

THE UNIVERSITY OF ILLINOIS AT CHICAGO  
ECON 221: MACROECONOMIC THEORY  
SPRING 1998

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                                 Your SSN: \_\_\_\_\_

**Homework 1**

1. [2 points] Consider the following GDP data:

	China		U.S.	
	Nominal (billions of Yuan)	Real (billions of 1990 Yuan)	Nominal (billions of \$)	Real (billions of 1990 \$)
1994	4662.2	2958.3	6935.7	6183.6
1995	5826.1	3270.4	7253.8	6309.1
1996	(Not Available)		7576.1	6462.5

Calculate the nominal growth rate, the real growth rate, and the inflation rate, for both countries in 1995, and the U.S. in 1996.

2. [8 points] (a) Suppose an economy is hit by an adverse oil shock. Use the labor market and the production function to predict the effects on employment, real wages, unemployment, and real output. (b) Consider the following data for Japan:

	oil price (\$/barrel)	employment (1000s of persons)	unemployment	real wage (growth rate)	real GDP (1985 ¥)
1971	2.57	51216	645	8.03%	178993
1972	2.80	51242	736	9.60	193712
1973	3.14	52595	668	7.52	208484
1974	11.22	52364	722	2.31	207197
1975	10.60	52228	1004	4.02	213122
1976	11.83	52705	1074	1.26	222098

Note that oil prices tripled in 1974. Are your predictions in (a) consistent with the Japanese experience of the mid-1970s?