Benchmarking Treasury Performance with KPIs

Agenda

- A Brief Introduction to Key Performance Indicators
- The Value of Treasury KPIs
- The KPI Selection Process
- Practical examples of KPIs
- Tools of the Trade
- Conclusion – Q&A

Introduction to Key Performance Indicators

Key Performance Indicator / kē pər fôrm əns ˌindi kātə

KPIs help to get insight in your business performance – “What gets measured, gets managed.”

KPIs are also known as performance metrics, business indicators, and performance ratios.

Can also be seen as:
Measure mania”, “the tyranny of targets, “silo-working”and “feeding the beast”
The Value of Treasury KPIs

- Treasury’s management reporting burden has increased since the financial crisis first struck
- Treasury’s importance requires objective, transparent and controlled workflows to support cash & risk management and treasury accounting
- KPIs – Key Performance Indicators – are an established benchmarking tool
- Treasury KPIs provide structured, objective benchmarking results - SOX compliance is enhanced

Selecting KPIs for your Treasury

- KPI programs are usually defined & implemented via enhanced treasury policy application
- Treasury KPIs are delivered through technology, and integrated into the treasury process workflow
- Choosing KPIs can be demanding!
- Your KPIs should reflect your specific need and priorities

Business Objectives of KPI Selection

- For the Treasury Team – to gain a better understanding of and ability to monitor and improve the performance of their daily tasks
- For Management – to benchmark critical treasury operations, and track & analyse performance improvement
- For Auditors – to enjoy a more accurate, objective and dependable insight into treasury
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Sample KPIs

- Liquidity and Cash Management KPIs
- Funding and Investment Management KPIs
- FX, Commodity and Interest Rate Exposure Management KPIs
- Treasury Operations and Accounting KPIs
- Risk Management and Policy Compliance KPIs

**Liquidity and Cash Management KPIs**

**KPI:** Percentage of Account Balances Reported Daily

Objective: supporting the monitoring and measuring of the effectiveness of the daily bank account balance reporting mechanism.

Typical Calculation:

\[
\frac{\sum \text{daily reported cash balances}}{\text{estimated total balance}} \times 100\%
\]

**Liquidity and Cash Management KPIs**

**KPI:** Percentage of wires which were released on time

Objective: To help ensure that wire processing is efficient

Typical Calculation:

\[
\frac{\text{number of payments released on time}}{\text{total number of payments processed}} \times 100\%
\]
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Liquidity and Cash Management KPIs

KPI: Time taken to initiate and complete a signatory change on a bank account

Objective: To ensure that authorized signers can be added or removed from accounts in a timely fashion to support controlled changes in the organization

Typical Calculation:
\[ \text{time signatory change complete} - \text{time signatory change initiated} \]

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Liquidity and Cash Management KPIs

KPI: Percentage Forecast Error

Objective: To improve the level of transparency of cash forecasting accuracy

Typical Calculation:
\[ \frac{\text{forecasted cash} - \text{actual cash}}{\text{actual cash}} \times 100\% \]

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Liquidity and Cash Management KPIs

KPI: Absolute Cash Balance Error

Objective: To minimize the required cash buffer in order to maximize the investment amount, or to minimize the borrowing amount. To improve the level of transparency of cash forecasting accuracy

Typical Calculation:
\[ \sum \text{reported ledger (collected) balances} - \sum \text{projected closing balances (as of prior day)} \]
Liquidity and Cash Management KPIs

**Objective:** To maximize the amount of cash that is mobilized for reuse within the organization.

**Typical Calculation:**

\[ \sum \text{[daily ZBA transfers]} \]

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**Liquidity and Cash Management KPIs**

**KPI:** Daily pooling & sweeping benefit

**Objective:** To monitor that pooling & sweeping benefits outweigh the costs of these processes.

**Typical Calculation:**

\[
\frac{\text{Offsetting Balance} \times \text{Rate}_{\text{benefit}}}{\text{Balance}_{\text{borrow}}} - \frac{\text{Offsetting Balance} \times \text{Rate}_{\text{invest}}}{\text{Balance}_{\text{invest}}}
\]

where

- **Offsetting Balance** = smaller of \( \sum \text{[daily deficit balances]} \) & \( \sum \text{[daily surplus balances]} \)

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**Funding & Investment Management KPIs**

**KPI:** Funding Buffer

**Objective:** To help ensure that the business has access to the funds if it anticipates needing over a specified time period.

**Typical Calculation:**

maximum expected cash needs over specified time period

− expected funding available on the peak date
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**Funding & Investment Management KPIs**

**KPI:** Maximum percentage of available credit per provider

Objective: To support assurance that funding is not too dependent on too few providers.

