



WHITE PAPER

FOCUS

CASH-FLOW FORECASTING

SPOTLIGHT **VOICES OF THE** INDUSTRY

CASH IS KING

"If cash remains king, we should treat it as such and implement tools to efficiently and regularly produce forecast for top management." Gaëtan Dumont, SQUARE FINANCE

ART, NOT A SCIENCE

"Although it may appear easy to set up, Cash-Flow Forecasting, as enterprise risk management remains an art rather than a science. Nevertheless, it requires coordination, organization and sponsorship from the CFO." Luca Grisot, FERRERO

REQUIRES IT TOOL

"Today, we cannot imagine accurate cash-flow forecasts without ad hoc and best of breed tools. Today, there are many solutions in-thecloud, easy to implement and more robust than spreadsheets." Johan Claudot, REVANTAGE

HIGH LEVEL OF UNCERTAINTY

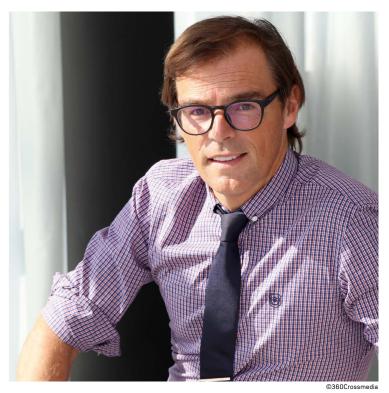
"Resource scarcity, turbulent markets and a general sense of economic uncertainty have given rise to the urgent need for multinational groups to effectively and cautiously manage their liquidities. Accurate cash flow forecasting has become more important than ever, yet at the same time, it has become even more challenging to undertake because of high degree of uncertainty." Didier Lang, MOOG

François Masquelier

INTRODUCTION

The last years, the cash flow forecasting has been in the limelight, not only because of the economic situation consequence of the health crisis. A functional cash flow forecasting to face its obligations and to reimburse system is an indispensable financial interest and loans without risking the management tool. Cash forecasting is the process of identifying short, medium, and long-term liquidity requirements to effectively manage liquidity risks and add value to the whole organization.

The objective of a long-term forecast is to identify structural consolidated cash shortages and/or surpluses. It can be achieved by identifying potential impacts of strategic initiatives and business changes on a corporation. These changes could affect long-term liquidities, cash reserves, balance-sheet and capital structure, leverage ratios and other financial covenants, and potential-



Chairman of Luxembourg Treasury Association, ATEL and Vice-Chairman of EACT

ly credit rating. The investors, shareholders, board of directors and C-level require forecasts to ensure that sufficient cash is generated to enable the company business activities.

Reliable cash forecasting processes are essential for effectively managing the liquidity risk. When planning a timescale, companies must understand the funding required for a range of potential scenarios. More importantly, the CFO must know which levers to pull or to push in a disrupted economy to monitor and maintain liquidity and fund its operating, investing, and financing cash flows. By accurately predicting shortfalls and surpluses, treasurers can optimize the use of cash and of credit facilities to enhance return on investments, negotiate better borrowing terms and conditions as well as minimize external financing.

IN SHORT

CASH-FLOW **FORECASTING**

CASH CONVERSION FACTOR

As the measure of performance and capacity to generate cash.

It is important to measure the "Cash Conversion Ratio"

CCR = Free Cash-Flow / EBITA (in %)

The capacity to convert operating profit before tax and depreciation into "Free Cash-Flow" (FCF).

TYPES OF CASH-FLOW FORECASTS

3 timesclaes for forecasting the net cash position of a company.

Each time scale is serving a different objective:

- **1. Short-term:** Daily and generally up to 30 days where the forecast is prepared by day and by week
- 2. Medium-term: One month (or the end of the short-term forecast) up to one year, where the forecast is prepared monthly
- **3. Long-term:** Over a year, where the forecast is for one or more years. Nevertheless, depending on the group organization, it is useful to have quarterly or at least half-yearly forecasts.

If you have to forecast, forecast often.

Edgar R. Fieldler

CORE REPORTING SYSTEM AND CATEGORIES

PROSPECTIVE DATA

(or 12 month rolling CFF) 2. Budget + Trend Years

3. Monthly "Light" Forecast

Projections

(Y, Y+1 and Y+2)

ACTUAL DATA (Starting point) 1. Monthly Actual (Figures) Quaterly. Consolidated (Figures)
Legal Consolidation (Full) 4. Cash & Treasury Monthly Reporting 5. Non Financial Information (e.g. HR/IT/etc.)

