THE WAGE-PRODUCTIVITY GAP AND THE CURRENT ACCOUNT BALANCE

EXAMINING CAUSALITY

Overview

- Introduction
- Review of Literature
- Methodology and Data
- Findings and Discussion
- Conclusion

Introduction

- An economy has comparative advantage if it is more productive than another.
- Some firms model wages explicitly as function of productivity but this does not apply to the economy as a whole therefore there may be wage-productivity 'misalignment'
- Wage-productivity gap is defined as the difference between the percentage change in wages and labour productivity.
- Wage-productivity gap causes supply and demand imbalances domestically, which in turn cause changes in current account position

Review of Literature

- The literature established a predominant negative relationship between productivity and the current account. (Glick and Rogoff, 1995), (Marquez, 2002), (Bussiere et al., 2005)

- Glick and Rogoff, (1995), derived and showed empirically that the impact of productivity on the current account is greater on the demand side than on supply side.

- If wages are rigid and too high, output and income will be low which implies low saving and a current account deficit. On the contrast, high wages means low returns on capital and low real investments which are associated with increases in the current account. (Rodseth, 2000).

Review of Literature Cont'

- Downs et al (1990) indicated that international competitiveness can be achieved through policies that increase labour productivity but there must be wage policies that reflect the interrelationship between productivity gains, real wage increases and inflation.

- Downes (2003) found that the growth in relative real wages, that is, a decrease in real wages enhances export competitiveness. Conversely, growth in relative labour productivity, that is, an increase in labour productivity in enhances export competitiveness (Downes, 2003)

Review of Literature Cont'

- If wage growth is in excess of productivity, this will ultimately cause exports to become uncompetitive which eventually translates into a balance of payment disequilibrium (Blackman, 1991).

- There is limited empirical literature on the wage-productivity gap and current account.

- Definition of the wage-productivity gap is subject to debate
  - Zavodny (1999) defines the wage-productivity gap as the difference between percentage change in productivity and wages.

- Sachdev (2007) attributed the disparity between the two to factors such as measurement errors, definitional error, technological change and changes in the power of unions.

METHODOLOGY
and
DATA

Methodology

- Unit root in Panel Data: Levin, Lin and Chu (2002) and Im, Pesaran and Shim (2003)

- Engel-Granger Based Co-integration test - Pedroni (1999 & 2004) and Kao (1999)

- Granger Causality: OLS model in level with and without fixed effects to test for HC and HENC (three groups)

Data Source

- The data set is composed from the International Monetary Fund (IMF) IFS, International Labour Organization (ILO) key indicators of labour market (KILM) and the World Bank World Development Indicators 2007 (WDI 2007) and Alleyne, 2000.

- Unbalanced panel with annual data from 1972 to 2005 for Jamaica and 1985-2001 for Barbados and Trinidad.

- Current account is taken as ratio to GDP.

