The Chair of Logistics & Supply Chain Management is offering the following Project Study:

**How to integrate exchange rate risk in strategic network design?**

**About the client:**
Daimler AG is one of the world's most successful automotive companies. With its divisions Mercedes-Benz Cars, Daimler Trucks, Mercedes-Benz Vans, Daimler Buses and Daimler Financial Services, the Daimler Group is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach. The department of Strategic Network Planning of Daimler Trucks focuses on the optimal design of the global production network including vehicle and aggregate production.

**Problem situation:**
As Daimler Trucks operates more than 30 production sites which are located in many different regions of the world, volatile exchange rates have a significant impact on the configuration of the production network. Depending on the actual exchange rate, the transfer prices for globally produced components vary, and the configuration of the production network may change. Therefore, it is important to integrate volatile exchange rates into standard planning processes.

Given the current strategic network configuration for one major component, the impact of different exchange rate scenarios should be analyzed. Furthermore, based on the results, an optimization approach that takes volatile exchange rates into account should be developed and optimization opportunities for the production network suggested.

**Key project tasks:**

- to develop a planning process that integrates exchange rate risk for strategic network design problems
- to prepare a sensitivity analysis for the given network configuration and different exchange rate scenarios
- to develop an optimization approach that takes volatile exchange rates into account
- to provide optimization potentials for the given network configuration
- to prepare presentations and final reports

**Requirements:**
The project study is for students of the study-program TUM-BWL. Qualified candidates have a major in Supply Chain Management and basic knowledge in Operations Research. Furthermore, the ability to work independently as well as analytical skills are required. The thesis should be written in English.

**Begin:** as soon as possible
**Advisor:** Maximilian Budde

For further information please contact Maximilian Budde. Any interested student, please send your application (including motivation letter, curriculum vitae and transcripts of records) by email to: maximilian.budde@tum.de.