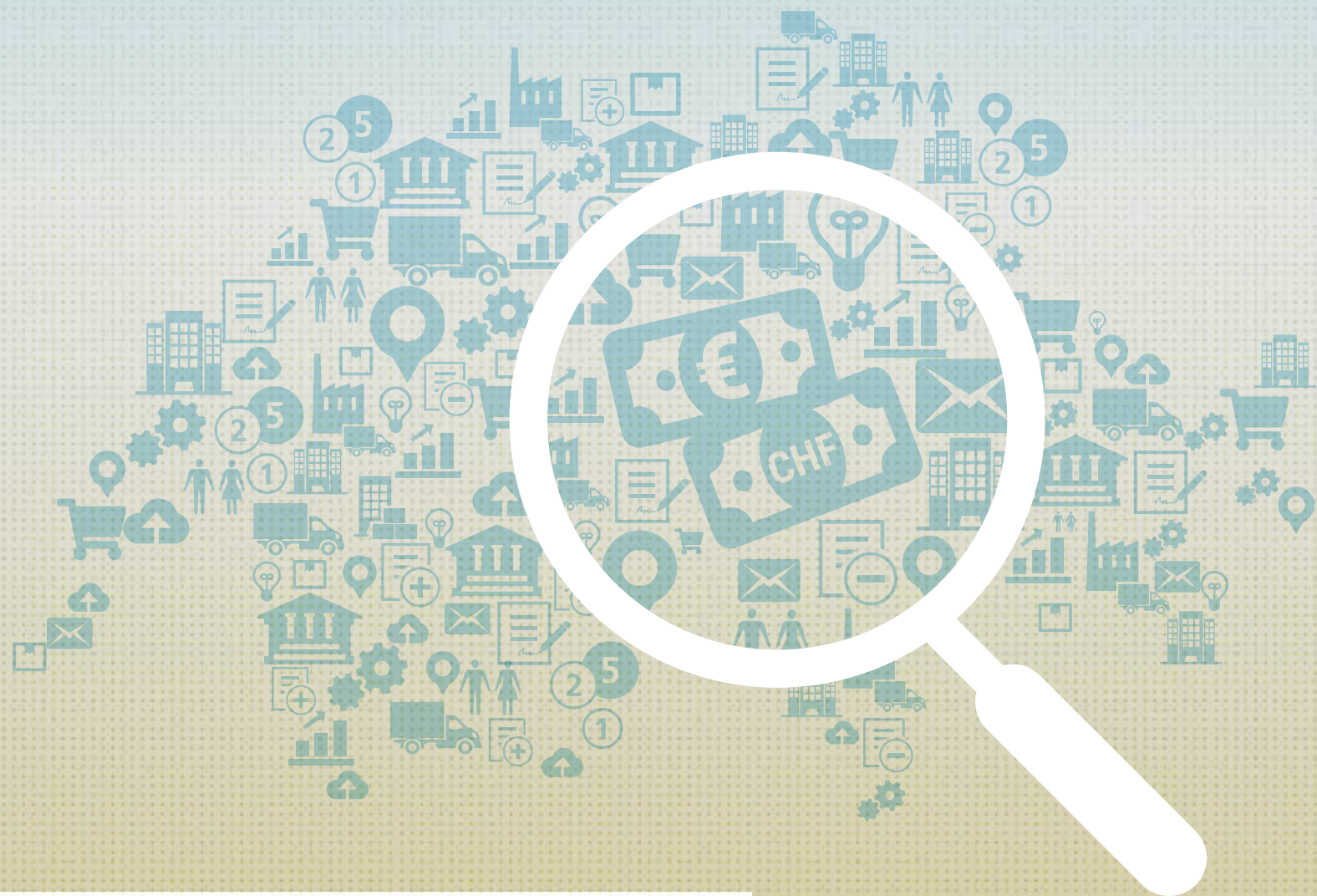


Working Capital

Management
Study 2021

In **search of** the
new normal



Supply Chain Finance-Lab



Universität St.Gallen

In cooperation with

PostFinance 



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- disruption-related working capital management

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Working Capital Management Study 2021

In search of the new normal

“What is normal in times like these?” This question hasn’t just concerned the general public during the COVID-19 crisis. Coronavirus-related effects have also been a big issue for finance and supply chain managers in managing their working capital.

The range of challenges facing Swiss companies – both now and in the future – in relation to working capital management (WCM) are quite manifold. The impact of the crisis is still present today. It isn’t clear yet what the ‘new normal’ will actually look like in the post-coronavirus period. While some companies faced liquidity bottlenecks that jeopardized their future, others met unprecedented demand by using partially modified business models, where funding also poses challenges for managers. The only clear thing is that working capital management must be able to change and adapt.

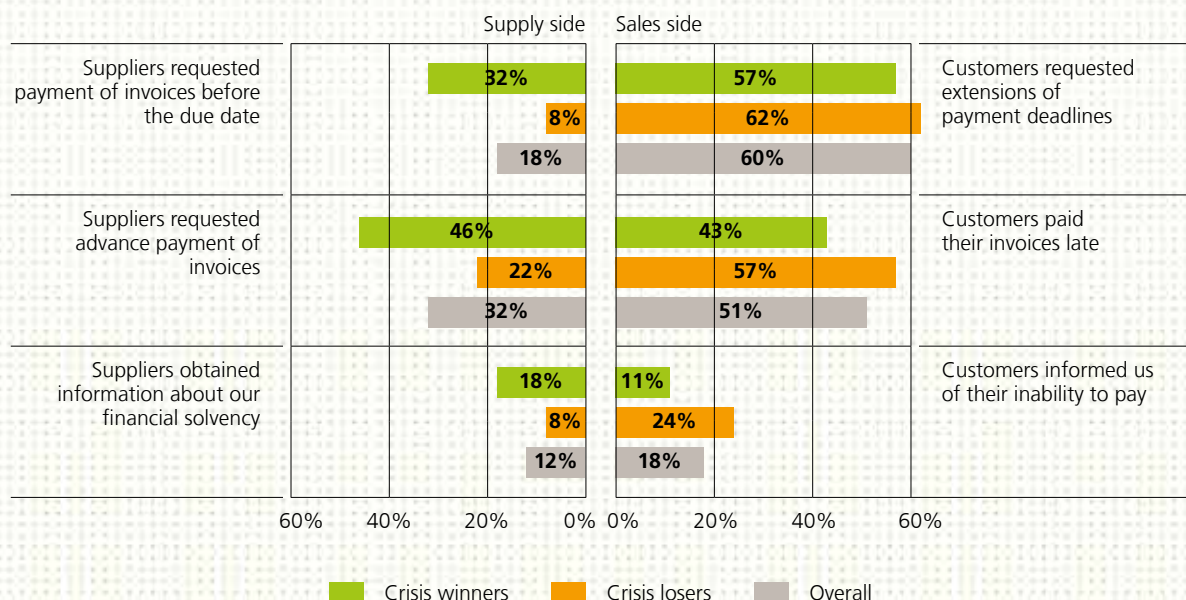
The eighth edition of the WCM Study focuses on this need for realignment. It provides answers to the following questions: How has the management of payables and receivables changed during the COVID-19 crisis in retrospect? What is the current liquidity situation in Swiss companies? And what future trends and developments are expected in WCM? The tendencies identified regarding the future structure of WCM provide an indication of the new normal and serve as a source of inspiration for finance and supply chain managers.

The COVID-19 crisis forced companies to introduce rigorous accounts payable management

As in every crisis, the COVID-19 pandemic produced winners, who benefited from a sharp rise in demand for their products. However, the economic restrictions during the crisis proved to be challenging for most Swiss companies. Over 60% of companies reported a decline in their operating result. These companies (referred to below as crisis losers) generally suffered significant falls in revenue or even went out of business.

The need for short-term liquidity impacted the WCM activities of most Swiss companies. To secure liquidity, the companies mainly focused on accounts payable management. 80% of the companies applied additional accounts payable management measures during the COVID-19 crisis. As a consequence of this approach, WCM challenges mainly occurred on the sales side.

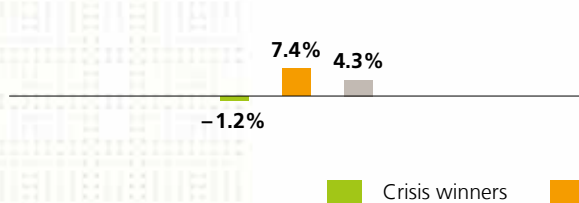
WCM challenges during the COVID-19 crisis depending on performance*



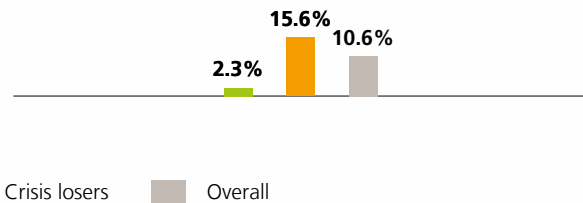
* Performance refers to the development of the operating result (operating profit) in 2020 year-on-year.

The volatile business environment during the crisis has impacted the components of the C2C cycle

Percentage change in days sales outstanding (DSO) compared to 2019*



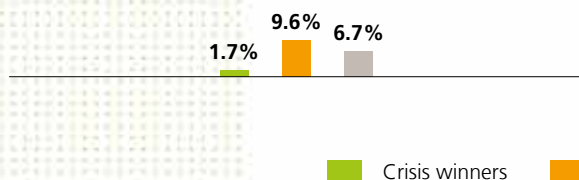
Percentage change in days payable outstanding (DPO) compared to 2019*



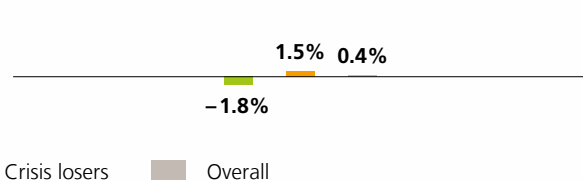
The development of the DPO figures highlights the accounts payable focused approach in WCM during the COVID-19 crisis. Exhausting supplier payment deadlines resulted in an increase in days payable outstanding of more than 10% year-on-year. Interestingly, the crisis winners achieved a reduction in the C2C cycle as they cut their C2C cycle by 1.8% year-on-year due, among other things, to more efficient accounts receivable management (-1.2%).

In contrast, the crisis losers recorded an increase in the C2C cycle. The sharp rise in days payable outstanding of more than 15% and the increase in days sales outstanding of more than 7% shows that companies in Switzerland tried to secure liquidity at the expense of their suppliers.

Percentage change in days inventory held (DIH) compared with 2019*



Percentage change in the C2C cycle compared with 2019*



* Sample information: 150 Swiss companies representative of all sectors excluding the financial sector; period from 2018–2020; database: Orbis (company database)

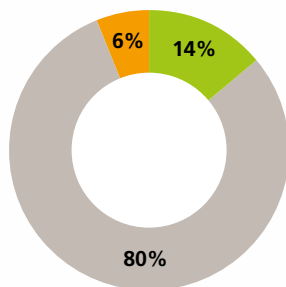
Emerging liquidity bottlenecks jeopardize operational continuity in the supply chain

Did the number of invoices settled after the due date rise during the COVID-19 crisis?

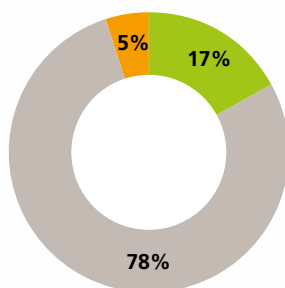
Crisis winners	43%	25%	32%
Crisis losers	30%	19%	51%

Disagree
Neither
Agree

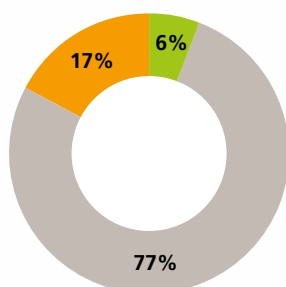
Anticipated liquidity bottlenecks for supply chain partners



Upstream supplier



Direct supplier



Customers

No cases
Few cases
Many cases

During the COVID-19 crisis, 51% of the crisis losers reported an increase in late payment of invoices. This increase points to a critical development. Overdue payments or even non-payment can cause far-reaching liquidity problems along the entire supply chain. As the consequences of transferring delayed payments to upstream suppliers might accumulate, SME suppliers in lower tiers of the supply chain could face liquidity problems that jeopardize their survival.

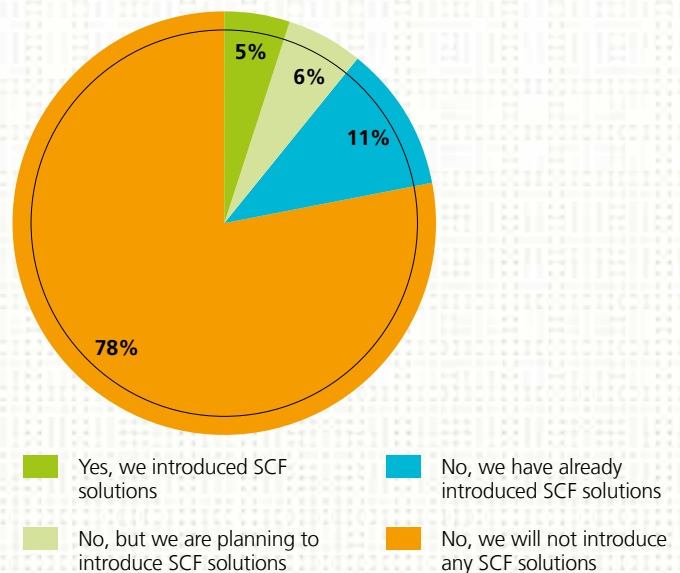
But that's not all. The consequences of the liquidity bottlenecks on upstream suppliers can also have an impact on customers in the form of supply disruption and a drop in quality. This means the effects of delayed payments or even non-payment also impact the company concerned. "Payment-induced boomerang effects" are created in the supply chain, which can jeopardize the operational continuity of all actors in the supply chain network.

Supply chain financing can be used preventatively to stabilize the supply chain

Besides their liquidity-generating attributes, SCF solutions have the benefit of not being charged to suppliers, unlike traditional supplier credit.

Swiss companies are beginning to appreciate this sustainable effect. 5% of companies introduced SCF solutions during the crisis and a further 6% plan to do so in the future. With 78% of companies not wishing to introduce SCF solutions, there is still huge potential for expansion.

Did you expand your WCM during the COVID-19 crisis by adding SCF solutions?

