Economics 103 — Spring 2003

International Monetary Relations

March 31, 2003

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Classroom:	HSS 2250
Class Time:	TuTh 9:30am - 10:50am
Class Web Page:	econ.ucsd.edu/muendler/teach/03s/103

1 Course Objectives

This course examines the macro-economy in an international setting. The course covers the exchange rate and the capital account, and relates their determination to world capital markets and the domestic macroeconomy. The course discusses economic policies and their effects under different exchange rate regimes—ranging from floating rates to fixed rates to monetary unions—, and presents implications for the current account and the economy as a whole.

2 Prerequisites

Economics 110A-B.

3 Readings

Required textbook: Krugman and Obstfeld (2003)

Required readings: McKinnon (1996), Sarno and Taylor (2002), Obstfeld and Rogoff (1995), McKinnon (2001), Stiglitz (2000)

Recommended readings: Taylor (1995), Ong (1997), Obstfeld (2001), Mihov (2001), Obstfeld (1998)

The required and recommended readings (articles) will be available as custom materials from AS Soft Reserves (two volumes, copyright fees apply). The readings can also be accessed through the class web page (see link above) and the UCSD electronic library.

4 Problem Sets

There will be three problem sets, due on scheduled dates throughout the quarter. You are encouraged to work on the problems with your classmates. Your teaching assistants Natalya Lebedeva and Pauline Kennedy will hold review sessions to help you approach the problems. Your solutions to the problem sets will be checked (check/no check) and your performance on them will be part of the final grade. Problem sets have to be handed in *before* 9:30am on the due date.

5 Assessment

There will be two midterm exams and a final exam. The two midterm exams will take 80 minutes each and the final exam will take 120 minutes. All exams are cumulative.

The final grade will be based on your total points in the three exams and the three problem sets:

Problem sets:	20 points (8+6+6 points)	4/22, 5/13, 6/5
Midterm 1 (80 minutes):	80 points	4/29
Midterm 2 (80 minutes):	80 points	5/20
Final (120 minutes):	120 points	finals week

Midterm exams last for the time of a lecture. (Problem sets have to be handed in *before* 9:30am on the due date.)

6 Class Schedule

1. **Tue, April 1:** Introduction to International Monetary Relations
   (Krugman and Obstfeld 2003/Ch. 12 and 18)

2. **Thu, April 3:** International Monetary Systems, Past and Present
   (Krugman and Obstfeld 2003/Ch. 18; McKinnon 1996)
   PROBLEM SET 1 OUT

3. **Tue, April 8:** Exchange Rates and Foreign Exchange Markets
   (Krugman and Obstfeld 2003/Ch. 13)

4. **Thu, April 10:** An Asset Approach to the Exchange Rate
   (Krugman and Obstfeld 2003/Ch. 13; *recommended*: Taylor 1995)

5. **Tue, April 15:** A Monetary Approach to the Exchange Rate
   (Krugman and Obstfeld 2003/Ch. 14)

6. **Thu, April 17:** Monetary Policy and Exchange Rate Determination
   (Krugman and Obstfeld 2003/Ch. 14)

7. **Tue, April 22:** Purchasing Power Parity
   (Krugman and Obstfeld 2003/Ch. 15; Sarno and Taylor 2002)
   PROBLEM SET 1 DUE

8. **Thu, April 24:** Purchasing Power Parity
   (Krugman and Obstfeld 2003/Ch. 15; *recommended*: Ong 1997)
   PROBLEM SET 2 OUT

Tue, April 29: MIDTERM 1
covering Krugman and Obstfeld (2003)/Ch. 12 through 15 (Ch. 18 will only be on the following exams); and McKinnon (1996), and Sarno and Taylor (2002)

9. **Thu, May 1:** Flexible Exchange Rates
   (Krugman and Obstfeld 2003/Ch. 16)

10. **Tue, May 6:** Policy under Floating Exchange Rates
    (Krugman and Obstfeld 2003/Ch. 16; *recommended*: Obstfeld 2001)

11. **Thu, May 8:** Fixed Exchange Rates
    (Krugman and Obstfeld 2003/Ch. 17)

12. **Tue, May 13:** Policy under Fixed Exchange Rates
    (Krugman and Obstfeld 2003/Ch. 17; Obstfeld and Rogoff 1995)
    PROBLEM SET 2 DUE

13. **Thu, May 15:** International Monetary Policy
    (Krugman and Obstfeld 2003/Ch. 18 and 19)
    PROBLEM SET 3 OUT

Tue, May 20: MIDTERM 2
covering Krugman and Obstfeld (2003)/Ch. 12 through 19; and Obstfeld and Rogoff (1995)

14. **Thu, May 22:** The US Current Account Deficit
    (McKinnon 2001)

15. **Tue, May 27:** Optimum Currency Areas and the Euro
    (Krugman and Obstfeld 2003/Ch. 20; *recommended*: Mihov 2001)

16. **Thu, May 29:** Capital Market Integration
    (Krugman and Obstfeld 2003/Ch. 21, *recommended*: Obstfeld 1998)

17. **Tue, June 3:** International Financial Crises
    (Krugman and Obstfeld 2003/Ch. 22; Stiglitz 2000)

18. **Thu, June 5:** International Financial Crises
    (Krugman and Obstfeld 2003/Ch. 22; Stiglitz 2000)
    PROBLEM SET 3 DUE

Thu, June 12 (Finals Week): 8:00am to 10:50am FINAL EXAM
covering Krugman and Obstfeld (2003)/Ch. 12 through 22; and McKinnon (1996), Sarno and Taylor (2002), Obstfeld and Rogoff (1995), McKinnon (2001), Stiglitz (2000)

References

KRUGMAN, P. R., AND M. OBSTFELD (2003): *International economics: Theory and policy*. Addison Wesley, Boston, 6th edn.

