Siemens in FX Markets
ECB FX Contact Group, July 2017

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## Agenda

1. Siemens Overview
2. FX Management at Siemens Treasury
3. Examples
Divisions of Siemens

Siemens AG

Power and Gas
Siemens Gamesa Renewable Energy
Power Generation Services
Energy Management
Building Technologies
Mobility
Digital Factory
Process Industries and Drives
Healthcare (separately managed business)
Financial Services

Power generation
Power transmission, power distribution and smart grid
Energy application

We create value for Siemens by enabling new technology models through our financial expertise
Treasury

On behalf of Siemens, we act as a center of expertise for all aspects of financial risk management, Company financing and payment transactions.

We concentrate Company-wide liquidity on a daily basis, effect global internal and external payment transactions, optimize financial risks and manage the treasury-related processes and activities of Siemens.

- Global management of Group liquidity and financing for Siemens
- Bank-relationship management to limit the increasing counterpart risk from bank exposure
- Bank-account management
- Centralized management of interest rate, currency, liquidity and credit risk
- Accounting for all financial processes, including fully automated posting of all transactions
- Management of short-term liquidity to ensure the ability to pay all liabilities
Treasury Organization

4 Regional Treasury Centers to ensure 24h coverage
- >300 Treasury employees worldwide
- Support of 700 Siemens operative units in 75 countries (out of >200)

Regional Treasury Centers:
- Iselin
- Munich
- Beijing
- Hong Kong
FX Management @ Siemens

- Siemens 2016: ca. 350,000 employees; turnover €79.6bln; on balance sheet per 09/2016: FX forwards/options €44.6bln; all derivatives: €99.9bln
- Goal: managing currency risks within the Siemens Group (active in >200 countries) in a cost-effective and centralized way; optimize liquidity management
- Currency Guidelines demand a hedge ratio of 75% - 100% for operative entities depending on business field and type (e.g. standard contracts, projects, forecasted transactions). Only transaction risk is hedged
- Hedges are not collateralized, Treasury manages individual bank limits based on allocated EL
- Hedge Approaches
  - Macro: on a portfolio basis (discretion: Treasury) within VAR limits and defined products/maturities => central book for all currencies (others: IR, commodities), major FX risk: USD
  - Micro: asset or liability transaction based (hedge accounting, projects) => decision (micro/macro) made by operative entity, orders partially automated (internal 360T routing)
- Instruments: FX Spot, Forward, Option, Swap, NDF/Option.
FX Usage Examples

• Liquidity Swaps: Treasury is managing liquidity in ca. 30 currencies (out of Munich: 21) on a daily basis. Ca. 75% of the volume is done through short-term FX swaps

• Fixings: not used as a hedging standard (normally: spot), but in specific cases:
  • Common reference required for commercial contracts with cash-flow transformation and the hedging instruments applied => infrastructure projects. Background: EU-wide tenders are usually based in EUR, but often settled in a different (local) currency. Example: Thameslink, 115 full trains (ca. 800 wagons) to be delivered until 2018
  • Payment of dividends from subsidiaries to Siemens AG out of countries with currency restrictions, e.g. India, China. These countries usually have local treasury entities for daily operations

• Options: mostly at request of internal customers to buffer short-term volatility risk for existing or planned FX positions, or for project business (p.t.o.) Instruments: ATM, OTM, Collars, Risk Reversals
Project Business: Phases

Preparation/ Bidding phase
- Siemens is in competition with other bidding firms for a project acceptance
- Time lines / cash flows of notional amounts are still highly uncertain

Signing phase
- Signing phase with shortest time frame
- Customer and Project Manager agree upon a project contract, so time lines and cash flows are more predictable

Binding phase
- Siemens has given its commitment to the project, while the customer still has the right to accept or decline
- Time lines and cash flow of notional are still highly uncertain as project negotiations commence

Execution phase
- Project implementation and deployment phase (can last several years)
- Time lines and cash flow notional can vary in accordance with endogenous and exogenous factors during the project

Variation order phase
- Customer can choose to make additional orders connected to varying preconditions
- Initiation of new cash flows and concrete time lines if customer decides to exercise its order option
### Project Business: Currency Risk at Each Phase

<table>
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<tr>
<th>Phase</th>
<th>Development Phase</th>
<th>Binding Phase</th>
<th>Signing Phase</th>
<th>Execution Phase</th>
<th>Variation Order Phase</th>
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<td>Time management to secure preferable spot and forward rates for the contract currency</td>
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<td>Transfer the risk by executing hedging strategies</td>
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<td>Forecast the potential cash flows generated from the project and achieve netting agreements</td>
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