Typical Calculation:

\[
\max \left\{ \frac{F_i}{\sum F} \times 100\% \right\}
\]

where

- \( F_i \) = Funding available from provider \( i \)

**Objective:** To monitor that the value of assets at risk with any one provider is not greater than a set percentage of the total investment portfolio.

Typical Calculation:

\[
\max \left\{ \frac{A_i}{\sum A} \times 100\% \right\}
\]

where

- \( A_i \) = Assets invested with counterparty \( i \)

**KPI:** Weighted average CDS spread of the investment portfolio

Objective: To monitor the portfolio’s overall non-performance risk.

Typical Calculation:

\[
\frac{\sum \text{CDS}_i \times A_i}{\sum A_i}
\]

where

- \( A_i \) = Assets invested with counterparty \( i \)

and

- \( \text{CDS}_i \) = CDS spread of counterparty \( i \) (or other risk indicator)
FX, Commodity & Interest Rate Exposure Management KPIs

KPI: Percentage that the traded rate deviates from the market or benchmark rate

Objective: To ensure that executed hedges are close to the current market or benchmark rate

Typical Calculation:
\[
\frac{| \text{executed rate} - \text{benchmark rate} |}{\text{benchmark rate}} \times 100\%
\]

FX, Commodity & Interest Rate Exposure Management KPIs

KPI: Prospective hedge effectiveness

Objective: Prove that future changes in value of each hedge are expected to be effective in offsetting the changes in value of the hedged exposures.

Typical Calculation:
\[
\frac{\text{Possible future change in fair value of each hedge}}{\text{Possible future change in fair value of hedged item(s)}} \times 100\%
\]

FX, Commodity & Interest Rate Exposure Management KPIs

KPI: Fixed/Floating Rate Mix

Objective: To protect earnings and/or future cash flow against adverse interest rate movements by ensuring that fixed and variable portions of the interest rate portfolio are in line with the treasury policy.

Typical Calculation:
\[
\frac{\text{Amount of fixed interest rate exposure}}{\text{Amount of total interest rate exposure}} \times 100\%
\]
### Treasury Operations & Accounting KPIs

**KPI:** Time taken to confirm new trade details with the counterparty

**Objective:** To help ensure that trade details are confirmed with the counterparty within a target timeframe

**Typical Calculation:**

\[
\text{time that trade details are confirmed with counterparty} \quad - \quad \text{time that trade initially executed or registered}
\]

### Treasury Operations & Accounting KPIs

**KPI:** Number of days taken for cash transactions to reach the GL

**Objective:** To help ensure that cash transactions reach the GL within a specified timeframe.

**Typical Calculation:**

\[
\text{date that cash transaction is posted in the GL} \quad - \quad \text{date that cash transaction is posted at the bank}
\]

### Risk Management & Policy Compliance KPIs

**KPI:** Asset and liability duration mismatch

**Objective:** To monitor that the difference between the durations of assets and liabilities is less than the limit set in treasury policy.

**Typical Calculation:**

\[
\frac{\text{Macaulay Duration}_{\text{asset}}}{\text{Macaulay Duration}_{\text{liability}}}
\]
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Risk Management & Policy Compliance KPIs

KPI: Portfolio CVA Significance

Objective: To help ensure that the quantitative assessment of non-performance risk is less than a predefined percentage of the portfolio fair value.

Typical Calculation:

\[
\frac{|\text{credit valuation adjustment}|}{\text{market value}} \times 100\% 
\]

* CVA is the difference between Fair Value and Market Value (Fair Value is calculated using credit adjusted yield curves).

Tools of the Trade

Ensure a balance scorecard – 3 generations, many options:

Gen 1 - Financial: “How do we look to shareholders?”
Customer: “How do customers see us?”
Learning and Growth: “How can we continue to improve and create value?”

Gen 2 - Focused version of Gen 1

Gen 3 - A destination statement
A strategic linkage model
A set of definitions for each of the strategic objectives.
A set of definitions for each of the measures selected to monitor each of the strategic objectives, including targets.

Gen 4 - Now evolving, includes:
Evidence Performance Strategy Maps Digital Dashboards
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In Conclusion
- The increased levels of measurement, analysis and transparency provided by treasury KPIs enhance the quality of treasury policy and SOX compliance.
- KPI implementation supports the introduction and effective management of treasury process improvement.
- KPI selection & implementation requires some effort to deliver the most effective KPI set for your organization.
- KPI implementation enhances the scope and quality of management reporting, and of treasury audits.

Any questions, please?

References
- 60+ KPIs included

- AFP’s Corporate Treasurers Council Guide to Treasury Metrics: Scorecards and Dashboards
Thank you for your time and attention!