

# Trade Receivables Risk: An Insider's Perspective

Over the past 15 years, **Igor Zax** has worked in credit research, structured finance and public finance for the likes of Citibank, Daiwa Securities and Eurohypo. Today, he is managing partner with SCF Capital, a boutique merchant bank. In a recent interview with GRR contributor **Robert Bothwell**, Zax shared his views on the credit risk and operational risk challenges posed by trade receivables, the loss of trust in the asset-backed commercial paper market and the pros and cons of credit insurance, among other interesting issues.

**Robert Bothwell (RB):** *Can you please give us an overview of trade receivables and their markets? Why do they exist, what risk do they carry, etc.?*

**Igor Zax (IZ):** If we start with the basics, from a risk point of view, a trade receivable is a mixture of “pure” credit risk (i.e., the inability of a buyer of goods to pay the invoice) and operational risk. The latter includes dilution risk, mainly related to contractual disputes between buyer and seller; seller’s fraud risk; and genuine errors — e.g., invoicing the wrong counterparty.

Overall, trade receivables represent a huge market: \$2.6 trillion in the United States and 3 trillion in Europe. However, only a small portion of trade receivables is financed externally. My estimates, even before the recent crisis on ABCP [asset-backed commercial paper] markets — based on a comparison of macroeconomic data and reported financing through securitization and factoring — is that 4.1% is financed in the US (mainly via securitization) and 5.1% in Europe (mainly via factoring).

Some sellers might choose only to insure trade receivables rather than to finance them, and there is a related, specialized industry of credit insurance dominated in Europe by three players: Euler Hermes, Atradius and COFACE (with some other insurers, such as AIG, having a smaller share). These companies, rated between A and AA, are covering the risk of non-payment (which is normally specified as being due to bankruptcy), protracted default or political risk events — but not due to any contractual disputes between buyer and seller. In Europe, about 35% of trade receivables is covered by credit insurance; in the US, less than 5% is covered.



Igor Zax

**RB:** *What magnitude of credit risk do trade receivables represent?*

**IZ:** From a credit risk point of view, trade receivables are actually quite a low-risk asset compared with most of the other obligations of a given buyer. This is due to their short duration, to structural issues and to the mechanics of consensual restructuring.

Taking a look first at the short duration issue, in my opinion, rating agencies tend to apply an almost mechanical approach to short-term ratings, which are predetermined by the long-term rating. However, the nature of these risks is very different.

Long-term risk is very much a function of the perceived long-term sustainability of a business model. For example, would a leading manufacturer of camera film be able to compete successfully in a digital world? Would a leading pharmaceutical company be able to continue to discover new drugs and survive patent expiration? Is there a risk that a legal challenge — which may take a very long time with appeals and different level courts — could result in large financial claims?

Short-term risk — with payments due within, say, 60 days — is a simple question of what might trigger non-payment within this time frame. In both the camera film manufacturer and pharmaceutical examples previously mentioned, there are large cash balances and not many maturing obligations in the short term.

Even in some highly risk leveraged companies with covenant-lite loans and deferred amortizations, short-term risk is very limited, due to the absence of trigger events. Technical default is unlikely if there are virtually no covenants, while with no amortizations there are no large payments to default on. This is unlike, to paraphrase [the famous economist] John Maynard Keynes, “in the long term, (where) we are all dead.”

And interestingly, the Merton credit risk model, which

was mainly calibrated on longer term assets, produces a very low default probability for such a short duration.

Moving on to the structural subordination issue, receivables normally occur at the operating company level, making them senior debt compared to obligations at the holding company level. (These latter are effectively an equity position in the subsidiary's bankruptcy, although if you have a parent guarantee, one can have best of both worlds — i.e., the debt of the subsidiary and an unsecured claim against the parent).

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Lastly, we have the mechanics of consensual restructuring issue. In trying to keep the company or its operating subsidiary as a going concern, as stated by one of the rating agencies, financial creditors often exclude trade creditors from the restructuring negotiations in order to maximize future enterprise value. This is important, because once core suppliers stop dealing with the company, either on their own accord or triggered by credit insurers' cancellation of limits, the recovery prospects might well cease to exist.