FINDINGS
and
DISCUSSION


Real Wages and Labour Productivity
Index for Jamaica (2000 =100)
Index
160
140
120
100
80
60
40
20
0
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
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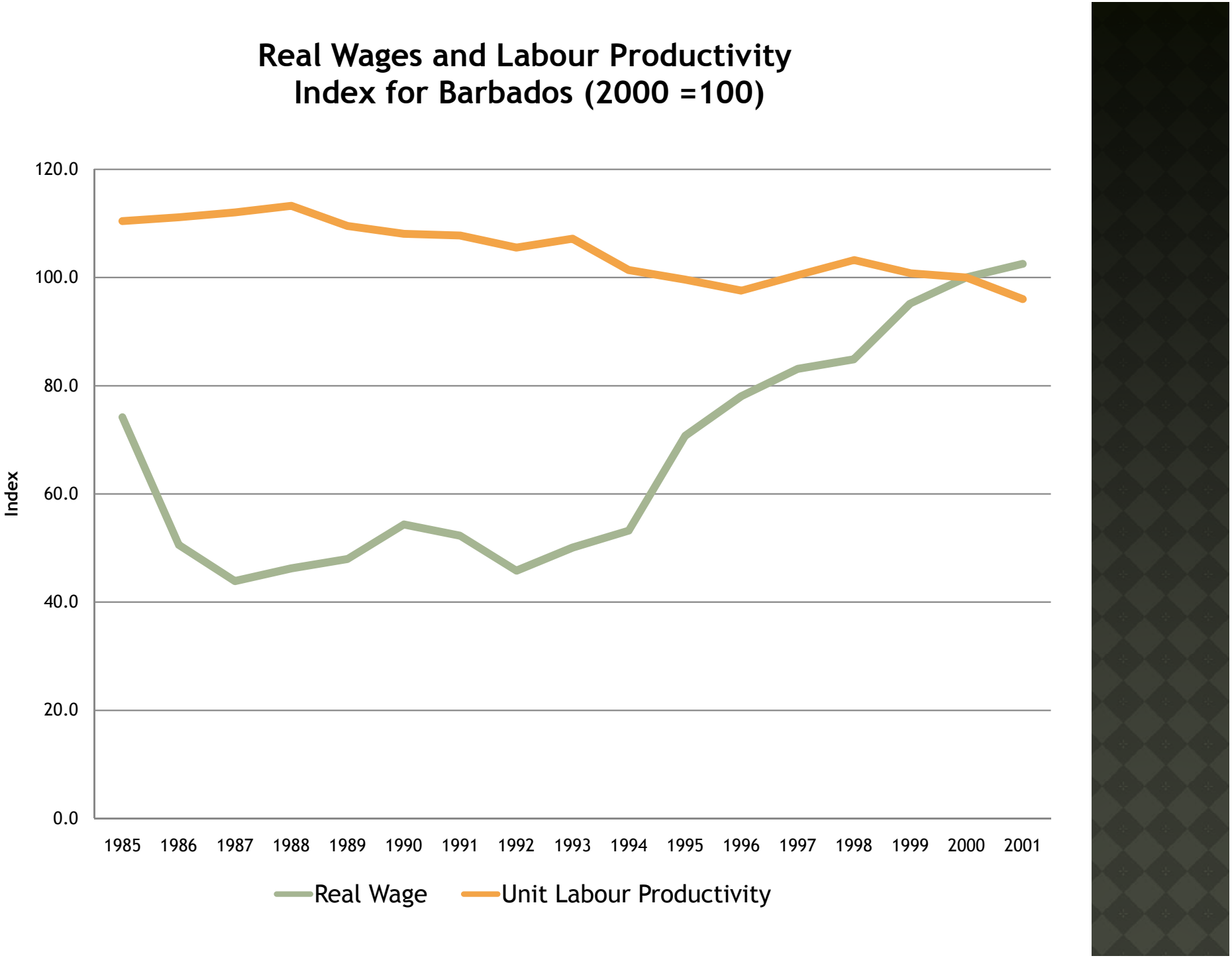
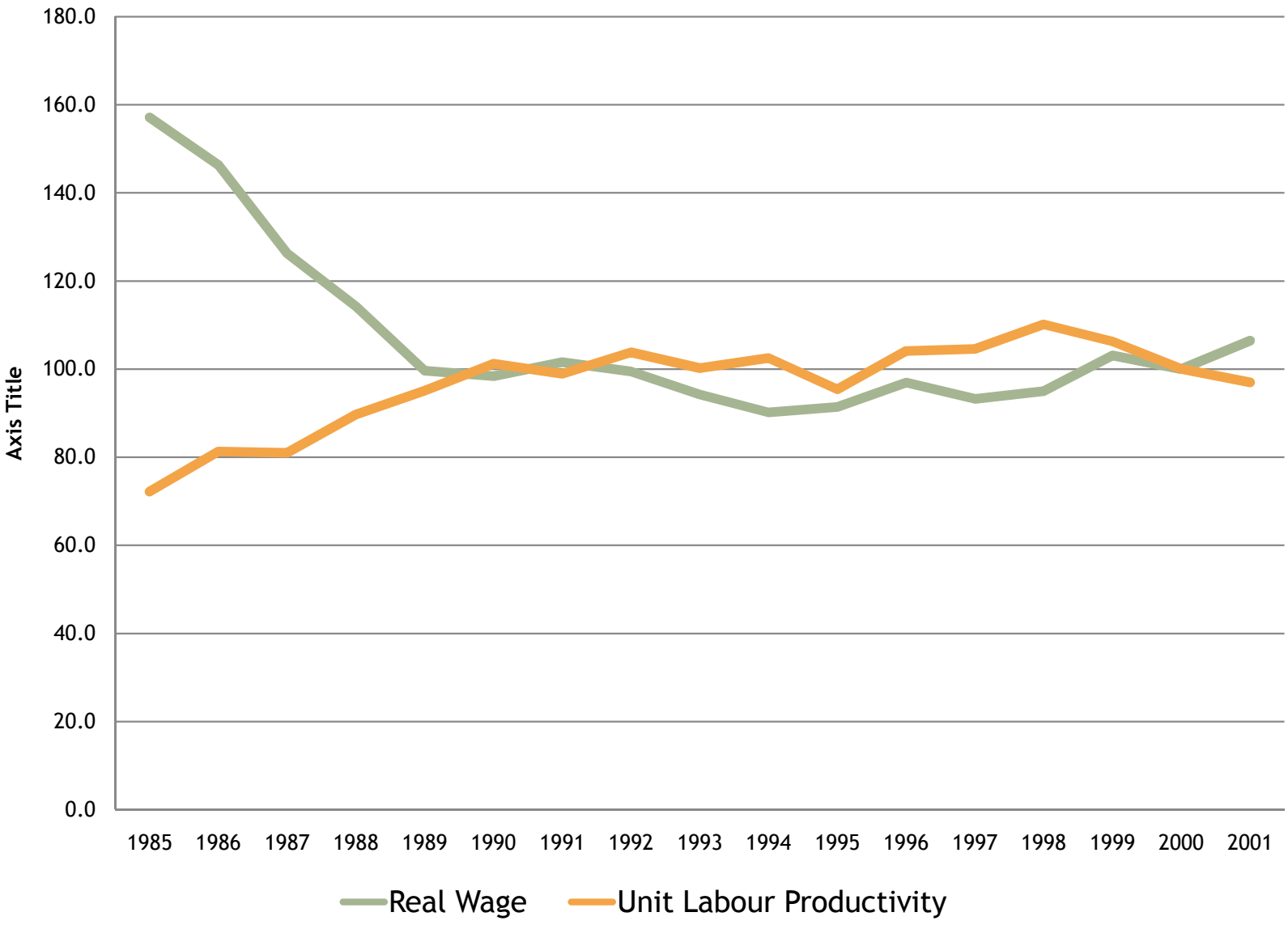
2004
2005
2006
Real Wages
Unit Labour Productivity


