

Global Treasury Advisory Services



The Challenge

Corporate treasury has evolved into a truly strategic function and as a chief financial officer or a corporate treasurer, you may face some unique challenges. From being a manager of liquidity and financial risk, corporate treasury has evolved into a strategic business partner. Further, a complex regulatory environment and other external business challenges may blur the vision of achieving treasury objectives.

Deloitte's Global Treasury Advisory Services practice combines the competencies of risk management, regulation, technology, operations, and performance management to help organizations address these challenges in an integrated, targeted, and cost-effective manner

Integrated Financial Risk Market Offerings

Deloitte has developed a specific assessment methodology for financial risk management which has been tested from every activity sector in consultancy processes, quantitative tools and models development, treasury management, and market financial risks.

Financial Risk Advisory: Our Financial Risk Advisory practice comprises services specifically tailored to support financial institutions in managing risks, while discovering new opportunities to create value. We provide end-to-end services spanning multiple domains, providing services for treasury management, risk and capital management, quantitative modeling, and technology services.

Global Treasury Advisory Services: Our Global Treasury Advisory Services practice provides customized solutions for clients to achieve their strategic objectives. We provide services in multiple domains including financial risk management, financial supply chain management, operations and technology and accounting, valuation, and assurance.

Assurance and Regulatory Services: Deloitte's assurance and regulatory services adopts a unique approach to compliance risk management focused on embedding a sustainable competency within existing business processes and functions to assess the management of evolving compliance risk profiles. It provides comfort to the board and senior management with respect to operational effectiveness of the policies and procedures and regulatory compliance.

Key challenges that clients discuss with us



Global Treasury Advisory Services

Hedge accounting and effectiveness testingValuation of financial instruments and model

validation



Liquidity management solutions

· Credit and liquidity risk mgmt.



Financial Risk Management Services

Our financial risk management specialists provide corporate treasuries with clear guidance and support around commodity trading and price risk management, currency and interest rate risk management, decision support, and quantitative analysis.

Service Offerings

Currency Risk Management

- Development of currency risk management strategy
- Designing the currency risk management policy
- Evaluation of hedging instruments and structures
- Industry-wise benchmarking of currency risk management strategy

Commodity Trading Advisory

- Development of commodity trading and supply chain management strategy
- Assistance in setting up global commodity trading centers
- Evaluation of pricing mechanism and benchmark linked pricing

Commodity Price Risk Management

- Designing the commodity price risk management strategy
- Development of commodity price risk management policy
- Transaction specific assistance for hedging and risk management instrument and structure design
- Development of business case for regulatory approval for hedging in overseas markets

Decision Support and Quantitative Analysis

- Development of pricing tools for hedging transactions
- Development of value at risk and cash flow at risk models to support business decision making
- Development of hedging decision support parameters and tools

Currency Risk Management



Developing currency risk management strategy

Development of alternate risk management strategies for mitigating currency risk including:

- Natural hedging
- Managing physical exposures
- Using financial derivative instruments



Designing the currency risk management policy

Development and design of currency risk management policy:

- Definition of risks
- Governance framework
- Roles of responsibilities Compliances
- Development of operational enablers such as standard operating procedures and MIS framework

Evaluation of hedging instruments

- Evaluation of hedging instruments and derivative structures in order to mitigate
- currency risk for clients Profit and Loss off-set between exposures and hedging instruments
- Risk mitigation strategies Accounting treatment

Industry Benchmarking

- Industry-wise benchmarking of currency risk management providing a comparative analysis and improvements in the function
- Newer ways of managing risks and leading practices

Commodity Trading Advisory



Evolution of pricing mechanism and benchmark linked pricing

- Pricing mechanism for procurement of inputs from suppliers and outputs sold to customers
- Utilization of commodity benchmarks to strengthen visibility and reduce risk
- Alternatives on dealing with mismatches in pricing of inputs and outputs in physical market
- Alternate methods for pricing to internal business units
- Hedging options to manage risk



Development of commodity trading and supply chain management strategy

- Development of sourcing organization and process
- Assistance to evaluate the pricing-in and pricing-out cycle including production time, inventory levels, and inventory holding time
- Supply portfolio management and restructuring of supplier relationships
- Development of a raw material sourcing strategy
- Assistance in visibility and analysis of factors triggering raw material sourcing decision



