TREASURY SERVICES

Sustaining Global Growth

Post-Crisis Trends in Supply Chain Finance



In a time when market volatility and concerns about risk continue, is the global recovery sustainable?

This J.P. Morgan Global Trade white paper discusses the evolution of Supply Chain Finance and its recent critical role in sustaining the global recovery, both in emerging economies and the developed world. Taking a close look at Supply Chain Finance post-crisis, it examines how major corporates are strategically applying this form of financing to support their working capital strategies, as the next generation of Supply Chain Finance takes shape and capital markets solutions develop further to add to the sophistication of the proposition. Sidebars focus on the diverse and growing Supply Chain Finance needs in North America, Latin America, EMEA and Asia and how new Export-Import Bank and International Finance Corporation (IFC) partnerships are working to keep the recovery on track. Finally, the paper considers lessons learned and outlines next steps to prepare for tomorrow's trade environment.



Andrew Betts Managing Director, Global Head **Supply Chain Treasury Services**

Andrew Betts is responsible for the J.P. Morgan global offering in open account trade and supply chain finance. Andrew has considerable experience in international trade and supply chain, leading teams in creating financing solutions for corporate clients in North America, Latin America, EMEA and Asia. He has previously held global management positions at the Royal Bank of Scotland, ABN Amro and Deutsche Post DHL.

The burning question

From the United States to China, and from the major economies of Europe to their trading partners globally, the economic question on everyone's mind continues to be: In a time when volatility and risk management are major concerns, is the global recovery sustainable?

In global trade, 2011 began with abundant good news, as 2010 trade levels rebounded to unanticipated heights. Even the World Trade Organization (WTO) could not forecast 2010's amazing 14.5% growth rate.

Nonetheless, from today's perspective in the third quarter of 2011, the global economic landscape has been substantially altered. As expected, growth is easing after 2010's record surge. The WTO's current forecast for 2011 is a tamer 6.5%.

Regional growth rates reflect local post-crisis economic realities. For emerging markets, the news continues to be good as they build on the recovery. This is less the case for more mature markets, which continue to exhibit weak gains.

Significant economic and geopolitical uncertainties complicate the global outlook. In the West, deleveraging and austerity continue to dampen consumption and investment. In the East, overheating of markets and inflation are ongoing concerns. Across the globe, it is acknowledged that access to liquidity will make or break the recovery. There is also an understanding of the important connection between healthy supply chains and sustained recovery and growth.

During the financial crisis, nearly every company, regardless of industry or region, struggled with its liquidity and financing costs and conducted an intensive search throughout the enterprise for ways to reduce the need for working capital. A major insight born of that search is that a company's supply chain is more than a logistical tool. It is a major source - and user of working capital. To ensure that a company holds onto as much of its cash as possible, business leaders need to better sync their procurement activity with the firm's financial strategy. At the same time, CFOs and Treasurers need a better understanding of the financial impact of certain supply chain and procurement strategies. Suppliers – especially of non-commoditized products – need to be assessed in the context of the buying company's operations. A buyer could fail if suppliers proved unable to sustain business-critical supply lines.



A company's supply chain is more than a logistical tool; it is a major source and user of working capital.

After the liquidity crisis

The complex and extended supply chains constructed during the last two decades have, for the most part, survived the liquidity crisis. All indications are that they will remain an essential feature of global trade. However, the risk profiles of certain countries and counterparties are changing, intensifying the focus on country and counterparty risk management. The twenty-first century's lean, efficient global supply chain could also prove physically vulnerable. Companies might feel the need to cover this risk by reassessing countries of origin and holding greater amounts of inventory and work-in-progress as a buffer against physical supply chain disruption. This increases the amount of working capital tied up in the supply chain and puts even more pressure on payables/receivables management. For strategists at global firms, the recent Icelandic volcano eruptions and Japanese tsunami/earthquake "double disaster" of 2011 highlighted the risks inherent in some supply chains, thereby intensifying the need for alternative supply chain models. Disrupted transportation systems, inaccessible raw materials and destroyed factories expose vulnerabilities that directly impact corporate returns.