CASH-FLOW FORECASTING BY NECESSITY

During periods of certainty and abundant liquidity, where cash is plentiful, a view adopted by some companies is that costs and time required to produce forecast is hard to justify, with some pushing the view that the cost or benefit analysis does not make it worthwhile. As a result, there are a mix of cash flow forecasting practices with some corporations having underinvested in their cash forecasting capability resulting in highly manual, inconsistent, and often inaccurate processes. This can result in a dangerous situation if the C-Suite is using inaccurate forecasts to forensically understand the liquidity needs.

TREASURY SHORT-TERM FORECASTS

Short-term forecasts are used to manage day-to-day liquidity requirements by determining amounts and timing of expected cash receipts and payments. They aim of this process is:

1. ensuring there is sufficient liquidity to meet all coming obligations and avoid the need for expensive, unanticipated bank overdrafts or other emergency funding 2. consolidating all surpluses to avoid any idle balances sitting in non-interest or low-interest-bearing accounts

3. optimizing cash across the group, with the right amount in the right place at the right time (the motto of all treasurers)

- 4. tracking variances (if any)
- **5.** monitor issues before things get too difficult to control.

These ST forecasts enable treasurers to identify funds required in advance. By anticipating, treasury can look at cheapest sources of funding available, bridge gaps (if any), enter markets at favorable time and eventually guarantee adequacy of credit lines to needs. Short notice and urgency may generate extra costs and make it impossible to finance. Cash-Flow forecasting is a way to manage treasury proactively and efficiently and to also minimize the number of unnecessary transfers.

For foreign exchange (i.e. FX) management, cash forecasts enable to identify sizes and timing of flows to better hedge and mitigate currency risks and P&L impacts. Potentially, the treasurer could identify natural hedges (if any) by matching currency surpluses and identify remaining exposures.

Benjamin Madjar (Deutsche Bank) Cashflow **Forecasting**



As in any of the latest evolution in Treasury & Cash Management, the rise of Cash flow forecasting solutions comes from a mix of regulation, technology (and the underlying investments) and user needs. For instance, Open banking regulation (such as PSD2 in EU) has unlocked smooth and easy access to banking data, fostering fintech's to provide new services. In the meantime, the growth of fintech providers have positioned new treasury solutions (niche ones sometimes) and push "old" players to accelerate in various areas. On that topic, the inflow of investments in the sector has accelerated the opportunities to develop new features. Finally, the corporate treasurers have been incentivized to gain process efficiencies and implement more digital and accurate tools to operate. For instance, 10 years ago, tools already existed on the market (ie. Sapphire, Cashsolve,...) but with little traction as market was not mature enough: excel was sufficient, digitalization of services was not a primary objective. This has changed 2 years ago (when more players entered the market, banks started to be interested in the CFF topic) and accelerated due to COVID crisis: digitalization, automation, anticipation, simulation are becoming a must...and the market adapt itself to this need.

Could you explain how some new technologies and fintech's enable treasurers to easily set up and customize cash-flow forecasting?

Multiple models are adopted by the market players. Most of them have a now APIs with major banks, allowing them to map historical flows



INTERVIEW

and project them into the future (direct format). In addition, others are consolidating accounting and budgeting data, applying a set of cash in / cash out rules to forecast future flows (indirect format, i.e. EBITDA to Cash and balance sheet). No one could contest that accurate and regular updated forecasts are essential and even more after this health crisis.

Could you give us a few tips to successfully implement a cash-flow forecasting solution and how to best select the system?

As a "good" former consultant, I would recommend to (1) carefully assess the organization, the processes, and data availability, and (2) define your objectives, i.e. what do you want to achieve with the forecasting data, which horizon do you need (i.e. Few days, few weeks, months...), which actions do you want to trigger consequently? It may also be a good opportunity to adopt a "disruptive" approach as the forecasting topic embed all operations (accounting, Sales, Procurement & Supply Chain) and it could be a good opportunity to involve the rest of the organization in the project. Once done, the IT tool selection becomes easier: it needs to start with your current IT landscape (i.e. ERP, TMS, consolidation tools already in place. Is there any existing module before reviewing a set of specialists or niche players in the area with a key question in mind? Do they really know what they are talking about or are they just providing a beautiful technology layer? How to best chose an IT tool for cash-forecasting?



How easy is it to automate, interface and populate IT solutions like CashLab to produce forecasts that are regularly updated and available for the C-level?

