Productivity - Technological Life-Cycles

	tech cycle == 1	tech cycle < 1	tech cycle == 1	tech cycle < 1	tech cycle == 1	tech cycle < 1	tech cycle == 1	tech cycle < 1	tech cycle == 1	tech cycle < 1
Patent KS - 2 L	0.280***	0.042								
	(0.106)	(0.031)								
Product KS - 2 L			0.136	0.044	0.220**	0.072*				
			(0.094)	(0.059)	(0.094)	(0.037)				
Process Use KS - 2 L			-0.046	0.283***			0.131	0.145***		
			(0.191)	(0.089)			(0.151)	(0.053)		
Mixed KS - 2 L			0.129	-0.140**					0.223**	0.049
			(0.094)	(0.056)					(0.099)	(0.033)
Patent SO - 2 L	-0.086	-0.008								
	(0.098)	(0.043)								
Product SO - 2 L			0.174	0.022	0.005	-0.022				
			(0.260)	(0.134)	(0.079)	(0.045)				
Process Use SO - 2 L			0.327	-0.136			0.062	-0.014		
			(0.282)	(0.146)			(0.089)	(0.044)		
Mixed SO - 2 L			-0.457	0.134					-0.056	-0.003
			(0.351)	(0.164)					(0.094)	(0.045)
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	94	690	94	690	94	690	94	690	94	690
Wald chi2	23.242	27.561	36.101	58.900	12.398	30.643	6.413	41.841	30.635	28.837

Note: The dependent variable (TFP) is estimated according to Ackerberg, Caves, Frazer (2015). Instruments for level equation are lagged differences. Heteroscedasticity-robust standard errors are in brackets. Controls include firm size, academic employees share, technological potential, price competition, foreign ownership and appropriability. The Arellano-Bond test for zero autocorrelation in first-differenced errors does not reject the null hypothesis of no serial correlation at order two. Hence, the moment conditions are valid. The Hansen test of overid restrictions confirms the validity of the instruments in each equation.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$