
COURSE SYLLABUS

FOR FULL-TIME UNDERGRADUATE PROGRAMS

(Issued under Decision No.1380/QĐ-ĐHKTQĐ on 15/8/2016 by the University President)

1. COURSE NAME: International Financial Model

Code: TOTC1111

Number of Credits: 02

2. DEPARTMENT IN CHARGE OF INSTRUCTION:

Department of Mathematical Finance

Office: Faculty of Economic Mathematics

Office Hours: Working hours, the working day

Office Telephone: (84) 04 3628 3007

3. PRE-REQUISITE:

Have studied the subjects: Microeconomics; Macroeconomics; Econometrics (major in Applied Mathematics in economics); Mathematical economics models; Financial and monetary theory.

4. COURSE DESCRIPTION:

- International financial models is a specialized course for 3rd year, 4th year students majoring in Applied Mathematics in economics.
- The course focuses on the main content of the international financial relations. Modeling approaches surveying was performed in some economies as well as the economic sector.
- The course also codifies the international financial models, practice analyzing foreign exchange relations, balance of payments, leveraging the market and the government's policies and financial instruments.

5. COURSE OBJECTIVES:

- The course gives learners the mathematical tools of international financial analysis such as these transactions on the foreign exchange market, the balance of payments, exchange rates or purchasing power of the market.
- The course provides learners with skills: Analysis of international financial relations by means of approaching mathematical models, skills of analyzing data a number of experimental models.

6. COURSE CONTENT:

TENTATIVE SCHEDULE

<i>No</i>	<i>Contents</i>	<i>Total hours</i>	<i>In details</i>		<i>Notes</i>
			<i>Theory</i>	<i>Practice, Discussion, Exams</i>	
1	Chapter 1	4	3	1	
2	Chapter 2	4	3	1	
3	Chapter 3	4	3	1	
4	Chapter 4	4	3	1	
5	Chapter 5	4	3	1	
6	Chapter 6	2	1	1	
7	Chapter 7	4	3	1	
8	Chapter 8	2	0	2	
9	Chapter 9	2	0	2	
	Total	30	19	11	

CHAPTER 1 - THE FOREIGN EXCHANGE MARKET

This chapter focuses on the basics of the forex market; introduces the definitions, analysis and the exchange rate types and considers the relationship between the spot rate and the forward rate.

1.1. Forex market

1.1.1. Concept

1.1.2. Features of the Forex market

1.1.3. The function of the foreign exchange market

1.1.4. Subjects participating in the foreign exchange market

1.1.5. Forex market structure

1.2. The basic problem of the exchange rate

1.2.1. Rate definition

1.2.2. Classification rates

1.2.3. Rate listing method

1.2.4. How to read and write rates

1.2.5. Exchange rate differences

1.2.6. Acts of foreign exchange trading

1.3. Spot foreign exchange market

1.3.1. Characteristics of the market

1.3.2. The model identifying the spot rate

1.4. Forward exchange market

1.4.1. Hedging organizations

1.4.2. The arbitrage trader

1.4.3. Speculators

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.
- 3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 2 - INTERNATIONAL BALANCE OF PAYMENTS

The purpose of this chapter is to present the basic contents of the balance of payments. The first content is the concept of the balance of payments; collecting, reporting and presenting the statistics of the balance of payments; accounting in accounts of balance of payments; dual accounting principles in the balance of payments; the concept of surplus and deficit of balance of payments. The second content of this chapter focuses on modeling and presenting an overview of models for the balance of payments.

2.1. The concept of the balance of international payments

Balance model presented describes the balance of payments, taking into account the empirical problem (data and data presenting).

2.2. Accounting and accounts of balance of payments

2.3. The division of balance of payments (Trade balance, Current account, Capital account, ...) and the official balance of payments.

2.4. Surpluses and deficits, model and analyzing methods

2.5. Keynesian model for open economies and the role of the balance of payments

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.
- 3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 3 - ELASTICITIES AND ABSORPTION APPROACHES TO THE BALANCE OF PAYMENTS

The goal of this chapter is to study the effects of exchange rate changes to the current account balance of the country through the elasticities and absorption

approaches. Both approaches are designed to answer the question of whether the dumping of a currency has led to a reduced level of the current account deficit or not.

3.1. The basic model and the analysis: Marshall-Lerner condition, price effects, volume effects.

3.2. Empirical testing of import demand elasticities and export in different conditions.

3.3. Absorbing approach: models analyzing the effects on the market

3.4. General model: inversion factor, the problem of dumping

References of the chapter:

1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.

2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.

3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 4 - POLICY COORDINATION IN THE OPEN ECONOMY

This chapter reviews the impact of the exchange rate and macroeconomic policies to external balance and external balance of open economies. To study the effect of exchange rate policy and fiscal policy, currency on the balance of payments is an important component of macroeconomic policy in open economies. Ensuring to maintain a certain status of certain balance of payments in a certain time in order to promote economic growth and achieving the goals of jobs and important economic objectives .

