subject to stricter lending rules, which disproportionately affect small businesses.²¹

While the cyclical factors affecting lending to small businesses *may* only be temporary, there are also structural changes in the financial market that are likely to persist:

- 1) Banking consolidation – small banks are more likely to lend to small firms, but there are fewer small banks, and banking assets are consolidated into fewer large institutions;
- 2) Search costs – small firms face high costs because they often need to apply to several lenders before securing a loan; and,
- 3) Transaction costs – the varied nature of small firms and the uses of their borrowed funds, combined with high failure rates, means that developing standards for lending to these firms is difficult and it costs banks a lot to process even small loans.²²

Large firms, on the other hand, can access capital through numerous means with generally highly favorable rates and, ironically, are often faced with excessive working capital, which typically earns low returns.²³ One would hope to see OEMs helping small suppliers reduce their cost of capital, ultimately strengthening their supply chain and adding to their bottom line.²⁴ However, it isn't that simple.

The economic case for accelerated payments to small firms

When OEMs tighten their payment terms, they put financial strain on their suppliers. If the suppliers become unhappy with the terms of payment, they may take their business to rivals to reduce their production costs, or they may raise their prices, both of which hurt buyers.²⁵ So why might large buyers not help suppliers reduce their working capital costs? Below, we discuss two possible reasons: competing priorities *within* corporations and conflicting incentives *between* corporations.

²⁰ *Cash Flow Constraints: Challenges and Opportunities for 2012*. The Receivables Exchange.

²¹ Mills and McCarthy page 28.

²² Ibid.

²³ Mitchell, *Reducing Costs by Optimizing the Financial Supply Chain* and Vipal Monga, *New Rules, New Corporate Puzzle: Where to Steer Cash?*, Wall Street Journal, November 3, 2014, Available at: http://online.wsj.com/articles/new-rules-new-corporate-puzzle-where-to-steer-cash-1415060846?mod=WSJ_hps_sections_busines.

²⁴ Mitchell.

²⁵ Serena Ng, *P&G, Big Companies Pinch Suppliers on Payments*, Wall Street Journal, April 16, 2003, Available at: <http://online.wsj.com/articles/SB10001424127887324010704578418361635041842>.

(It is worth noting a nascent movement of firms that are beginning to recognize the benefits of helping their suppliers with working capital, and we discuss this important and positive sign at the end of this section.)

Competing priorities *within* corporations

There can be an internal struggle within the company between the accounting department that manages the finances and the procurement department that pays the bills based on the differing priorities and incentives of each.²⁶ Getting internal stakeholders aligned can be challenging. Company cash flows are tracked closely by outside investors, and maintaining a larger flow of funds makes a firm look like a better investment opportunity. Overall, most OEMs aim to set payment terms that maximize available cash and demonstrate strong cash flow management. In contrast, the procurement department may care more about having strong suppliers, which benefit from quick payment.

The operational benefits of a strong supply chain are diffuse; supply chain disruptions affect everyone who depends on that supply chain. OEMs whose suppliers are unable to meet demand can see reduced revenue or market share, higher costs, and reduced production. These costs may in turn reduce the firm's credibility with investors and increase the cost of capital.²⁷ The benefits of a strong supply chain are often difficult to measure directly in terms of returns on Wall Street; nevertheless, some studies have validated these benefits: a report by Spend Matters analyzed the data on public companies and found that in 17 of the 20 largest manufacturing industries, higher shareholder returns were correlated with shorter payments; shorter payments tend to strengthen supply chains.²⁸ In a study of more than 800 companies that saw a supply chain disruption between 1989 and 2000, those companies reported 33- to 40-percent lower stock returns relative to their peers. In addition, share price volatility the year after the disruption was 13.5 percent higher than the year before. Finally, these firms saw 7 percent lower sales growth, 11 percent higher costs, and 14 percent larger inventories.²⁹ The study estimated that it can take businesses two years or more to recover from a supply chain failure.

