E-Journal of International and Comparative Labour Studies

Volume 6, No. 2 May-June 2017
ADAPT International School of Higher Education in Labour and Industrial Relations

Scientific Directors
Lauren Appelbaum (USA), Greg Bamber (Australia), Stuart M. Basefsky, (United States), Daria V. Chernyaeva (Russia), Richard Croucher (United Kingdom), Maurizio del Conte (Italy), Tomas Davulis (Lithuania), Tayo Fashoyin (Nigeria), József Hajdu (Hungary), Ann Hodges (USA), Richard Hyman (United Kingdom), Maarten Keune (The Netherlands), Chris Leggett (Australia), Guglielmo Meardi, (United Kingdom), Shinya Ouchi (Japan), Massimo Pilati (Italy), Valeria Pulignano (Belgium), Michael Quinlan (Australia), Juan Rasò Delgue (Uruguay), Raúl G. Saco Barrios (Peru), Alfredo Sánchez Castaneda (Mexico), Malcolm Sargeant (United Kingdom), Jean-Michel Servais (Belgium), Silvia Spattini (Italy), Michele Tiraboschi (Italy), Anil Verma (Canada), Stephen A. Woodbury (USA)

Joint Managing Editors
Malcolm Sargeant (Middlesex University, United Kingdom)
Michele Tiraboschi (University of Modena and Reggio Emilia, Italy)

Editorial Board
Lilli Casano (Italy), Emanuele Ferragina (United Kingdom), Antonio Firinu (Italy), Valentina Franca (Slovenia), Erica Howard (United Kingdom), Karl Koch (United Kingdom), Attila Kun (Hungary), Felicity Lamm (New Zealand), Cristina Lincaru (Romania), Nikita Lyutov (Russia), Merle Muda (Estonia), Boaz Munga (Kenya), Peter Norlander (USA), John Opule (UK), Eleonora Peliza (Argentina), Daiva Petrylaite (Lithuania), Aidan Regan (Ireland), Marian Rizov (United Kingdom), Salma Slama (Tunisia), Francesca Sperotti (Italy), Barbara Winkler (Austria), Machilu Zimba (South Africa)

Language Editor
Pietro Manzella (ADAPT Senior Research Fellow)

Book Review Editor
Peter Norlander (UCLA, Anderson School of Management)
Okun’s Law Revisited Within the Context of High Eurozone Unemployment: A Note

Abstract Purpose. The purpose of this paper is to empirically investigate Okun’s Law that proposes an inverse relationship between the rate of unemployment and economic growth. In other words, the higher the unemployment rate the lower the economic growth for a given country which represents lost production opportunities.

Design/methodology/approach. The paper analyses 185 countries around the world. In particular, the average economic growth rate over 5 years [from 2011 to 2015] is regressed against the average unemployment rate over the same period.

Findings. The paper discovers that or 185 countries in the world, a strongly negative association [26% Correlation at a 1% significance level] is found. More importantly, the results strongly support Okun’s Law: that a 1% drop in unemployment leads to a ¼ % increase in growth, in crude terms, across the globe.

Research limitations/implications. The research uses a parsimonious but robust analytical framework and invites future empirical investigation that uses a cross-sectional time series approach.

Originality/value. The paper suggests that from the rudimentary but robust analysis, there is a strong link between unemployment and economic growth.


Keywords: Unemployment, Economic Growth, Okun’s Law, European Unemployment, Eurozone, Ben Bernanke, Brexit, Social Costs.

1 Research Fellow, University College of Football Business, London (UK). Email address: hoovcomm@hotmail.com.
1. Introduction

With unemployment in the Eurozone running at over 10%, with some countries like Spain and Greece experiencing in excess of 45% youth unemployment, the loss in potential economic growth is huge. This is coupled with high unemployment’s damaging social cost which brings depravity to millions.

The purpose of this note is to bring attention to the link between economic growth in unemployment across the globe then apply that to the EU member states by analysing this issue from a global perspective.

Okun's law “is intended to tell us how much of a country's gross domestic product (GDP) may be lost when the unemployment rate is above its natural rate”\(^2\). It explains that “the logic behind Okun's law is simple. Output depends on the amount of labor used in the production process, so there is a positive relationship between output and employment. Total employment equals the labor force minus the unemployed, so there is a negative relationship between output and unemployment (conditional on the labor force)”\(^3\).

Bernanke summarizes Okun’s law basic concepts in a speech at the National Association for Business Economics Annual Conference, Arlington, Virginia, March 26, 2012\(^4\):

That rule of thumb describes the observed relationship between changes in the unemployment rate and the growth rate of real gross domestic product (GDP). Okun noted that, because of ongoing increases in the size of the labor force and in the level of productivity, real GDP growth close to the rate of growth of its potential is normally required, just to hold the unemployment rate steady. To reduce the unemployment rate, therefore, the economy must grow at a pace above its potential. More specifically, according to [the] currently accepted versions of Okun's law, to achieve a 1 percentage point decline in the unemployment rate in the course of a year, real GDP must grow approximately 2 percentage points


faster than the rate of growth of potential GDP over that period. So, for illustration, if the potential rate of GDP growth is 2%, Okun's law says that GDP must grow at about a 4% rate for one year to achieve a 1 percentage point reduction in the rate of unemployment.

2. Research Method

In order to test parsimoniously the cross-sectional relationship between unemployment and economic growth, the following univariate regression is estimated:

\[ \text{Economic Growth as Measured by GDP Growth \%age [average over 5 years]} = \alpha + \beta_1 \times \text{\%age Unemployment} + \epsilon \]

Data is sourced from the World Bank Economic and Social Indicators Database.

3. Results

For 185 countries in the world [in the Chart above], a strongly negative association [26% Correlation at 1% significance level] is found. More importantly, my results strongly support Okun’s Law: that a 1% drop in unemployment leads to a \(\frac{1}{4}\) % increase in growth, in crude terms, across the globe.
Quite clear from the rudimentary but robust analysis is that there is a strong link between unemployment and economic growth. The high levels of unemployment in the Eurozone member states needs to be addressed within the context of economic reform so as to alleviate the pain and suffering among the long-term disempowered youth as a priority.
ADAPT International Network
ADAPT is a non-profit organisation founded in 2000 by Prof. Marco Biagi with the aim of promoting studies and research in the field of labour law and industrial relations from an international and comparative perspective. Our purpose is to encourage and implement a new approach to academic research, by establishing ongoing relationships with other universities and advanced studies institutes, and promoting academic and scientific exchange programmes with enterprises, institutions, foundations and associations. In collaboration with the Centre for International and Comparative Studies on Law, Economics, Environment and Work, (DEAL) the Marco Biagi Department of Economics, University of Modena and Reggio Emilia, ADAPT set up the International School of Higher Education in Labour and Industrial Relations, a centre of excellence which is accredited at an international level for research, study and postgraduate programmes in the area of industrial and labour relations. Further information at www.adapt.it.

For more information about the E-journal and to submit a paper, please send a mail to LS@adapt.it.