Is Democracy A Prerequisite

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Abstract

The current literature is silent on whether democracies are more fragile or less susceptible to economic and political breakdowns. Using a host of political instability and policy instability variables, this paper explores empirically, whether political freedom (a proxy for democracy) has any effect on the stability of the political order. Furthermore, it also explores the possibility that political freedom explains differences in the stability of economic policies.

I.   Introduction

*M*ost of the regime shifts in democracies occur through the electoral defeat of the incumbents, while dictatorships relinquish power only through violence. Democracy requires consent of the citizenry, and consent requires political legitimacy. Therefore, violent popular opposition is neither a necessary nor a sufficient condition for a democratic breakdown. Thus, it seems that to the extent that democratic authority is rooted in the popular consent, political violence poses less of a threat to them than it does to dictatorships. However, recent experiences in Africa and Latin America indicate that democratic decay and political delegitimization coupled with disastrous economic performance shortened the lifespan of many democratic regimes. It is therefore not clear whether democracies are more or less resilient than dictatorships. Nevertheless, it is possible that democratic regimes are characterized by more stable economic policies than non-democratic regimes and therefore the type of the political regime may be important, not for just being democratic or dictatorial but for the stability of its policies.

By focusing on poor indicators of instability such as coups, revolutions and political assassinations, the current literature has failed to differentiate between the collapse of democratic and authoritarian rules or whether democratic regimes collapse for the same reasons as do authoritarian regimes. The current literature is silent on whether democracies are more fragile or less susceptible to economic and political breakdowns. Using a host of political instability and policy instability variables, this paper explores empirically, whether political freedom (a proxy for democracy) has any effect on the stability of the political order. Furthermore, it also explores the possibility that political freedom explains differences in the stability of economic policies. The rest of the paper is organized as follows. Section Two is an alternative view on the relative stability of democracies and dictatorships. Section Three is an empirical examination of the effect of political freedom on the stability of political regimes and also its effect on the stability of the underlying economic policies. Section Four concludes and provides suggestions for future research.

II.   Alternative Views on Democracy and Stability

Some studies suggest that democracies are more stable than dictatorships. Resler and Kent (1993) suggest that democracies build their legitimacy on institutionalized procedures and constitutional guarantees of political rights and freedoms, while the primary means through which dictatorships establish their legitimacy is good economic performance. Hence, economic setbacks are more likely to create instability in dictatorships than in democracies.

Sorensen (1991) suggests that political democracy facilitate the translation of economic power into political power. Dictatorships on the other hand threaten powerful interest groups and therefore undermining their sustainability. The mutual accommodation of economic and political interests of the powerful makes democracies less destabilizing. Przeworski (1991) also claimed that democracy allows political players to adopt, alter strategies, and build new alliances to advance their interests in the future. It gives them opportunities to achieve their goals

through institutionalized competition within the existing political framework without creating political upheavals. Dictatorships on the other hand dampen these opportunities and political actors resort to violence to change policies or to assume leadership.

Democratic governments have a better mechanism for handling the transitions from one leader to another than authoritarian regimes, and elections are a practical and often peaceful ways for choosing between rival political leaders. Therefore, democratic regimes allow for a variety of leaders with different kinds of skills to come to power. If one fails, it is possible to replace him with someone else with very different qualities. Clague et. al. (1996) indicated that the turnover in democratic leaders is not a sign of political instability but a reflection of an effective judiciary that denies those who are defeated in elections to unilaterally extend their hold on power, making the underlying institutional framework stable and durable.

Hirschman (1972) suggested that freedom of speech in democracies allows political leaders early warnings to serious troubles and when and how their policies run into trouble. Sen (1984) has also argued that, precisely because they give citizens a means to express themselves, no democratic regimes have suffered from the kinds of massive famines that have afflicted authoritarian regimes.[1]

Democratic regimes are also more likely to be freer and thus more dynamic economically than autocracies. Economic growth allows governments to meet the demands of citizens without raising taxes. Democratic regimes are therefore more likely to be better than authoritarian regimes at developing policies that are effective and, as a result, satisfy the desires of the people. A more satisfied people are less likely to be attracted to revolutionary ideas, which allows democratic regimes to be particularly stable. Karen Remmer (1996) in a study of regime durability in Latin America found that the average durability of political democracies in Latin America since 1945 was 11.9 years, as compared to an average of 6.8 years for dictatorships.

In his seminal article on the social prerequisites of democracy, Lipset (1959) proffered the hypothesis that economic development precedes the development of economic freedom and democratic political institutions. He argued that broadly based economic development is conducive to a democracy, because it usually leads to urbanization and unionization where educational levels rise and the middle class expands to the point where the division between the wealthy oligarchy and the impoverished masses is broken down. Lipset (1959, pp. 31) pointed out: "Democracy is related to the state of economic development. The more well-to-do a nation, the greater the chances that it will sustain democracy."