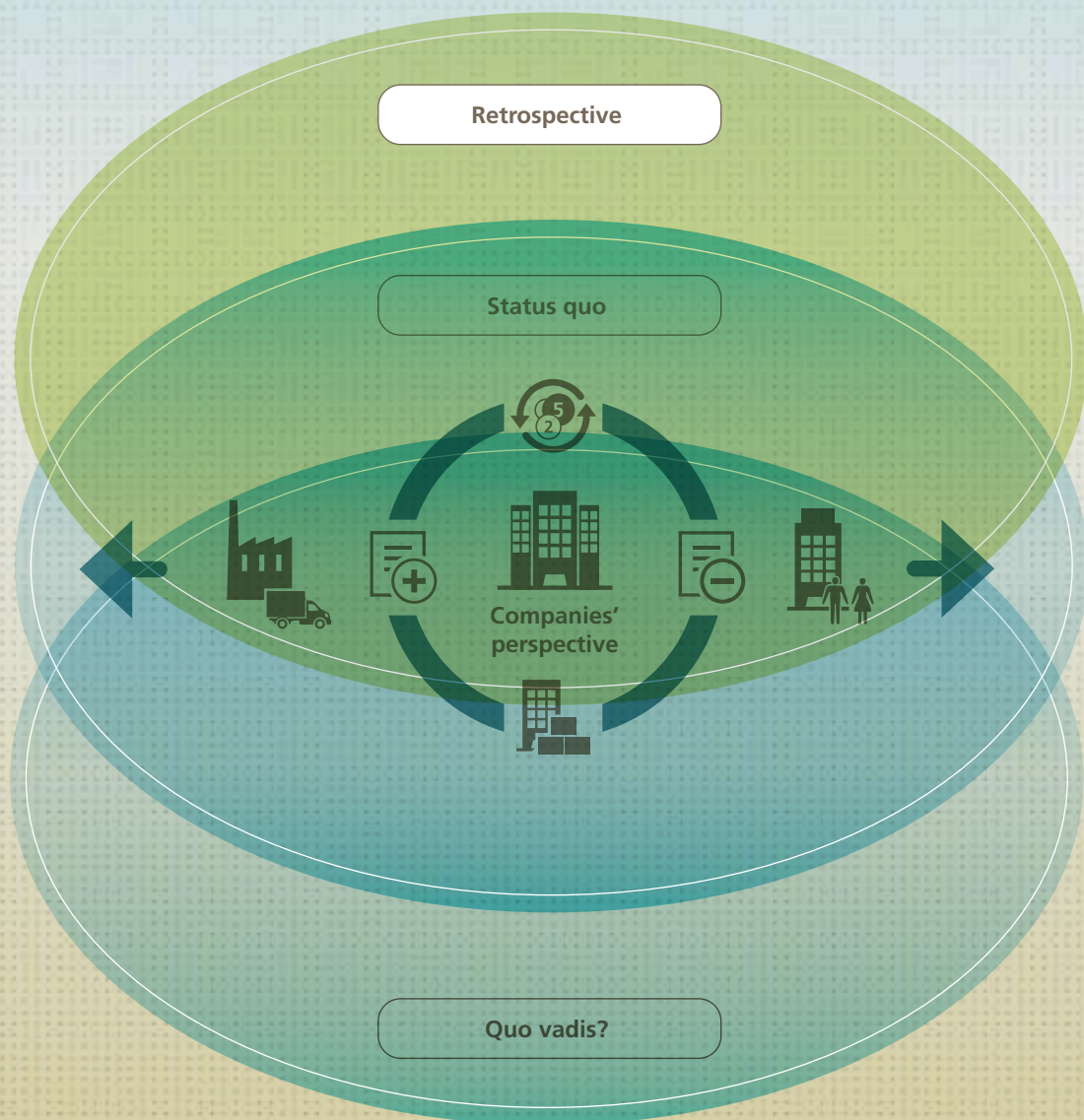


At the moment, it is hard to predict precisely what implications the COVID-19 crisis will have for WCM in the future. Concerns about postponed insolvencies in the supply chain network, the emergence of new types of SCF solutions, increasing regulatory requirements, and sharply rising inflation may shape the new normal in WCM. We can certainly say that the new alignment of WCM will increasingly be determined by factors that do not just focus on the financial optimization of net working capital, but also include more far-reaching elements (e.g. sustainability).

Future target areas in WCM

Securing operational continuity across the supply chain				
Integrating environmental and social aspects (ESG criteria)				
Addressing regulatory requirements in SCF				
Hedging against inflation and interest rate risks				
	Low	Medium		High

Retrospective



A package of state measures provided liquidity support to companies

Although the COVID-19 crisis originally hit the healthcare system, the measures taken by governments worldwide to combat the spread of the virus set the entire economy into a state of emergency. Swiss companies, too, were hit hard by the economic restrictions.

Governments around the world agreed on various support programmes to overcome the crisis. The Swiss package of measures intended to cushion the economic impact alone will amount to 70 billion francs by the end of 2021 – the biggest economic aid package in the nation's history.¹⁾ In addition to the extensive introduction of short-time working, companies were also able to rely on further measures which aimed to ensure their commercial survival:

COVID-19 bridging loans

In Switzerland, SMEs which were impacted by the restrictions could apply for a bridging loan from their bank of up to 10% of their annual revenue. Zero-interest loans of up to 500,000 francs were fully secured by the Confederation. The Confederation also secured 85% of more extensive loans up to 20 million francs.²⁾

Suspension of notices of overindebtedness

On 16 April 2020, the Federal Council exempted companies in Switzerland from the obligation to provide notice of overindebtedness. Companies did not have to report notices of overindebtedness if they were in a financially secure position at the end of 2019 and there were prospects of redressing the overindebtedness after the COVID-19 crisis. The measures were limited to six months and applied until 19 October 2020.

Huge state support measures were provided worldwide within a short space of time. The 15 billion euro coronavirus support fund in Austria, the 50 billion euro immediate support programme in Germany, and the 45 billion euro aid package in France are just a few examples that indicate the extent of the measures taken.³⁾

CHF 17 bn



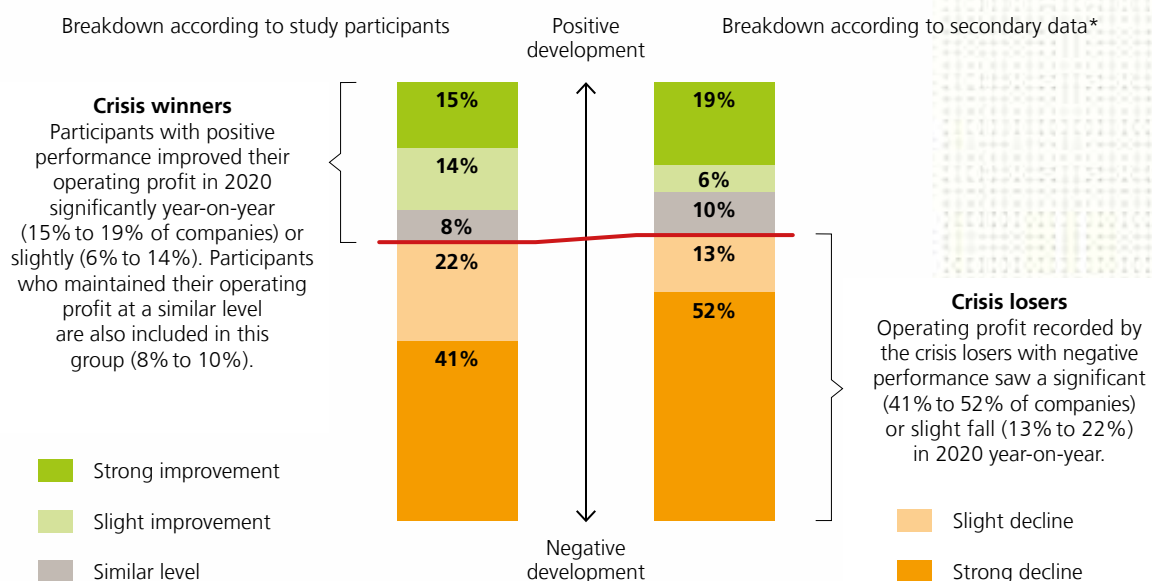
represents the volume of COVID-19 bridging loans that have been taken out since the start of the crisis in Switzerland (as at: June 2021).⁴⁾

The COVID-19 crisis generated countless losers and very few winners

Despite the state support measures, the impact of the economic restrictions hit many companies hard. Only actors which, on the one hand, were able to continue operating despite the restrictions and, on the other, were able to adapt their business model to the new circumstances benefited during this period. Examples of this include the online retail sector, which has enjoyed a major boom and whose market volume in Switzerland rose by 27.2% in 2020.¹⁾ However, most companies suffered from sharp declines in revenue, which in turn resulted in significant liquidity bottlenecks. The COVID-19 crisis produced both winners with positive performance and losers with negative performance.

These performance groups are analysed in a differentiated way in this year's WCM Study. The development of the operating result (operating profit) between 2019 and 2020 is used as a basis for the analysis. A clear picture emerges – operating profit fell significantly at more than 60% of the companies. Unlike these crisis losers, just under 30% of companies emerged as clear crisis winners.

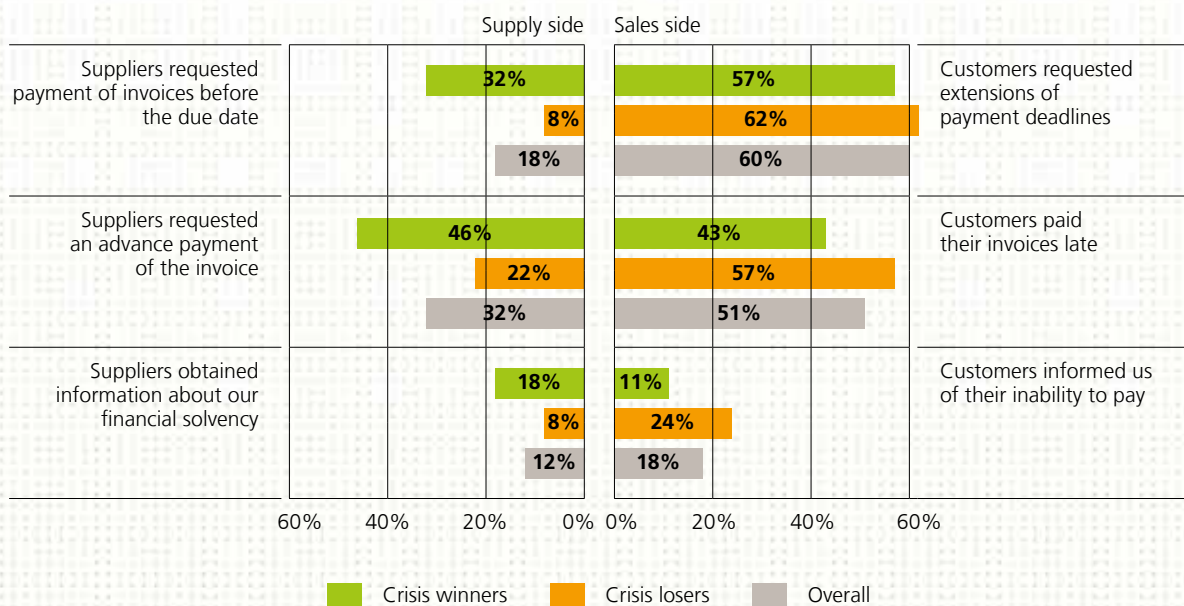
Development of operating profit in 2020 year-on-year



* Sample information: 150 Swiss companies representative of all sectors excluding the financial sector; period from 2018–2020; database: Orbis (company database)

Winners and losers had to contend with many challenges during the crisis

Challenges in WCM during the COVID-19 crisis



Challenges in WCM increasingly emerged on the sales side during the COVID-19 crisis. To increase their liquidity, customers tended to extend their payment terms beyond contractual agreements – at the expense of their suppliers' liquidity. The survey results underscored this development as 60% of the companies indicated they had received requests to extend payment terms. Half of the companies also reported invoices being paid late by customers. The fact that mainly crisis losers complained of late receipt of payment is an indication of the negative effects resulting from the transfer of liquidity problems to suppliers.

The challenges on the supply side appear slightly less urgent. Here, we see that suppliers only contact their customers directly to request premature or advance payments if they face increased liquidity requirements. The fact that suppliers mainly emerged as crisis winners can be seen as a result of the transfer of liquidity problems described above. Suppliers do not expect support as a result of customers paying late. Suppliers also wish to reduce requests for early payment to a minimum as they could be interpreted by customers as a sign of financial weakness.

Measures aimed at combating the crisis concerned accounts payable ...

Concerning the measures undertaken by companies to deal with the crisis, a clear preference emerged in terms of accounts payable management. Exhausting the payment terms granted by suppliers is predominant in the WCM of all companies at 58% and is viewed as a significant lever for maintaining short-term liquidity. This behaviour can be explained by the fact that Swiss companies paid their suppliers on time or even ahead of schedule before the crisis, which means there is increased potential for exhausting payment terms.

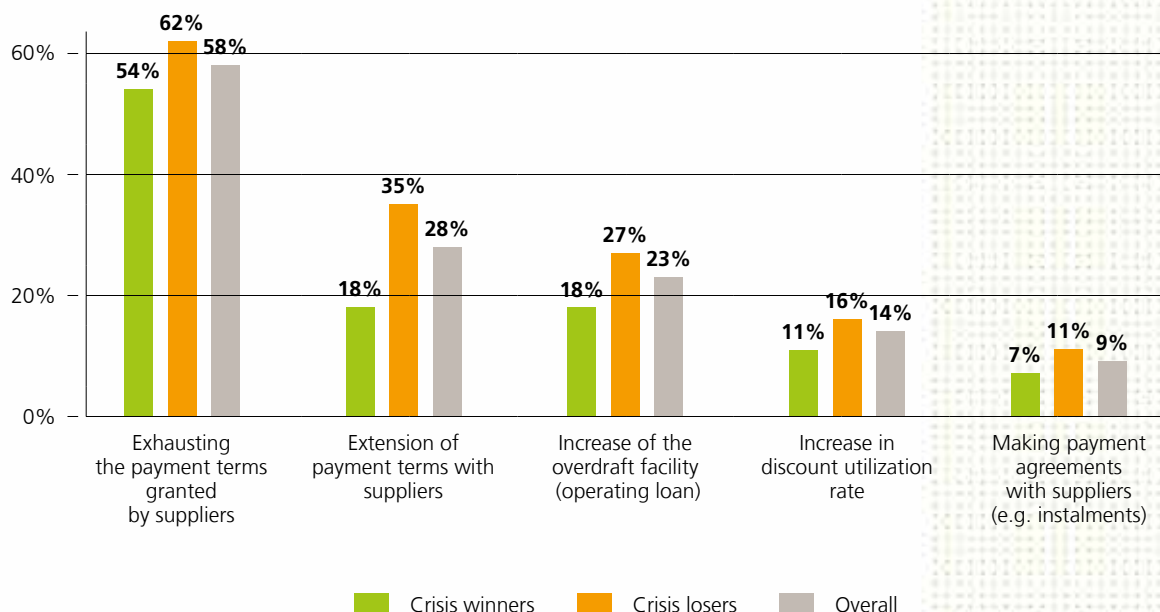
81%



of the companies used at least one of the WCM measures listed in accounts payable management during the COVID-19 crisis.

