

Roland Berger

Focus

April 2017

Funds Transfer Pricing

The gateway to managing the bank within the bank



Management summary

Funds transfer pricing ("FTP") is both a regulatory requirement and an important instrument for at least managing the bank's internal market for liquidity, their interest rate and FX position. From the strategic point of view, FTP can be used to impact the balance sheet structure directly. Furthermore, FTP is the key to measuring risk-adjusted profitability, taking into account maturity transformation (interest rate and liquidity) and non-linear effects (e.g. contingent liquidity risk). It enables liquidity (interest rate) costs, benefits and risks to be transferred from Treasury/ALM functions to the originating customers, products and business lines. Rolling out an FTP mechanism enables product pricing and profitability management, while also addressing the impact of liquidity and interest rate risk separately on the balance sheet.

In order to analyze the as-is situation relating to FTP, Roland Berger Treasury/ALM experts have amalgamated the knowledge acquired from recent project work with the results of a survey of German EBA banks. The insights gained are the subject of this study.

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Section 1:

Introduction and current situation

The topic of funds transfer pricing ("FTP") has received heightened attention within the banking sector in recent years. Regulators now require banks to develop and implement an appropriate FTP system. FTP deficiencies were identified during the financial crisis (2007-2009) surrounding the incorrect consideration of liquidity. Liquidity risk in the sense of an inability to pay (cash flow risk), illiquidity risk and funding risk was a neglected area in bank management. Liquidity and liquidity risk effects were ignored when calculating the profitability of individual products.

Before the global financial crisis, liquidity did not attract the interest of banks. It was taken for granted and was nowhere near the top of bankers' priorities. At the time, they assumed that funding was always available at no or very low cost. As a consequence, banks had no interest in establishing strong liquidity practices. On the one hand, they did not distinguish between liquidity management and interest rate management in their Treasury/ALM functions, and on the other hand, they did not develop a strong liquidity risk management function. Subsequently they arranged business models to ensure profitability based on liquidity mismatch – the funding of long-term assets with short-term liabilities.

- > Liquidity risk is considered one of the main causes of the financial crisis.
- > The materiality of the liquidity mismatch and liquidity (risk) costs, in the sense of liquidity and liquidity risk being priced incorrectly, was underestimated by many banks.
- > Before the financial turmoil the drawdown of liquidity facilities (liquidity option) was not taken into account. The pricing of liquidity costs was deemed immaterial for reasons of simplicity. But many institutes had to meet unexpectedly high off-balance liabilities, putting their P&L and their risk bearing capacity (going concern scenario) under pressure.

- > Funds Transfer Pricing procedures, methodologies and systems have not been adequate subsequently (e.g. funding costs higher than internal price).
- > Financial markets, regulators and rating agencies demand greater transparency.

Thus, the requirements for the comprehensive management of liquidity (funding) costs, benefits and risks are a particular focus of regulators. It has become increasingly important for banks to integrate FTP into both liquidity management and holistic bank management and planning processes.

In 2016, the Federal Reserve, the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency published their "Interagency Guidance on FTP related to Funding and Contingent Liquidity Risks" for large banks. FTP systems implemented before the financial crisis were used by banks as a management accounting tool to measure performance internally. Their use for business lines and balance sheet management (in the sense of product liquidity risk management) has been developed since the financial crisis. The above-mentioned guidance formalizes this approach, putting FTP at the top of the list of priorities for balance sheet management as part of the holistic bank management function.

Implementation in line with this guidance implies:

- > Transparency, consistency and robustness of FTP processes across the institution – no opportunities for arbitrage
- > Preparation of FTP reports
- > Validation of FTP system, in other words governance, process (incl. key controls), methodology, data/applications/system – approach has room for improvement in most cases
- > Incorporation of contingent liquidity risk into FTP framework, e.g. reflecting liquidity characteristics in product pricing
- > Enhanced data capture and analysis capabilities in respect of data, applications (tools) and HR

We believe that large financial institutions ("FIs") should validate their FTP framework taking this guidance into consideration. Their remediation plan should focus on the findings prioritized in the gap analysis, which should cover the full scope of an FTP framework, especially price provision methodology, curve methodology, operative price provision (pre-calculation), recalculation, FTP policy, FTP model change, provision market data, provision curves, publishing price tableau and FTP tool. The guidance specifically addresses large FIs. However, we expect the outlined regulatory requirements to impact midsized FIs, especially EBA banks, too. The EBA and other authorities are informally assessing whether their FTP system is aligned with the guidance.