The supply chain challenges of multi-country sourcing and distribution management remain. New trade flows have strengthened since the crisis, with more demand worldwide from "non-traditional" buyers. While consumer demand from the U.S. and Europe remains subdued, demand is mounting in traditionally-labeled "emerging" economies for consumer goods. For example, intra-China trade flows and India imports are both intensifying, and as the middle classes grow in countries like Brazil, China and India, more domestic sourcing demand is resulting in higher internal trade levels. In such a rapidly evolving environment, trade banks must look past traditional models to serve clients who often find themselves operating in new circumstances.

JAPAN'S DISASTERS AND THE GLOBAL SUPPLY CHAIN

The earthquake and tsunami that struck Tohuko, Japan on March 11, 2011, caused extensive and severe damage to roads, railways and ports. Japanese automakers were devastated by the "double disaster." While the quake disrupted Japan's power grid and transportation system, the tsunami ruined thousands of vehicles waiting for export. Toyota, Honda, Nissan and Mazda were all forced to shutter plants and shut down production lines for lack of parts and materials, disrupting the global supply chain for a number of weeks. Merck KGaA — the sole producer of a paint pigment for Ford – was unable to enter its plant for eight weeks, because it was 28 miles from the nuclear reactor crippled by the quake and tsunami. In the aftermath, industry analysts highlighted the vulnerability inherent in concentrating so many key links of the automotive supply chain in Japan and called for alternate supply chain models.





Buyers use Supply Chain Finance to ensure supply and support working capital strategies

For today's corporates, success hinges on effectively managing a complex environment. Buyers regularly negotiate lower pricing, as well as improve both contract and payment terms with their suppliers. Re-evaluation and re-negotiation of payment terms has created a situation of huge complexity for some large buyers at a time when many are trying to attain greater standardization across their supply base and become more efficient in global sourcing.

When a buyer decides to extend terms, having a Supply Chain Finance program in place can lessen the impact on the supplier base. (See our Caterpillar case study on page 10.) Near-constant review is needed to optimize current sourcing and distribution channels. These actions/ activities are critical to improving efficiencies in operations, minimizing inventory carrying costs and reducing expenses overall – the formula for succeeding in today's intensely competitive markets.

Managing the aforementioned changing risk scenarios, rapidly escalating regulatory environment and increasing accountability for working capital usage (both Days Payables Outstanding and Days Inventory Outstanding), buyers now realize the critical importance of maintaining supply chain stability. When a buyer makes a decision to extend terms, a Supply Chain Finance program can significantly reduce the impact of that decision. Buyers should deploy programs to support their thoughtful working capital strategies.

To support critical cash-strapped suppliers struggling to obtain credit facilities in the wake of the financial crisis, buyers are increasingly stepping in for business continuity reasons and to prevent disruptions. They have good reason for doing so, as the consequences of a failure to support key suppliers can be dire. An obvious case often cited is the 2009 insolvency filed by German coachbuilder Karmann, the main supplier of convertible roofs for Mini cars, which jeopardized BMW's production line in the midst of a worldwide financial crisis.



CONFIDENCE BUILDING: SUPPLY CHAIN FINANCE IN EMEA

Economic confidence is still fragile in Europe, where governments continue to focus on reducing their debt obligations and consumers feel the pinch of austerity measures. In this environment, cash is crucial and companies look for banks that can assist them in terms of optimizing their working capital and further reducing risk. In 2010, the demand for Supply Chain Finance from larger corporates grew rapidly in Europe. In research published by Demica in January 2011, some companies using Supply Chain Finance programs reported that by leveraging the corporate customer's credit rating, suppliers were saving 3-4 percentage points on their cost of borrowing. Supply Chain Finance programs have the added benefit of addressing the liquidity and working capital needs of buyers and suppliers in trade flows that encompass EMEA as well as North America, Latin America and Asia.