The results also indicate that crisis losers tend to rely on additional WCM measures. This is primarily due to increased liquidity requirements. The share of crisis losers using an extension of payment terms with suppliers at 35% is around twice as high as the share of crisis winners.

COVID-19-induced WCM measures in accounts payable management



... as well as accounts receivable

69%



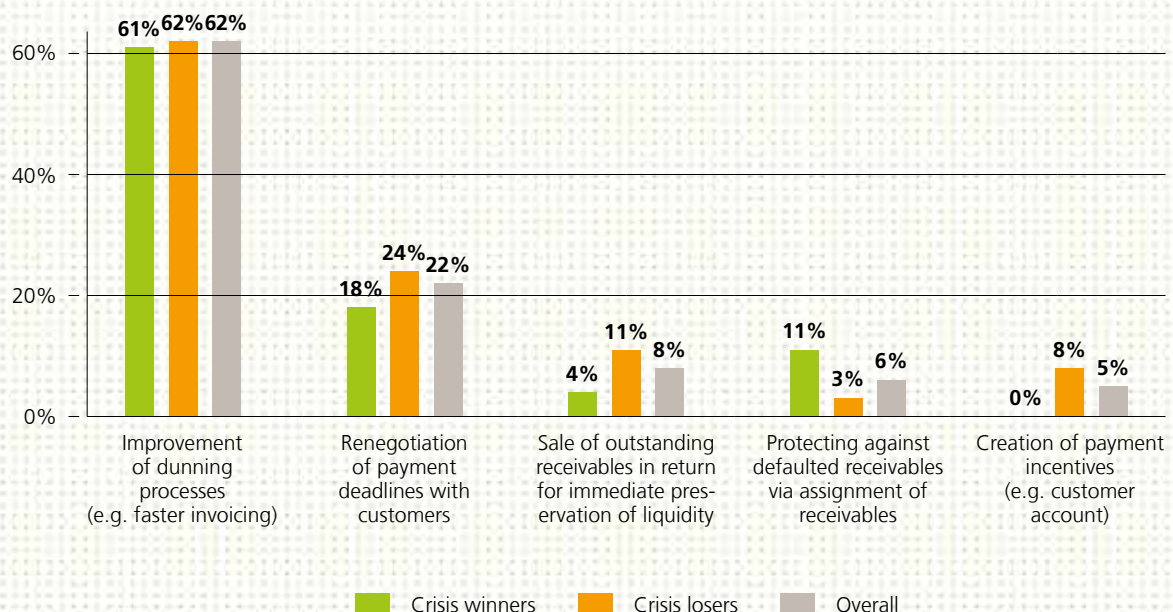
of the companies used at least one of the WCM measures listed in accounts receivable management during the COVID-19 crisis.

During the COVID-19 crisis, the improvement of the dunning processes was the instrument of choice in accounts receivable management. 62% of Swiss companies accelerated invoicing processes. This measure enables companies to avoid proactive confrontations with customers. It means that requests for early payment can be avoided.

Measures requiring direct customer contact were only used to a small extent. While 22% of companies renegotiated payment terms with customers, the sale or assignment of accounts receivable was used much less frequently. The creation of payment incentives also only represented an alternative for a few companies at 5%.

The results confirm that Swiss companies tended to adopt a cautious approach during the COVID-19 crisis when it came to accounts receivable management. The approach adopted is explained by concerns that customers may interpret requests for early payment as a sign of financial weakness and potentially look for alternative suppliers.

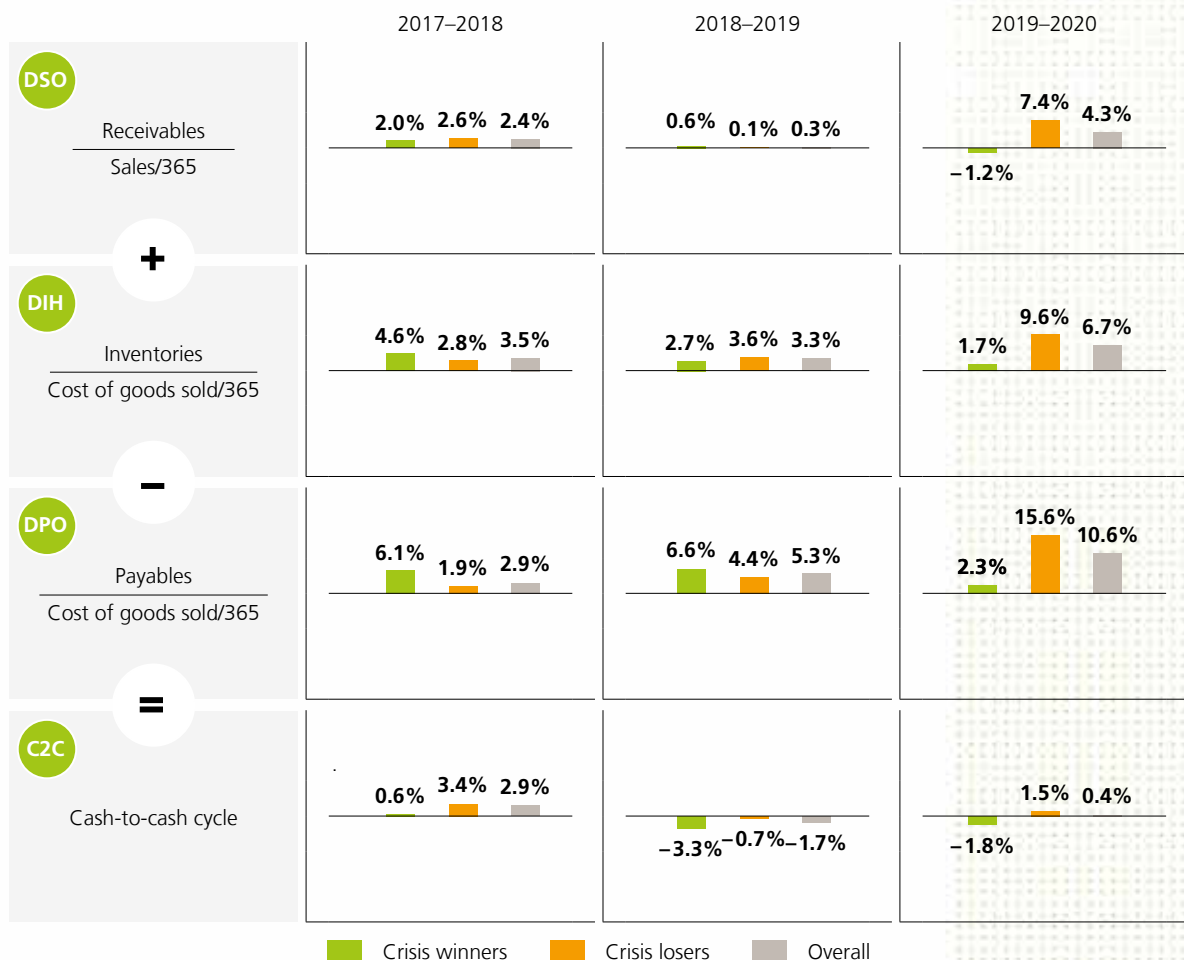
COVID-19-induced WCM measures in accounts receivable management



The C2C cycle is the main key indicator for working capital management in companies

It is not just during times of crisis that securing liquidity in day-to-day business is important. As a key indicator in WCM, the cash-to-cash cycle (C2C cycle) is a popular parameter for working capital management. The C2C cycle records the cash conversion cycle at companies in days between payment to suppliers (DPO) and receipt of payment from customers (DSO) including the entire inventory period (DIH).

Percentage changes of C2C-cycle components year-on-year*



* Sample information: 150 Swiss companies representative of all sectors excluding the financial sector; Period from 2017–2020; database: Bloomberg

Due to the high volatility of the key indicators, the C2C cycle displayed weaknesses during the crisis

Unlike the winners, the losers of the COVID-19 crisis experienced a clear increase in the individual components in all areas of the C2C cycle. By contrast, the performance of the crisis winners was more differentiated.

In accounts receivable management, the crisis losers waited on average 7.4% longer for payment from their customers year-on-year. The crisis winners achieved the opposite. By reducing the receivables term (DSO) by 1.2%, they managed their receivables more efficiently during the crisis than in 2019.

A similar picture emerges in the handling of accounts payable (DPO). Both performance groups extended the payment terms for suppliers as in the previous years. However, the increase amongst the crisis losers at 15.6% was much higher than the 2.3% among the crisis winners. This development was previously observed in the WCM measures taken. This confirms that companies' problems were increasingly transferred at the expense of suppliers' liquidity.

As the inventory periods (DIH) of the crisis losers also rose at a higher rate than in the previous years, the development of the C2C cycle increased by 1.5%. By contrast, the crisis winners achieved a 1.8% reduction in the cash conversion cycle during the COVID-19 crisis.

However, we need to exercise a degree of caution in analysing the key indicators of the C2C cycle during the COVID-19 crisis. In a business environment where volatility is high, reference-date figures do not generally provide a meaningful picture of current developments.

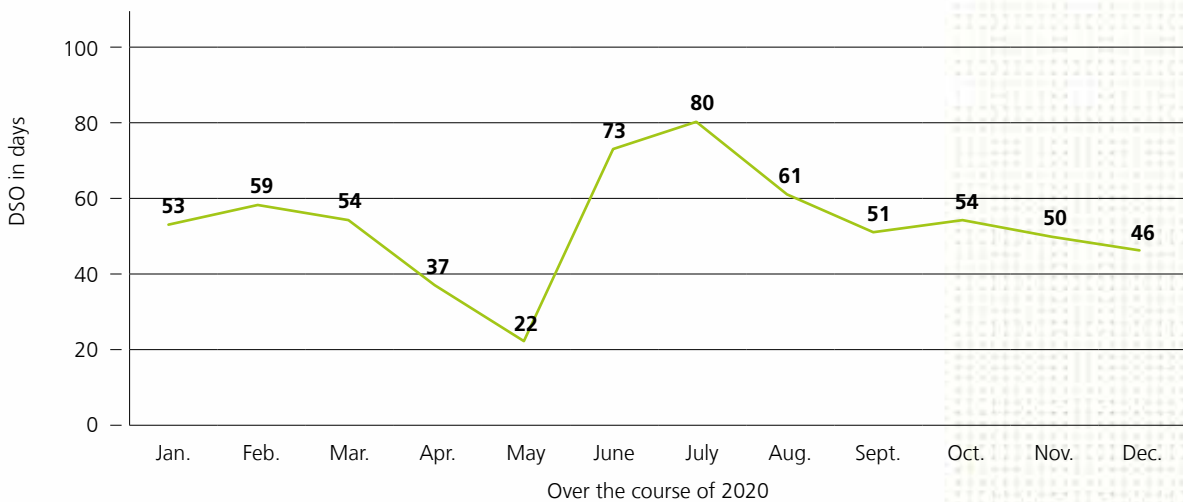
The C2C cycle period also only takes account of changes in the individual company concerned. Typically, effects on upstream suppliers or downstream customers are not systematically recorded in the key indicator. Attempts to shorten the C2C cycle short-term via extended accounts payable conversion can result in working capital boomerang effects. The suppliers faced with longer payment terms experience liquidity problems themselves short-term and factor the additional capital costs incurred into the price of their products over the medium term.

Case study: Schaeffler Group

Reference-date key indicators are not adequate for the operational management of accounts receivable

Background

As an international automotive and industrial supplier, the Schaeffler Group faced the challenge of establishing a suitable range of management tools when introducing financial supply chain management. The aim was to provide meaningful input during the crisis for the tools. An initial need for action was identified in accounts receivable management.

An example of a DSO key indicator of an anonymized Schaeffler customer

Analysis of the DSO indicator alone was not sufficient for the day-to-day management of receivables. This is due to the high level of volatility and the relatively low meaningfulness of the indicator in relation to the actual receivables situation. This issue became apparent during 2020. The average DSO indicator stood at 53.4 days in 2020. From February the figure fell, bottoming out at 22.1 days in May, before rising to 80.3 days in July and returning to the pre-crisis level in September.

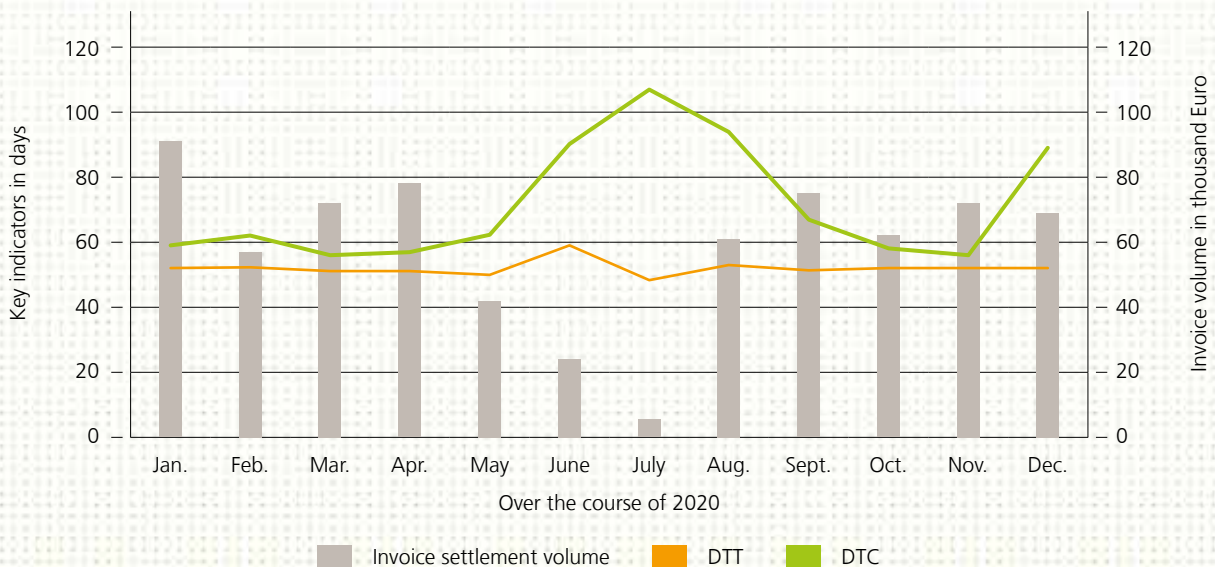
The solution

The Schaeffler Group recognized that greater transparency in the processes was needed to ensure professional accounts receivable management. With this in mind, the company upgraded its key indicator system. This is based on all billing transactions (incl. settled invoices) within a month. The key indicator system complements the DSO analysis, and does not just record outstanding receivables and booked invoices.