FIs are looking for competitive advantages and substantial strategic benefits from the implementation of an appropriate FTP system at instrument level. A robust FTP mechanism will need to be incorporated in order to walk the tightrope between profitability and risk considerations. For an FTP system to be successfully implemented, the following aspects will need to be adequately addressed: product pricing, liquidity management,

funding management, profitability management and balance sheet management.

1. PRODUCT PRICING

- > Incorporation of a risk-return-based approach for product pricing, incl. pre-calculation and recalculation, consideration of contingent liquidity risk
- > Usage of market benchmarks, e.g. capital market curves secured and unsecured, and interest rate curves
- > Usage of bank-specific data
- > Implementation of a product strategy with incentivized pricing

2. LIQUIDITY MANAGEMENT

- > Management of the internal market for liquidity – collection and distribution of liquidity across business units
- > Resolving the liquidity mismatch by funding at "optimal" cost
- > Deployment of surplus liquidity – centralized management by global head
- > Buildup of strategic liquidity positions

3. FUNDING MANAGEMENT

- > Diversification of funding sources
- > Minimization of funding costs taking sustainability into consideration
- > Management of a DCM profit center

4. PROFITABILITY MANAGEMENT

- > Centralized controlling of the liquidity book and the interest rate book, both account view and present value view (periodic P&L/PV from mismatch spread) – separation of liquidity and interest rate necessary
- > Controlling of liquidity costs, liquidity benefits and liquidity risk costs (liquidity account)
- > Controlling of strategic positions (interest rate, FX, liquidity)

- > Centralized controlling of net interest margin (NIM)
 - business unit, product and customer
- > Targeting for interest income (NIM and P&L from mismatch spread) and fee-based income

5. BALANCE SHEET MANAGEMENT

- > Management of NIM and structural interest (liquidity) mismatch
- > Transfer of interest rate risk and liquidity risk to a central unit
- > Management of tactical/strategic bond and collateral portfolios (illiquidity risk of asset classes)
- > Buildup of strategic interest rate and FX positions
- > Reallocation of capital based on risk-weighted performance parameters

Conclusion:

Funds transfer pricing ("FTP") is both a regulatory requirement and an important instrument for at least managing the bank's internal market for liquidity, their interest rate and FX position. From the strategic point of view, FTP can be used to impact the balance sheet structure directly. Furthermore, FTP is the key to measuring risk-adjusted profitability, taking into account maturity transformation (interest rate and liquidity) and non-linear effects (e.g. contingent liquidity risk). It enables liquidity (interest rate) costs, benefits and risks to be transferred from Treasury/ALM functions to the originating customers, products and business lines. Rolling out an FTP mechanism enables product pricing and profitability management, while also addressing the impact of liquidity and interest rate risk separately on the balance sheet.

In order to analyze the as-is situation relating to FTP, Roland Berger Treasury/ALM experts have amalgamated the knowledge acquired from recent project work with the results of a survey of German EBA banks. The insights gained are the subject of this study.

Section 2:

Selected survey result highlights

Based on insights from recent project work, Roland Berger surveyed the treatment of FTP among German EBA banks. The objective was to investigate and analyze the current treatment of FTP as well as to understand the banks' respective ambitions. Ultimately, the goal is to use these insights to develop best practices based on lessons learned that may have evolved within the industry.

1. FTP USER PROFILE

Analysis of the banks' FTP user profiles reveals a considerable discrepancy between their ambitions and the status quo. It is important to note that while there is no right or wrong here, there is a difference between what is wanted and what is actually happening. The conceptual design and implementation of an FTP system is defined by the required functional and technical user profile. So how is FTP used in line with Holistic Bank Management?

The survey participants agreed that FTP is their strategic instrument in respect of liquidity cost charge. FTP is the basic instrument for managing the liquidity account – required by the regulator – in line with management of liquidity P&L (liquidity book). Beside this, the FTP methodology is used in the context of strategic planning and the P&L forecast. The FTP module is of considerable importance for managing a Treasury/ALM profit center, interest rate management banking book (IRM BB) profit center and liquidity management liquidity book (LM LB) profit center. Furthermore, banks have FTP in place for active balance sheet management and active liquidity management. Banks want their FTP methodology to manage their internal market for liquidity – to manage liquidity supply and demand.