Assistance in setting up global commodity trading centres

- Re-structuring sourcing organization and setting up of global trading
- Re-engineering strategy and process for financial risk management and financial supply management
- Regulatory compliance
- Re-organize AR and AP as per re-invoicing arrangement with trading centre
- Development of checklists and process flows for flow of activities and documents

Commodity Price Risk Management



Commodity price risk management strategy

 Development of alternate risk management strategies for mitigating risk from volatility in commodity prices including re-structuring of physical exposures/ physical contracts, effective use of financial derivative instruments for risk mitigation, assistance making a business case for obtaining regulatory approvals, etc.



Designing the commodity price risk management policy

- Developing and designing of the commodity price risk management policy including governance definition of risks, drafting of risk mitigation strategies, governance framework, roles of responsibilities within the function and compliances
- Development of operational enablers such standard operating procedures and MIS framework



Accounting, valuation and P/L off-set bridge

Accounting and valuation

for exposures and hedges

related to commodity price risk management transactions • Designing of profit and loss off-set bridges for commodity price risk management



Transaction specific assistance

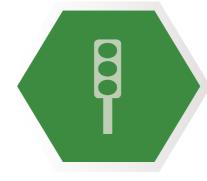
- Evaluate the transaction from a risk management perspective to verify the effectiveness of the derivative/ structure in off-setting the risk on account of the underlying exposure
- Review of transaction from a regulatory and compliance perspective

Decision Support and Quantitative Analysis



Pricing tools for hedging transactions

- Development of pricing tools using commodity and currency benchmarks like cost-sheets and parity-sheets for decision making
- Build-up of cost based computation templates that can be used for lowering input costs



Value at risk and cash flow at risk based models

- Development of Value at Risk (VaR) and cash flow at risk based models to support business decision making
- Evaluation of maximum possible loss from open exposures based on statistical tools
- · Designing of a value at risk based hedging program giving guidance to decision makers



Decision support tools and parameter

- Development of tailor-made hedging decision support parameters and tools
- Predictive risk management tools for decision support
- Evaluation of risk and performance parameters
- Customized MIS reporting formats and management dashboards including mapping of data sets and sources



Accounting, Valuation, and Performance Management Services

Our accounting, valuation, and Performance Management Services professionals help companies with regards to hedge accounting and effectiveness testing, valuation of financial instruments, and model validation. We also offer management assurance on internally implemented policies as well as regulatory compliances for the treasury function.

Service Offerings

Treasury Review Services

- Review of treasury strategy and operations
- Evaluation of performance of the risk management and hedging strategy
- Benchmark treasury operations with industry and global practices
- Benchmarking treasury performance

Transactional and Regulatory Compliance Audits

- Internal audit and transaction audit of the treasury function
- Review of compliance with FEMA guidelines, RBI guidelines and internal policies
- Thematic reviews based on emerging market risks
- Review of payment processing operations

Hedge Accounting and Effectiveness Testing

- Development and review of hedge accounting framework and documentation under FAS-133, IAS-39, IFRS-9, and AS-30
- Development and validation of hedge effectiveness testing framework

Valuation of Financial Instruments and Model Validation

- Development and validation of valuation models for derivatives and financial instruments
- Testing valuation model compliance with FAS157/ IFRS13
- Development and validation of models for CVA adjustment

Treasury Review Services



Review of treasury strategy and operations

- Review of the treasury strategy
- Operational review of the treasury function covering the financial risk management and financial supply chain management space
- Special thematic reviews and management assurance



Benchmarking of treasury operations

- Industry-wise benchmarking of treasury operations providing a comparative analysis and highlighting improvements for the function
- Benchmarking of treasury performance
- Alternative ways of managing financial risks and documenting of leading practices



Evaluation of performance of risk management

- Evaluation of performance of the risk management strategies and hedging strategy
- Verifying profit and loss off-set based on the hedging program and risk management strategy