This chapter focuses on analyzing the basis of combining policies to achieve internal balance and external balance and operating mechanism of monetary fiscal policy in a fixed and a floating exchange rate regime .

4.1. Concepts related to internal and external balance

4.2. The basic models

4.3. To coordinate fiscal policy in the country and the international financial

References of the chapter:

1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.

2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.

3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 5 - MONETARY APPROACH TO THE BALANCE OF PAYMENTS

This chapter introduces the monetary approach to the balance of payments. The main content is simple monetary models, the concept of imbalance status of the balance of payments in view of monetarist. On the basis of the built model, analyzing the impact of the devaluation, monetary expansion to the balance of payments. To clarify the meaning of this approach in practice, Chapter 5 also introduces the results of a number of empirical studies on the monetary approach to the balance of payments of Vietnam.

- 5.1. The monetary model, the unbalanced state of balance of payments
- 5.2. The impact of the devaluation and currency exchange rate equation
- 5.3. Increased income issues and modeling the impact of increased income
- 5.4. International prices in different situations
- 5.5. Limitations of the monetary approach

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.
- 3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 6 – PURCHASING POWER PARITY AND EXPERIENCE OF EXCHANGE RATE FLOAT

This chapter introduces the law of one price, the theory of absolute and relative purchasing power parity, measurement problems in the testing of purchasing power parity, and the explanation of the less operation of the purchasing power parity theory and finally presents the Balassa - Samuelson model.

- 6.1. Purchasing power parity theory and the law of one price
- 6.2. model measuring purchasing power parity
- 6.3. These models and experimental verification
- 6.4. Balassa-Samuelson model

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in of economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.

3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 7 - MONETARY APPROACH TO THE DEFINING OF EXCHANGE RATE

This chapter introduces some classic models of exchange rate defining determination. That is the model following the monetary theory: the monetary model of expectation price; fixed price model; equilibrium models of goods, real interest rate differentials.

7.1. Property prices

7.2. Expectation model and analysis

7.3. Monetary models defining the expectation price

7.4. Fixed price model and the interpretation

7.5. Equilibrium models of goods, real interest rate differentials

References of the chapter:

1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.

2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.

3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 8 - MODEL OF BALANCED PORTFOLIO

This chapter presents the model of portfolio equilibrium. If such a model for defining the currency exchange rate was based on the hypothesis of "domestic bonds and foreign bonds are the perfect replacement bonds", this hypothesis is discarded in the model of portfolio balance. The model will be presented in its simplest form for ease of analysis.

8.1. Introduction

8.2. Activities of the model of portfolio equilibrium

8.3. Model

8.3.1. The hypotheses and the model equations

8.3.2. Derivative asset demand functions

8.3.3. Line describing balance in the currency market

8.3.4. Line describing the balance in the bond market

8.3.5. Line describing the balance in foreign bonds market

8.3.6. Balance of models

8.3.7. The impact of foreign exchange transactions

8.3.8. The influence of open market operation

- 8.3.9. The impacts of disabled foreign exchange transactions
- 9.8.10. Comparison between Forex trading operations, open market operations and disabled foreign exchange transactions .
- 3.8.11. Dynamics of models
- 8.4. Fiscal expansion funded with cash as opposed to financing by bonds
- 8.4.1. Spending funded by cash
- 8.4.2. Expenditure financed by bonds
- 8.5. risk compensating money , imperfect and perfect replacement
- 8.6. Conclusion

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.
- 3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

CHAPTER 9 - EXPERIMENTAL EVIDENCE ON EXCHANGE RATE

We have presented a model of exchange rate defining in order to give managers a powerful tool to be able to choose from and each model has very different implications for the administration exchange rate. But can we confirm that which model can be unchanged on the experimental testing. Some researchers have tested the existing exchange rate model with different econometric levels and have shown that the exchange rate models seem to be empirically weak.

- 9.1. Efficient Market and testing
- 9.2. Some findings on the characteristics of effective market
- 9.3. Empirical testing on exchange rate and Analysis -Forecasts models,

References of the chapter:

- 1) Nguyen Khac Minh (2002), The methods of analysis and forecasting in economics, Publisher of Science and Engineering.
- 2) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.
- 3) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

7. REQUIRED TEXTBOOK & COURSE MATERIALS

1) Nguyen Khac Minh (2008), international financial models, Publisher of Science and Engineering.

8. RECOMMENDED TEXTS & OTHER READINGS:

1) Nguyen Van Tien (2000), Modern International Finance, Statistical Publishing House.

2) James Calvin Baker (1998), International Finance, Prentice Hall, January 15.

3) Journal of International Financial Management & Accounting (<http://www.blackwellpublishing.com>).

9. ASSESSMENT & GRADING POLICY:

- Attendance enough hours under Regulation (attending at least 80% specified number of hours): 10%
- Discussion, exercises: Full at the request of teachers
- Practice, presentations: At the request of teachers
- Exam: 30%
- Final exam: 60%

HEAD OF DEPARTMENT

(signed)

PhD. Hoang Duc Manh

Hanoi, 2016

PRESIDENT

(signed)

Prof.Dr. Tran Tho Dat