Dynamics of Second Job Holding: A Case Study of Political Cycles in Slovenia

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[Abstract]

The political party in power tries to follow policies to encounter adverse effects of second job holding (moonlighting) prior to elections for vote maximization. This tendency is accountable for formation of Political Business Cycle of Moonlighting. This paper is aimed to examine whether the dynamic behavior of moonlighting growth is influenced by political decisions and thereby form Political Business Cycle of Moonlighting in Slovenia. By estimating time trends for regimes between two election periods of the National Assembly in terms of spline functions using quarterly data for the period of 2001 Q1 to 2014 Q2, this paper shows empirically that there is no evidence of decline in moonlighting growth rate between the two election periods in Slovenia. Therefore, it is concluded that there is complete absence of political cycles of moonlighting in Slovenia.

Keywords: Second Job Holding, Political Business Cycle, Spline Function

I
INTRODUCTION

Slovenia is a developed country with a high degree of wealth and stability. After independence from Yugoslavia in June 1991, it joined in the European Union and NATO and adopted globalization policies to keep up with the global economy. Since then, it has made a conscious effort to expand its trade with the West and transatlantic nations. Within a few years, the country attained prosperity. The new constitution of parliamentary democracy with multiparty system was enacted in December 1991.

The president is the head of the state chosen by the popular vote for five years and plays a crucial integrating role in the country. The Prime Minister and his cabinet, elected by the National Assembly (Drzavni zbor Republike Slovenije), forms the Government of Slovenia and enjoys the supreme executive and administrative power in Slovenia. Although the legislative authority in Slovenia is bicameral, the maximum power is concentrated in the National Assembly. Among ninety members of the National Assembly, 88 members are elected for a four-year term by all the citizens in a system of proportional representation and other two are elected by the registered

members of the Hungarian and Italian minorities. The National Council (Drzavni svet Republike Slovenije), comprising of forty members, has a limited advisory power to the government.

The practice of working in additional secondary jobs along with employment in a primary job is known as second job holding or moonlighting (Shisko and Rostker (1976), Krishnan (1990), Renna and Oaxaca (2006), Yamb and Bikoue (2016), Pauliakas (2017)). The labour markets of modern economies exhibit second job holding as a key feature (Pouliakas (2017)). Second Job Holding or Moonlighting is an agenda for the Slovenian economy due to its role of feeding the shadow economy (Zagorsek, Jaklic and Hribernik (2009)). Slovenian 'shadow' economy comprises of 26.2% of the official economy within 1999 and 2007 (Schneider, Buehn and Montenegro (2010). Nastav and Bojnec (2007) also pointed out a high degree of shadow economy in Slovenia.

There are relatively more flexible working conditions in private sectors in Slovenia (Kozjek (2014)). As economies move to more flexible work environments as a result of globalization and privatization, moonlighting is becoming more prevalent (Baines and Newell (2004), Combos, McKay and Wright (2007)).

There are two aspects to the impact of moonlighting on the national economy. Moonlighting is viewed as a skill-building facilitator in the welcoming aspect (Panos, Pouliakas and Zangelidis (2011)). But this advantageous effect of moonlighting is, generally, less manifested than its dreadful impact on the economy, the nourishment of shadow economy. Moonlighters generally try to avoid paying tax on their secondary income to the government. This escaping tendency may encourage the shadow economy (Frey and Schneider (2000), Schneider (2010), Barth and Ognedal (2005)). Moonlighting may also bear some distortional effects in the labor market in terms of performance and productivity (Biglaiser and Ma (2007)). Therefore, Moonlighting is typically thought of being economic irresponsibility.

If the realization of the destructive role of moonlighting force the ruling political party to follow some anti-moonlighting policies to reduce shadow activities prior to elections on the urge for vote maximization, growth of moonlighting will follow the pattern of Opportunistic Political Business Cycle (Adhikary and Pal (2012)). In case of Opportunistic Political Business Cycle (OPBC)) it is assumed that the political parties in power have some 'ability' to manipulate the economy. The ruling political party assumes that citizens decide to vote on the basis of economic conditions in times of elections ((Nordhaus (1975), Lindbeck (1976), Tufte (1978), Persson and Tabellini (1990), Stein and Streb (1998)).