It may vary from one IT vendor to another. In the context of the banking data and automated cash in / cash out flows, it is easy and "plug and play". Then if you want to integrate your accounting data, it may be a bit more complex: all ERP instances are not similar, and no efficient and universal ERP data aggregator exist yet. In that context, a manual set-up is still needed (despite what is said by a couple of solution providers...). We consider this customization as needed in any case as you want to customize the CFF to your organization and processes. In addition, an important feedback from IT departments shall be considered: they are not very enthusiastic about having a direct API with the ERP data. Thus, the best way to automatize it is to be explored.

On the frequency of updates, it may vary from one organization to another: daily for a Retailer with tight covenants, weekly for a Pharma with high level of liquidity, monthly for more stable businesses.

Do you think CFF solutions must include functionalities for simulations and stress testing, which were frequently requested by CFO's since mid-March 2020?

It's a must. What is also crucial is to include a set of functionalities to allow you to initiate the right actions, either to optimize your performance (working capital, forecasting accuracy, liquidity management, FX hedging & costs) or your processes (budget and planning approach, reduce underlying costs...). A cash flow forecasting tool is not the end-solution, it shall enable the Treasurer to optimize his cash & treasurv performance.



CHALLENGES OF CASH FORECASTING

There are several challenges associated with generating reliable cash flow forecasting. Without surprise, finance executives consider accurate forecasting to be one of the most complicate elements of cash management.

WHY IS CASH **FORECASTING SO DIFFICULT?**

- The choice of a good IT solution / system
- Data quality and integrity issues
- Old debate between profit and cash generation
- value chain
- Discipline for producing accurate forecasts

All these require clear communication and, frequently, an education process to ensure that the preparers of forecasts have the necessary information from other business units available as well as the confidence that other business units are accurately maintaining their data. While there are many benefits of spreadsheets - notably their simplicity, accessibility and widespread use which makes them a simple solution for finance teams to provide information – data integrity issues can arise if they are not effectively controlled and managed.

• Place are accurate, refined over time and regularly updated.

• The absence of strong sponsorship from the CFO and team / project leader • Lack of expertise (or staff) on how to develop forecasts

• Perfect internal communication and respect of the cash flow forecasting

• Only "accessible" cash (that can be pooled at HQ level) can be taken into consideration (exclusions of cash in minority interests, idle cash, some JV's,..)

RULES TO BE FOLLOWED FOR GOOD FORECASTING

1. DISCIPLINE AND SCOPE OF COVERAGE

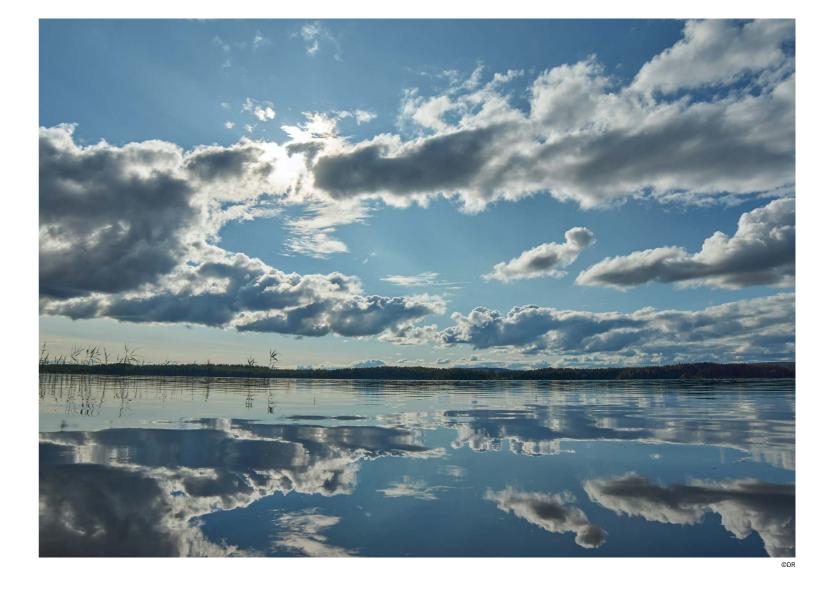
Generally missing, discipline and rigour enable producing quality forecasts. Similarly, the scope of coverage (which ideally should be complete full consolidation) is often partial. The level at which forecasts are prepared (sub-consolidation/Business Unit - BU level or operating subsidiary level/Reporting Unit - RU). It is obvious that the level of granularity and inputting data in the finest detail will improve the reliability of data and the completeness of the consolidated figures. The use of identical definitions and similar software applications also aids data accuracy.