In contrast, the gap between ambition and reality becomes obvious when analyzing the FTP as-is user profile. The banks stated that their current FTP methodology mainly serves to fulfill regulatory requirements

(liquidity account). Only certain banks use FTP as a strategic instrument in line with Holistic Bank Management, especially to strengthen the Treasury/ALM function.

This gap between ambition and reality demonstrates that while many banks have understood the strategic importance of FTP, they have thus far failed to modernize their Treasury/ALM business model and Holistic Bank Management function accordingly.

Figure A illustrates the survey results, showing the FTP objectives generally accepted by banks and those in the FTP as-is user profile that they are aiming to implement in the future – depending on the bank's business model. → [A](#)

The ambition-to-reality analysis highlights the current gap between the targeted and actual user profile. This gap seems to be exacerbated by the fact that banks have not utilized the chance to modernize the Treasury/ALM function – or transform Treasury/ALM into a sustainably profitable function.

Some more survey results:

- > The survey indicates that the CFO is in most cases (45 percent) responsible for FTP. For 30 percent of participants, the CRO is responsible. In 25 percent of cases the responsibility lies with Markets.
- > 85 percent of the participants have implemented a liquidity transfer pricing system (LTP system) with internal charging by Treasury/ALM. 70% use FTP for all liquidity bearing engagements. 30% fail to apply FTP on derivatives, 20% do not use it on securities business and other off-balance sheet positions.

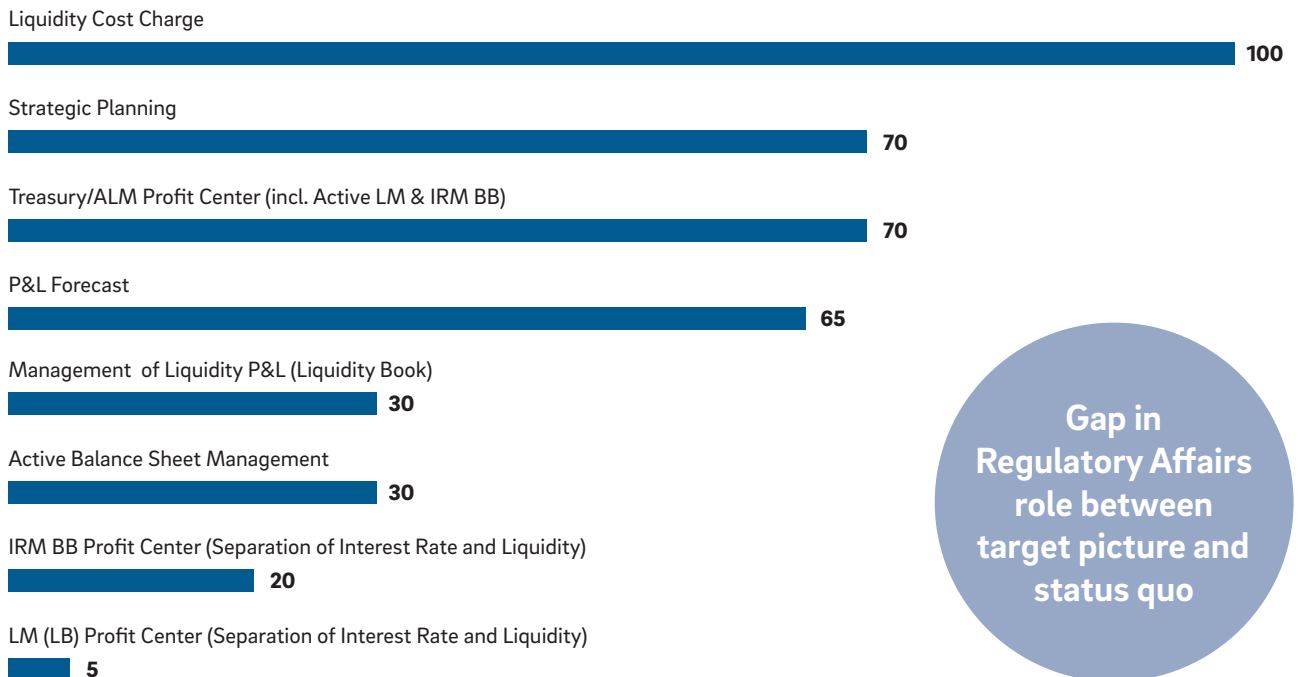
A: Gap between FTP objectives and FTP as-is user profile.