Alternative to OPBC, the Partisan Political Business Cycle (PPBC) is based on the logic that political parties decide according to their political ideologies, not to their political opportunism (Hibbs (1977)). Since all political party disfavor shadow economy, OPBC is anticipated to be responsible for change in growth rate of moonlighting.

This paper is aimed to inquire the existence of OPBC of moonlighting in Slovenia. In Section II we present the methodology, Section III analyses the results followed by conclusion in Section IV.

II
METHODOLOGY

Slovenia follows a multiparty representative democracy. The president, elected by popular vote for a term of four years, is the ceremonial head of the state. The cabinet, appointed by the president after a general election to the National Assembly, enjoys the supreme executive and administrative power. Our empirical investigation of the PBC of second jobholding is restricted to the election of the National Assembly only because it has the maximum power and responsibility to form a government.

In order to justify the effect of political decision in manipulating the growth rate of moonlighting imminent to the election of the National Assembly, we consider the trend line of growth rate of second job holding within two election periods. We have used quarterly time series data from 2000 Q4 to 2014 Q2 on "Employed persons having a second job" and "Employed persons", downloaded from Eurostat, to compute the rate of second job holders as percentage of total employed persons. Then the growth rate of moonlighting (rate of second job holders as percentage of total employed persons) is computed for the period of 2001 Q1 to 2014 Q2.

Within 2001 Q1 and 2014 Q2, parliamentary elections were held in Slovenia on 15th October 2000, 3rd October 2004, 21st September 2008, 4th December 2011 and 13th July 2014. Therefore, we get the following electoral regimes presented in Table – 1. We have estimated time trends for those regimes in terms of spline functions.

Table 1: Description of Regimes

Period	Regime
2001 Q1 to 2004 Q4	Regime 1
2005 Q1 to 2008 Q3	Regime 2
2008 Q4 to 2011 Q4	Regime 3
2012 Q1 to 2014 Q2	Regime 4

Our postulated model is to estimate the spline trend equation,

$$g_t = a_1 + \delta_1 w_{1t} + \delta_2 w_{2t} + \delta_3 w_{3t} + \delta_4 w_{4t} + \varepsilon_t \qquad (1)$$

where we define g_t as the growth rate of moonlighting and

$$w_{1t} = t \qquad \text{for Regime 1}$$

$$w_{2t} = \begin{cases} 0 & \text{if } t \le t_2 \\ t - t_2 & \text{if } t_2 < t \end{cases} \qquad \text{for Regime 2}$$

$$w_{3t} = \begin{cases} 0 & \text{if } t \leq t_3 \\ t - t_3 & \text{if } t_3 < t \end{cases} \quad \text{for Regime 3}$$

$$w_{4t} = \begin{cases} 0 & \text{if } t \leq t_4 \\ t - t_4 & \text{if } t_4 < t \end{cases} \quad \text{for Regime 4}$$

such that t is the time variable and $t_2 = 2004$ Q4, $t_3 = 2008$ Q4, $t_4 = 2012$ Q1 are the knots of spline trend. If $\delta_i < 0 \ \forall \ i = 1,2,3,4$ we can conclude that political manipulation may have effect on g_t to decrease in the regime i. This is indicative for existence of OPBC of moonlighting.

III
RESULTS

We have calculated the number of second job holders (moonlighters) as percentage of employed persons for total (TSJH), male (MSJH) and female (FSJH) second job holders in Slovenia for the period of 2000 Q4 to 2014 Q3. Table 1 shows the summary statistics. From this table it is clear that female citizens in Slovenia are less likely to moonlight on average. Standard Deviation of MSJH is higher than FSJH which implies that male moonlighters are more likely to vary.

Table – 2: Summary Statistics

	TSJH	MSJH	FSJH
Mean	3.144095	3.813209	2.349920
Median	3.227154	3.982650	2.351515
Maximum	4.733400	6.087122	3.847084
Minimum	1.432958	1.596639	0.852130
Std. Dev.	0.771357	0.989241	0.581093
Skewness	-0.409801	-0.355572	-0.077375
Kurtosis	2.971311	2.886064	3.274174
Observations	55	55	55

Source: Author's own computation based on secondary data from http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/.

To compute growth rate of second job holding, we have calculated GTSJH=(TSJH - TSJH(-1))/ TSJH(-1), GMSJH=(MSJH - MSJH(-1))/ MSJH(-1), GFSJH=(FSJH - FSJH(-1))/ FSJH(-1) where TSJH(-1) is the first period lag of TSJH, MSJH(-1) is the first period lag of MSJH and FSJH(-1) is the first period lag of FSJH.