The extended accounts receivable analysis improved transparency significantly during the COVID-19 crisis

The days to term (DTT) and days to cash (DTC) indicators were added to the key indicator system. DTT indicates the invoice-volume-weighted length of the payment terms for all transactions. DTC includes DTT and is extended by the days where the customer does not pay by the agreed due date. This means the DTC indicator records the period where the capital is tied up with a particular customer.

Extended accounts receivable analysis (DTT and DTC) of the sample customer and the level of invoice settlement volume during the COVID-19 crisis



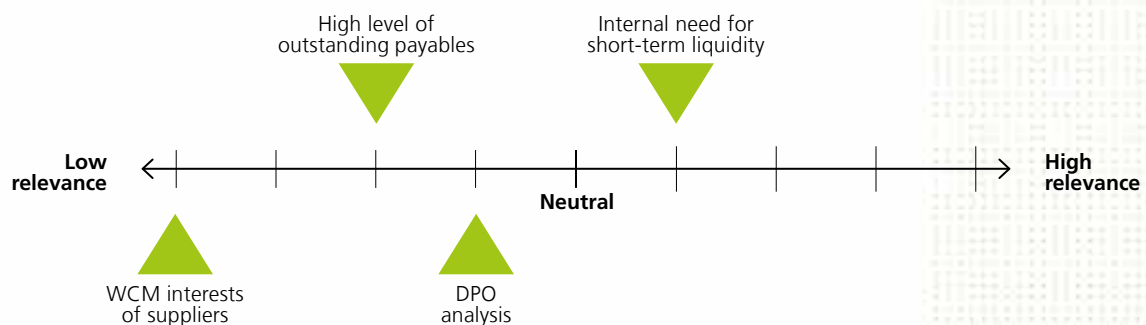
In this example, the DTT indicator stands at 52 days on average at the end of the month throughout 2020. The brief rise in June 2020, followed by an immediate decline in July 2020, is clearly evident. The accounts receivable analysis shows that the customer only settled invoices with a net payment term of 60 days in June. The settlement volume then fell below EUR 100,000 in July. The customer's main volume was now via invoices with a net payment term of less than 50 days. Customer revenues normalized from August 2020 onwards.

The analysis of the DTC indicator shows that the customer paid 14.7 days after the agreed due date on average. With the increase in COVID-19 disruption from April 2020, the customer only settled long overdue invoices. This is shown by the rise in the DTC indicator from 56.7 days in April to 107.5 days in July 2020. The integration of this information produces a comprehensive picture, which the DSO analysis alone would not have provided.

Univariate management of WCM with just one key indicator is usually not sufficient

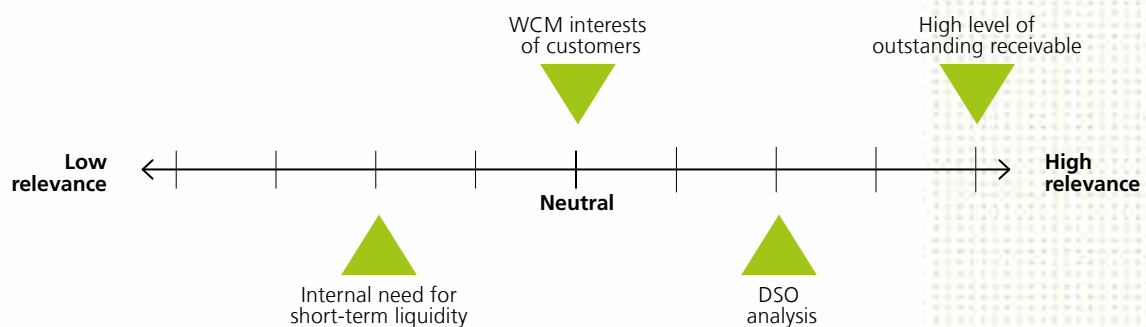
More and more Swiss companies believe the analysis of the C2C cycle alone in WCM is inadequate. Alternative criteria in managing accounts payable and accounts receivable are gaining importance.

How do you assess the relevance of the criteria used for controlling your accounts payable management during the COVID-19 crisis?



Both the companies themselves and their supply-chain partners accelerated accounts payable management during the crisis. The main driver was the internal corporate need for short-term liquidity. Criteria such as the interest of suppliers in early payments were deemed much less relevant to WCM during this period.

How do you assess the relevance of the criteria used for controlling your accounts receivable management during the COVID-19 crisis?



Swiss companies set different controlling priorities in accounts receivable management. The high level of outstanding receivables and the accounts receivable term were deemed to be the relevant criteria. Much less importance is attached to short-term liquidity needs than accounts payable management.

The extended analysis of payment behaviour reveals the extent of the liquidity crisis

The analysis of overdue accounts receivable illustrates how significantly the crisis has affected the payment behaviour of Swiss companies. 32% of the crisis winners recorded an increase in the number of invoices paid after the due date. The trend amongst the crisis losers is even more striking. 51% reported an increase in late payments from their customers. This increase includes a rise in the value of the overdue invoices in many cases, which is a concerning development in the payment behaviour of Swiss companies during the COVID-19 crisis.

Did the number of invoices settled after the due date increase during the COVID-19 crisis?

Crisis winners	43%	25%	32%
Crisis losers	30%	19%	51%

Did the value of the invoices settled after the due date increase during the COVID-19 crisis?

Crisis winners	54%	21%	25%
Crisis losers	35%	27%	38%

Disagree
Neither
Agree

A well-known rule seems to retain its validity even during the crisis: if companies fail to collect the outstanding receivables, the outcome is a payment default. These defaults can cause considerable liquidity problems for companies as additional revenue has to be generated many times to compensate the default on the amount of the receivables.

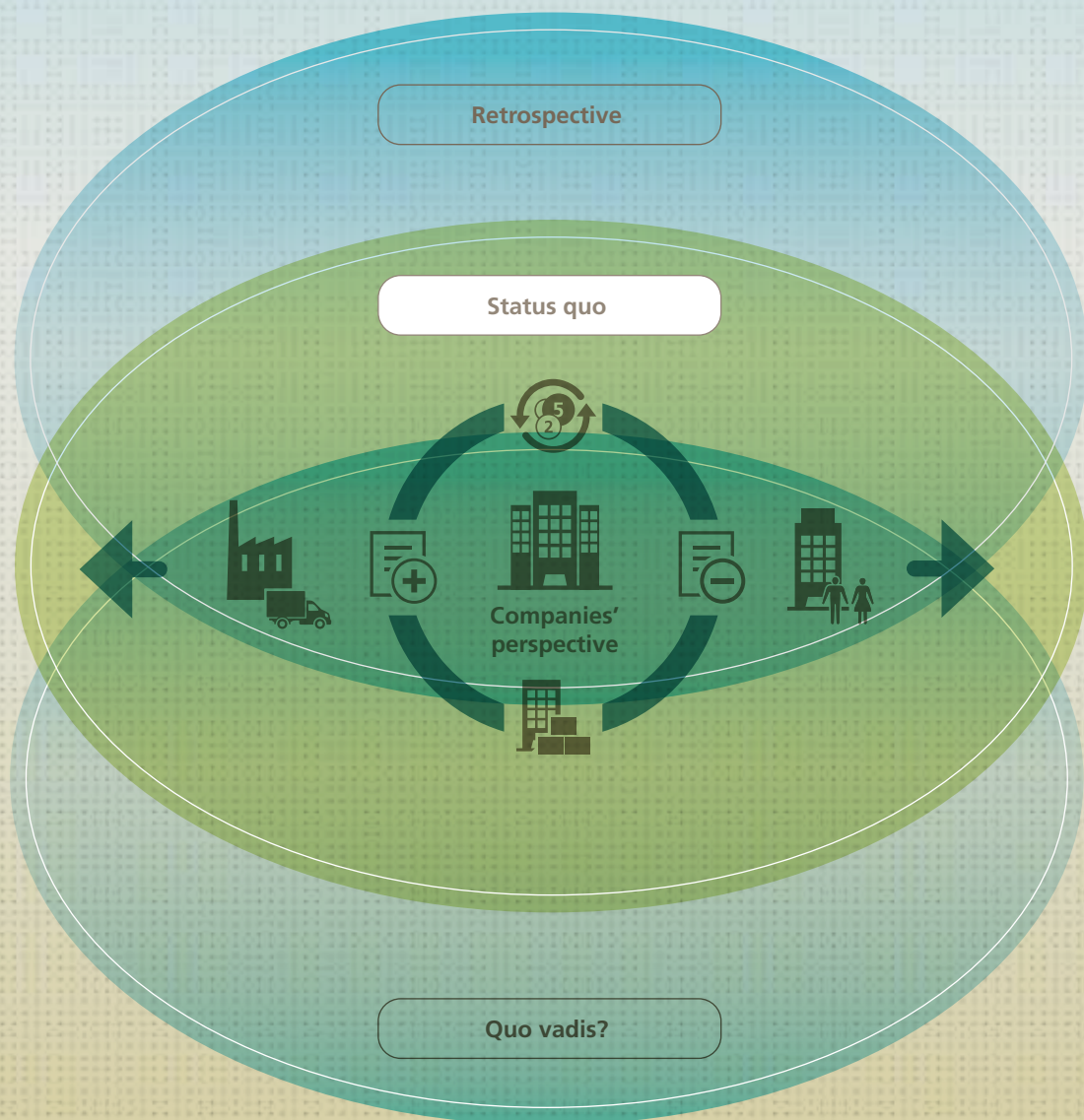
20%



of crisis losers reported an increase in the number of defaulted invoices as well as an increase in the value of defaulted invoices.

Based on this correlation, an increase in defaults on invoices is often seen as a precursor to an impending liquidity bottleneck. The development of payment behaviour during the COVID-19 crisis raises the question of whether the supply chains of Swiss companies are still on a solid liquidity footing.

Status quo



The consequences of the economic restrictions during the COVID-19 crisis are still not entirely clear

Swiss finance managers are currently facing the consequences of the economic restrictions during the COVID-19 crisis. The expiry of state support measures, the emerging fall in the level of creditworthiness in various sectors, and the postponement of the overall market shakeout of effectively insolvent companies presents risks for the entire supply chain.

19%

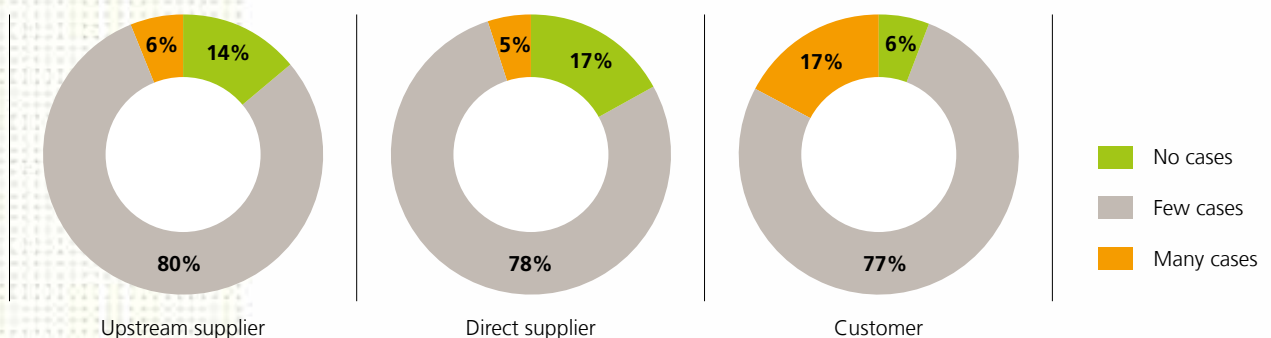


fewer cases of company insolvency were recorded in Switzerland in 2020 than in the previous year.¹⁾

The situation sounds like a paradox: of all times, company insolvencies fell significantly during the crisis year of 2020. This does not just apply to Switzerland (–19%) but also to Germany (–8%) and Austria (–40%).¹⁾ There are growing concerns that the state support measures and temporary suspension of the notice of overindebtedness have created a wave of zombie companies. Zombie companies are firms that would have been forced to declare bankruptcy under normal circumstances, but have been able to stay alive artificially due to the financial support. Such “zombification” creates the problem that the actual financial state of companies and their supply chains are no longer being recorded by the usual analysis tools. The market shakeout, which would normally have happened, has been prevented. The very low level of interest rates also favours the emergence of zombie companies as they can continually take out new loans which they use to pay off old ones.

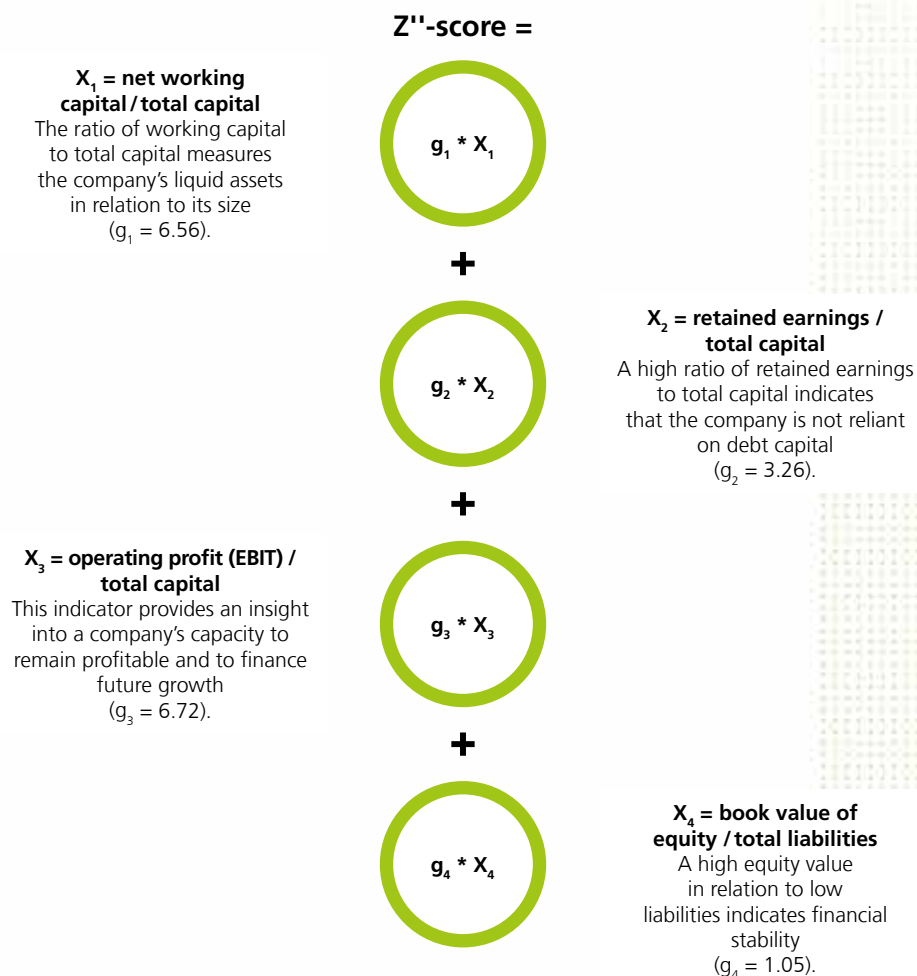
This uncertainty regarding zombification is consistent with the assessments of the study participants. A greater number of insolvencies (17% of companies) is expected on the customer side in particular in the near future.