Hedge Accounting Framework and Effectiveness Testing

- Development of hedge accounting framework and documentation under FAS-133, IAS-39, IFRS-9 and AS-30
- Development of hedge accounting strategies
- Preparation of required hedge documentation
- Review of hedge accounting framework and documentation
- Development of hedge effectiveness testing framework
- Validation of hedge effectiveness testing framework
- Evaluation of effectiveness of hedging transactions
- Assistance in operationalizing hedge effectiveness testing framework

Hedge Accounting framework

Hedge Effectiveness testing

Transactional and Regulatory Compliance Audit



Internal audit of the treasury function

- Internal audit of the treasury function
- Transactional audit of the treasury function
- Concurrent/ periodic audit of the treasury function



Compliance and regulatory audits

- Review of compliances to internally laid down policies and procedures
- Review of compliances to relevant RBI guidelines and FEMA guidelines and other applicable regulations



Special thematic reviews of the treasury function

- Review of treasury function based on authorized upon procedures and agreed upon scope of work
- Risk based review of the treasury function
- Review based on emerging market risks

Valuation of Financial Instruments and Model Validation

- Development of valuation models for derivatives and financial instruments
- Development of models for CVA adjustment
- Valuation of assets and liabilities for financial reporting
- Provisioning and impairment analysis
- Validation of valuation models for derivatives and financial instruments
- Testing valuation model compliance with FAS 157 and IFRS 13
- Validation of models for CVA adjustment

Development of valuation models

Testing and validation of models



Financial Supply Chain and Liquidity Management

Deloitte's subject matter experts in financial supply chain management and liquidity management provide solutions to our clients towards monitoring and integration of global treasuries, cash and liquidity management and investment operations.

Service Offerings

Global Treasury Integration and Monitoring

- Conceptualizing, designing and implementing global treasury centers
- Assistance in setting up trading hubs for financial risk and liquidity management
- Assistance in setting up re-invoicing centers
- Designing exposure management and monitoring framework for global treasury operations

Credit and Liquidity Risk Management

- Designing liquidity and credit risk management policies
- Advisory assistance in review of ISDA master agreement
- Liquidity risk management indicators and models
- Debt servicing and cash flow framework

Liquidity Management Solutions

- Developing global and multi-entity cash pooling structure
- Designing cash pooling arrangements
- Advisory assistance in setting up and managing global banking relationships

Investment and Retiral Fund Advisory

- Designing investment management strategy and policy
- Development of optimization models for investments management
- Review and development of retiral fund management framework
- Review of compliances with retiral fund guidelines

Global Treasury Integration and Monitoring



Development of treasury integration models

- Development of functional integration model for the global treasury function
- Development of geographic integration model for the global treasury function
- Change management and transition to a global and functional integrated treasury function



Location and taxation strategy

- Development of key considerations included as part of the location strategy
- Analysis of tax costs and regulatory implications
- Assistance in incorporation of entity for the global treasury
- Review of potential tax and other incentives
- Assistance in compliance with transfer pricing regulations
- Development of tax and regulatory compliance strategy



Operations management framework for global treasury

- Development of strategy for the global treasury function
- Documentation and review of policy and procedures for the global treasury function
- Assistance in putting in place decision support tools
- Assistance for designing business and system solutions and their implementation to automate processes within the global treasury framework

Credit and liquidity risk management

Liquidity Management Solutions

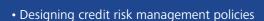
gning global and multi-entity cash pooling structures covering

- Designing cash pooling arrangements
- Advisory assistance in setting up and managing global banking relationship

Liquidity management solutions



Credit and Liquidity Risk Management



- Developing liquidity risk management policies and procedures
- Review of ISDA master agreements and Credit Support Annex terms
- Development of liquidity risk management indicators and models
- Review and development of debt servicing and cash flow framework



Investment and Retiral Fund Advisory



Investment management strategy and policy

- Design and develop investment management strategy
- Documentation of investment management policy providing guidelines to the function