Lipset suggested that the sustainability of political freedom and democracy builds on the concept of economic effectiveness. According to Lipset (1959, p. 91), "Prolonged effectiveness which lasts over a number of generations may give legitimacy to a political system; in the modern world, such effectiveness mainly means constant economic development." More recently, Przeworski (1991) argued that freedom can not be sustained without economic development. Przeworski (1991, p. 32) commented "To evoke compliance and participation, democracy must generate substantive outcomes: It must offer all the relevant political forces real opportunities to improve their material welfare." Therefore, the arguments of Lipset and Przeworski suggest that economic development fosters democracy, which then in turn promote stability.

Contrary to the commonly held view that democracies are more stable than dictatorships, some studies suggest that dictatorships are more successful at economic management and are therefore less threatened by performance failure (Diamond 1988). If regime durability varies with economic performance, and dictatorships are more able to channel resources to accumulation and the creation of wealth rather than consumption, democratic regimes are more vulnerable to economic performance setbacks and political turmoil than their authoritarian counterparts.

Ali and Crain (2002) suggest societies that have adopted infrastructures that favor production over diversion have typically done so through strong effective governments. Democracies are more susceptible to

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[1] The deadly famine in Ethiopia in the early 80s lead to massive unrest and the eventual collapse of the communist government of Mengistu Haile Miriam.

political pressure groups and therefore tend to divert resources to their political power bases. Voter preferences for current consumption over long term investment make democracies ill equipped to undertake the kind of policies necessary for sustained economic growth. Bardhan (1993), Przeworski and Limongi (1993) and Weede suggest that development-minded authoritarian regimes are characterized by a high degree of insulation from short-term, pork-barrel politics. They also report that the ability to insulate institutions from redistributive politics allowed East-Asian non-democratic, resource-poor countries to grow faster than comparable democratic countries. Hence, if political stability is a function of economic development, dictatorship should last longer than comparable democracies.

III.   The Empirical Results

i)   Democracy and Political Stability

Table 1 displays the regression results of the effect of political freedom, a proxy for democracy, on political instability. The political instability variables are from the World Handbook of Political and Social Indicators, Bank's Cross Polity Time-Series Data, and Levine and Easterly (1997).[2] Most of the data is from 1960-1990. See Appendix I for a detailed description of these variables. The data of the other explanatory variables are from the World Development Indicators (2000), International Monetary Fund's (IMF) International Financial Statistics and the IMF's Government Finance Statistics Yearbook. The data covers the period 1975-2000 and over 119 countries.[3] A political regime dataset by Gasiorowski (1996) gives dates of transition among democratic, semi-democratic, authoritarian, and transitional regimes in the 97 largest third world countries from independence to 1992. While very useful, this data set has two limitations. First, it only includes regimes in Africa, Asia, and Latin America. And second, it defines a change in regime as a change from one type of regime to another. That is, the Gasiorowski coding doesn't show a shift from one form of authoritarianism to another, but only changes among the four possibilities of democratic, semi-democratic, authoritarian, and transitional regimes. Thus, Ethiopia was coded authoritarian from 1871-present. This political regime dataset, then, is satisfactory if we adopt the first approach to understanding stability and define stability as the duration of a particular kind of regime. By itself, however, this dataset will not allow us to define stability as the duration of a particular regime.

The dependent variables are different measures of political instability. The independent variable of interest is Gastil's political freedom index. The index is from Freedom House and measures the level of political freedom. It ranks countries on a scale of 0-7, the higher the score, the lower the level of political freedom and civil liberty. The scale is reversed and the original ranking of 0-7 is converted into a scale of 0-1. Since there is no reliable data on the democratic nature of different countries, political freedom is used as a proxy for democracy. Because heteroskedasticity could be important across countries, the standard errors are based on White's (1980) heteroskedasticity-consistent covariance matrix.

Column 1 of Table 1 includes two control variables used as standard in the literature and political freedom as an additional explanatory variable. The two control variables are GDP level, and the enrollment in secondary schools as a proxy for human capital. It is possible that democracy or political freedom itself is a function of the level of development (GDP). Therefore, the presence of multicollinearity among the explanatory variable (political freedom) and the other two control variables (GDP and LSEC75) are tested. A novel approach of testing multicollinearity is to use "Variance inflationary Factor or VIF." For example $VIF_j= 1/(1-R_j^2)$ whereby R_j^2 is the coefficient of determination of regression X_j on all other explanatory variables. If $VIF_j > 5$, X_j is highly correlated with other explanatory variables.[4] All the VIFs were less than 3. Since none of the VIFs exceeded 5, we proceeded using the ordinary least-squares regressions.

The dependent variable in column 1 is a political instability index (antigovernment demonstrations). The findings in column 1 suggest that political freedom is negatively correlated with antigovernment demonstrations; however, the effect of political freedom on antigovernment demonstrations is not significant at the conventional

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[2] Using data from Jodice and Taylor (1983), and Barro and Wolf (1989) did not significantly change the results.
[3] Because of missing data in some countries, the reported results are based on a sub-sample of the 119 countries.
[4] For a detailed description of VIF, see Marquqardt (1980).

level. The effect of the level of economic development (GDP) on this political instability index appears to be weak with a very small coefficient. The other control variable (LSEC75) is also not significant.