Real Wages and Labour Productivity
Index for Barbados (2000 =100)
Index
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Real Wage
Unit Labour Productivity

Real Wages and Labour Productivity Index for Trinidad and Tobago (2000 =100)



Unit Root Test

Level Variables /Unit Root Test	Levin, Lin & Chu t*	Breitung t-stat	Im, Pesaran and Shin	ADF - Fisher Chi-sq.	PP - Fisher Chi-sq.
	Null: Unit root (assumes common unit root process)		Null: Unit root (assumes individual unit root process)		
Current Account	0.0400	0.0410	0.1475	0.1818	0.2628
Wage-Productivity Gap	0.0003	0.4374	0.0323	0.0205	0.0201
Wage	0.0204	0.9654	0.1983	0.1308	0.0023
Productivity	0.2534	0.3385	0.4076	0.3636	0.6796

Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution.
All other tests assume asymptotic normality.
Automatic selection of lags based on SIC
Exogenous variables in level: Individual effects, individual linear trends

OLS Granger Causality

Null Hypothesis:	P_value
Total Panel (OLS in levels)	
Wage-productivity Gap does not Granger Cause Current Account	0.0450**
Current Account does not Granger Cause Wage-productivity Gap	0.9964
Total Panel (FIXED EFFECTS in levels)	
Wage-productivity Gap does not Granger Cause Current Account	0.0533***
Current Account does not Granger Cause Wage-productivity Gap	0.8961
Barbados	
Wage-productivity Gap does not Granger Cause Current Account	0.0237**
Current Account does not Granger Cause Wage-productivity Gap	0.0396**
Jamaica	
Wage-productivity Gap does not Granger Cause Current Account	0.5269
Current Account does not Granger Cause Wage-productivity Gap	0.5993
Trinidad and Tobago	
Wage-productivity Gap does not Granger Cause Current Account	0.1877
Current Account does not Granger Cause Wage-productivity Gap	0.0650***

*significant at 1% level ** significant at 5% level *** significant at 10% level

CONCLUSION

- The research finds no co-integrating relationship between wages and productivity.
- HC and HENC suggest a one-way causal relationship between the gap and current account, that is, the gap Granger-causes the current account.
- It is important for small open economies to minimize the gap between wages and productivity as it has implications for the current account.
- Policy makers in these jurisdictions need to continue to ensure that growth in wages is aligned as far as possible with productivity.

CONCLUSION CONT'

Going forward:

- An extension (or the replication) of the present study to cover more developing countries, provided that the associated obstacle of data unavailability could be surmounted.

- A study which examines the determinants of the wage-productivity gap itself, which would be of great interest and utility to policy makers as a guide to minimising the gap going forward.

- The development of an intertemporal model which models the relationship of the current account explicitly as a function of the wage-productivity gap.

THE END.

THANK YOU!