2. CENTRAL SOFTWARE **APPLICATION AND MIX OF METHODS**

Choosing software is a tricky business. Obviously, everyone has their own ways of doing it. Nevertheless, using a single consolidation and reporting application for preparing future cash position and cash flow reports is a real advantage. With monthly balance sheets and income statements, it is possible to mix the direct (based on in/out flows) and indirect methods (based on balance sheet movements), giving more information and means of explaining variances. This is because the difficulty is often giving explanations after the event of the variations observed. Information on working capital is also essential and must be forecast and monitored quarterly.

We should however note that many multinational group BU's/RU's use Excel spreadsheets for their local forecasts and for preparing partial balance sheets and income statements. These two factors then make it possible to mix direct and indirect methods.





3. CRITICAL POINTS

Of the many potential problems and critical points, inter-company returns are important (they can be symmetrical or non-symmetrical, as defined in advance). They must allow for offsetting and clearing of balances to give a consolidated picture. It is necessary to distinguish inter-company transactions external to the BU from ones internal to it. Input should therefore ideally take place at the lowest subsidiary level possible, thereby ensuring that the information is as relevant and as reliable as possible (i.e. the RU level). Similarly, the VAT aspect can also give rise to misunderstandings and must be clearly defined. Head office (or local) adjustments, also called "lifting" may also modify overall profit for several reasons. The consolidation percentage should be included, but sometimes a subsidiary consolidated at equity can report funds to the central pool (although the opposite is most often found). The consolidation scope must be as consistent as possible over the various budgeting, forecasting, and accounting periods, to provide consistency and comparability. If possible, the same definitions should be used at the financial accounting, consolidation, and treasury level as at the internal reporting level. These common definitions will generate Key Performance Indicators. In the interests of greater consistency, FX should be treated as it would be for budget or consolidation purposes. The interfaces between the IT applications used will be crucial for providing as many links and similarities as possible between the reports and the software applications. If a local software application is used to prepare monthly forecast balance sheets which themselves give forecasts of future cash flows, (indirect method), the interface will be more than just useful. Eventually, explanation and narratives must be included in reports to give an understanding of the assumptions used and for checking that they are consistent.

TAKE AWAYS

CONCLUSIONS

Reliable forecasts of future cash flows are still a tricky exercise and a cliff to be scaled. This steep slope must however not prevent the treasury manager working on gualitative improvements and greater completeness of CFFs. You need to invest money to save money. However, it is not just a question of putting in an IT system.

Dynamic forecasting is a subtle art, needing consummate technique and it has a long, almost continuous, learning curve. Rigour must be inculcated. This rigour will come with practice and by monitoring forecasts with a qualitative review after the event. That is the price of quality. The ability to convert operating profit (EBITA) into Free Cash-Flow is essential for survival in an economic world. To accurately forecast net borrowing needs, forecast requires real discipline across the whole group.

Technology is available and solutions exist, like CashLab, Treamo, High-Radius, Tipco, CashForce, etc.. and many other Fintech's solutions. Treasurers can adopt solutions easy to implement, robust, customizable, efficient, and not too expensive.

Managing is forecasting. Invoices do not get paid in profit, unfortunately, but in cash. This explains why the treasury manager, "the custodian of cash", has become a centre of attention and why CFF has become so essential. For many, CFFs are simply a sort of budget revision exercise. It ought to be consolidated (in IFRS format) at least quarterly, with a monthly review, with forecasts going forward to at least the end of the current financial year and with a subsequent review to explain the variances and to instil forecasting discipline. If your forecasts are reliable, you can even test them using stress test scenarios.

Effort put into forecasting is not incompatible with robust action on working capital requirement. By working on accounts receivable, accounts payable and stock, you can improve the reliability of cash flow forecasts. Everyone is hunting for cash, which is the oxygen, or the fuel needed for the firm's survival.

• Invaluable tool if tailored to meet specific needs of the company

- It should be: (1) **Timely** (and regular); (2) Prepared using **reliable data**
- Many businesses experience disruptions and therefore are looking to liquidity and define better cash management strategies.
- Subsidiaries must be required to **explain divergences** from forecast important.
- applications to carry out forecasts. It is no surprise that **EXCEL** tool.

Old saying of "garbage in, garbage out" is key. Cash flow forecasting is only useful if the data being used in the first.

base and (3) Ensures **back testing** over time to improve accuracy.

• It should ensure that time and money for preparing forecasts are justified and **deliver value** to the company and its key decision-makers.

improve forecasting accuracy to identify and manage levers to optimize

(actual against forecast + forecast against re-forecast). Requiring explanations inevitably imposes discipline and gives the exercise greater accuracy and value. The **narrative portions of the CFF report** are also

• Many companies refrain from investing in purpose-built computer spreadsheets seem to be the most common cash flow forecasting





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