Anticipated liquidity bottlenecks for supply-chain partners



The time will come when the liquidity of zombie companies runs out

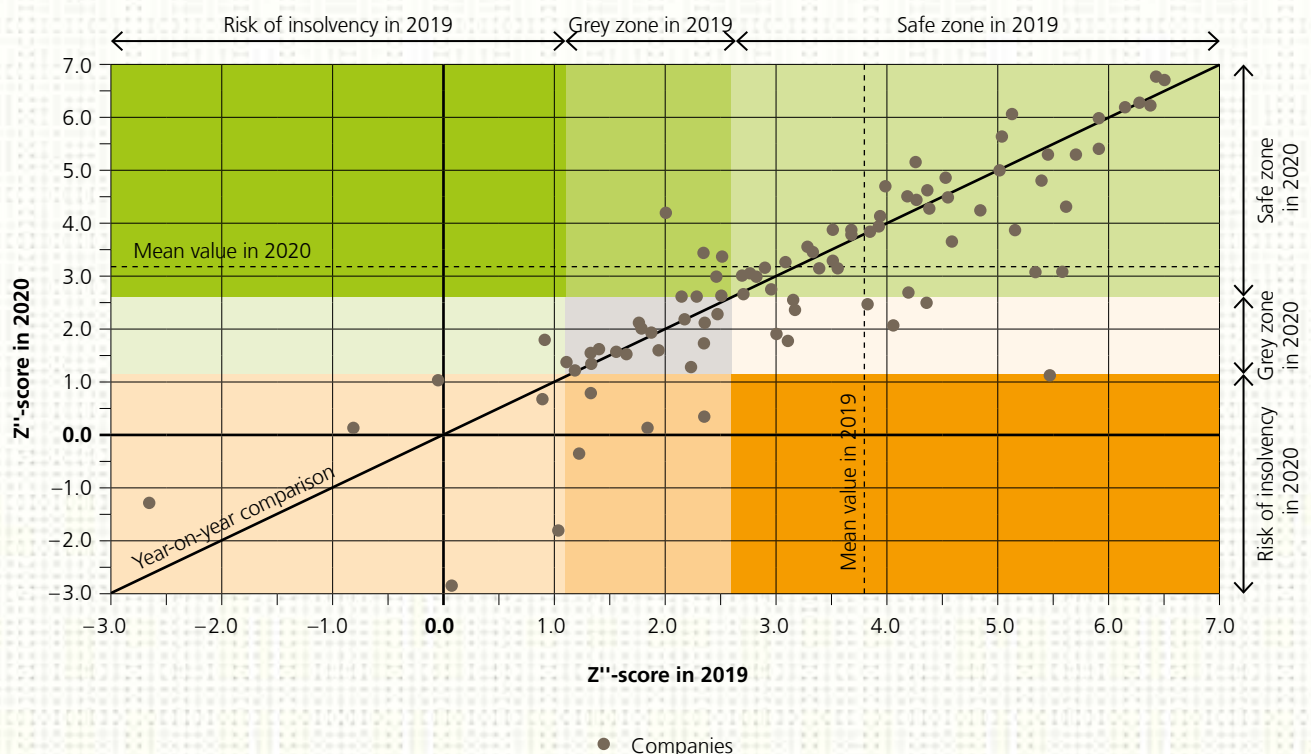
To estimate the current state of insolvency in the Swiss economy, the following statements were made about the likelihood of companies facing insolvency within a two-year period. Using the Z-score model of Edward I. Altman, the Z''-scores of various Swiss companies are analysed in this study. In contrast to the original Z-score (only applies to the manufacturing industry), the Z''-score used here is not sector-specific. The score is calculated using four differently weighted parameters (X_1 to X_4), whose weighting Altman derived from previous insolvencies.



Various indications point to a tight insolvency situation in Switzerland

The annual comparison of the Z''-score shows that 55% of the Swiss companies analysed reduced their likelihood of insolvency slightly in 2020. This recognition is explained by the small distance between the points (companies) above the diagonal yearly comparison line. However, the decline in the Z''-score of the remaining 45% of companies has a greater weighting in calculating the arithmetic mean value. The mean value fell from $Z'' = 3.8$ in 2019 to $Z'' = 3.2$ in 2020. The analysis clearly illustrates that the likelihood of insolvency rose significantly for some companies during the crisis.

Z''-score – a year-on-year comparison for 2019/2020*



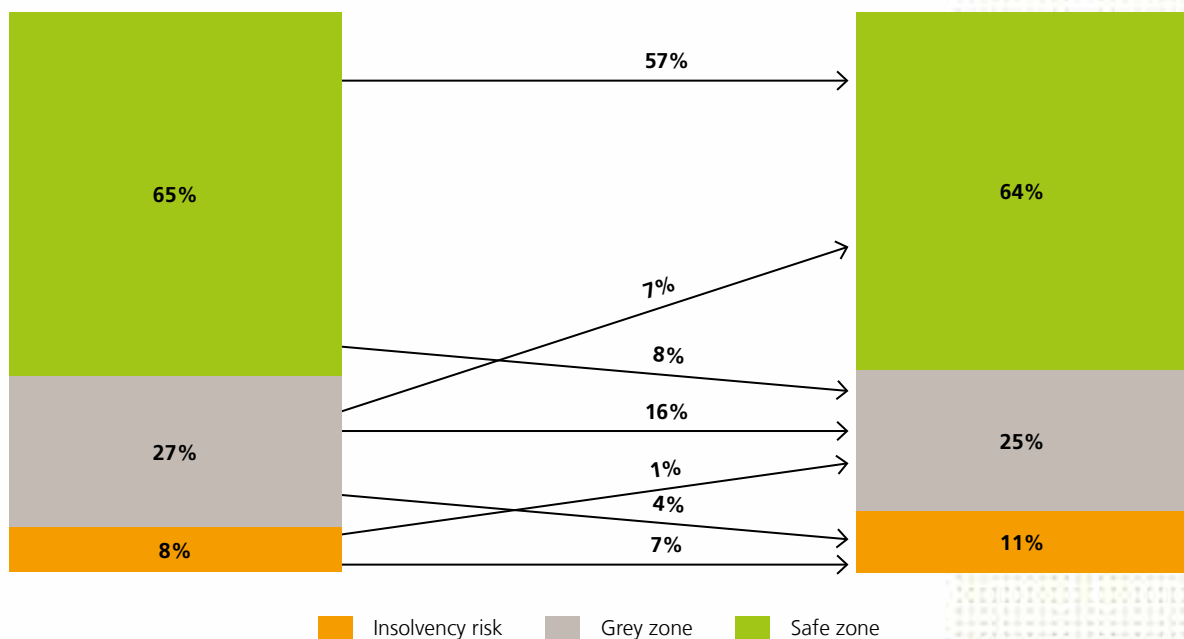
In addition to the increase in outstanding and defaulted receivables among crisis losers, the decline in the arithmetic Z''-score is a further indication of the emergence of zombie companies within the Swiss economy.

* Sample information: 150 Swiss companies representative of all sectors excluding the financial sector; period from 2018–2020; database: Orbis (company database)

Despite the solid liquidity basis enjoyed by many companies, the warning signs are growing in Switzerland

The overall analysis of the companies in the respective Z''-categories shows that the insolvency forecast for 80% of Swiss companies has not changed during the COVID-19 crisis. As before the crisis, around two-thirds of Swiss companies have a low risk of insolvency (safe zone). The number of companies slipping from the safe zone into the grey zone is offset by companies that have actually improved their Z''-score during the COVID-19 crisis. Overall, 8% of Swiss companies reduced their risk of insolvency.

Development of the Z''-score categories year-on-year



Contrary to the positive development, 12% of Swiss companies show an increase in the likelihood of insolvency. 4% of the companies that were in the grey zone in 2019 – which meant they already exhibited negative indicators of insolvency – are classified as at risk of insolvency in 2020.

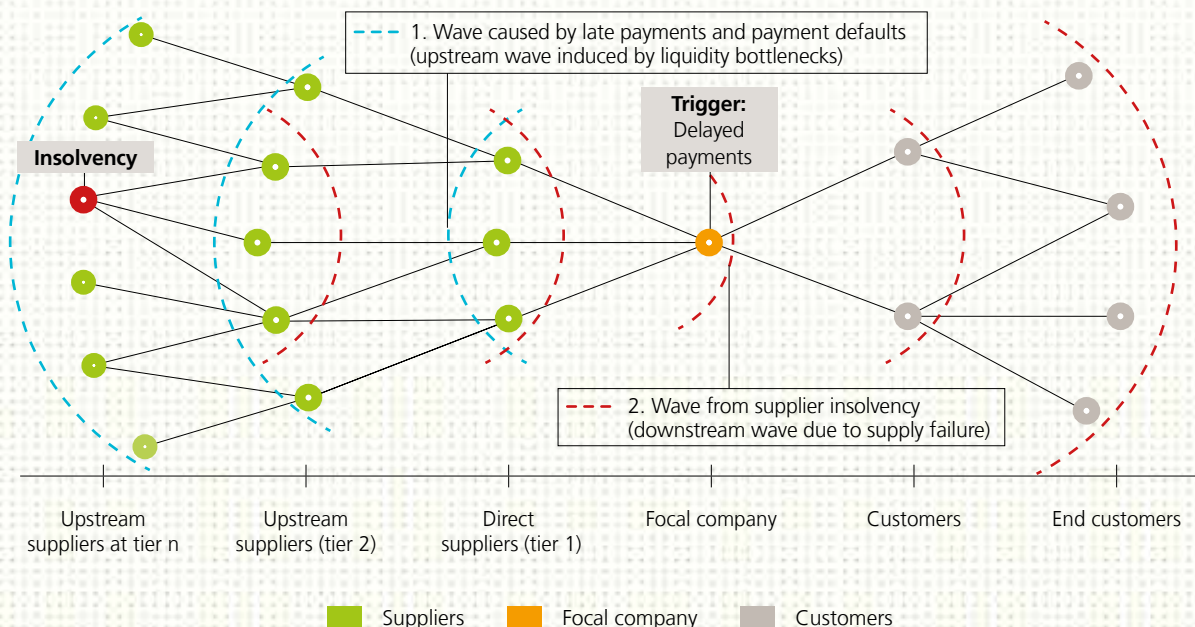
The Z''-score is a leading indicator – its consequences have not yet impacted the real economy. One reason for this is the postponement of notices of insolvency, on one hand, and the possible increase in zombie companies, on the other. How the liquidity situation of suppliers and customers from abroad develops also remains to be seen.

Delayed payments can have boomerang effects across the entire supply chain network

The following generic example illustrates the consequences that delayed payments can have on a complex supply chain network. The effects of delayed payments build up across the supply chain as liquidity problems are transferred to upstream suppliers. A first wave of liquidity bottlenecks is triggered upstream. Upstream suppliers at tier n have to contend with these cumulative payment fluctuations as they also face a tight liquidity situation due to the crisis.

If this first wave hits suppliers facing tight financing conditions, this can result in liquidity-induced supply failures or even insolvencies, with their consequences having an impact downstream in a second wave. This second supply-failure-related wave presents a more serious risk as customers of the focal company can now also be affected in addition to suppliers.

Payment-induced boomerang effects in supply chains

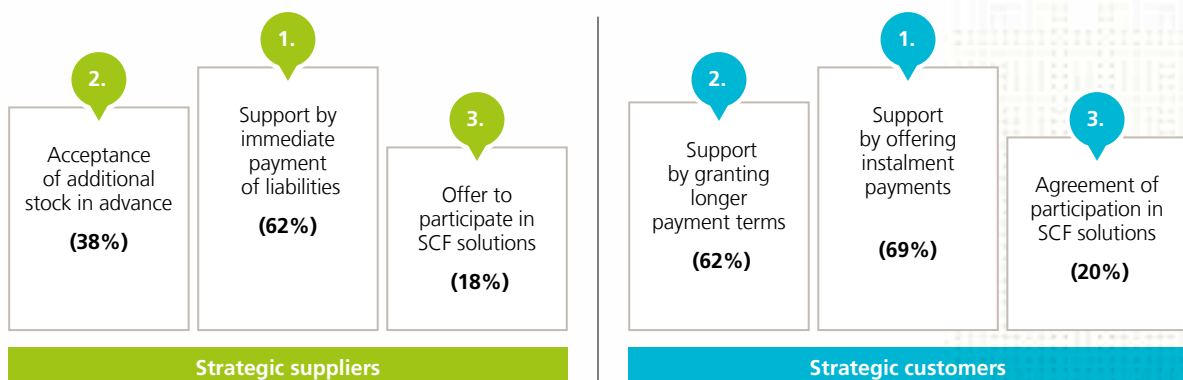


The waves outlined can be described as “payment-induced boomerang effects in supply chains” (in short: financial bullwhip effects). They illustrate the medium to long-term outcome of the transfer of liquidity problems to suppliers, which has often been applied during the COVID-19 crisis.

Reactive support measures exist to overcome liquidity bottlenecks in the supply chain ...

If a liquidity bottleneck occurs in the supply chain, companies have various options to provide financial support to suppliers or customers.

WCM measures to support supply chain partners



Contrary to the transfer of liquidity problems during the COVID-19 crisis, Swiss companies show a relatively high level of solidarity in supporting supply chain partners. 86% of the companies state that they can support their suppliers with WCM measures during a liquidity bottleneck. The willingness to support customers facing a financial bottleneck is even higher with a score of 91% in agreement.

Both preferred measures – on the supplier and customer side – are pragmatic in nature. Payment flexibility through immediate payment of suppliers (62% of companies) and the provision of instalment payments (69% of companies) are seen as the preferred measures for direct support.

Compared to other measures, taking part in existing SCF programmes is viewed with more restraint (around 20% of the companies). Here, it is important to note that SCF solutions need to be established before the bottleneck occurs in the company. Experience has shown that launching an SCF solution (incl. the required IT integration and onboarding process) takes between three and four months on average.