Conflicting incentives *between* firms

There are also incentive problems between firms. OEMs tend to share in a supply chain ecosystem, using the same suppliers or similar technologies. Investment in technologies, equipment, and workers throughout the supply chain ultimately benefits all firms in that system. If only one customer slows payment, the overall damage done to the supply chain is fairly small, as other firms will continue to fund the working capital needs of their common suppliers. However, if other companies find themselves at a

²⁶ Mitchell.

²⁷ Rudd Bosman, *The New Supply Chain Challenge: Risk Management in a Global Economy*, FM Global, 2006, Available at: <http://www.fmglobal.com/pdfs/ChainSupply.pdf>.

²⁸ *Ibid.*, page 9.

²⁹ Kevin B. Hendricks and Vinod R. Singhal, *An Empirical Analysis of the Effect of Supply Chain Disruptions on Long-run Stock Price Performance and Equity Risk of the Firm*, November 2003, Available at: <http://smgpublish.bu.edu/ren/Seminar/Vinod%20Singhal/hendricks-singhal%20glitches%20long-term%20stock1.pdf>. Published in *Production and Operations Management Journal*, vol. 14, no. 1, pp. 35-52, 2009.

competitive disadvantage, they may follow suit. Collectively, these large firms could diminish the investment capacity of their common supply chain (see Box 2 on the prisoner’s dilemma).

Box 2. The Prisoner’s Dilemma

This box illustrates an extreme example of this potential collective action problem. In most cases, however, this problem would reduce (not eliminate) benefits that a single firm acting alone would achieve by paying more quickly. The choice of large firms not to pay quickly represents a classic collective action problem known as a prisoner’s dilemma. The traditional statement of the prisoner’s dilemma involves two criminals deciding independently whether to confess their crimes in hopes of receiving a lighter punishment, but the logic has business applications as well. As shown in Figure 2, if Firm A decides to pay slowly and Firm B pays quickly, Firm A reaps the benefits this could be in the form of increased investment because of their stronger cash flow or the ability to finance more short-term projects while the small business’ cash flow needs are satisfied by another firm. In fact, regardless of Firm B’s decision, Firm A is better off paying slowly—if Firm B chooses slow payment, Firm A sacrifices competitive advantage by not doing the same. Firm B faces the same decision, so the seemingly rational course of action will be for both firms to pay slowly, leading to the outcome shown in the upper-left part of Figure 2. Note that this outcome is strictly worse for both firms than the one in the lower-right, which occurs when both firms pay quickly.

Figure 2. Prisoner's Dilemma

	Firm A pays slowly	Firm A pays quickly
Firm B pays slowly	Both firms receive \$100.	Firm A receives \$0. Firm B receives \$300.
Firm B pays quickly	Firm A receives \$300. Firm B receives \$0.	Both firms receive \$200.

More purchasers are beginning to realize the benefits of assisting suppliers with working capital management. The motivations may be altruistic: a desire to see small, often minority-owned, suppliers prosper. And companies may be motivated by concerns about how they are perceived, their own reputation.. Regardless, the outcome is broadly beneficial.

Indeed, reducing supplier working capital is in large firms’ self-interest – both individually and as a group. Many, or even most, OEMs are able to pay their suppliers more quickly without hurting their own bottom lines. While faster payment of suppliers may make the OEM’s cash flow look worse, it provides working capital for suppliers to invest, which in turn increases supplier quality, innovation, and on-time delivery. Alternatively, suppliers that do not need to turn to expensive financing options are better able

to offer competitive prices and avoid causing a disruption in the supply chain, which ultimately helps the OEM's bottom line.

Advances in information technology make it cheap to allow banks to understand that risks faced by small suppliers are less than those faced by other small businesses, and thus banks should lower the interest rates charged to small suppliers. OEMs have to pay a small cost to implement these supply chain finance mechanisms, though a lack of standardization of the terms makes this cost higher than it should be.³⁰ While this could be a barrier to OEMs supplying their suppliers with working capital, a 2014 survey of procurement managers by Spend Matters revealed that 90 percent of those surveyed felt that they were mature third-party software solutions available to match up information between their companies and vendors.³¹ More than two-thirds of the procurement managers cited "too many conflicting priorities" as the main reason for not taking action on providing suppliers with working capital; this was the most commonly cited reason by far.