MCKINNON, R. I. (1996): "The Rules of the Game: International Money in Historical Perspective," in *The rules of the game: International money and exchange rates*, ed. by R. I. McKinnon, pp. 23–90. MIT Press, Cambridge, MA and London.

——— (2001): "The International Dollar Standard and the Sustainability of the US Current Account Deficit," *Brookings Papers on Economic Activity*, pp. 227–39.

MIHOV, I. (2001): "Monetary Policy Implementation and Transmission in the European Monetary Union," *Economic Policy*, 16(33), 369–406.

OBSTFELD, M. (1998): "The Global Capital Market: Benefactor or Menace?," *Journal of Economic Perspectives*, 12(4), 9–30.

——— (2001): "Mundell-Fleming Lecture: International Macroeconomics: Beyond the Mundell-Fleming Model," *IMF Staff Papers*, 47, 1–39.

OBSTFELD, M., AND K. ROGOFF (1995): "The Mirage of Fixed Exchange Rates," *Journal of Economic Perspectives*, 9(4), 73–96.

ONG, L. L. (1997): "Burgernomics: The Economics of the Big Mac Standard," *Journal of International Money and Finance*, 16(6), 865–78.

SARNO, L., AND M. P. TAYLOR (2002): "Purchasing Power Parity and the Real Exchange Rate," *IMF Staff Papers*, 49(1), 65–105.

STIGLITZ, J. E. (2000): "Lessons from the Global Financial Crisis," in *Global financial crises: Lessons from recent events*, ed. by J. R. Bisignano, W. C. Hunter, and G. G. Kaufman, pp. 89–107. Kluwer Academic, Boston, Dordrecht and London.

TAYLOR, M. P. (1995): "The Economics of Exchange Rates," *Journal of Economic Literature*, 33(1), 13–47.

LIST OF MARC'S VARIABLES (foreign variables carry an asterisk, superscript *e* denotes the expectation of a variable)

1. Stock variables

K Capital stock

W Net wealth of a country (net claims on the future output of the rest of the world)

2. Flow variables

Y^{GNP} Output—measured as Gross National Product, i.e. as the income generated by domestic factors of production in one year. Y^{GNP} roughly equals national income

C Consumption of private households

G Government consumption

I Investment, $I=\Delta K$ (increase of capital stock)

EX Exports

IM Imports

CA Current account balance, (roughly) defined as $CA \equiv EX - IM$ (net exports)

In general, $CA = \Delta W$ must be satisfied

A current account surplus is equivalent to foreign lending. Domestic consumers give up consumption of their goods today, but only in exchange for future consumption of foreign goods. A current account surplus is therefore an accumulation of claims on the future output of the rest of the world. A current account deficit is equivalent to borrowing from abroad. If *private* capital flows do not match the current account surplus (or deficit), the central bank has to "fill-in" and to increase (or reduce) its reserves. Reserves are part of a country's net wealth, held by the central bank.

S Savings, $S = I + CA = \Delta K + \Delta W$. In an open economy, national savings are used for both domestic investment and foreign lending.

E *Nominal* exchange rate (denominated in [$/units of foreign currency]). A *nominal* appreciation is equivalent to a lower E. (E^e is the expected nominal exchange rate.)

F *Forward nominal* exchange rate (denominated in $[\$/\text{units of foreign currency}]_{\text{tomorrow}}$)

P Domestic price level (price of one unit of the domestic consumption basket)

P^* Foreign price level (price of foreign basket)

Q *Real* exchange rate, defined as $Q \equiv \frac{EP^*}{P}$ (denominated in quantities: [1]). It denotes the relative price of a unit of the foreign consumption basket (numerator) in terms of the domestic consumption basket (denominator). A *real* appreciation is equivalent to a lower Q.

M Money supply of domestic central bank

M^* Money supply of foreign central bank(s)

R *Nominal* interest rate

π^e (Expected) inflation rate, $\pi^e \equiv \frac{(\Delta P)^e}{P}$

r^e (Expected) *real* interest rate; $R = r^e + \pi^e$.

[Y^{GDP} Output—measured as Gross Domestic Product, i.e. as the production of goods within domestic borders in one year. Then,

$Y^{GNP} = r \cdot W + Y^{GDP}$, $CA = r \cdot W + EX - IM$.

The $r \cdot W$ term is there because wealth yields interest income. $W > 0$ means that $r \cdot W > 0$ ($r > 0$): domestic capital invested abroad is generating income for domestic residents.]