

Appendix: Data and Research Design Issues

Variable	How measured	Data Source	Rationale
Heavy Metal Bands	(Metal Bands created in a country year/population)* 100,000	Encyclopedia Metallum ( <a href="http://www.metal-archives.com/">http://www.metal-archives.com/</a> ) <a href="#">Mayer and Timberlake 2014</a>	
Regional Metal Presence	Regional Average of DV	Derived from DV	-Impact of geography on diffusion of bands -Proxy for cultural similarities
Income	GDP per capita (logged)	World Bank, <a href="#">World Development Indicators</a>	<a href="#">Commonly cited</a> as reason behind prevalence of metal bands, as it implies presence of economic infrastructure as well as disposable income on part of musicians.
Social Globalization	Social Globalization Index (includes such measures as cross-border personal contacts and information flows)	<a href="#">KOF Index of Globalization</a>	Measures social connectivity across borders.
Economic Globalization	Economic Globalization Index (includes measures of trade and global investment as well as relevant state policies in that area).	<a href="#">KOF Index of Globalization</a>	Proxy for increased openness to global economic system.
Democracy	Democracy – Autocracy scores on Polity IV measure	<a href="#">Polity IV</a>	Political rights provide proxy for ability of bands to function without fear of violent reprisal from state.
Physical Integrity Rights	Index of freedom from threats such as torture, political imprisonment, and assassinations.	<a href="#">CIRI (Cingranelli-Richards) Data Project</a>	Absence of state repression of human rights should encourage ability to produce music, even if music is critical of established order.
Fiscal capacity	Tax revenues as a percentage of GDP	World Bank, World Development Indicators	Fiscal capacity is related to better provision of public goods and better government performance.
Worker Rights	Index of respect for core worker rights recognized by the ILO (collective bargaining, acceptable work conditions and wages, prohibitions on child and forced labor)	<a href="#">CIRI (Cingranelli-Richards) Data Project</a>	Worker rights as proxy for steady work schedule plus ability to have vacation time from work; facilitates ability to balance competing demands faced by musicians.

## Findings – The Determinants of Formation of Metal Bands by Country-Year, 1990-2008

Variable	Model 1		Model 2	
	Coefficient/ Standard Error		Coefficient/ Standard Error	
<b>Regional Metal Presence</b>	0.4085	**	0.4218	**
	0.0545		0.0572	
<b>Income</b>	0.0127	*	0.0292	**
	0.0068		0.0123	
<b>Social Globalization</b>	0.0019	**	0.0016	**
	0.0002		0.0002	
<b>Economic Globalization</b>	0.0002		0.0000	
	0.0003		0.0003	
<b>Democracy</b>	0.0000		-0.0003	
	0.0006		0.0006	
<b>Fiscal Capacity</b>	0.0824	*	0.0649	
	0.0472		0.0493	
<b>Worker Rights</b>	0.0062	**	0.0065	**
	0.0031		0.0032	
<b>Physical Integrity Rights</b>	0.0002		0.0001	
	0.0014		0.0014	
<b>Fixed Effects?</b>	no		yes	
<b>Wald X2</b>	258.21	**		
<b>F Statistic</b>			21.25	**

Note:

-Time-series regression with fixed and random effects.

-Diagnostic tests (testparm command in stata) revealed that time fixed effects were not significant, thus they are not used in the above analysis.