There is widespread consensus among banks about which FTP objectives are already fulfilled and which should ideally be fulfilled.

FTP objectives



FTP as-is user profile



Gap in
Regulatory Affairs
role between
target picture and
status quo



2. FTP METHODOLOGY

The use of a cause-related internal allocation of liquidity costs, utilities and risks is essential for an effective FTP model. Non-covered liquidity (assets) and funding (liabilities) curves serve as a basis for the development and steering of an internal market for liquidity and the cost allocation with Treasury/ALM.

Figure B illustrates the survey results regarding the "FTP curve approach", distinguishing three kinds of approaches: "single" curve, "multi" curve and "blended" curve. In general, different curves have to be defined for "assets and liabilities" and for "secured and unsecured". → [B](#)

The approach for determining the "blended" curve mentioned above uses a wide range of data. Figure C illustrates the survey results on the different sources of data banks use to determine their FTP curves. → [C](#)

Some more survey results:

- > 60% of the surveyed banks allocate collaterals through curve adjustments, 35% through internal service charge (ISC) and 5% not at all.
- > 35% of the surveyed banks incentivize business via curve adjustments, 15% via internal service charge (ISC) and 50% not at all.
- > None of the banks in the survey use bid-ask spreads for liquidity and interest rates. 1 institute focuses bid-ask spreads on liquidity, 2 focus on interest rates. 65% of the spreads rely on durations, 35% are constant.
- > Only 30% of the surveyed banks consider cost of carry within the calculation. Model risks are incorporated in only 45% of banks via buffers. 100% conduct recalculations as well as validations of the FTP approach regularly. Again, 100% use liquidity options for pricing. Liquidity costs (e.g. liquidity reserve, LCR/NSFR) are reallocated for only 50% of respondents.
- > Only 15% of the banks reallocate liquidity costs for EMIR, European Central Bank (ECB) or deviations

from the funding plan. An internal service charge for so-called Treasury/ALM Services is applied and reallocated in only 40% of cases.

- > To calculate the liquidity costs 45% of the surveyed banks use the fair value approach and 55% apply the average capital lockup approach.
- > 100% of the banks in the survey have an escalation plan for FTP in place.
- > 70% of the participating banks distinguish between interest rate and liquidity based on 3M-Euribor.
- > 30% distinguish between interest rate and liquidity of businesses with duration of less than 1 to 3 years based on IONIA.
- > The cost-allocation curves are adapted regularly. 75% of the surveyed banks adjust the curves monthly, 10% bi-weekly and 15% even do so weekly. Ad hoc adjustments are conducted by 45% of the respondent banks.
- > Only 70% of the participating banks have a liquidity account for the aggregation of cause-related liquidity costs, utility and risks.
- > Only 20% of the banks in our survey are able to calculate a fair value for the so-called liquidity book.
- > 50% of the banks conduct liquidity P&L planning and 35% have a liquidity P&L forecast.

Conclusion:

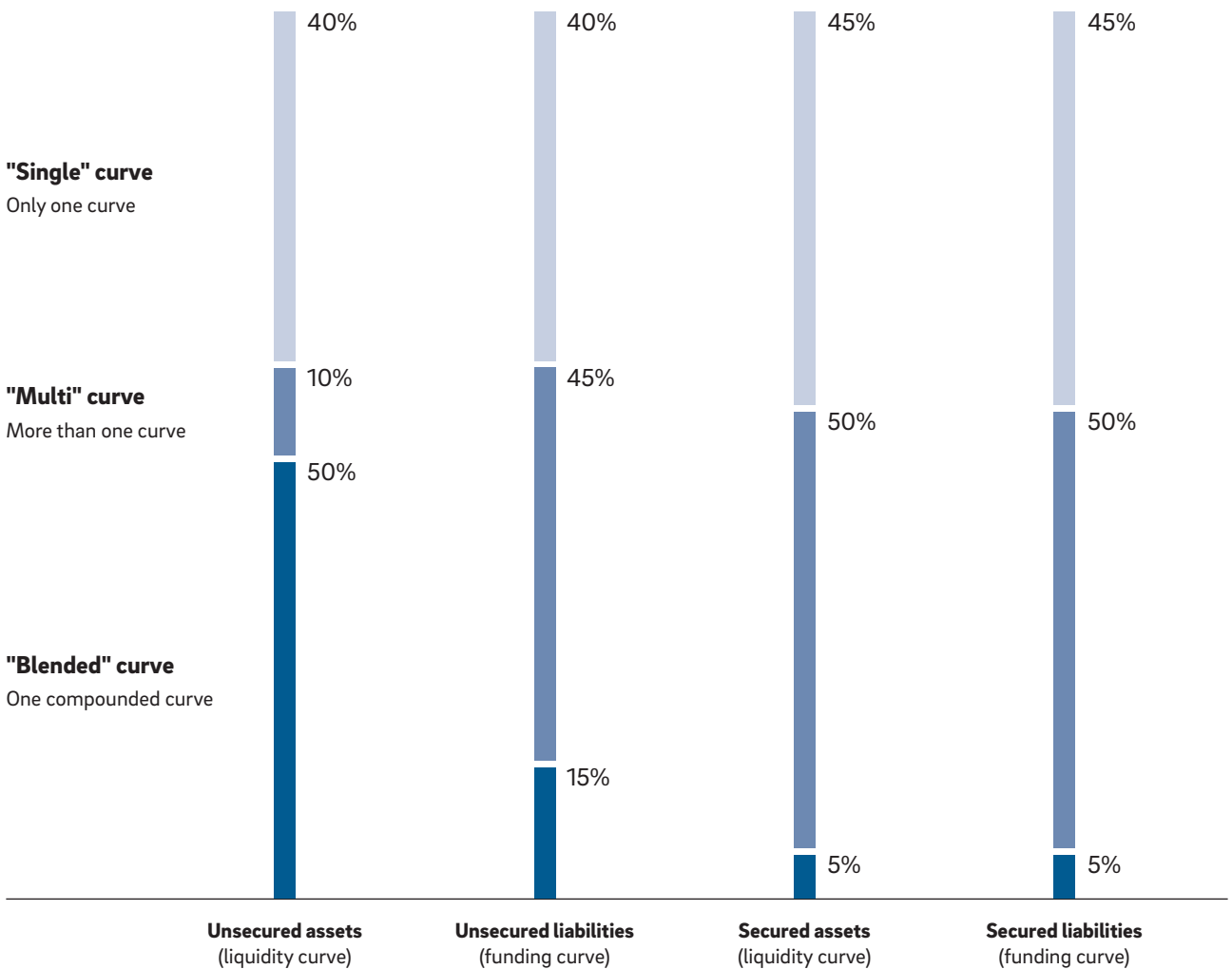
The banks surveyed clearly indicated that the complexity of the FTP methodology is correlated with the bank's business model.

3. FTP CORE PROCESS

Our survey indicates there are only three departments, Risk Management, Finance and Treasury/ALM, involved in and responsible for the FTP core process. Figure D illustrates the survey results regarding responsibility for the FTP sub-processes. → [D](#)