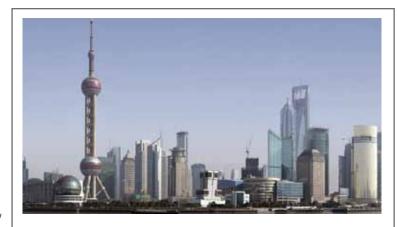
Supply Chain Finance is now the world's fastest growing trade finance option

Supply Chain Finance programs can help buyers facilitate the extension of their payment terms with suppliers by providing an avenue for suppliers to obtain early payment on their accounts receivables while preserving the buyers' trade accounts payable accounting.

In a typical buyer-backed supplier finance program, selected suppliers have the option to sell receivables due from the buyer at a discount in order to receive early payment. The purchaser, typically a bank, then collects payment from the buyer on the due date - say, 60 days out having extended its own funds and balance sheet to provide the supplier with needed liquidity. Within a typical Supply Chain Finance program, invoices are presented and paid electronically via the purchaser's online platform. Due to buyer demand, these platforms are becoming increasingly more sophisticated.

These solutions afford benefits to both buyers and suppliers. Buyers gain enhanced supply chain visibility and streamlined payments while suppliers receive funding, in the form of speeding Days Sales Outstanding, and mitigate payment risk. At the same time, Supply Chain Finance programs help suppliers forecast their cash flows more accurately and leverage their buyer's credit capacity rather than their own.

As a direct result of the financial crisis, Supply Chain Finance has become a critical tool for optimizing working capital management in the last two years. This is due to the fact that, during the crisis, Supply Chain Finance programs proved a much-needed asset for both buyers and their suppliers that were frozen out of credit markets. Also, many buyers deploy Supply Chain Finance to maximize cash to meet working capital management goals and fund investments in business growth.



SOUTH-SOUTH TRADE FLOWS AND SUPPLY CHAIN FINANCE

Economies in Latin America and Asia have stayed strong as trade between these regions continues to show growth and vitality. Asia's appetite for Latin America's natural resources and the rising consumption of Asian goods by Latin America's growing middle classes have done much to keep the global recovery on track. At both ends of the South-South supply chain, global and local programs are meeting the credit and risk mitigation needs of buyers and suppliers. In Brazil and Mexico, banks like J.P. Morgan are actively engaged in financing supply chains with real- and peso-based buyer programs that support a range of industries, including energy and metals. In Asia, where there is a need to mitigate risk related to volatile commodity prices, buyer-led and supplier-led Supply Chain Finance solutions allow buyers to ease the impact of raw material costs on their cost of goods and, at the same time, allow suppliers to better manage larger receivables balances.

The next generation of **Supply Chain Finance**

As the recovery takes hold, more companies are introducing Supply Chain Finance programs and/or expanding their existing program's scope. Industry observers point out that this is due to buyers' changed viewpoints about Supply Chain Finance. What was once seen as a method to source funds defensively is now regarded as a more proactive way to provide suppliers with critical financing to help meet increasing order volumes. Plus, it works for both sides. Enrolled suppliers are obtaining the liquidity they need to meet orders – permitting buyers to retain cash that can be used to make strategic growth investments.

Post-crisis, banks are seeing sharp growth in demand for buyer-backed programs, now critical for multinational corporations with global supplier networks. In terms of industry sectors, the heaviest demand for buyer-led programs comes from the manufacturing, consumer, retail, pharmaceutical, telecommunications and technology sectors – all of which are managing complex global supply chains.

Treasurers whose organizations are expanding internationally have come to see Supply Chain Finance as an essential working capital management tool. As it grows in importance and gains universal acceptance post-crisis, Supply Chain Finance is morphing into more of a market than a single product. The definition of Supply Chain Finance has expanded to mean a wide array of payables and receivables solutions that support domestic, regional and global supply chains. More programs in the market generate a new level of commonality and demand for standardization in terms of program parameters and delivery.

This broadening of the solution is a direct result of corporates frequently being both buyer and supplier. For example, large manufacturers in the automotive, technology and consumer goods spaces have a need to source materials that are used or converted into other goods (acting as a buyer) which they sell to other firms (acting as a supplier).