Optimization models for investment management

- Benchmarking of investment returns across asset classes
- Development of Investment portfolio optimization model based on risk-return liquidity principles



framework

Design and develop retiral fund management framework including the

• Induction of members and members leaving the trust

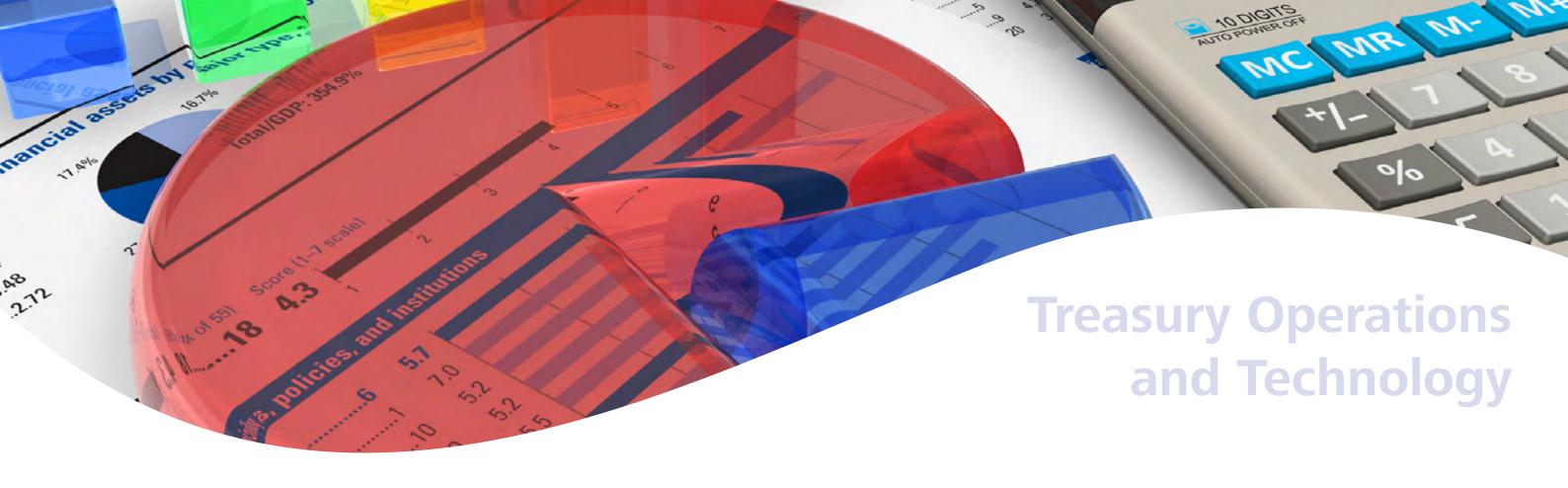
processes around:

- Contribution to member accounts
- Filing of returns and annual accounts



Review retiral funds operations and compliances

- Review of compliances to retiral funds guidelines from
- Ministry of Labour and Pension Fund Regulatory and Development Authority
- Review of retiral funds operations



Treasury Operations and Technology

Our operations and technology team help clients in mitigating operational risk and leveraging technology to support superior treasury management. Our services include support throughout the system selection and implementation cycle for our clients.

Service Offerings

Treasury Shared Services

- Design and implementation of the model
- Evaluation of operational procedures for shared service migration, cost benefit assessment
- Support roll-outs and stabilization of treasury shared services operations
- SLAs and performance metrics
- Audits for outsourced operations

System Implementation and Enhancement

- Design and enhancement of treasury, commodity and financial risk architecture
- Assistance in selection and implementation of systems
- SAP treasury custom solutions
- Development of risk models and tools
- Bespoke system developments

Governance and Operational Processes

- Designing governance framework for the treasury function
- Development of processes and standard operating procedures
- Designing reporting frameworks to support treasury risk and performance management

Handholding and Competence Building

- Hand-holding, oversight and implementation assistance
- Training programs to support enhancement of competence
- Outsourced/ co-sourced middle office operations and performance reviews

Treasury Shared Services



Treasury shared service model

- Designing of treasury shared services model
- Implementation road map for roll-out of treasury shared services
- Evaluation of parameters for control and monitoring of treasury shared services
- Development of Service Level Agreements and performance metrics



Assistance in roll-out and standardization of treasury shared services

- Hand-holding support during roll-out of treasury shared services operations
- Assistance in standardization of processes for smooth roll-out of treasury shared services
- · Assistance in control and oversight of the treasury shared services operations
- Trainings and workshops for knowledge transfer and competence building