Financing early payments

Companies choosing to provide their suppliers with access to earlier payments have a variety of options available to them. While shortening payment terms is the simplest choice, these options provide alternatives that may also ease the working capital burdens of small businesses and boost the value of large firms at the same time. Discussed below are some financing methods and how they involve integrating data and information from various sources, often using technology to streamline the process and reduce finance costs for the entire supply chain.³²

Factoring³³

There are several mechanisms buyers can use to support their suppliers, but first consider factoring, where a supplier takes the initiative to increase their working capital cash. When a small business supplies a large business with goods or services, there is a lag between when the supplier sends the invoice and when the buyer pays. This lag is increasing, putting pressure on the ability of small firms to finance short-term investment. The oldest and most traditional financing solution available to suppliers is factoring, in which a small supplier can sell its accounts receivable to a third-party financial intermediary called a factor (often a bank) in exchange for a partial prepayment of around 80 percent. This arrangement is initiated by the small firm, rather than the buying firm. The factor then collects the accounts receivable on behalf of the small firm and pays the remainder (less fees) upon final payment by

³⁰Oliver Belin, *The Three Structures Fueling Growth in Supply Chain Finance*, Pepperdine University Graziadio School of Business and Management, Available at: <http://bschool.pepperdine.edu/studentblog/index.php/the-three-structures-fueling-growth-in-supply-chain-finance/>.

³¹ Mitchell.

³² Treasury Management Systems and Supply Chain Finance, Aite Group, June 2013, Available at: <https://www.scfcommunity.org/wp-content/uploads/2014/07/Aite-Treasury-Management-Systems-and-Supply-Chain-Finance.pdf>.

³³ For more information about factoring, see <http://www.businessweek.com/stories/2008-10-03/the-pros-and-cons-of-factoringbusinessweek-business-news-stock-market-and-financial-advice>.

the original customer.³⁴ By collecting some of their accounts receivable in a shorter time frame, small firms are able to increase their cash flow and free up capital for other purposes. Invoice discounting, or discrete discounting, is similar to factoring, except that businesses keep control of their sales ledger and continue to interact with the large company regarding payment.³⁵

Factoring frees small businesses from the difficulties of qualifying for loans from banks that may view them as a credit risk and therefore charge high interest rates for a loan or not offer it at all. A factor's primary interest is in receiving payment from the original buyer, which is often a large, stable firm. To some extent, factoring allows the smaller firm to shift the credit risk onto the larger firm, which is unlikely to default on its obligations. However, because the invoices are not approved by the buyer, the factor assumes the downside risk of the buyer declining to pay. In this case, the factor must recoup its cash from the smaller firm, which may not be solvent without payment from the buyer. Because of this risk, factors tend to charge fairly high fees. Typical fees are between 2 and 7 percent for a 30 day invoice.³⁶

Reverse factoring, or approved payables financing

One way in which a factor may reduce its risk exposure is reverse factoring, or approved payables financing.³⁷ Under a reverse factoring arrangement, a factor buys accounts receivable only for one larger firm or a small group of large firms that have been thoroughly vetted for creditworthiness. In addition, because the reverse factoring relationship is initiated by the buyer, the factor can operate as a single point of contact between the large firm and several smaller suppliers, reducing overhead costs and forming a stable relationship with the large firm. Fees for reverse factoring, used by customers to pay suppliers more quickly, are generally quite a bit less than the rates for factoring, where a supplier sells their accounts receivable to a factor.

Figure 3 shows an example of how reverse factoring can work.³⁸ Rather than making the supplier wait 60 days to be paid in full under the new payment terms, the large firm can arrange for a factor, or a bank, to pay the supplier a portion of the invoice in 10 days; the difference between the full invoice amount and the amount the supplier receives is the interest or fee charged by the bank and is ultimately paid by the supplier. The large firm pays the full amount of the original invoice to the bank on day 60. The main advantage of this relationship between the buyer and bank is that it eliminates the commercial risk of an unapproved invoice that can plague a traditional factoring arrangement. By initiating the arrangement with the reverse factor or bank, the buyer commits to paying the invoice in full, leveraging its creditworthiness to get favorable terms.