Another reason for Supply Chain Finance's expansion is the increasing desire of some buyers to extend pre-shipment financing to their suppliers in the SME (Small to Medium Enterprise) category – often in emerging economies in Eastern Europe and Southeast Asia. Such supplier financing, arranged by buyers with the support of private lenders, is similar to the working capital financing currently provided through Export Credit Agencies (ECAs) and multilateral organizations. In fact, the reach of these programs can be aided by ECA, MLA (Multilateral Agency) and private insurance programs (see page 11, "Leveraging opportunities for growth").

While traditional credit flows are still not as strong as they were pre-crisis and supply chain risk is still a concern, Supply Chain Finance solutions including receivables finance and pre/post export solutions – are proving vital as demand for output increases and cross-border trade gradually recovers over time. Multi-country, multi-currency programs are becoming more common as buyers plan to deploy programs in more than 25 countries. Such increasing demand presents challenges to buyers and providers, both in handling programs as they quickly expand and in reaching all suppliers in all markets. These size and volume challenges have begun to be managed through risk distribution, provider partnerships and market syndication. The trade community is still addressing issues related to program funding, electronic on-boarding of suppliers, integration of multiple investors and risk mitigation resources, and ECAs making it a priority to help their own national companies.

As corporate Supply Chain Finance programs develop larger credit needs and broader global supply bases, collaboration between financial institutions is increasingly essential to successful funding. Funding from several sources works well for buyers, mitigating or eliminating concentration risk. However, since Supply Chain Finance is typically delivered electronically, buyers prefer to avoid the complications of working with several different banking platforms. Buyers want a more cohesive solution, which often integrates funding from several of their banking relationships with processing and delivery via a single global platform. Such a solution, however, necessitates that electronic on-boarding be made available to all participating suppliers in the network.

Industry experts believe that as it continues to evolve in response to the needs of the market, Supply Chain Finance may well come to resemble syndicated lending, with seamless capability to add funding partners to programs. In fact, the Supply Chain Finance market is now poised to move towards more sophisticated risk distribution via capital markets structures such as Special Purpose Vehicles (SPVs) and notes that can be sold to other financial institutions. Money funds of various types may soon participate in programs as well, buying assets and notes based on receivables in a manner reminiscent of the commercial paper market.

This capital markets aspect is a new facet of the collaborative model for Supply Chain Finance, one in which banks will leverage syndication and distribution capabilities to bring additional liquidity to Supply Chain Finance programs.

Supply Chain Finance supports challenged, but critical SMEs

Even in the face of the growing sophistication of Supply Chain Finance, it is important to recognize that today's corporate Supply Chain Finance programs are still not widely available to all suppliers, regardless of size.

There is evidence that some Treasurers are now taking a step beyond the "first-tier" suppliers they supported at the height of the liquidity crisis. Mapping their entire supply chain presents a fuller picture of the risks they face, and helps identify which firms – are really critical.

To date, most major multinationals have tended to limit participation in their Supply Chain Finance programs to what the industry calls "strategic" suppliers, so defined because they tend to account for a larger portion of a buyer's spend. For example, consider a major buyer with 2,000 suppliers who only offers Supply Chain Finance participation to 10% of their supplier base. Generally speaking, this is usually because those 200 suppliers represent 75% of buyer spend, making it "strategically" desirable to include them in the Supply Chain Finance program. For most buyers, it isn't economically or logistically feasible to offer their Supply Chain Finance program to all their suppliers.

Hence, as the global recovery accelerates and more strategic suppliers sign up for buyer-backed Supply Chain Finance programs, many SMEs in emerging economies struggle to access affordable lines of credit. These suppliers face a significant challenge in meeting their working capital needs in the absence of credit. Even when a high credit-risk supplier is willing to pledge 100% collateral, many banks are unable to offer assistance. As a result, many suppliers may be left out in the cold, as multinational corporations and their key suppliers increasingly employ Supply Chain Finance to manage their working capital and to mitigate risk in the supply chain. This is exacerbated by the inexorable trend towards Open Account (OA), which also supports the increasing use of Supply Chain Finance programs for those whose credit and risk profiles allow access.