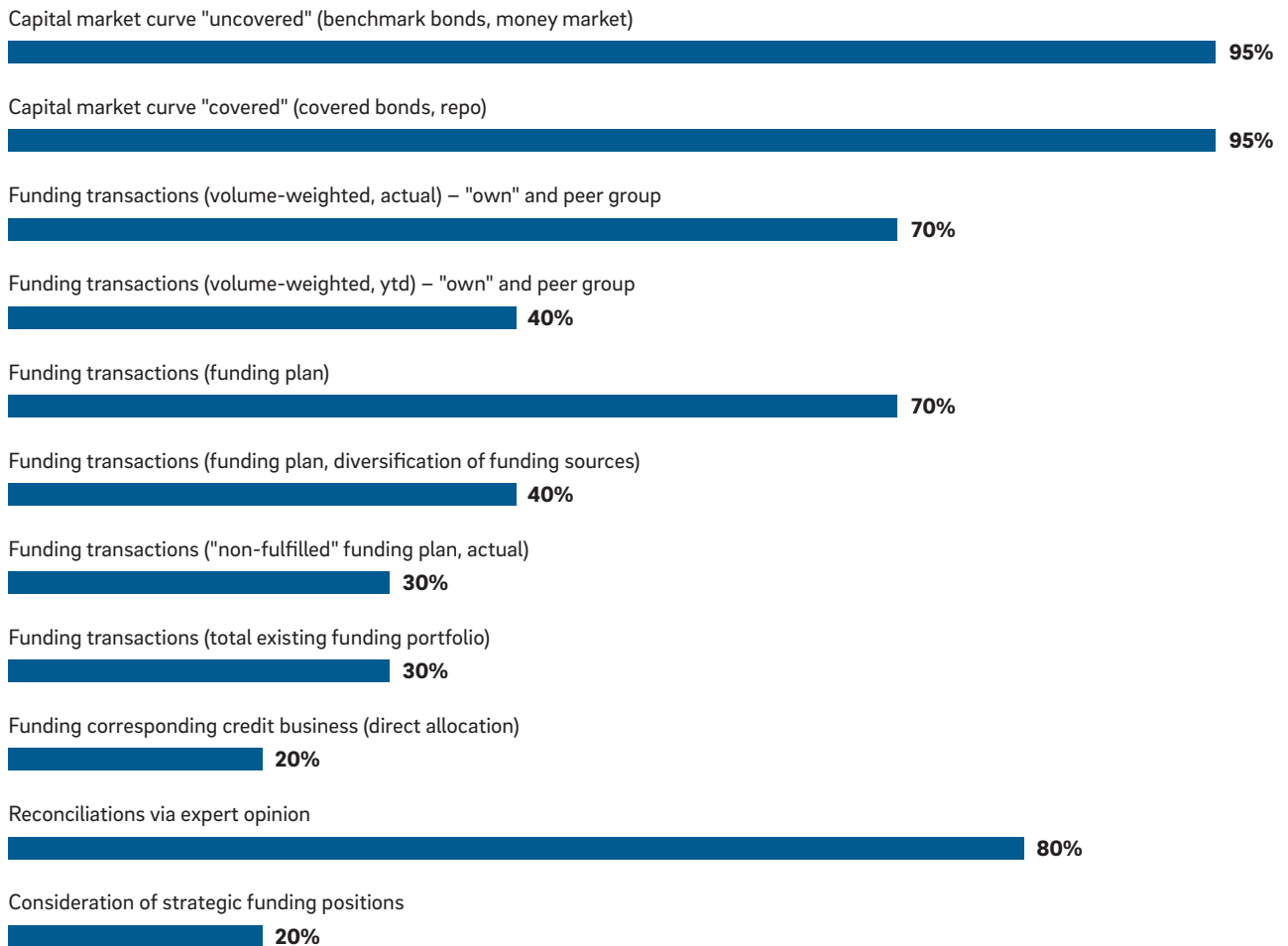
B: Different FTP curve approaches.

In general, different curves have to be defined for "assets and liabilities" and for "secured and unsecured".



C: Data sources for determining "blended" curves.

The approach for determining the "blended" curve uses a wide range of data.



■ Usage

Source: Roland Berger

D: "Responsibilities" within the FTP core process.
Sub-processes/business units.

Price Provision Methodology



Curves Methodology



Validation of FTP



Operative Price Provision (Pre-calculation)



Recalculation



FTP Policy/Framework



FTP Model Change



Provision Market Data



Provision Curves



Publishing Price Tableau



FTP Tool



■ Risk ■ Finance ■ Treasury/ALM

Source: Roland Berger

Section 3:

Conclusion and outlook

The results of the survey illustrate the gap between ambition and the current status quo of FTP systems. The fact that most banks have allocated the responsibility for single FTP sub-processes to different departments shows that there is room for improvement in the efficiency of the whole process. The survey demonstrates that banks have understood the strategic importance of FTP and its impact on the entire business model. However, the target-to-actual comparison of the FTP user profile in particular shows that FTP does not yet command the operative and strategic orientation it should possess.

The study findings (scope: German EBA banks) reveal a severe gap between the banks' ambitions and the status quo of FTP. This gap is particularly apparent when analyzing the target-to-actual situation of the FTP user profile. Although some banks seem to have understood the strategic importance of FTP for their business model as well as for their long-term competitiveness, they have not done enough thus far to establish an effective Treasury/ALM function or Holistic Bank Management.

THE ANALYSIS OF THE SURVEY RESULTS REVEALS FIVE HIGHLIGHTED RECOMMENDATIONS

1. Compliance regarding new regulatory requirements – FTP Audit
 2. Further development regarding modeling and cause-related allocation of liquidity costs, utilities and risks (modeling of deposits and allocation, collateral allocation and liquidity options)
 3. Process for the computation and updating of liquidity cost curves (e.g. overlapping durations, input data, etc.)
 4. Validation of FTP methodology
 5. Integration of FTP in Liquidity/Funding Management and Holistic Bank Management
-

The banks we surveyed indicated that tailored FTP constitutes a crucial element for effective Holistic Bank Management. However, banks have not yet implemented an FTP system that fulfills regulatory requirements completely.