Auditing of treasury shared services

- · Review and audit of treasury shared services function whether internal to the company or outsourced to third parties
- Compliance to parameters agreed upon in Service Level agreements
- · Performance evaluation of the treasury shared services function

Governance and Operational Processes



Governance framework

- Designing governance framework for the treasury function
- Developing governance framework for commodity trading and price risk management operations
- · Developing details delegation of authority within the function mapping to personnel levels and bandings



Operational processes

- Documenting detailed standard operating procedures for the front office, middle office and back office operations within treasury and risk management functions highlighting roles and responsibilities and data flows as per laid down policies
- Developing checklists and job cards personnel within the function
- · Review and enhancement of existing procedures of the



Reporting framework

- · Developing MIS reporting framework to support management reporting and decision making within the treasury and risk management functions
- Designing risk and performance parameters and their monitoring
- Developing of management dashboards

System Implementation and Enhancement



Assistance in selection of treasury system

- · Business requirement analysis and system specification mapping
- Treasury system landscaping and vendor evaluation and technical scoring
- · Vendor evaluation report
- · Vendor contracting and system licensing



Assistance in system implementation

- Development of business blueprint document with agreed upon solutions and workarounds
- · Assistance in configuration and implementation of treasury system
- · Assistance in user acceptance testing and go-live of the development/ entrancement and



Enhancement of treasury systems

- · Assistance in upgrading of existing treasury system
- Development of customized automated reporting in SAP Treasury Risk management and Commodity Trading Risk Management
- Bespoke development and implementation · Assistance in UAT and go-live of the development/

enhancement and

change management

Project management Office

- · Assistance in end-to-end management of the project
- Liaison with system vendor, IT division of the client, implementation partner and core users of the business teams
- Designing of project updates, timelines and responsibilities · Status updates and follow-ups on



Post implementation reviews

· Review of system implementation vis-à-vis business requirement document and business blueprint document

· Evaluation of

system usage by business and possibility of further automation

Hand-holding and Competence Building



Hand-holding and competence building

- Hand-holding, oversight, and implementation assistance for operationalizing risk management framework
- Assistance in pilot implementation of policy, processes, and reporting framework designed for monitoring and decision support
- Assistance for treasury automation in the form of co-sourced project management office, assistance in User Acceptance Testing and **End-User trainings**



Training programs

- Documenting detailed standard operating procedures for the front office, middle office and back office operations within treasury and risk management functions highlighting roles and responsibilities and data flows as per laid down policies
- Developing checklists and job cards personnel within the function
- · Reviewing and enhancing existing procedures of the function



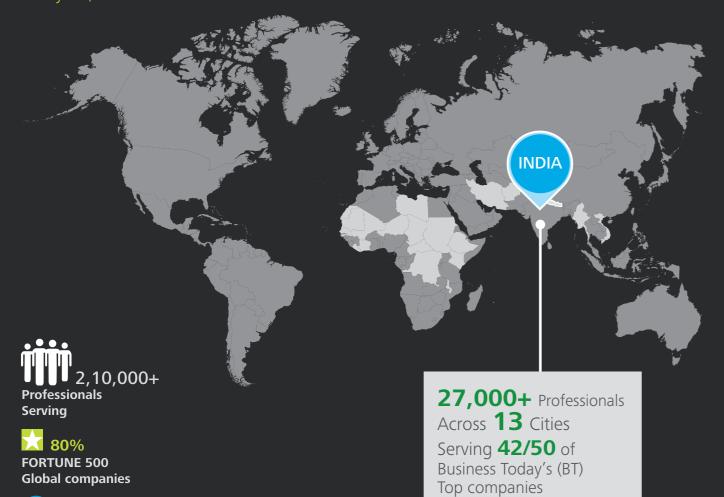
Outsourced/ Co-sourced operations model

- · Developing MIS reporting framework to support management reporting and decision making within the treasury and risk management functions
- Designing risk and performance parameters and their monitoring
- · Developing of management dashboards

Deloitte. at a Glance*

With a globally connected network in more than 150+ countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges.

Deloitte commands the strongest risk advisory and service presence in India among the Big 4 with 2,600+ risk advisory professionals on ground. Our Risk service offerings include Government, Risk and Regulatory, Control Transformation and Assurance, Cyber Risk, Risk Analytics, Internal Financial Controls and Finance Transformation.