This has significant effects across the trading world. With the rising tide of recovery now needing to lift more boats in countries like China and India –not to mention disaster-struck Japan – the critical issue may well be whether enough Supply Chain Finance can be made available to provide SMEs with a debt-free alternative to traditional bank loans. Indeed, in some of the most critical emerging economies, the ongoing recovery itself depends on further support for suppliers who would not typically be invited to participate in a global financing program.

In all of this, it is clear that lenders have a distinct role to play. An ongoing challenge for custodians of the global economy will be to provide credit and risk mitigation solutions to meet the needs of suppliers in emerging economies. To accomplish this, it is critical that support be available to further mitigate counterparty risk while making Supply Chain Finance available to a much larger portion of the supplier base.

Export-Import (Ex-Im) Bank programs, International Finance Corporation (IFC) programs, and/or funding syndicates that provide funders with additional financial and risk capacity could prove an effective means of bringing the benefits of global Supply Chain Finance programs to more SME suppliers. There are also opportunities for providers to partner with Ex-Im, IFC, Asian Development Bank (ADB) and others to significantly improve efficiencies. Across the board, enhanced automation and more widely available platforms for electronic on-boarding would undoubtedly give many more SMEs in emerging economies critical access to financing through Supply Chain Finance programs.



Preparing for tomorrow

The recent financial crisis has delivered some important lessons about supply chains. On the financial side, the crisis has unquestionably heightened awareness of the importance of maintaining supply chain financial health. Perhaps, the principal lesson major firms have learned from their deployment of Supply Chain Finance is the necessity of providing liquidity to strategic suppliers.

Another vital lesson involves leveraging bank liquidity and balance sheets to ensure that all parties win in a tough economic cycle. A defensive weapon during the financial crisis, Supply Chain Finance has proven to work just as powerfully in recovery, since it has now become an indispensable tool for working capital management. Post-crisis, Supply Chain Finance has demonstrated its usefulness in meeting funding and risk mitigation goals for both buyers and suppliers.

The hope is that innovative Supply Chain Finance solutions will provide the liquidity needed to sustain the alternate, geographically-diverse supply chains that allow developing countries to become sourcing alternatives in tomorrow's trade environment. Continuing collaboration by banks, ECAs, and multilaterals to provide more Supply Chain Finance to more buyers and suppliers, plus the expanding participation of the capital markets, will do much to sustain the global recovery and permanently improve the trade finance landscape.

A great strength of the proposed IFC programs is the willingness of the organization to fund programs directly. Challenges remain, however. Primarily, a meeting of the minds is required regarding what is commercially feasible in terms of execution and delivery. All participants – buyers, banks, ECAs and multilaterals – are challenged to streamline programs and channels of delivery so that liquidity can be quickly injected into the supply chain.

Recoveries are sustained in part by applying lessons from the last crisis. Companies have learned to hold onto their cash so that they are better prepared for difficult financial conditions. They have also learned that the health of their supply chains depends on their suppliers' access to financing. The demand for Supply Chain Finance to support international trade will grow rapidly all over the globe in the next five years, with particularly sharp spikes in Asia and Latin America. According to Celent's recently published report, Supply Chain Finance accounted for 8% of international trade in 2010; by 2015, that market share is expected to reach 16%. Celent adds that the rapid growth of Supply Chain Finance programs in Asia will be largely due to the limited availability of traditional bank financing to Asian SMEs. Meeting the steadily growing demand for both buyer- and supplier-centric finance programs in the developing world will require unprecedented levels of cooperation and collaboration between various industry segments, the global banks and local banks serving both buyers and suppliers, ECAs, MLAs, third-party technology

providers, regulatory bodies, lawmakers and institutional investors. The suppliers (and the buyers who support them) will find themselves seeking financing much earlier in their production cycles and will want to participate in programs that can finance inventory at the pre-shipment stage.

Intelligent technology, funding and global/local teamwork are key to successful Supply Chain Finance programs. The right combination of these is also absolutely essential to managing successfully through volatile markets and changing times.