6%

of companies indicated that they are unable to support suppliers or customers during a financial bottleneck.

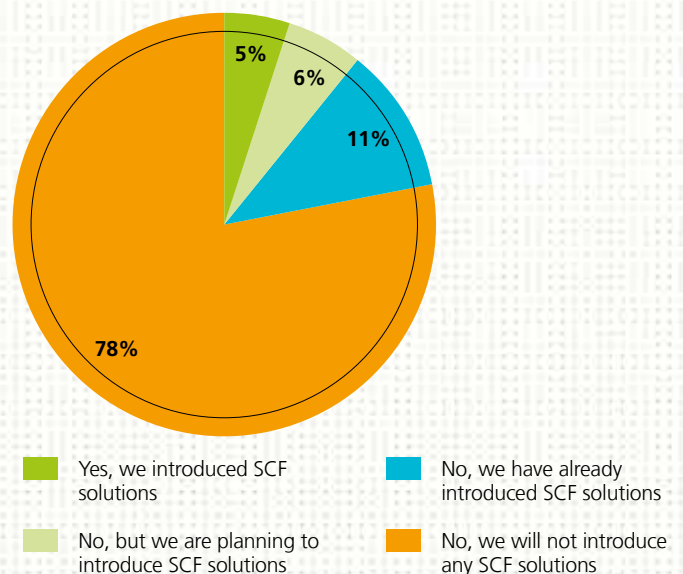
... and even preventative instruments to offset future liquidity bottlenecks with supply chain financing

Various SCF solutions* are available to secure and release inter-company liquidity in the value creation networks. The introduction of SCF solutions stabilizes the liquidity situation across the supply chain in the long term. This practice can be used preventatively to combat the emergence of payment-induced boomerang effects in the supply chain.

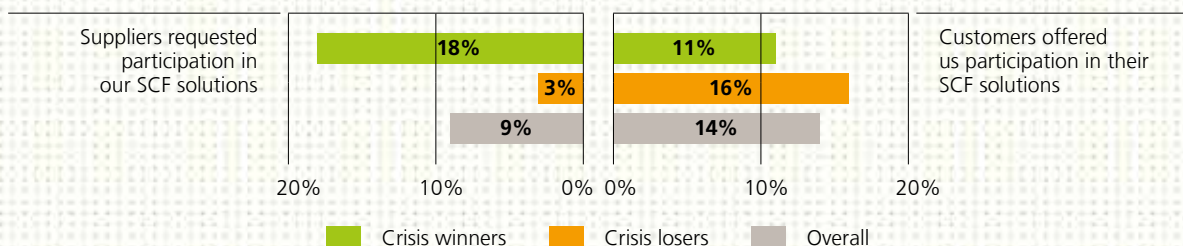
The use of SCF solutions in Switzerland still has considerable potential for expansion. As a further 5% of companies introduced SCF solutions during the COVID-19 crisis, around 16% of companies are currently using SCF for working capital management. This is an upward trend as another 6% of companies plan to introduce SCF solutions in future.

Above all, the analysis across the supply chain highlights the growing interest in SCF solutions. 18% of crisis winners received requests from suppliers to participate in their SCF solutions and 16% of crisis losers received offers from their customers to participate in their SCF solutions.

Did you expand your WCM during the COVID-19 crisis by adding SCF solutions?



Supply and demand of SCF solutions



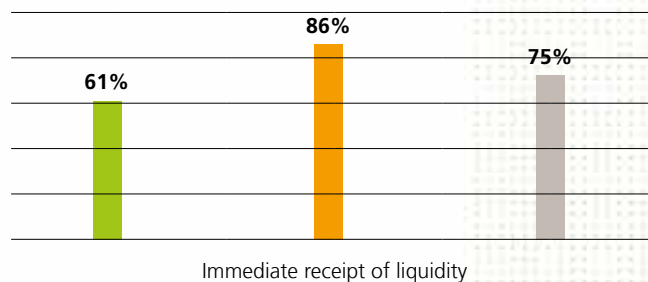
* NB: A list of various SCF solutions can be found in the annex to this study and in the WCM Studies from previous years (see recommended literature).

The importance of factoring – one of the most well-known SCF solutions – has grown even more during the crisis

The old saying that periods of crisis are generally good years for factoring proved true during the COVID-19 crisis. 86% of companies indicated that factoring became more important for them during the crisis. Furthermore, Swiss business leaders increasingly understand how to use the multifaceted nature of factoring for their own benefit. We can recognize this development when looking at the increase in the importance of the three main functions of factoring.

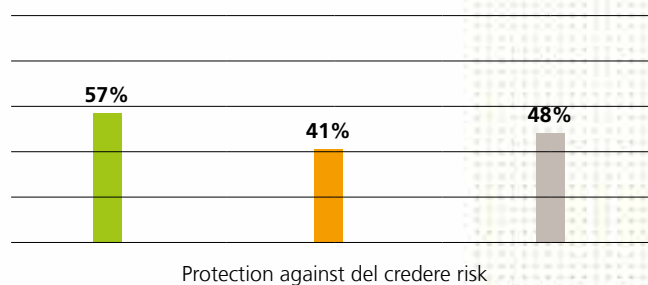
1. Financing function

This function of factoring is clearly the most important for Swiss companies. 75% of companies attribute the growing importance of factoring to the immediate receipt of liquidity by selling accounts receivable.



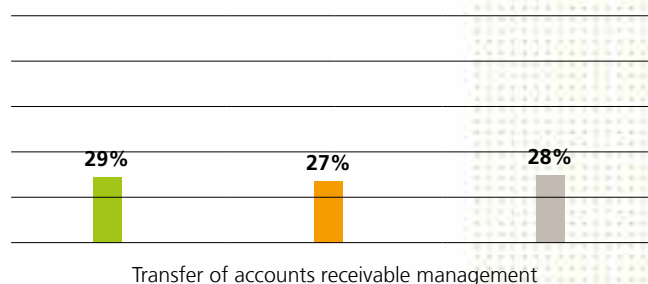
2. Del credere function

If the factor assumes the default risk, the transferring company is protected against loss of assets and obtains a more reliable basis for its liquidity planning. Crisis winners in particular (57% of companies) appreciate this function of factoring.



3. Service function

Accounts receivable management can also be transferred, i.e. the accounts receivable accounting, billing process and the dunning and payment collection procedures. At 28%, slightly less relevance is attributed to this function for the increase in the importance of factoring than the other functions.

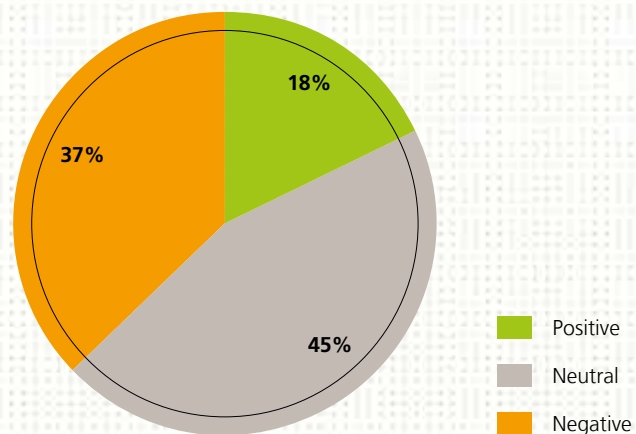


There is still a degree of reluctance towards the use of SCF solutions in Switzerland

Besides the inter-company improvement of working capital, SCF solutions promise a rise in the operational efficiency of financial processes between suppliers, customers and external service providers (e.g. banks or fintechs). The successful introduction requires the persuasion and involvement of internal and external stakeholders and undoubtedly represents a major obstacle to the introduction of SCF solutions.

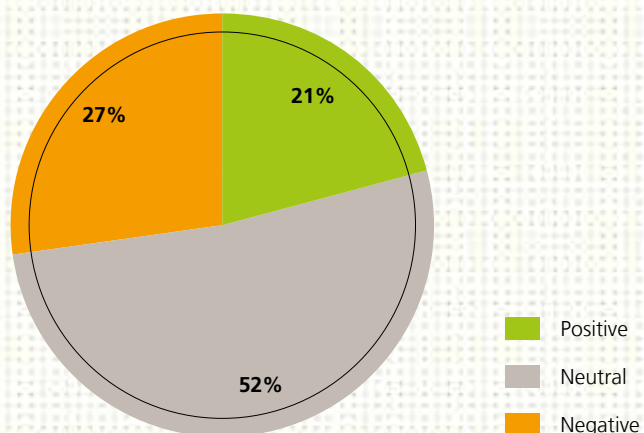
SCF solutions on the accounts receivable side (e.g. factoring) are rated negatively by 37% of customers. The reason for this is primarily the concern that the use of SCF solutions is regarded as a sign of financial distress of the user (supplier). 45% of companies adopt a neutral position. In their view, these SCF solutions are internal company matters.

How would you evaluate the assignment of receivables by your supplier?

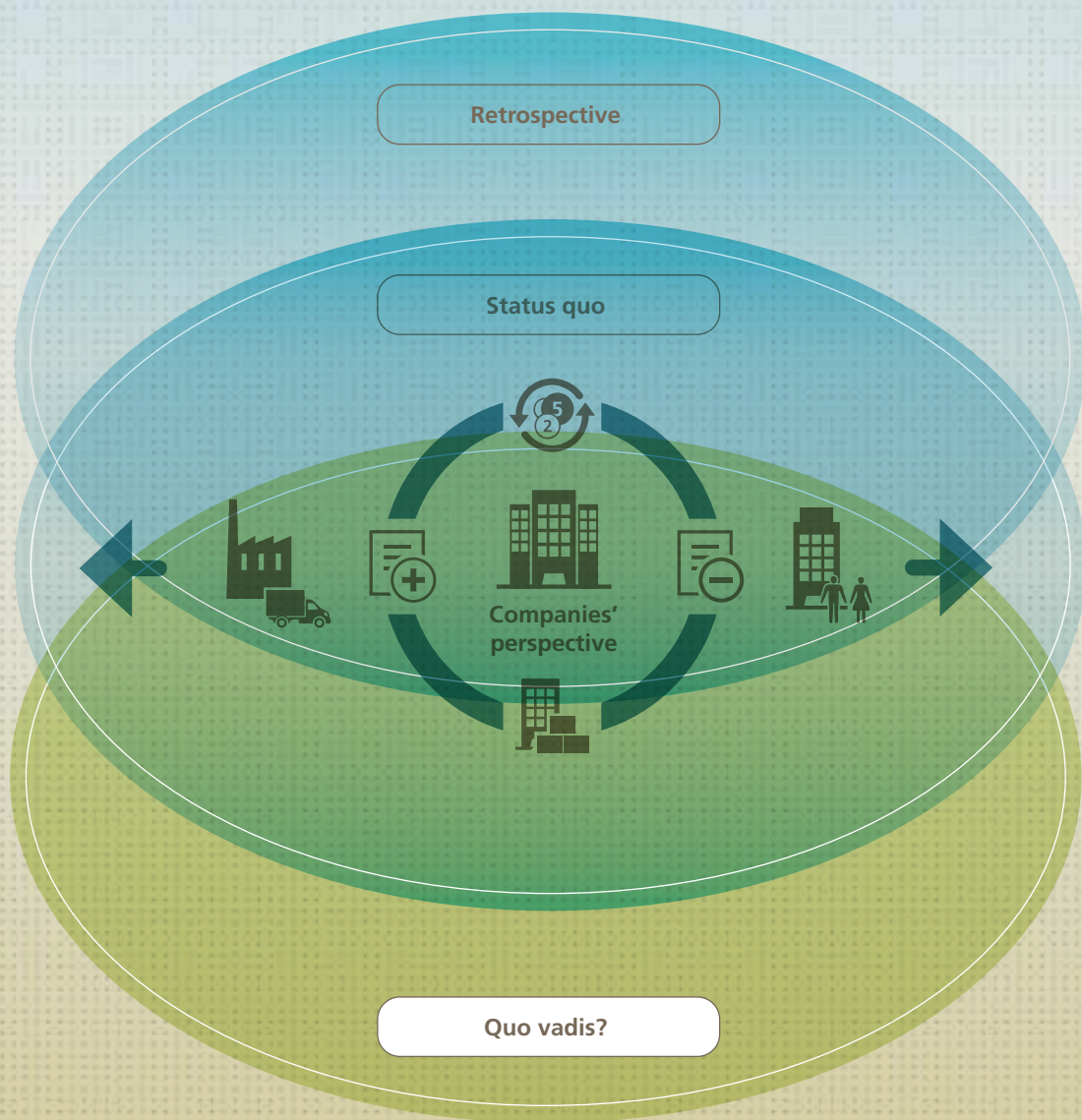


Requests to participate in the customer's SCF solutions (e.g. reverse factoring) tend to be received more positively by Swiss companies. This view is firstly based on the related option for companies to reduce their days sales outstanding by taking up such offers. Companies assume that customers are trying to exhaust their existing WCM potential. More than half of the companies (52%) adopt a neutral stance with regard to their customers' SCF requests. In their view, assessing participation in the customer's SCF solution is only possible after in-depth analysis.

How would you evaluate requests from your customers to participate in their SCF solution?



WCM – Quo vadis?



The “new normal” after the COVID-19 crisis is beginning to take shape

The extraordinary situation due to the pandemic impacted the management of net working capital last year. The consequences of the actions taken will probably become apparent as the real economy progresses towards normalization at the end of 2021, or in many cases even in 2022. The huge distortions in global supply chains are making it even more difficult to get a clear picture of what the near future holds.

It is also difficult to see exactly what form the new normal will take in WCM. Various issues may shape the new normal, including concerns over postponed insolvencies in the supply chain network, the emergence of new types of SCF solutions, increasing regulatory requirements (specifically in relation to accounting treatment) and sharply rising inflation with a consequent change in interest rates.

The survey results demonstrate that there are uncertainties regarding the future design of WCM. Both the relevance of WCM in internal company decision-making and the focus on reducing short-term debt are interpreted very differently.