³⁴ For examples of payment structures of factoring agreements, see:

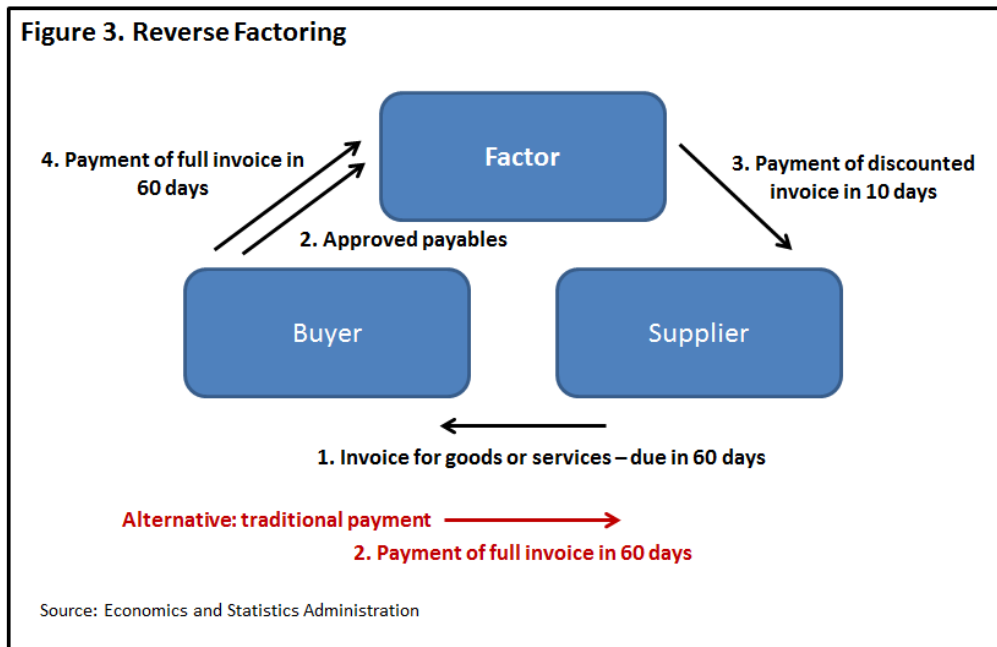
- a. J&D Financial: <http://www.jdfinancial.com/factoring-services.php>
- b. CJM Financial, Inc.: <http://www.cjmfinc.com/how-much-does-factoring-cost/>
- c. CFS Commercial Finance: <http://www.cfsolutionsinc.net/invoice-factoring/factoring-discount-rates/>

³⁵ See Wikipedia: http://en.wikipedia.org/wiki/Invoice_discounting.

³⁶ Based on the rates discussed in the sources in footnote 34.

³⁷ See, for instance, <http://tfig.unece.org/contents/reverse-factoring.htm>.

³⁸ Serena Ng, *P&G, Big Companies Pinch Suppliers on Payments*.



Overall, the supply chain finance market is large and growing. Oliver Belin of PrimeRevenue, a supply chain finance firm, estimates that the potential supply chain finance market size for the United States is approximately \$600 billion in traded volume per year.³⁹ The Aberdeen Group published a report, *Supply Chain Finance: Gaining Control in the Face of Uncertainty*, which surveyed over 140 large, midsize, and small enterprises (of which 60 percent were North American companies). According to the survey, 16 percent of end-users employ factoring, while 14 percent employ reverse factoring.⁴⁰

Dynamic discounting

Borrowing from banks or factoring accounts receivable can be very costly for small businesses. Dynamic discounting is another mechanism used by small businesses to finance working capital. Through dynamic discounting, smaller firms accept a discounted price in return for advance payment by larger firms (their customers).⁴¹ The discount is “dynamic” in that it has been contractually agreed upon; the discount can vary based on the date of the early payment—the earlier the payment, the greater the discount. This arrangement is similar to factoring, but it eliminates the factor and the associated expenses and is a business-to-business transaction. It is good for small businesses because they obtain cash more quickly and easily than through other financing methods, and it is good for large businesses because they receive goods and services at a reduced cost. This type of payment arrangement is most efficiently executed through the use of a robust technology platform that can easily process the necessary calculations and negotiations.⁴²

³⁹ Belin.