So this is clearly a critical issue for those subsidiaries that a liquidator or administrator hopes to sell as a going concern. In fact, I have been involved in several situations where relatively healthy subsidiaries in a high-profile restructuring were eventually sold off successfully. That would not have been possible if their trade creditors had not been paid on time.

**RB:** *So what are the ways to finance receivables, and what issues do they raise?*

**IZ:** There are various ways to finance receivables — the main ones being factoring, invoice discounting and securitization. However, all these methods create various problems, such as co-mingling of credit and operational risks, mixing of asset classes and insufficient disclosure.

In factoring, the seller transfers (sells) receivables to a third party, who then undertakes the collection and administration, as well as any credit protection. This differs from invoice discounting, where invoices are sold but the original seller continues to manage them.

As for securitization, the bulk of this is via ABCP multi-seller conduits. These conduits, most of which are run by major banks, will buy receivables from companies based on pre-agreed criteria, which include advance rates, requirements on defaults and dilutions, reporting requirements, etc., and then provide additional enhancement through programwide credit enhancement and liquidity facilities.

Most of the conduits also invest in other asset classes — for example, credit cards, loans [and] mortgages — alongside the trade receivables. To finance these purchases, the conduit issues asset-backed commercial paper (or sometimes medium-term notes) normally rated A1/P1 or above, which is then placed with investors, typically money market funds.

A relatively high dilution risk (S&P data as of the end of 2006 reflects that the dilution rate across rated transactions was around 0.6%, whereas defaults were only 0.2%) shows that in financing receivables, the risk of the seller is *often greater* than the risk of the buyer. While receivables portfolios are normally well diversified and stable, the risk of the originating company may be significant and could in fact threaten the whole purpose of transaction, which is to shift from the weak credit of the seller to the better credit of its portfolio.

In addition, when a financier is relying only on information provided by the seller, fraud risk is significant, as was shown in the Parmalat case (financed through a conduit) or the Peregrine case (financed using factoring). Even before the recent ABCP “crisis,” problems such as the absence of verification capabilities by finance providers, the very high cost of running low-tech verification by some traditional factors and the low level of trust in the data provided by the sellers (partly because of the deficiency of their own systems) forced rating agencies and finance providers to make very conservative assumptions and to impose some onerous conditions. The result was that securitization products became less attractive for sellers, a trend which is even more pronounced now due to increased costs and even more onerous requirements.

**RB:** *What is your view on the recent volatility in the asset-backed commercial paper (ABCP) market?*

**IZ:** In my view, three key issues have caused a significant loss of trust in all types of structured financings, including ABCP markets. These revolve around underwriting crite-

ria, transparency and what in the equity markets would be called “conglomerate discount.”

Looking back to when the securitization markets first started, a key reason for their development, in areas such as prime mortgages, was the clear and transparent criteria for asset underwriting. This made the modelling of portfolio risk relatively straightforward.

The shift to subprime was designed to achieve the same rating, with much more doubtful underwriting criteria but with a greater degree of over-collateralization. While under the “old” theory this would generate a similar expected loss, weak underwriting criteria produced a much higher volatility under stress. In the case of structured investment vehicles (SIVs), the problem was brought to a head, as issuers were behaving rationally and putting in “cheapest to deliver” assets in order to achieve the given rating.

Given that the market did not differentiate based on the asset types held, many conduits ended up owning all types of assets, some more suitable from a risk and liquidity standpoint — e.g., trade receivables — some less so — e.g., some CDO tranches. As a result, ABCP was very much de-linked from the underlying assets. This meant that a problem in any conduit — for example, one with high exposure to subprime mortgages — triggered a sell-off of all ABCP, including that issued by major conduits investing primarily in trade receivables.

Paradoxically, this created a situation where short-term, unsupported corporate exposures (in the form of “normal” commercial paper) were traded deeply sub-LIBOR, while similar exposures (in the form of receivables-backed ABCP) could not be placed even at a huge premium.