Factors influencing the future structure of WCM

Relevance of WCM in internal company decision-making	37%	26%	37%
Focus on reducing short-term debt	34%	34%	32%
Use of supplier credit as a source of liquidity	54%	38%	8%

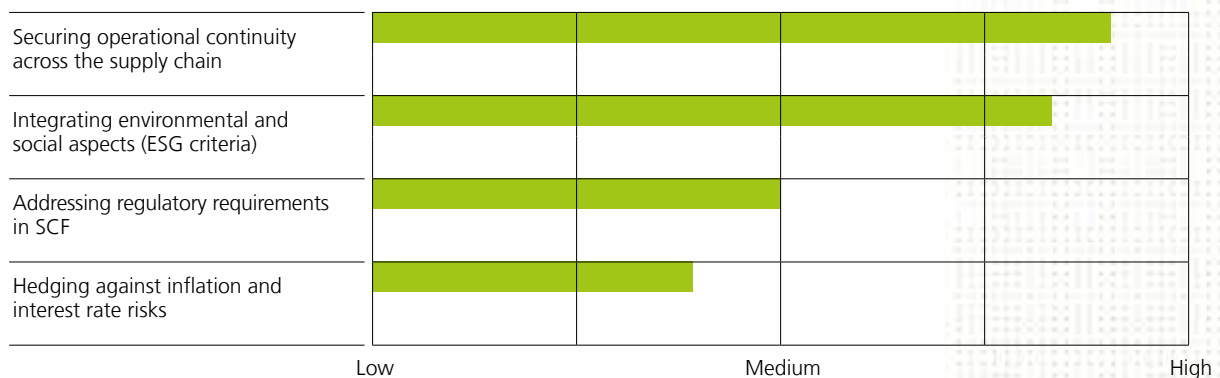
Low influence
Neutral
High influence

The views on the use of supplier credit as a source of liquidity provide an initial indication of the future design of WCM. Only 8% of Swiss companies expect the influence of supplier credit to increase in WCM. Over half of the companies (54%) expect the importance of this source of liquidity to decrease.

Instead, the influence of various trend themes is having a major impact on the new normal in WCM

Financialization – the purely finance-driven motivation to improve working capital – will fade into the background in the WCM of the future. Instead, companies will focus on new target areas in WCM, which extend beyond purely financial goals.

Future target areas in WCM



Ensuring operational continuity will have a decisive impact on WCM. Although this assessment was made by Swiss companies independently of their performance in the crisis, this factor is directly related to experiences during the COVID-19 crisis. Supply chains were pushed to their limits in many places. Some of the consequences included non-deliveries and unfulfillable demand. These challenges can be actively managed through dynamic financing of suppliers and upstream suppliers in line with requirements.

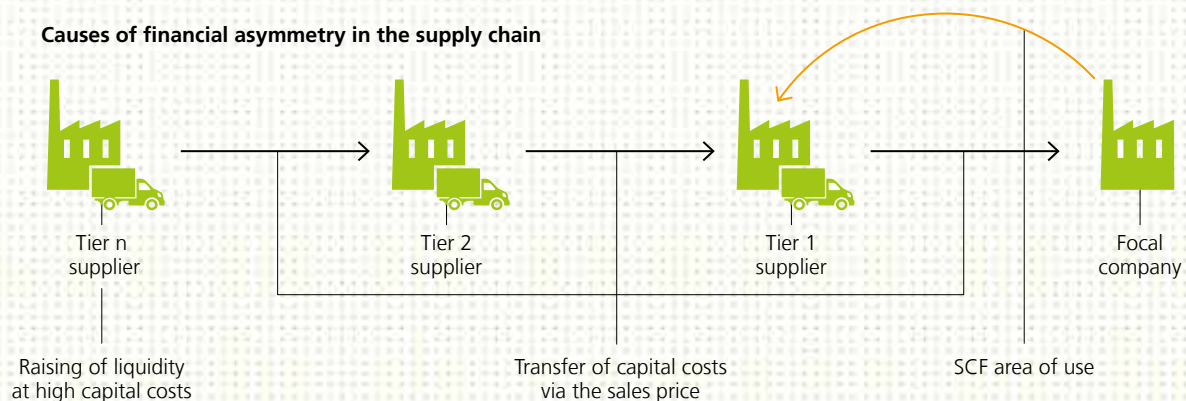
A second trend theme, which saw its importance initially decline during the crisis but that companies are now focusing on to a greater extent, is sustainability. This includes both environmental and social aspects of sustainability as well as good governance. Increasingly innovative approaches are also emerging in SCF, which couple environmental factors with companies' WCM, promoting sustainable actions in the supply chain.

Trend theme I: Securing operational continuity across the supply chain ...

Financial risks in the supply chain have been at the top of the agenda for finance and supply chain managers since the crisis began. Companies are increasingly focusing on SCF solutions to minimize risks due to their liquidity-generating qualities. However, there are limits to their function as a tool for risk minimization.

Traditional SCF solutions (e.g. reverse factoring) do not extend beyond the direct suppliers (tier 1 supplier) of the focal company. Suppliers in the upstream tiers of the supply chain (tier 2 to tier n) are excluded from the focal company's financing capability. But it is precisely these upstream tiers of the supply chain with SME suppliers that require greater liquidity to pre-finance raw materials and supplies. This means these suppliers support the financing of the supply chain with higher capital costs than the focal company, resulting in financial asymmetry. On one hand, this asymmetry in the supply chain results in greater risk as the financial position of upstream suppliers partly determines their ability to supply. On the other hand, the upstream suppliers include their capital costs into the sales price, which means downstream companies ultimately contribute to the financing as well.

Causes of financial asymmetry in the supply chain

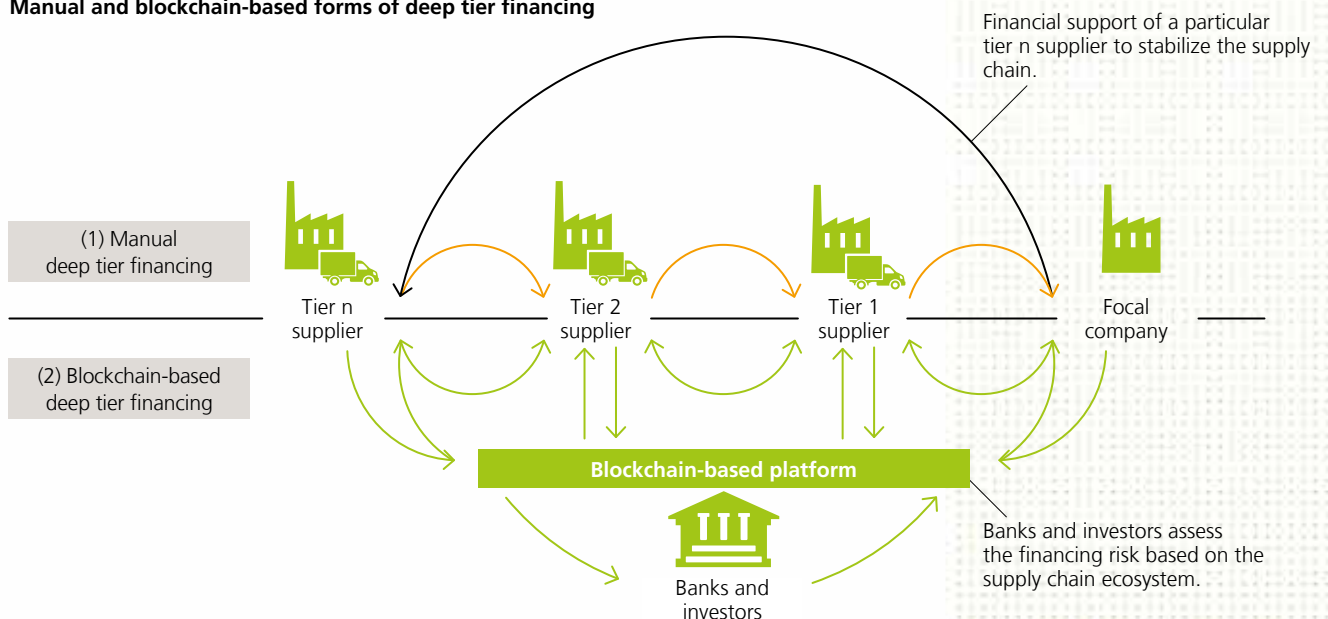


"Deep tier financing" aims to unlock the value of overarching business relationships so that every supplier can obtain access to attractive financing conditions. In other words, banks and investors do not just assess the financing risk based on the direct relationship that an upstream supplier has with a direct customer in the supply chain, but instead as part of an extensive ecosystem. In the globalized world, such an ecosystem typically extends to a focal company with the highest credit rating.

... can be done manually or based on blockchain technology

The manual form of deep tier financing (1) can be interpreted as an inter-company form of materials supply. By purchasing primary materials for upstream suppliers, the focal company can reduce the upstream supplier's WCM burden and achieve economies of scale. This form of deep tier financing focuses on supporting the financially weakest company in the strategically relevant supply chain.

Manual and blockchain-based forms of deep tier financing



In contrast, blockchain-based deep tier financing (2) is carried out by maximizing transparency in the financial flows of the supply chain ecosystem. The technology enables suppliers to provide evidence that they are part of the ecosystem. The documented business relationships mean that the focal company's good reputation can also be transferred to the upstream suppliers. Using the digital documentation, banks and investors can grant finance to upstream suppliers, with conditions based on the focal company's credit standing.

The more upstream suppliers have access to financing on advantageous terms, the more resilient the supply chain becomes. Securing financing is a key factor in maintaining operational continuity. Providing every supplier in the supply chain with access to attractive financing opportunities minimizes the financial risk for suppliers, customers and the focal company.

Trend theme II: The integration of environmental and social aspects into working capital management ...

The importance of environmental, social and governance (ESG) aspects is rapidly becoming a key element of economic activity. Issues such as climate change and social justice can be addressed with various instruments in the supply chain. However, given its inter-company impact and scale, trade finance is seen as one of the most promising instruments in relation to ESG.

Various ESG criteria in the areas of environment (E), social (S) and governance (G)



Some actors are already showing how SCF can be used to drive positive changes in terms of sustainability. For example, there is the option of combining suppliers' sustainability programmes with customers' SCF solutions. The customers define specific sustainability criteria. Suppliers which meet these criteria can obtain preferential conditions as part of the SCF programme. Using this approach, companies can actively reward and manage the fulfilment of sustainability criteria in the supply chain.

We have also seen greater use of securitization instruments to address environmental and social aspects via WCM recently. Coupled with the traditional SCF approaches focusing on sustainability, these concepts can be grouped together under the umbrella term "sustainable supply chain finance" (SSCF).

... can be achieved on the basis of reverse factoring or reverse securitization

Theoretical structure of an SSCF programme based on reverse factoring

The SSCF programme based on a reverse-factoring solution can be used by suppliers to meet specific sustainability criteria. The supplier is offered early invoice settlement, including discounts depending on the level of fulfilment. The discount is calculated based on a reference interest rate, a bank fee (depending on the customer's credit standing) and a bonus/penalty. The latter element is based on how well the sustainability criteria are fulfilled so that only suppliers with a high degree of fulfilment benefit from a lower discount. Depending on the level of fulfilment, the rating results in a reduction or increase in the discount rate applied to suppliers. The SSCF programme also facilitates an efficient flow of information and suppliers can usually decide for themselves which invoices will be discounted.

Companies which have used this type of SSCF include Bridgestone (Japan), Levi Strauss (USA), Puma SE (Germany) and Walmart Inc. (USA).

Theoretical structure of an SSCF programme based on reverse securitization

Unlike reverse factoring, reverse securitization increases the number of potential financing partners for suppliers. The effect of a multi-investor basis coupled with the focal company's strong credit standing leads to more options and greater flexibility in terms of financing. The supplier presents certification to prove that its products meet ESG criteria. The certification process is generally carried out by a third-party organization (e.g. sustainability agency). The ESG certification means the accounts receivable can be bundled with an ESG label, securitized and auctioned via a platform. The multi-investor base establishes a market mechanism, which determines the discounting rate for accounts receivable with an ESG label. To date, initiatives have shown that the discount rate for suppliers with ESG certification was lower than suppliers without ESG certification by double-digit basis points.

An example of this type of SSCF programme, which is still not widely used, is the cooperation between Nestlé and the fintech CRX Markets.

The checklist for gradually reaching the new normal in WCM

The emerging trend themes give an indication of what the new alignment of WCM could look like in future. At present, this development is still at an early stage. Companies have the opportunity to actively shape this development and take a step towards achieving the new normal. The following recommendations provide some guidance.

In accounts payable management

- Consider paying certain suppliers voluntarily and on your own initiative with shortened payment terms. This helps SME suppliers, in particular, to achieve financial stability.



- Advise your suppliers on working capital management if required. Suppliers should benefit from your financing expertise as part of supplier management.



- Analyse and assess the financial situation of your suppliers on a regular basis. This includes the risk exposure of direct and upstream suppliers.



- Introduce a reverse-factoring programme to create incentives for your suppliers to adopt sustainable development. This programme can later be used as the basis for the introduction of an SSCF solution.



In accounts receivable management

- Establish a common understanding of sustainability with your customer. Raise awareness of the relevance of ESG criteria so that your customer rewards them.



- Assess the payment deferrals of your customers and don't apply dunning procedures to negotiated payments in arrears. Introduce clear rules and ensure they are implemented.



- Analyse and assess the financial situation of your customers on a regular basis, including possible reasons or changes in days sales outstanding.



- Use innovative auction platforms where you can offer trade accounts receivable to institutional investors. There are already opportunities for integrating ESG factors.



Contribution to ensuring operational continuity across the supply chain



Contribution to integrating environmental and social aspects into WCM

Annex



Key terms and explanations

The following glossary is a collection of the key terms in the field of WCM and SCF. The list is continued, updated and added to where necessary from study to study.

- **Accounts payable-based buyer leasing** is a financing solution for reducing the investment-related capital commitment of purchasing companies. Accounts payable-based buyer leasing enables the usage-oriented provision of capital goods.
- **Accounts receivable-based vendor leasing** is a financing solution used in particular for the sale of capital goods. Accounts receivable-based vendor leasing enables companies to provide capital-intensive products in combination with a financing solution as a package and is usually provided in cooperation with a leasing company.
- **Advanced analytics** covers a wide range of research methods that enable companies to analyse data which cannot be evaluated using traditional data processing methods due to its complexity, dynamics and structure. These include methods such as big data, predictive analytics and data mining.
- **Altman's z-score** is part of a multivariate method for forecasting company insolvencies. The method was developed in 1968 and uses key performance benchmarks to assess a company's likelihood of insolvency.
- **At-shipment financing** is an innovative financing solution that enables the financing of goods during transport based on a track and trace system. Real-time data is used to create real risk profiles for financial service providers and to make transport inventories accessible for external financing as early as possible in a supply chain.
- **Automation** in the narrow sense refers to systems able to perform tasks and resolve problems independently (autonomously). One of the aims of automation in the context of WCM is to reduce manual activities and processing.
- **Blockchain technology**: a blockchain is a decentralized database protocol, which enables the management of monetary units or securities. Blockchain technology enables smart contracts, for example, which not only check individual contractual conditions but also implement them automatically.
- **Cash-to-cash cycle (C2C cycle)**: Compared to static analysis of working capital, the C2C cycle enables dynamic analysis of WCM. Dynamic analysis means that the cycle between liquidity and outgoing and incoming payments is recorded in time units (days). The C2C cycle also enables good external comparability through which potential savings can be determined compared against various internal and external benchmarks. The indicator is also clear, easy to understand and can be calculated from publicly accessible data sources without great expense. Because of different cost accounting practices at companies, sales instead of manufacturing costs are used to calculate DIH and DPO in this study. This change enables external comparability but results in a reduction in accuracy. As well as the strengths of the C2C cycle, its weaknesses must also be taken into account in the evaluation of the study analyses. A first point of criticism is that the approach is susceptible to "balance sheet adjustments". The external comparability is at the expense of accuracy; for example, changes during the year are not adequately taken into account. Finally, it should be noted that the approach does not take account of the actual level and "quality" of the capital commitment.
- **Dynamic discounting** is an SCF solution where the purchasing company offers the supplier earlier payment of the invoice. In contrast to conventional discounting, dynamic discounting uses dynamic payment methods and is generally conducted via a platform available on the market. If a supplier makes use of the early payment option, a dynamic discount applies. The earlier an invoice is settled, the higher the discount.