Before estimating equation (1), we have to test the stationarity of the data. Both the Augmented Dicky Fuller (ADF) and Phillips Perron (PP) tests has been performed. The test result is presented in Table -3 which confirms that the growth rates of moonlighting in Slovenia are $I(0)$. Since all variables are $I(0)$, there is no problem to estimate equation (1). The regression result is presented in Table - 4.

Table - 3: Unit Root Test

Series	Level with intercept				Level with intercept and trend			
	Test Statistics		Probability		Test Statistics		Probability	
	ADF	PP	ADF	PP	ADF	PP	ADF	PP
GTSJH	-9.958007	-10.38702	0	0	-9.866042	-10.26153	0	0
GMSJH	-10.01594	-10.95966	0	0	-9.918805	-10.75876	0	0
GFSJH	-10.87431	-10.99347	0	0	-10.76716	-10.88112	0	0

Source: Author's own computation based on secondary data from http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/.

Table - 4. Regression Output

Dependent Variable: GTSJH; Method: Least Squares; Sample (adjusted): 2001Q1 2014Q2 Included observations: 54 after adjustments							
					Diagnostic statistics		
	Coef	Std. Error	t-Stat	Prob.	$R^2(\bar{R}^2)$	F-Stat	DW stat
C	-0.078573	0.096094	-0.817665	0.4175	0.048(-0.029)	0.626467	2.678209
w_{1t}	0.010386	0.008565	1.212625	0.2311			
w_{2t}	-0.015264	0.013953	-1.093912	0.2793			
w_{3t}	0.002649	0.015334	0.172744	0.8636			
w_{4t}	0.016272	0.022540	0.721924	0.4738			
Dependent Variable: GMSJH; Method: Least Squares; Sample (adjusted): 2001Q1 2014Q2 Included observations: 54 after adjustments							
					Diagnostic statistics		
	Coef	Std. Error	t-Stat	Prob.		F-Stat	DW stat
C	-0.082114	0.098244	-0.835813	0.4073	0.047(-0.031)	0.601665	2.709305
w_{1t}	0.011145	0.008757	1.272767	0.2091			
w_{2t}	-0.016773	0.014266	-1.175756	0.2454			
w_{3t}	0.003977	0.015677	0.253667	0.8008			
w_{4t}	0.013999	0.023044	0.607483	0.5463			
Dependent Variable: GFSJH; Method: Least Squares; Sample (adjusted): 2001Q1 2014Q2 Included observations: 54 after adjustments							
					Diagnostic statistics		
	Coef	Std. Error	t-Stat	Prob.		F-Stat	DW stat
C	-0.073115	0.131030	-0.558004	0.5794	0.034(-0.043)	0.443822	2.815747
w_{1t}	0.011830	0.011679	1.012940	0.3161			
w_{2t}	-0.018281	0.019026	-0.960829	0.3414			
w_{3t}	0.004441	0.020908	0.212425	0.8327			
w_{4t}	0.017990	0.030735	0.585327	0.5610			

Source: Author's own computation based on secondary data from http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/.

The regression output is presented in Table – 4. The coefficients are all insignificant, as this table demonstrates. It indicates that OPBC of moonlighting does not exist for any regime. In other words, the data do not show any possibility of manipulation of moonlighting growth by the ruling party in Slovenia to influence voters for the desire to win in next election. The estimations of time trends for various regimes during election periods in Slovenia in terms of spline functions demonstrate that the political business cycle of moonlighting does not exist at all.

Although there are some signs that the political business cycle of moonlighting may exist in the Czech Republic (Adhikary and Pal (2012)), Slovenia is totally free from it. Therefore, we conclude that there is no political interference with the growth rate of moonlighting in Slovenia.

IV
CONCLUSION

To ascertain if politics has any role in explaining the dynamics of moonlighting growth rate in Slovenia, an empirical task is carried out to find out trends in moonlighting growth by estimating time trends for regimes between two election periods of the national assembly in terms of spline functions. According to our empirical analysis, there is absolutely no evidence of a decline in moonlighting growth rate between the two election periods in Slovenia. Therefore, there is complete absence of the OPBC of moonlighting in Slovenia.

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