A study on the unemployment hysteresis in the US states

E-mail: 324866@ mail.dyu.edu.tw

ABSTRACT

The unemployment was a significant signal to measure the entire economic activity. Besides, its long-term tendency value was related to the effectiveness of the government's policy. Therefore, there was a controversy over natural unemployment rate hypothesis and magnetic lag hypothesis.The study was based on the monthly unemployment in the United States and District of Columbia. The duration of the study was from January, 1976 to January, 2010. The study explored the unemployment in the United States, analyzed its mean value, standard deviation, margin of fluctuation, and the pattern of the allotment. And it determined whether there was a magnetic lag effect in the United States based on the statistical data, as a reference for the policy-makers. During the time, the events included the oil shock event caused by the Iran and Iraq war in September, 1980, the serious problem of the inflation in the U.S. during 1981 to 1982, the froth of the Internet in 2000, the credit crisis of the finance houses from 2007, the credit crisis of the secondary house credit, and a succession of the Financial Tsunami crisis after the bankruptcy of Brother Leiman's company in 2008. The unemployment population emerged in larger numbers. The unemployment rates were increasing. Finally, the unemployment was observed based on the results of two panel LM unit root tests, including IPS and MW. On the whole, the unemployment rates in the United Sates conformed to the natural unemployment rates. That is, the government did not have to excessively intervene the policy, and the unemployment rates would go back to the mean.

Keywords : Unemployment Rates   Hysteresis Effect   Panel Unit Root Test

Table of Contents

REFERENCES

(2001)   panel   (2004)

(1993)   ADF   PP

Monte Carlo   21(1)   117-149   (2003) OECD

(2009)   -   :   Barro, R. (1988), " The Persistence of Unemployment," American Economic Review, 78, 32-37. Blanchard, O and L. Summers (1986), " Hysteresis and the European Unemployment Problem," NBER Macroeconomics Annual, 1, 15-78. Blanchard, O. J., and L. H. Summers (1987), " Hysteresis in Unemployment," European Economic Review, 31, 288-295. Blanchard, O. J. and D. Quah (1989), " The Dynamic Effects of Aggregate Demand and Supply Disturbances," American Economic Review, 79, 655-673. Brunello, G. (1990), " Hysteresis and the Japanese Unemployment Problem: Apreliminary Investigation," Oxford Economic Papers, 42, 483-500. Breuer, J. B., R. McNown, and M. S. Wallace (2001), " Misleading Inferences from Panel Unit-Root Tests with an Illustration from Purchasing Power Parity," Review of International