Section 4:

Why Roland Berger?

OUR CORE SKILLS

Roland Berger has extensive experience across the banking industry, as exemplified by our multiple client references. Our strategic thinking across the latest developments, trends and business models is demonstrated for example by our annual CIB Outlook and our studies on retail banking, digitization and the European banking sector. Our recent study, Successfully navigating changes to payments regulations: Payments Services Directive 2 (PSD2) – a strategic and technological challenge, is a pertinent example of how our experts both recognize the impact of disruption within the European banking sector and are able to prepare our clients for the changes to come. PSD2 will fundamentally redefine the bank-customer relationship and poses a huge challenge to banks and their business model.

Our understanding of collaboration is a strong partnership based on trust. We have a robust worldwide footprint with more than 300 financial services experts with extensive experience in managing large projects with a large number of stakeholders.

We are experts in Treasury/ALM, Risk Management, Finance and Regulation. Our experienced team will ensure a successful review process and a significant value add. By leveraging previous project experience, we ensure the achievement of critical transition success factors including:

- > Strategic priorities: Incorporating a large number of stakeholders with widely differing interests and their interdependencies in the setting of priorities (Treasury/ALM, Risk Management, Finance, Regulation, IT, Organization, Markets, etc.)
- > Keeping a close eye on the overall picture, also considering ongoing strategy, current business model and/or operating model transformation
- > Identifying and managing interdependencies with other programs, projects and teams

Our understanding of collaboration is a strong partnership based on trust.

- > Integrated bank management: Efficient and effective integration of FTP into Holistic Bank Management (HBM)
- > Staying on time and on budget

How we respond to the challenges:

- > Harmonize different strategic priorities and stakeholder interests into an actionable plan
- > Set clear deliverables and milestones
- > Support structured evaluation and documentation
- > Provide a diverse range of tools and methods
- > Proven gap analysis: Analyzing the target as well as the current status of FTP systems
- > Expertise in current topics in Treasury/ALM, Risk Management, Finance, Regulation, etc.
- > Tools (e.g. for functional analysis and proceeding incl. specified task manuals)

Our integrated approach provides for the successful design and implementation of an effective and efficient FTP system – we accompany our clients until rollout.

OUR VALUE ADD

Our clients testify to our strong results-driven approach and implementation skills. Our integrated approach provides for the successful design and implementation of an effective and efficient FTP system – we accompany our clients until rollout. Powerful and proven proprietary RB tools used in multiple project settings are available, which we'll select in conjunction with our clients to ensure sufficient granularity and a consistent format. Experience in stakeholder and budget management and harmonization in complex project structures is our strength.

Furthermore, we generate added value by:

- > Providing benchmark analyses as well as outside-in views on existing organizations, processes and methods from comparable projects – in-depth industry expertise through our expert network
- > Extensive experience in FTP design for leading banks
- > Providing active support and taking a leading role in discussions/alignment with management
- > Feasibility checks of an elaborated FTP system and implementation timeline
- > Providing clear focus on all relevant dimensions and critical success factors
- > Coordination of different project streams, keeping the big picture in mind
- > Critical evaluation of results with regard to internal and external regulatory requirements
- > Reduction of complexity and handling of multiple stakeholders based on extensive project experience
- > Broad selection of different reporting formats and content according to recipients' interests
- > Professional management of project risk and transparent mitigation measures
- > An integral perspective – linking the strategic component of FTP with its hands-on operational duties at business level

- > Extensive strategic change management know-how
- > Anticipation of transformation hurdles based on extensive experience (IT, organization, methods, processes, culture, HR, etc.)

Our clients benefit from our 360-degree advisory approach combining strategy, operations and IT perspectives. We have extensive relevant professional experience in FTP and are partnering our clients along the whole value chain from strategy to implementation.

Imprint

WE WELCOME YOUR QUESTIONS, COMMENTS AND SUGGESTIONS

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For the past 50 years, Roland Berger has helped its clients manage change. Looking at the coming 50 years, we are committed to supporting our clients conquer the next frontier. To us, this means facilitating navigating the complexities that define our times by providing clients with the responsive strategies essential to success that lasts.

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