**RB:** *Do you believe that credit insurance could assist the banks with balance sheet and securitization transactions?*

**IZ:** As mentioned originally, many corporate clients use credit insurance to cover the non-payment risk with respect to the buyers of their goods and services. These insurance policies normally cover *undisputed* receivables in the event of buyer bankruptcy, protracted default (defined as payment being outstanding for a specific period after a given due date — e.g., 90 days) and political risks (predominantly for emerging market sales). Credit insurers assess each individual credit (there is also normally a small discretionary limit granted to sellers) and, in the case of non-payment, pay a specified percentage, which is usually 90%. Typically, such policies cover the whole turnover of the seller — its specific subsidiaries or market segments — in order to avoid any risk of cherry-picking.

Credit insurance provides a very good hedge against the credit risk of a buyer and, unlike, say, credit derivatives, it does not involve any basis risk, given that the instrument covered is the receivable itself. (By comparison, in the case of hedging with a CDS, the reference security could well be different from the original exposure and so might not always trigger a cross-default.) However, payment under an insurance policy is not unconditional. Firstly, such insurance only covers a credit event, not a contractual dispute. Secondly, payment depends on the seller’s compliance with the policy, including the correct buyer being insured, premiums paid on time and claims being made within the designated time limit. The nature of such insurance coverage is, therefore, fairly similar to the receivable itself, entailing a very low credit risk but a higher operational risk.

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While traditional credit insurance usage is widespread in Europe, it has so far been almost ignored in ABCP transactions. Where it is used, the product is normally a specialized conduit insurance offered by a separate department of the insurance company — e.g., the financial solutions department — and would therefore be priced and managed differently from a normal insurance policy. Such cover would typically be structured with the first loss retained by the seller — i.e., no risk transfer unless a large cumulative loss occurs.

**RB:** *What technological developments have there been in receivables finance, and how might they be used to mitigate the above risks?*

**IZ:** During the last decade, the physical supply chain and accounts payable areas have undergone major technological change, from being heavily paper-based and manual to being much more electronic and automated. This includes improvements in internal systems, electronic invoicing, messaging standards (in particular, TWIST and SWIFT’s trade service utility for corporate-to-corporate), corporate-to-bank and bank-to-bank communication and vari-

ous reconciliation methods.

Buyers and sellers now have a massive amount of easily accessible information, which traditional finance techniques have failed to take advantage of. This has led to a new paradigm named supply chain financing (SCF). The key differentiator that technology brings to SCF financing is the ability to capture not only the seller's data but also the buyer's data, particularly with respect to their record of the acceptance of goods, which allows financiers to almost eliminate buyer risk as far as dilutions and potential fraud are concerned. Technology platforms also enable the capture of third-party data, such as data provided by credit insurers, logistics service providers and banks.

As supply chains become more and more important for many industries, the cooperation between various entities in the supply chain is steadily increasing. There are many examples of such cooperation in the physical supply

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chain, which is now spilling over to the financial side. Globalization has led to the new concept of a “platform company,” one that “produces nowhere but sells everywhere.” With companies looking more toward the end-to-end supply chain, financing costs incurred by their supply chain partners — who are often smaller and therefore more expensive to finance — are becoming apparent.

In addition, global sourcing means an increase of suppliers in countries where financing is more expensive. On the distribution side, in many industries, sales and distribution are outsourced to relatively small companies — such as value-added resellers (VARs) in the computer industry — that might also operate in emerging markets and for which financing is relatively expensive.

**RB:** *What efforts have banks made to develop supply chain finance, and have they got it right?*

**IZ:** The recent growing interest on the part of companies in financing their supply chain, as well as recent techno-

logical developments that allow this to be done more efficiently, come about when banks have seen a marked decline in two long-standing business areas: “traditional” trade finance (mainly letters of credit) and payments, which have been impacted by developments like the Single Euro Payments Area (SEPA).

As a result, a number of major banks — including JPMorgan, Citibank, HSBC, ABN Amro and RBS — have developed or acquired a proprietary platform to deal with supply chain financing and are marketing some form of supply chain financing to their customers.

