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.2009-1985

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()

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.2012/11/7 2010/2/24

(Peter. 1955).

2819

2009

) "
" (1989 Shroeder) .(1989

"
(1998 Procopinko)
()

:

.1

:

/ =

.2

:

.3

.4

.5

:

(1987)

.(Chsi)

(2003)

" (Litter)

"

"

- :

$$\frac{\text{الإنتاج}}{\text{رأس المال + الآلات والمعدات والخامات + العمل + التنظيم}} = \frac{\text{الإنتاج}}{\text{عناصر الإنتاج}} = \text{الإنتاجية الكلية}$$

:

(1983) .

- :

- :

(1994)
= - :

:

- = /
- = /
- = /

(2007)

- :

(Q)

:

(X)

$$AP = Q / X$$

:

0.071

2005

0.052

-2005

%36

2009

.(2001

)

:

$$AW = W / L$$

(W)

(AW)

:(1)

(L)

(1)

(2009-2005)

	(+)	15) (15) () (
0.052	118907	12649	106258	6205.6	2005
0.059	118739	13714	105025	7116.0	2006
0.065	126379	14587	111792	8296.0	2007
0.081	124348	14455	109893	10048.7	2008
0.071	129524	15485	114039	9253.4	2009

:

1988-1978 (1990 .)

1987 1978 7.64
25.27 :

8) 280
3.64 ((1987)
1987 12.03 1978

5.4%

1979-1975

3.1%

1982-1980

1987 12.92 1978 5.5 - 5.2%

1982-1975 9.7%

.- (1991 .)

-1986)

2.4% (1990

-1980 (1988)

1984

(Stepwise Regression) ()

:

(20%)

:

(1996)

(2002)

()

(1993-1968)

1997-1986
(Cobb-Douglas)

0.67%

1.2%

.(OLS)

.0.23%

(1996 Corvers)

(2002 IMD)

:

- " (2005 .) (2002)
- 2004 - 1994
- (2004)
- .() (2006)
- " "
- (2004-2002)
- (2006 R.Nicolini L.Artige)
- ()
- (2005 Voulgaris Papadogonas)
- 2006-1995
- (2009 Tanveer) 3035

2003

2005-1980

.2003-1998

(2009 Ismail Jajri)

2005-1985

:

:

(2010 Marian Daniel Dalia)

(2011 Mehin Sojoodi Fallahi)

()

Stationary)

:

- 12299
:(Test

Cointegration)

- (2011 Octavio)
:(Model -1988

Error Correction) -
 :(Model
 (Adjustment)
 (2009 Tanveer)
 :(Granger Causality) -

$$APL_t = \beta_0 + \beta_1 I_t + \beta_2 AG_t + \beta_3 ALS_t + \beta_4 T + U_t \dots \dots \dots (1)$$

$$= U$$

$$= t$$

$$= Bs$$
 (NL) -
 (AP_L) -
 (TP)
 (NL) \
 (AI) =
 (NL) \
 (AG) -
 (gg) =
 (NL) \
 (ALS) -
 (LS) =
 (NL) \
 (CPI) -
 :(Stationary Test) ()
 2002
 (Trend) (T) -

2. Maximal Eigen value Test.

(OLS)

Trace
1% 5%

Max-Eigen

Augmented Dickey- Fuller (ADF)

:(1998 Maddala)

$$\Delta Y_t = \alpha_0 + \alpha_1 T + \beta Y_{t-1} + \sum_{i=1}^n \delta_i \Delta Y_{t-i} + \varepsilon_i$$

(Normalized Co-integration Vector)

Akaike Information (AIC)

Criteria

$$APL = -0.005 + 2.79 I - 2.52 AG + 18.32$$

ALS.....(4)

t-statistic (3.00) (3.77) (10.25)

R²= 0.84 Adj R²= 0.80 F-

statistic= 18.69

(H₀: β=0)

t
Mackinnon

OLS

(ADF)

0.05

(2.79)

Co-integration)

:(Test

1%
2.79%

1. Trace Test.

(18.32)

2.2%

(11.78)

1%
18.32%

1%

11.78 %

(-2.52)

()

(AG)

$$ALS = 0.002 + 0.02 APL + 4.05 CPI - 1.14$$

NL..... (6)

t-statistic (3.22) (4.36) (-4.67)
R²= 0.94 Adj R²= 0.92 F-
statistic= 57.10

)

(

(6)

$$APL = -0.005 + 2.2 I + 11.78 ALS$$

.....(5)
t-statistic (0.778) (3.816)
R²= 0.84 Adj R²= 0.80 F-
statistic= 23.98

(2.2)

1%

(ECM) (ALS)

(0.02) 1%

Roots Of Characteristic) 0.02%

(Polynomial (CPI) (4.05) 1%

) 4.05%

(

EC 1% (-1.14)

0.45 1.14%

45%

Error Model)

(Correction

(Granger Causality)

Error) .

(2)

(Correction Model

(2)

	D (I) ← D (APL)
	D (ALS) ← D (APL)
	D (APL) ← D (ALS)
	D (I) ← D (ALS)

	.1988 .		.1996 .
.(1984-1980)			
.2	.15		
	.1987 .		.2007 .
	.4 .14		.2 .3
	.2002 .		.2009-2000 .
			.2009-2000 .
	.1990 .		
	.51		.2004 .
	.8 .1983 .		
- 1994			- .1994 .
	.2005 .2004		
.27			- .2007 .
	.4		
	.2003 .		
	.1991 .		
	.1989		.1989 .
	.2006 .		
			.2002 .
			.1 .8

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The Factors Influencing Labor's Productivity and Wages in Jordan's Manufacturing Sector

Mohammad Waleed Alomari and Waleed Mahmoud Hmedat ***

ABSTRACT

The analysis and identification of factors that influence the labor's productivity and wages in Jordan's manufacturing sector during the period 1985 – 2009 are introduced. In order to ensure the credibility of the results, the study uses the statistical tests that included in both descriptive and standard approaches to evaluate both the productivity and wages models. These statistical tests are: the stability test of time series data, co-integration test, and error correction model that used for demonstrate the causal relationship between the productivity and its affecting factors. The results of the first model demonstrate a positive relationship between the labor's productivity and both the labor's fraction from investment in the manufacturing sector and the labor's fraction from compensation of employees in the same sector. In addition, the relationship between the labor's productivity and credit facilities balances granted for manufacturing industries was a negative relation. Moreover, the results of the second model which explains the factors that influence the wages demonstrate a positive relationship between labor's compensation and both labor's productivity and inflation. However, for the labor factor the results indicate the existence of a negative relationship with compensation of employees; which means that the increase in the number of employees will lead to a decrease in the labor's compensation if we assume that the compensation is constant.

KEYWORDS: Industry, Productivity, Manufacturing Industries, Jordan.

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