- **Factoring** refers to the commercial, revolving transfer of a company's accounts receivable to a financial service provider or a factoring company. Factoring as an SCF solution provides companies with a liquidity effect, while at the same time reducing financing costs and loan losses. Genuine factoring occurs when a factor assumes the credit risk. If the risk of loan loss is not assumed, this is referred to as recourse factoring.
- **Fintech (financial technology)** is a general term for technologically driven financial innovations and is often equated with companies that provide new kinds of financing instruments and services.
- **Insolvency** occurs when a natural person or legal entity is no longer able to meet payment obligations towards its own creditors.
- **Instant payments** are electronic payments processed within seconds and credited from one bank to another without any intermediary.
- **Invoice discounting:** In contrast to conventional factoring, invoices for accounts receivable are not sold to a factoring company with invoice discounting, but are instead used only as collateral for short-term financing (asset-based lending approach). The use of digital invoice discounting platforms provides companies with flexible access to liquidity while also reducing the risk for external financial service providers through increased transparency.
- **Invoice securitization** is an SCF solution where accounts receivable are sold. In contrast to conventional factoring, accounts receivable are bundled and converted into short-term securities and offered to a broad base of investors on the capital market via a special purpose vehicle (SPV). The payment default risk is generally assumed by the investors.
- **Working capital:** Various definitions of working capital exist in theory and practice. Working capital is essentially the capital required for business operations minus current liabilities. The latter is often equated with trade accounts payable.
- **Off-balance inventory financing** refers to the financing of inventories where operational goods logistics and ownership are transferred to an external logistics service provider. This results in a reduction in costs due to lower storage and logistics costs and an increase in liquidity through a reduction in the capital tied up in inventories.
- **On-balance inventory financing** refers to an instrument for the financing of inventories. In contrast to the off-balance solution, the inventories remain on the purchasing company's balance sheet with the on-balance solution and serve only as a guarantee for a credit agreement (asset-based lending approach).
- **Preferred customer** refers to a strategy through which a purchasing company stands out from other competitors by providing exceptional products and services for suppliers (e.g. rapid settlement of invoices). Companies become preferred customers if they succeed in structuring the relationship between their procurement and the supplier's sales units better than their competitors.
- **Preferred supplier** refers to a strategy through which a supplier stands out from competitors through exceptional products and services (e.g. the provision of generous payment terms). Companies become preferred suppliers if they succeed in structuring the relationship between their sales and the procurement organization of the customer concerned better than their competitors.
- **Procurement cards (P-Cards)** are a form of business customer card (often in credit card format) and enable goods and services to be purchased from pre-defined suppliers without a traditional procurement process. P-Cards are generally used for smaller purchases to achieve greater cost efficiency and control.
- **Purchase order financing** is an SCF financing solution agreed between purchasing companies and suppliers to achieve financing at an early stage (at the time of the order).

- **Reverse factoring** is a conventional SCF solution which essentially enables a customer to obtain pre-financing of liabilities from their supplier. With reverse factoring, a factoring provider concludes a contract with the buyer of goods (purchasing company) in which it undertakes to pre-finance the liabilities of its suppliers. Requirements that must be met to ensure the successful implementation of a reverse factoring solution are good creditworthiness of the purchasing company and the onboarding of suppliers onto an SCF platform.
- **Reverse securitization** is an SCF solution where, in contrast to traditional invoice securitization, the credit risk is concentrated in the initiating purchasing company. The assets to be financed are sold to a special purpose vehicle (SPV) in securitized form at a discount and then sold to private and institutional investors on the capital market.
- **Return on capital employed (ROCE)** is an economic indicator which shows how efficiently a company uses the capital available to it.
- **Sales offer financing** refers to financing solutions that suppliers use to promote the sales of their products and to create financial flexibility for customers (e.g. through the use of payment by instalments).
- **Self-financing capacity:** This indicates the extent to which companies can make investments without having to rely on external financing sources.
- **Smart contracts** are blockchain-based computer protocols which enable customer and supplier contracts to be displayed digitally. As agreed provisions are set out digitally in smart contracts, they can be executed and implemented in a decentralized and autonomous manner.
- **Supply chain finance (SCF)** extends the perspective of WCM to the entire supply chain and addresses the company-wide optimization of financial structures and payment flows in company networks. The aim of SCF solutions is to create added value for all parties concerned by adopting a holistic approach to financial processes between suppliers, purchasing companies, and external financial and logistics service providers.
- **Sustainable supply chain finance** covers practices and methods for financing the supply chain, which influences transactions in such a way that reduces the negative impact on the environment and generates environmental, social and economic benefits for stakeholders.
- **Trade credit insurance** insures outstanding receivables from services provided for customers.
- **Zombie companies** refer to firms unable to cover the capital costs required with their business model. They can only artificially remain solvent by borrowing additional debt capital.

Study methodology and background

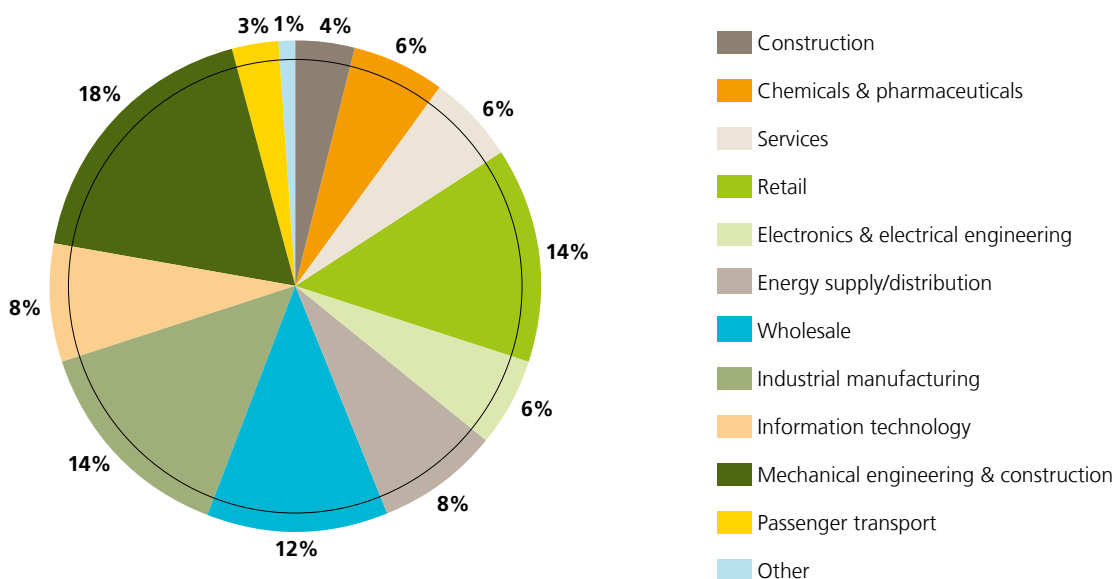
The starting point of the WCM Study 2021 is the supply-chain-oriented view of WCM taken by Swiss companies against the background of the COVID-19 crisis. It examines the following key issues:

- Which measures have proven successful for maintaining short-term liquidity during the COVID-19 crisis?
- How has the management of accounts payable and accounts receivable changed in retrospect during the COVID-19 crisis and which challenges did companies face?
- How do supply chain partners rate the use of SCF solutions in accounts receivable and accounts payable?
- Which WCM approaches and SCF solutions can companies use to manage the economic consequences of liquidity shortfalls in the supply chain?
- How do companies view the likelihood of the emergence of liquidity bottlenecks on the supply and sales side?
- What impact are the developments of the COVID-19 crisis having on the future structure of WCM and which aspects will become part of the new normal in WCM?

Study participants

The WCM Study 2021 covers several sectors to provide the most comprehensive insight possible into WCM at Swiss companies. The sample includes companies from over 12 different sectors, where large corporations (>250 employees) account for two-thirds, and small and medium-sized enterprises (SMEs) one-third of participants. The balanced composition of the sample aims to increase the representative nature and generalizability of the study results for the Swiss market.

Sector affiliation of study participants (primary data)



Information sources

The WCM Study 2021 is based on two data sources:

- 70 relevant questionnaires (WCM expert survey 2021)
- Economic and financial databases (in particular ORBIS and Bloomberg)

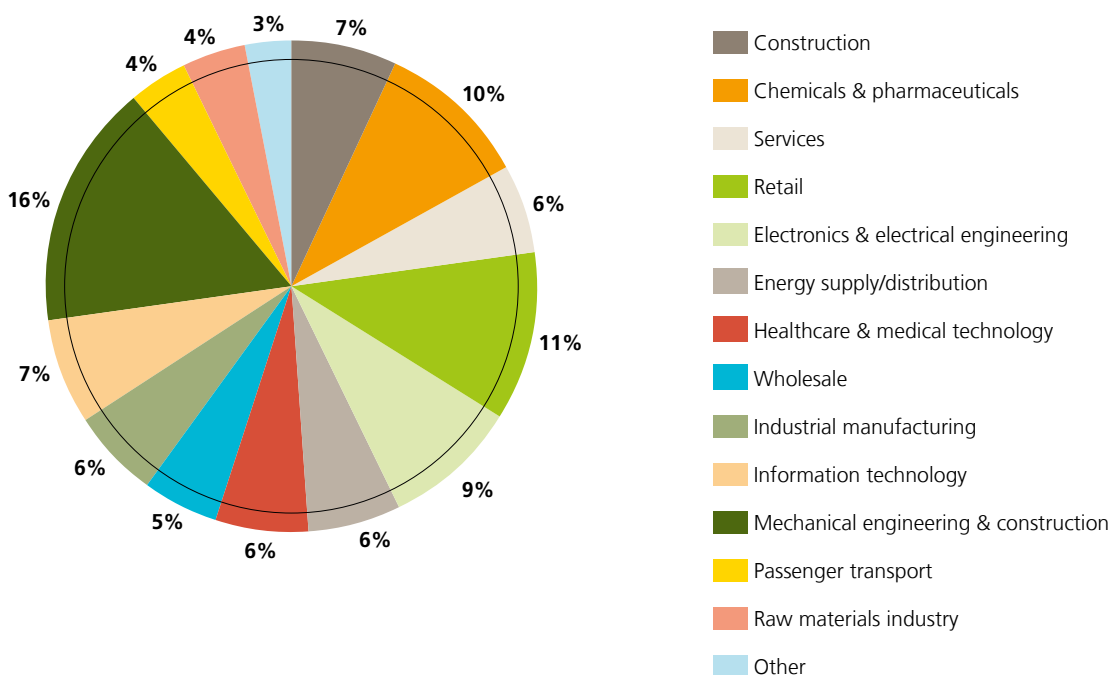
The external data sources are used in the calculations of the WCM key indicators and in the multivariate insolvency forecasting method. This enables a company-specific analysis to be carried out and the database to be enlarged.

All further evaluations are based on the questionnaires carried out during the period April to June 2021 as part of the WCM expert survey 2021. The survey focuses on the Swiss market and various issues concerning WCM and SCF in relation to the COVID-19 crisis.

Methodology

The WCM Study 2021 is based on primary and secondary data, which was initially analysed in a differentiated way based on the individual topics and then interpreted in a correlated manner. Both qualitative estimates and quantitative information were used here. All information and data were thoroughly checked, validated and systematically prepared.

Sector affiliation of the companies in the sample (secondary data)



Supply Chain Finance Lab

The Supply Chain Finance Lab of Swiss Post (SCF Lab) at the Institute of Supply Chain Management at the University of St. Gallen conducts applied research on financial supply chain management at the interface between knowledge and application. The research activities focus on the broad topics of working capital management and supply chain finance. The annual WCM Study and the Swiss WCM Awards are a major part of the SCF Lab's activities.

WCM Study

The WCM Study was published for the first time in 2014. It sought to determine the current performance level of Swiss companies in WCM and to identify good practices. The WCM Study 2021 builds on these objectives and provides valuable insights for improving working capital management and creating financial flexibility for the entire supply chain.

Swiss WCM Awards

The Swiss WCM Awards recognize outstanding overall working capital management performance and innovative solutions that make a significant contribution to improving WCM over the long term. The jury of the Swiss WCM Awards is made up of the following high-level experts (as at: June 2021):

- Prof. Dr. Erik Hofmann (chair of the jury and Director of the Institute of Supply Chain Management at the University of St. Gallen)
- Adrian Brönnimann (Head of Market Development & Sales, PostFinance Ltd)
- René Cotting (Group CFO of Smartenergy Invest AG)
- Pascal Koradi (CEO of alt-feld.ch)
- Rolf Renz (former CFO Siemens Region South West Europe/Siemens Switzerland)
- Mario Rossi (former CFO of Swisscom)
- Stephan Zehnder (CFO of the Bossard Group)

Further studies and recommended literature

WCM Studies from previous years:

- **Hofmann, E., Wetzel, P. (2020):** Working Capital Management Study 2020 – Supply Chain Finance in-n-out. Supply Chain Finance Lab of Swiss Post at the University of St Gallen, Bern.
- **Hofmann, E., Wetzel, P. (2019):** Working Capital Management Study 2019 – Supply Chain Finance Follow-up. Supply Chain Finance Lab of Swiss Post at the University of St Gallen, Bern.
- **Hofmann, E., Wetzel, P. (2018):** Working Capital Management Study 2018 – Supply Chain Finance Introduction. Supply Chain Finance Lab of Swiss Post at the University of St Gallen, Bern.
- **Hofmann, E., Martin, J. (2017):** Working Capital Management Study 2017 – Digitization. Supply Chain Finance Lab of Swiss Post at the University of St Gallen, Bern.
- **Hofmann, E., Martin, J. (2016):** Working Capital Management Study 2016 – Trends. Supply Chain Finance Lab of Swiss Post at the University of St Gallen, Bern.

Selected literature recommended by the authors:

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