⁴⁰ Scott Pezza, *Supply Chain Finance, Gaining Control in the Face of Uncertainty*, Aberdeen Group, January 2011, Available at: http://c686699.r99.cf2.rackcdn.com/PdfWhitePaper/Aberdeen_Group_Supply_Chain_Finance.pdf.

⁴¹ See Wikipedia: http://en.wikipedia.org/wiki/Dynamic_discounting.

⁴² Aite Group.

Technology and supply chain financing

Technology is becoming increasingly important in managing financing arrangements for small businesses. Entrepreneurial companies have begun designing online platforms that are changing the way small businesses access capital, such as peer-to-peer networks that match small businesses with lenders. These companies use “big data” to develop algorithms that predict small business creditworthiness with more accuracy than the personal credit scores of their owners.⁴³

Such advances in information technology make it easier for banks to understand that *the credit risk associated with small suppliers of large firms is often quite a bit lower than the credit risk of small businesses in general*. This may allow banks to set interest rates lower, knowing that they can count on the large firms to pay their suppliers.⁴⁴ In addition, many of the companies operating in this space are not banks, but rather online-only service providers who are willing to issue small loans that are of less interest to large banking institutions. These supply chain finance options allow lenders to provide short-term credit that optimizes working capital for both the large firms and their suppliers.

Technology also allows firms to automate activities and track invoices and finances across all aspects of the transaction.⁴⁵ Such automation and tracking can reduce the overhead associated with reverse factoring, making that a more attractive option for large firms to manage the payment of their supplier. These technologies can also be used to detect events, compare them to pre-determined thresholds, and take action.⁴⁶ Major players in this field include Citibank, JPMorgan, Deutsche Bank, HSBC, Santander, and PrimeRevenue, which together manage about 40 percent of the market share.⁴⁷ Other global supply chain finance leaders include Ariba, Orbian, GT Nexus, Taulia, and Allianz.⁴⁸

Conclusion

Helping suppliers reduce their working capital costs benefits the whole supply chain – and, indeed, this is the intention behind the Obama Administration’s SupplierPay initiative: to bring companies together to address the working capital challenges facing small firms. This approach potentially confers broad economic benefits – to buyers as well as suppliers. Buyers receive bottom line benefits as well as CSR.

While slow payment of suppliers makes the large firm’s cash flow look better, it hurts supplier investment, thus reducing supplier quality, innovation, and on-time delivery. Alternatively, suppliers will build their increased financing cost into their prices which ultimately hurts the OEM’s bottom line.

Solutions exist to each of the three problems mentioned above as to why buyers don’t work to reduce suppliers’ working capital costs. For example, to reduce within-firm conflicts to paying more quickly,

⁴³ Mills and McCarty, p. 11.

⁴⁴ Belin.

⁴⁵ See Investopedia: <http://www.investopedia.com/terms/s/supply-chain-finance.asp>.

⁴⁶ Aite Group, page 9.

⁴⁷ Belin.

⁴⁸ Anita Hawser and Paula L. Green, World’s Best Supply Chain Finance Providers 2013: Global Winners, Global Finance Magazine, July 14, 2013, Available at: <http://www.gfmag.com/magazine/julyaugust-2013/worlds-best-supply-chain-finance-providers-2013-global-winner>.

firms might consider measuring operational benefits of strong supply base, and adopt supply-chain finance methods. If the cost and integration required for these new methods is too high, large buyers might consider reducing payment terms. And finally, paying suppliers faster is more beneficial when more large buyers do it, because of the collective action problems mentioned above. Programs like the SupplierPay initiative discussed above can help with this.

In sum, reducing supplier working capital costs unlocks supplier capital to be put to work for the benefit of the economy – their large customers included.