CASE STUDY:

Caterpillar Balances Working Capital Management and Supplier Liquidity in its Global **Supply Chain Finance Program**

Overview: As post-crisis equipment sales showed signs of recovery in 2009, global manufacturer Caterpillar saw challenges for suppliers who might struggle to finance ramped-up production. Rather than use its cash to support suppliers, Caterpillar chose J.P. Morgan to help balance working capital management and supplier liquidity. J.P. Morgan proposed a Supply Chain Finance program that, in addition to funding, offered global program management and ongoing support for enrolling suppliers.

Solution: J.P. Morgan's Supply Chain Finance solution has been deployed to hundreds of suppliers, standardizing consistent payment terms and implementing electronic payment processing. Using a single platform, Caterpillar electronically presents selected invoices to suppliers who can then decide to take early payment at a discount, with J.P. Morgan funding the early payment. Available to selected suppliers in North America, Latin America, EMEA and Asia, in multiple currencies, the solution is attractive to suppliers whose financing rate would more than offset the cost of payment terms standardization.

Results: By implementing electronic invoicing and standardizing payment terms across its supply base, Caterpillar was able to expedite payments across multiple divisions and streamline payables processing. Launched in 2010 with pilot buying entities in the United States and Western Europe, the Caterpillar Supply Chain Finance program is now rolling out to buying subsidiaries in the United Kingdom, Latin America and Asia. Achieving benefits in excess of its original goals, Caterpillar's program has already proved an extraordinarily effective working capital tool.

Leveraging opportunities for growth

Trade Banks, ECAs and MLAs team up to keep recovery on track with a range of supplier financing programs designed to meet the market's changing needs.

Export-Import Bank of the United States Supply Chain Guarantee Program

A recent positive development in terms of providing liquidity to more businesses is an export program that J.P. Morgan has helped launch.

The recently announced U.S. Export-Import Bank's Supply Chain Finance Guarantee Program was developed to strengthen the U.S. export supply chain in order to help create and maintain jobs, especially for small business suppliers. The new guarantee benefits U.S. exporters and their SME suppliers by providing accounts receivable financing, with the intention of injecting liquidity into the marketplace and delivering more access to capital to suppliers.

The guarantee is designed to enable banks to increase purchases of accounts receivables owned by U.S. suppliers and due from major U.S. firms, all of which are related to purchases of goods and services by these firms for export-related production. Qualified suppliers can obtain cash more quickly and increase liquidity to fulfill new orders. Exporters have the option to extend payment terms and obtain a working capital benefit without imposing undue financial hardship on their suppliers. Suppliers will see cash flow improvements and working capital benefits as a result of discounting their accounts receivables in exchange for faster payment.

International Finance Corporation Supplier Finance Programs

Emerging markets' suppliers receive help from the International Finance Corporation.

The International Finance Corporation (IFC) was a "first responder" to the global financial crisis, providing record levels of trade finance and working with local banks in emerging economies to support local businesses and stimulate trade. The IFC has lately been focusing on supplier finance programs, launching a \$500 million program at the end of 2010 and currently in close discussions with major trade banks (including J.P. Morgan, Standard Chartered, Deutsche Bank, Unicredit and BNP Paribas) to determine the support that it can offer for OECD (Organization for Economic Co-operation and Development) buyer-led programs rolled out for suppliers in emerging markets. The goal of the IFC programs will be to bring efficient financing to suppliers in targeted less developed countries through leveraging the buyer's cost of credit. The IFC is looking to participate in both funded structures – where it offers a proportion of the financing – and unfunded structures, in which the IFC shares the credit risk presented by the buyer with banks. In direct touch with buyers in developed economies who are interested in setting up programs in emerging markets, the IFC also wants to offer its support to emerging market suppliers who are looking to finance sales to large buyers. The IFC plans to announce its first deals in the second half of 2011.





J.P. Morgan's Supply Chain Finance solutions help buyers and suppliers meet their working capital, risk mitigation and cash flow objectives with open account financing propositions that include supplier finance, receivables purchase and pre-export and post-import solutions that can be delivered to meet client needs around the world.

For more information, please contact your J.P. Morgan Treasury Services representative or scan this mobile bar code with your smart phone or visit jpmorgan.com/ts.



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