

# **Do Public Sector Employment Reductions Promote the Informal Economy?**

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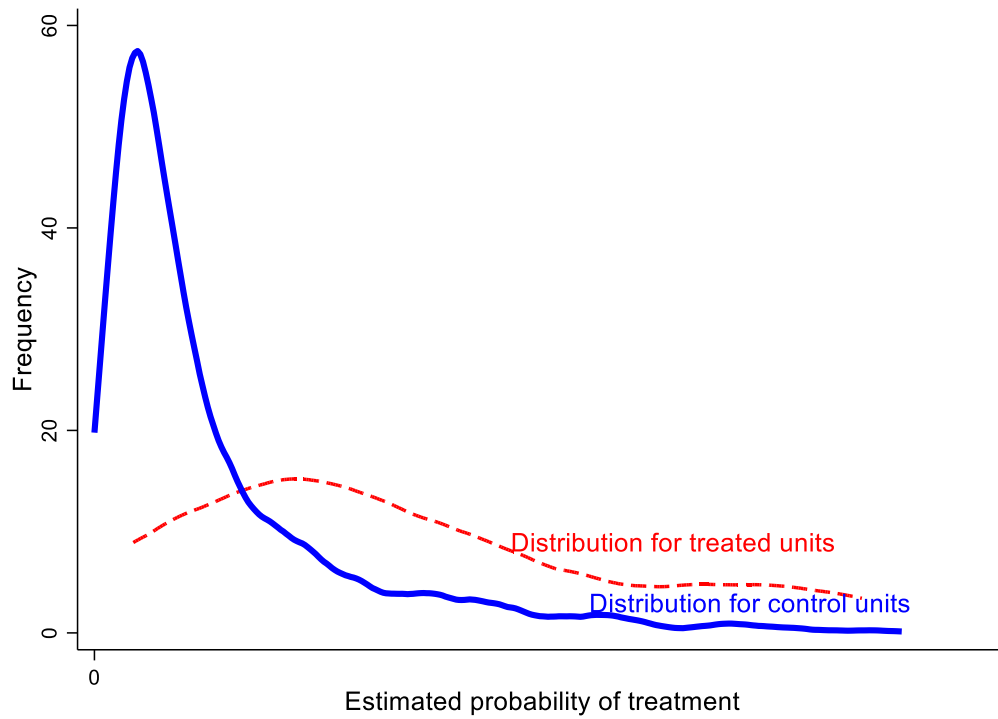
## **Online Appendix**

<b>Table A1: variable sources and definitions</b>		
<b>Variable</b>	<b>Definition</b>	<b>Source</b>
Institutional Quality	The mean value of the ICRG variables “Corruption”, “Law and Order” and “Bureaucracy Quality” scaled 0-1.	Teorell et al., (2016)
Democracy dummy	Dichotomous indicator of democracy. A country is defined as democratic, if free and fair elections were conducted, and there was a peaceful turnover following those elections.	Bjørnskov and Rode (2020)
GDP per capita growth	Annual percentage growth rate of GDP per capita based on constant local currency.	World Bank’s World Development Indicators (WDI)
Log GDP per capita	The log of the GDP per capita is gross domestic product (in constant 2010 dollars) divided by midyear population.	WDI
Unemployment Rate	The share of the labor force that is without work but available for and seeking employment.	WDI
Corruption	Model-based country-year point estimates, aggregated from multiple codings submitted by country experts on the question “How routinely do public sector employees grant favors in exchange for bribes, kickbacks, or other material inducements”.	Varieties of Democracy project.
Urban Population	The share of people living in urban areas as defined by national statistical offices.	WDI
Labor Force Participation Rate	The proportion of the population ages 15-64 that supply labor for the production of goods and services during a specified period (ILO estimates).	WDI
No of years in IMF program	The total number of years (since 1980) that the country has spent in an IMF program.	Kentikelenis (2016) and author calculations
CA balance	Record of all transactions in the balance of payments covering exports and imports of goods and services, payments of income, and current transfers between residents and nonresidents as % of GDP.	IMF’s World Economic Outlook (WEO)
Budget Balance	Difference between the share of total revenue and the share of government expenditure to GDP.	WEO and author calculations
Share of the Shadow Economy (DGE)	Dynamic general equilibrium model-based (DGE) estimates of informal output (% of official GDP)	Elgin et al. (2021)
Share of the Shadow Economy (MIMIC)	Multiple indicators multiple causes model-based (MIMIC) estimates of informal output (% of official GDP)	Medina and Schneider (2017)

**Table A2: Country sample and start year of employment reduction IMF program<sup>1</sup>**

Country	Start Year	Country	Start Year	Country	Start Year
Albania	1992,1997	Gabon	1990,1994,2000,2004	Mozambique	1990
Algeria	1994	Gambia	1998	Nepal	1992,2003
Angola		Georgia	1994	Nicaragua	1994,1997,2002
Argentina		Ghana	1998,2009	Niger	1996
Armenia	1994	Greece	2010	Nigeria	
Azerbaijan	1994	Guatemala		Pakistan	1990
Bangladesh	2003	Guinea	1991,1992,1994	Panama	1992
Belarus		Guinea-Bissau	1994	Paraguay	2003
Benin	1990	Honduras	1990,1998,2004,2008,2010,2014	Peru	
Bolivia		Hungary	1996	Philippines	1994
Bosnia	1996	Iceland		Poland	
Brazil		India		Portugal	
Bulgaria	1996	Indonesia		Russia	1992
Burkina Faso	1993	Ireland		Rwanda	1997
Burundi	2002	Jamaica		Senegal	1994
Cambodia	1993,1999	Jordan		Sierra Leone	1994
Cameroon		Kazakhstan	1993	Slovakia	
Cape Verde		Kenya	1990,1993,1996,2003	South Korea	
Central African Republic	1994,1998,2004	Kyrgyz Republic		Sri Lanka	1990
Chad	1994,2005	Laos	1990	Tajikistan	1996
Chile		Latvia	2008	Tanzania	1996
Colombia	1999	Lebanon		Togo	1992
Comoros		Lesotho		Trinidad and Tobago	
Congo	1994,2000	Liberia		Tunisia	
Costa Rica	1991,1995	Lithuania		Turkey	1999
Cote d'Ivoire	1994,1998,2001, 2007	Macedonia	1993,2003	Uganda	1990
Croatia		Madagascar		Ukraine	1994
Cyprus		Malawi	1990,1994	Uruguay	1996
Czech Republic		Maldives		Venezuela	
Dominican Rep		Mali	1992	Vietnam	
Ecuador	2003	Mauritania	1992	Yemen	1995,2001
Egypt		Mexico		Zambia	1995,1999,2004
El Salvador		Moldova	2006	Zimbabwe	1992,1998
Equatorial Guinea	1990	Mongolia	1991		
Estonia		Morocco			
Ethiopia					

**Figure A1. Overlap plot**



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<sup>1</sup> To code an IMF program as involving reductions in the number of civil servants, we followed the IMF Conditionality database (Kentikelenis et al., 2016), specifically searching within the “Labor Issues (public and private sector)” Policy Area. Programs were coded as involving civil servant reductions if they contained any condition specifying reductions in public sector employment. This language varied across programs and countries. For example, in the 2012, Greek Program there was the condition of “Mandatory Exits (head count, in thousands).” Similarly, in Azerbaijan 1996, it was phrased as “Reducing government net employment by 10 percent by end-September 1996 compared to end-September 1995.” In Guinea in 1996, the condition simply read “Number of civil servants.” Given that each condition related explicitly to reducing public sector employment and fell under “Labor Issues,” we are confident in the consistency of our coding approach.

