

Foreign Exchange (FX) Market: Fundamentals & Trading

Instructor Information

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Course Information

- FRE-GY 7301
- Foreign Exchange (FX) Market: Fundamentals & Trading
- Time & Place: As Announced in Albert

Course Overview and Goals

In comparison to Fixed Income or equity markets, the Foreign Exchange (FX) stands out as the largest and most dynamic market. Distinguished by its continuous operation 24 hours a day and 7 days a week, and absence of a fixed physical exchange location, the FX market plays an important role in global trade and travel, exerting a profound influence on various aspects of life across nations. The significance of FX is underscored by the diverse array of participants in that market, ranging from commercial banks and international corporations to central banks, hedge funds, money managers, speculators, and even retail investors.

Understanding the FX market and its conventions, not only offers a comprehensive view of the global financial landscape but also opens up a multitude of career opportunities for our students. Knowledge of this domain is in high demand across banks, international companies, central banks, and institutions dealing with foreign exchange, including organizations like the International Monetary Fund (IMF). Acquiring the essential knowledge in FX can thus significantly broaden the employment prospects for our students, positioning them as valuable assets in a wide range of financial and economic institutions worldwide.

Upon completion of this course, students will be able to:

Understand the working of the Foreign Exchange (FX) market, and be well-versed in its conventions and equipped with insights into the factors that drive its fluctuations. The course covers various instruments and structures including Forward Contracts, Cross-Currency Swaps,



and FX Options. Students will acquire practical knowledge on employing these instruments to effectively manage and hedge FX risks.

Furthermore, the course enables the students to assess and interpret the influence of diverse economic factors on FX rates. They will develop the analytical skills needed to determine how changes in FX rates can pose financial risks for companies and entities with FX exposures. Upon completion of this course, students will gain skill that will make them marketable for FX positions at financial institutions as well as corporations.

Course Requirements

- Courses in Investment, Probability and Statistics, working knowledge of EXCEL and high level language such as R or Python

Class Participation

Lectures

Assignments

There will be weekly assignments dealing with actual situations in the market

Final Project

Assigned Readings

Articles will be posted regarding current events in the financial markets and their relevance to the topics being covered in the course.

Grading of Assignments

The grade for this course will be determined according to the following formula:

Assignments/Activities	% of Final Grade
Homework	45%
Short Midterm	15%
Final	40%

Letter Grades

Letter grades for the entire course will be assigned as follows:

Letter Grade	Percent
A	95% and Higher
A-	90%-95%
B+	85%-90%
B	80%-85%
B-	75%-80%
C+	70%-75%
C	60-70%
F	Less than 60%

Course Schedule

Topics and Assignments

Week	Topic	Assignment Due
1	FX Market, Quoting conventions, FX regimes: Fixed, Floating, Managed Floating, and Pegged. Spot vs. Forward, Deliverable vs. Non-deliverable, Crosses and Synthetic Crosses, and Triangle Arbitrage	Sunday, two weeks from the lecture
2	Major factors impacting FX rates: Trade and Current Accounts, Capital Account, Short-Term and Long-Term Capital Flow, Balance of Payment, Term of Trade and Real Term of Trade, Local and Foreign Debts, Capital Flight and Moratorium, Central Banks and their Mandates, Market Intervention and speculative attacks	Sunday, two weeks from the lecture



3	Interest Rate Differentials (Short-Term and Long -Term), Purchasing Power Parity, Nominal and Real Exchange Rates, Interest rate Parity and Forward Rate Hypothesis, Relative Steepness of Curves, Carry Trade, Cross Currency Swaps	Sunday, two weeks from the lecture
4	Currency Forecasting, Fundamental Approaches (Balance of Payment, Asset Market, and Political), Volatility Index, Current Account Deficit, Fiscal policies, Budget Deficit, Monetary Policies, Central Bank Interest Rate Policies, Monetary Expansion and Money Supply, Economic Growth (Inflation, Employment, Industrial Production, ...), Currency Devaluation, Currency Jump and Fat Tail, FX parsimonious models.	Sunday, two weeks from the lecture
5	Some commonly used technical indicators such and Moving Averages, Support, Resistance, Japanese Candle Stick and their Statistical Interpretations. Application of some Machine Learning techniques to Technical Analysis.	Sunday, two weeks from the lecture
6	Fundamentals of FX Options. Risk Reversal, Barrier and Binary Options, Some second generation options and FX strategies.	Sunday, two weeks from the lecture
7	Practical considerations, issues, and conventions. Hedging with Various Instruments. Accounting (Hedge Accounting, Fair Value Accounting, Cash Flow Accounting), and Hedge Effectiveness	

Course Materials

Required Textbooks & Material

Will be provided

- **Access your course materials:** [NYU Classes](https://nyu.edu/its/classes) (nyu.edu/its/classes)
- **Obtain 24/7 technology assistance:** Tandon IT Help Desk (soehelpdesk@nyu.edu, 646.997.3123)
NYU IT Service Desk (AskIT@nyu.edu, 212-998-3333)

Policies

Academic Misconduct

- A. Introduction: The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness, and students at the School of Engineering are expected to exhibit those qualities in their academic work. It is through the process of submitting their own work and receiving honest feedback on that work that students may progress academically. Any act of academic dishonesty is seen as an attack upon the School and will not be tolerated. Furthermore, those who breach the School's rules on academic integrity will be sanctioned under this Policy. Students are responsible for familiarizing themselves with the School's Policy on Academic Misconduct.
- B. Definition: Academic dishonesty may include misrepresentation, deception, dishonesty, or any act of falsification committed by a student to influence a grade or other academic evaluation. Academic dishonesty also includes intentionally damaging the academic work of others or assisting other students in acts of dishonesty. Common examples of academically dishonest behavior include, but are not limited to, the following:
1. Cheating: intentionally using or attempting to use unauthorized notes, books, electronic media, or electronic communications in an exam; talking with fellow students or looking at another person's work during an exam; submitting work prepared in advance for an in-class examination; having someone take an exam for you or taking an exam for someone else; violating other rules governing the administration of examinations.
 2. Fabrication: including but not limited to, falsifying experimental data and/or citations.
 3. Plagiarism: Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise; failure to attribute direct quotations, paraphrases, or borrowed facts or information.
 4. Unauthorized collaboration: working together on work that was meant to be done individually.

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5. Duplicating work: presenting for grading the same work for more than one project or in more than one class, unless express and prior permission have been received from the course instructor(s) or research adviser involved.
6. Forgery: altering any academic document, including, but not limited to, academic records, admissions materials, or medical excuses.

Disability Disclosure Statement

Academic accommodations are available for students with disabilities. Please contact the **Moses Center for Students with Disabilities** (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

Inclusion Statement

The NYU Tandon School values an inclusive and equitable environment for all our students. I hope to foster a sense of community in this class and consider it a place where individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations, and abilities will be treated with respect. It is my intent that all students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. If this standard is not being upheld, please feel free to speak with me.