Economics, 9(3), 482-493. Chang, T., K. C. Lee, C. C. Nieh, and C. C. Wei (2005), " An Empirical Note on Testing Hysteresis in Unemployment for Ten European Countries: Panel SURADF Approach," Applied Economics Letters, 12, 881-886. Dickey, D. A. and W. A. Fuller (1979), " Distribution of the Estimators for Autoregression Time Series with a Unit Root," Journal of American Statistical Association, 74, 427-432. Enders, W. (2004), " Applied Econometric Time Series," New York: John willey Sons, Inc. . Fisher, R. A. (1932), " Statistical Methods for Research Workers," Oliver and Boyd, Edinburgh 4th Ed. Fuller, W. A. (1976), " Introduction to Statistical Time Series," New York, Wiley. Granger, C. and P. Newbold (1974), " Spurious Regressions in Econometrics," Journal of Econometrics, 2, 111-120. Hadri, K. (2001), " Testing for Stationarity in Heterogeneous Panel Data," Econometrics Journal, 3, 148-161. Im, K. S., M. H. Pesaran, and Y. Shin (2003), " Testing for Unit Roots in Heterogeneous Panels," Journal of Econometrics, 115, 53-74. Jaeger, A.and M. Parkinson (1994), " Some Evidence on Hysteresis in Unemployment Rates," European Economic Review, 38, 329-342. Lee, C., C. Chang, and P. Chen (2008), " Unemployment Hysteresis in OECD Countries: Centurial Time Series Evidence with Structural Breaks," Economic Modelling, 312-325. Lee, J. D., C. C. Lee, and C. P. Chang (2009), " Hysteresis in Unemployment Revisited: Evidence from Panel LM Unit Root Tests with Heterogeneous Structural Breaks," Bulletin of Economic Research, 61(4), 325-334. Lee, C. F. (2010), " Testing for Unemployment Hysteresis in Nonlinear Heterogeneous Panels: International Evidence," Economic Modelling, 27(5), 1097-1102. Leo'n-Ledesma, M. A. (2002), " Unemployment hysteresis in the US States and the EU: A Panel Approach," Bulletin of Economic Research, 52, 95-103. Levin, A. and C. F. Lin (1992), " Unit-Root Test in Panel Data: Asymptotic and Finite Sample Properties," University of California at San Diego, working paper. Leybourne, S. J. and P. Newbold (2000), " Behavior of the Standard and Symmetric Dickey-Fuller-Type Tests When There Is a Break under the Null Hypothesis," Econometrics Journal, 3, 1-15. Mackinnon, J. C. (1991), " Critical Values for Cointegration Test," University of California at San Diego, Working Paper. Maddala, G. S. and S. Wu (1999), " A Comparative Study of Unit Root Tests with Panel Data and a New Simple Test," Oxford Bulletin of Economics and Statistics, 61, 631-652. Magnus, G. and O". Pa"r (2007), " Does Unemployment Hysteresis Equal Employment Hysteresis? Economic Record, 83 (261), 159-173. Mitchell, W. F. (1993), " Testing for Unit Roots and Persistence in OECD Unemployment Rates," Applied Economics, 25, 1489-1501. Nelson, C. R. and C. I. Plosser (1982), " Trends and Random Walks in Macroeconomic Time Series: Some Evidence and Implications," Journal of Monetary Economics, 10, 139-162. O`Connell, S. and S. Zeldes (1988), " Rational Ponzi Games," International Economic Review, 29, 431-450. Papell, D. H., C. J. Murray, and H. Ghiblawi (2000), " The Structure of Unemployment," The Review of Economics and Statistics, 82, 309-315. Perron, P. (1989), " The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," Econometrica, 57(6), 1361-1401. Phillips, P. C. B. (1987), " Time Series Regression with A Unit Root," Econometrica, 55(2), 277-301. Phillips, P. C. B. and P. Perron (1988), " Testing for a Unit Root in Time Series Regression," Biometrika, 75, 335-346. Said, S. E. and D. A. Dickey (1984), " Testing for Unit Roots in Autoregressive-Moving Average Models of Unknown Order," Biometrika, 71, 599-608. Song, F. M. and Y. Wu (1997), " Hysteresis in Unemployment: Evidence from 48 U.S. States," Economic Inquiry, 35, 235-243. Song, F. M. and Y. Wu (1998), " Hysteresis in Unemployment: Evidence from OECD Countries," The Quarterly Review of Economics and Finance, 38, 181-192. Summers, L. (1986), " Why is the Unemployment Rate So High Near Full Employment?" Brookings Papers on Economic Activity, 17(2), 339-383. Taylor, M. and L. Sarno (1998) " The Behaviour Of real Exchanges during the Post-Bretton Woodsperiod," Journal of International Economics, 46, 281– 312. Chang T., M. J. Yang, H. C. Liao, and C. H. Lee (2007), " Hysteresis in Unemployment: Empirical Evidence from Taiwan's Region Data Based on Panel Unit Root Tests," Applied Economics, 39(10), 1335-1340. Zivot, E. and D. W. K. Andrew (1992), " Further Evidence on the Great Crash, the Oil-Price Shock, and the Unit Root Hypothesis," Journal of Business and Economic Statistics, 10, 251-270.