Job Creation and Destruction in Taiwan

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Acronyms and Abbreviations

ABS	Australian Bureau of Statistics
ACF	Auto-Covariance Function
AIC	Akaike Information Criteria
APEC	Asian-Pacific Economic Cooperation
AR	Auto-Regressive
ARMA	Auto-Regressive Moving Average
AREMOS	Advanced REtrieval MOdeling System
ARIMA	Auto-Regressive Integrated Moving Average
BEVT	Bureau of Employment and Vocational Training
BLS	Bureau of Labour Statistics
BLS	Business Longitudinal Survey
CBT	Central Bank of Taiwan
CEPD	Council for Economic Planning and Development
CLA	Council of Labour Affairs
CPS	Current Population Survey
DMI	Dun and Bradstreet Market Identifier
EM	Expectation Maximisation
EX	Excess Job Reallocation
GARCH	Generational Autocorrelation Conditional Heteroskedasticity
GDP	Gross Domestic product
GNP	Gross National Product
HSIP	Hsinchu Science-based Industrial Park
IRF	Impulse Response Function
LRD	Longitudinal Research Database
LTS	Labour Turnover Surveys
MA	Moving Average
MCMC	Markov Chain Monte Carlo
ML	Maximum Likelihood
MS	Markov Switching
MS-AR	Markov Switching Autoregression
MS-ARX	Markov Switching Autoregression with Exogenous Variable

Acronyms and Abbreviations (cont)

MS-VAR	Markov Switching Vector Autoregression
MS-SVARs	Markov Switching Structural Vector Autoregression
MSM-AR	Markov Switching Autoregression with Mean regime-dependent
MSI-AR	Markov Switching Autoregression with Intercept regime-dependent
MSIH-AR	Markov Switching Autoregression with regime-dependent Intercept and Heteroscedasticity
MSIH-ARX	Markov Switching Autoregression with Intercept and Heteroscedasticity regime-dependent and Exogenous Variable
NBER	National Bureau of Economic Research
NET	Net Employment Change
NETS	National Establishment Time Series
NID	Normally and Independently Distributed
NIE	Newly Industrialising Economy
NP	Non-Parametric test
OECD	Organization for Economic Co-operation and Development
SBA	Small business Administration
SC	Schwarz Criterion
SIC	Standard Industrial Classification
SMEA	Small and Medium Enterprises Administration
SMEs	Small and Medium Enterprises
SEE	Survey on Earnings of Employees
STSP	Southern Taiwan's Science Park
VAR	Vector Autoregression
VARMA	Vector Auto-Regressive Moving-Average
JC	Gross Job Creation
JD	Gross Job Destruction
JR	Job Reallocation
WRIS	Workplace Industrial Relations Survey

Abstract

This thesis explores the behaviour of job flows in Taiwan. The investigation of the behaviour of job creation and destruction has improved our understanding of the dynamics of the Taiwanese labour market and also has important implications in terms of economic research and policymaking.

Chapter 2 discusses the basic features of the overall post-war Taiwanese economy. We find that large flows of workers enter and exit the employment pool. The large worker flows offer an interesting insight about the job flow dynamics. Based on the measures proposed in Chapter 3, Chapter 4 carefully examines the so-called small business job creation hypothesis. We find that small business can be viewed as the engine of job creation. However, small business is not the source of sustained increases in employment. Chapter 5 documents the basic features of job creation and destruction. We find that job creation is more volatile than job destruction in the manufacturing and service sectors, but reveals the opposite pattern in the construction sector. Based on the methodologies outlined in Chapter 6, Chapter 7 investigates the regime switching and asymmetric behaviour of job creation and destruction. We find that the interest rate can help to explain the asymmetric behaviour of job creation and destruction rates in all sectors. Furthermore, we find an interesting feature that a lower interest rate stimulated beneficial regime shifts in job flows. Chapter 8 explores the similarities and differences of regional business cycles by reference to the employment growth rate as well as job creation and destruction rates. We find that the regime switching behaviour of employment growth was similar across the North, Central and South regions. However, behaviour in the East Region was dramatically different. Furthermore, the regime switching behaviour of the common regional business cycle (specified in terms of employment growth) is consistent with the business cycle indicator proposed by Council for Economic Planning and Development (CEPD).