■ Deloitte presence worldwide *As of July 2015.

150

COUNTRIES

Strong Presence in India

India clientele (November 2014 BT500*)



Serves 39 of 89 companies in BT500 list	·••	Consumer business
Serves 49 of 109 companies in BT500 list	*	Financial services
Serves 35 of 62 companies in BT500 list	6	Energy & resources
Serves 23 of 40 companies in BT500 list	%	Life sciences & healthcare
Serves 35 of 60 companies in BT500 list		Tech, media & telecom
Serves 73 of 138 companies in BT500 list	*	Manufacturing

Deloitte delivers value by ...

Identifying **Issues** that affect your Business Working together to derive **Solutions**Achieving a result-driven **Impact**



Deloitte named a global leader in Business Intelligence based on capabilities by Forrester

Source: Forrester Research, Inc. (2012)

Eminence and Credentials

Our Eminence and Thoughtware draws upon our research and experience, and that of co-authors in academia and business, to advance the conversation on topics of interest to executives and government leaders. These insights can spark new ideas or provide readers with guidance on evolving market and regulatory trends.

Deloitte ranked **Financial Services** Consulting by

Deloitte named a Gartner

Deloitte named a global leader, ranked #1, in **Risk Consulting** in Financial Services by Kennedy

Deloitte named a global leader in **Business Consulting** Services for Governance, Risk, and Compliance by IDC MarketScape



Our Eminence in the Marketplace

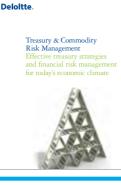
Alerts – Provide the latest updates on what's happening in various industries and finance environment

CFO Program – Supported by eminence, surveys and research that differentiates Deloitte as the pre-eminent advisory to the CFO community in India

India Thoughtware – Showcases some of the research of the India practice



A white paper representing a case study involving and SAP custom development for SAP Treasury



A thought paper on effective strategies for treasury and commodity risk provides views and industry management



Deloitte's '2015 India Corporate Treasury Survey' insights from corporate treasurers and CFOs

Contact Us



Senior Director Mobile: +91 99200 28365 Email: muzammilpatel@deloitte.com



Senior Director Tel/Direct: +91 22 6185 4050 Mobile: + 91 98926 00670 Email: hemalmehta@deloitte.com



Director Mobile: +91 99676 59145 Email: abbajpai@deloitte.com



Mehul Sanganee Email: msanganee@deloitte.com



Director Mobile: +91 99203 75455 Email: arindamb@deloitte.com



Prateek Chaturvedi Senior Manager Mobile: +91 98730 26046 Email: prateekc@deloitte.com



Jrvax Chiniwala Senior Manager Mobile: +91 98190 46293



Mobile: + 91 98702 18415



Mobile: +91 99200 12453

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about for a more detailed description of DTTL and its member firms.

This material is prepared by Deloitte Touche Tohmatsu India LLP (DTTILLP). This material (including any information contained in it) is intended to provide general information on a particular subject(s) and is not an exhaustive treatment of such subject(s) or a substitute to obtaining professional services or advice. This material may contain information sourced from publicly available information or other third party sources. DTTILLP does not independently verify any such sources and is not responsible for any loss whatsoever caused due to reliance placed on information sourced from such sources. None of DTTILLP, Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte Network") is, by means of this material, rendering any kind of investment, legal or other professional advice or services. You should seek specific advice of the relevant professional(s) for these kind of services. This material or information is not intended to be relied upon as the sole basis for any decision which may affect you or your business. Before making any decision or taking any action that might affect your personal finances or business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person or entity by reason of access to, use of or reliance on, this material. By using this material or any information contained in it, the user accepts this entire notice and terms of

©2015 Deloitte Touche Tohmatsu India LLP. Member of Deloitte Touche Tohmatsu Limited

Deloitte Touche Tohmatsu India Private Limited (U74140MH199 5PTC093339) a private company limited by shares was converted into Deloitte Touche Tohmatsu India LLP, a limited liability partnership (LLP Identification No. AAE-8458) with effect from October 1, 2015