However, there are some key limitations of bank-sponsored solutions, including:

- **Platform inflexibility.** As most of the banks have long product development cycles and a limited understanding of corporate needs at the outset, once the platform is developed, it significantly limits the possibilities of future transaction types it can handle. With a rapidly changing environment, including accounting and regulatory changes as well as client requirements, this is a significant limitation.
- **Weak link with risk distribution.** While banks focus a lot on operational issues and have expertise in financing and risk distribution, in most cases these areas are not connected. Supply chain financing in most banks fits within the transaction services area (or equivalent), created by merging trade finance and cash management. The trade finance area by its very nature, especially if mainly involved in letters of credit business, was in turn reliant on bank counterparty limits managed by the “financial institutions” groups. Most of the banks have ABCP conduits; however, there is little evidence they use these to fund supply chain financing programs. As a result, most of the business that banks do in supply chain finance is for their major corporate clients, using existing lines to offer additional financing products. While some banks advertise their strong position in multiple areas — such as supply chain financing and securitization — a simple test to see if this is indeed the case is to ask senior people in one area to name their counterparts in the other. From personal experience, I can say that more often than not, an answer is not forthcoming.
- **Proprietary systems.** This problem existed with letters of credit and continues with supply chain finance. The ability to take risk and to price it accordingly varies from bank to bank. Therefore, many corporates prefer to have relationships with a number of banks, using particular banks for specific products and risks. However, it is impractical for a supplier to have system integration

with several providers or even to assess several application service provider-based solutions at the same time.

- **Understanding of corporate needs and deal structuring ability.** By design, transaction services areas are focused on a process and not on deals, unlike in the investment banking world. Supply chain financing, however, requires significant deal structuring — including accounting and tax [calculations] and various counterparties to distribute risk; it also involves complex legal issues. Compare this to letters of credit, where all processes are standard and documentation is governed by UCP standards.

**RB:** *Do you think that ABCP could be re-established, with better risk management, as a trade receivables financing tool?*

**IZ:** As we have seen, the mixing of asset classes and risks has caused investor confusion and market volatility. Looking at trade receivables as a separate asset class would help to clarify the risk that investors are taking. But although it is one of the largest markets, it is perhaps the least understood.

Secondly, financial markets have become reasonably efficient in evaluating, structuring and pricing credit risk (with the caveat that to date this has mainly been for long-term risk), but not operational risk. The key differentiator is the ability to reconcile buyer and seller information and to obtain confirmation from the buyer that invoices are not contractually disputed, thereby avoiding the main operational risks: [e.g.], dilution risk caused by contractual disputes and seller's fraud caused by the submission of non-existent or duplicate invoices and mistaken buyer identification — i.e., invoicing the wrong customer.

A robust and reliable system to provide such reconciliation would transform the portfolio from being a mixture of different seller risks — which is difficult to model, given that performance risk is relatively unpredictable for distressed sellers — to being a mixture of buyers' credit risk that can be modelled, enhanced and priced more efficiently.

Better monitoring ability would also put a very different perspective on the use of credit insurance. Financing only undisputed invoices would resolve a key issue arising with insurance — i.e., the fact that disputed invoices are not covered — while the buyer's confirmation would resolve two other issues — i.e., seller fraud and mistaken customer identification. (A common example of the latter is when a seller obtains a credit limit on one subsidiary

but then invoices another.)

Other possible causes of non-payment — e.g., submitting overdue declarations or claims outside of the time limit — could easily be avoided with automated information systems, as could policy management (premium payments and turnover reporting). Not having to rely solely on information from the seller, but having control and information from all elements of the process, would completely change the risk, transforming credit insurance from a useful but uncertain and risky enhancement into an almost unconditional cover at A1/P1 level.


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Recent subprime losses have shown that financial institutions are not necessarily better in originating credit than corporates. Financing undisputed receivables represents an exposure to short-term corporate credit risks of relatively high credit quality, without the separate need to originate them. With improved transparency and investor education, undisputed trade receivables are likely to take the place originally designed for ABCP.

**RB:** *Last of all, coming back to yourself, what triggered your decision to move from a large bank to a boutique company?*

**IZ:** I believe that during times of significant growth in the market, it pays to be small and flexible. Many banks would say they have an ability to do every product, and this is correct; however, large institutions suffer from the “silo effect,” and different groups are often not even talking to each other.

The fact that one of my IT colleagues sits next to me during deal negotiation, making sure that the IT system accurately reflects the deal structure, could come as a shock to anybody who has spent years working for larger organizations. ■

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