Column 2 uses the political instability measure (Assassinations) as the dependent variable. The control variable (GDP) is significant and of the expected sign. LSEC75 remains negative and statistically insignificant. The effect of the variable of interest (political freedom) on political assassinations is negative and significant. Column 3 includes a measure of cabinet change as the dependent variable. The coefficient of the control variable (GDP) is negative and significant while the other control variable (LSEC75) is negative and insignificant. The variable of interest (political freedom) is negative and insignificant. Columns 4 and 5 report the regression results for measures of genocidal incidents and constitutional change as dependent variables. The effect of the control variable (GDP) on genocidal incidents is negative and insignificant while its effect on constitutional change is negative and significant. LSEC75 has no effect on either of these variables. The effect of political freedom on genocidal incidents is negative and significant while its effect on constitutional change is negative and insignificant. Columns 6 and 7 use measures of government crisis and purges as the dependent variable. The control variable (GDP) is negative and significant in the government crisis equation. It is negative and insignificant in the purges equation. The other control variable (LSEC75) remains negative and insignificant. The variable of interest (political freedom) is negative and significant in both equations.

Columns 8 and 9 use riots and revolutions as dependent variables. The coefficient of GDP is negative and significant in both equations while the coefficients of LSEC75 and the variable of interest (political freedom) are negative and insignificant in both equations. Columns 10 and 11 report the regression results when political instability measures (border wars and civil wars) are included in the regression equation as the dependent variables. The coefficient of GDP is negative and insignificant in the border war equation and negative and marginally significant in the civil war equation. The coefficient of LSEC75 is negative and insignificant in both equations. Political freedom is negative and insignificant in the border war equation but negative and significant in the civil war equation. The last regression in column 12 reports the result when coup d'etat is the dependent variable. In this equation the coefficients of both GDP and the variable of interest (political freedom) are modestly significant. The coefficient of human capital (LSEC75) is once more negative and insignificant.

Column 13 shows the regression results when the political instability indices are aggregated into a composite index (AVG.INDEX) and used as the dependent variable. The index is the weighted average of all the political instability indices. The principal component analysis is used to determine the linear combination-the weights-of these variables that maximize the variation of the constructed components. Principal component analysis involves a mathematical procedure that transforms a number of (possibly) correlated variables into a (smaller) number of uncorrelated variables called *principal components*. The first principal component accounts for as much of the variability in the data as possible, and each succeeding component accounts for as much of the remaining variability as possible. This is an objective method of combining a set of variables into a single variable that best reflects the original data. The coefficient of political freedom is negative and insignificant. The coefficient of the control variable (GDP) is negative and significant while that of LSEC75 is negative and insignificant.

To summarize the results of Table 1; the effect of political freedom (a proxy for democracy) on political instability is inconclusive. Political freedom has no effect on six out of twelve commonly used proxies of political instability when two other control variables are also included in the model. It has a negative and significant effect on another five of these instability measures while it has a modest and negative effect on the remaining variable. Political freedom has also no effect on the aggregated index when the political instability indices are aggregated into a composite index of political instability. While the relationship between political freedom and political instability is clearly negative, the relationship is not solidly conclusive. The results clearly indicate that political freedom is not a significant differentiating factor of why some regimes are characterized by a political turmoil while others are stable. Hence, political freedom failed to explain differences in political instability across countries. Although political freedom may not have a direct effect on political instability it might contribute to the overall level stability of a country by fostering stable economic policies, an issue that will be addressed for the remainder of this section.

ii)   Democracy and Policy Instability

It is possible that the effect of democracy (or political freedom) on the level of political instability is indirect. One possible channel through which political freedom translates into a stable political environment is its effect on economic policies. We might be able to better understand political stability in terms of the stability of economic policy regimes, and this, in turn, can be affected by the nature of the political regime (democracy vs. autocracy or in this case higher level of political freedom vs. lower levels of political freedom). In other words, political stability can itself be a function of the stability of economic policies which is also a function of democratic political institutions.

Following the procedure used by Aizenman and Marion (1991) the unexpected effect of an economic policy can be calculated by fitting a first-order autoregressive process of the form:

$(Policy)_t = B_0 + B_1 (Policy)_{t-1} + \varepsilon,$

where B_1 is the autoregressive parameter. The standard deviation of the residual term (ε) is the unexpected part of the economic policy. This policy instability variable is then used as the dependent variable.[5] The variable of interest (political freedom) and the other two control variables will again be used as the right hand explanatory variables.

Policy Uncertainty = $(\beta_0) + (\beta_1)(GDP) + (\beta_2)$ LSEC75 + (β_3) Political Freedom

Table 2 reports the empirical results of the relationship between political freedom and the policy instability variables. Political freedom is significantly and negatively correlated with almost all of the policy uncertainty variables when controlled for the other relevant exogenous variables. Column 1 of Table 2 contains the control variables of Table 1 and political freedom as the explanatory variable of interest. The standard deviation of the residual (here on as SDR) of domestic credit as a measure of monetary policy uncertainty is used as the dependent variable. The coefficient of political freedom is negative and significant. Similarly in column 2, the effect of political freedom on the SDR of public debt (SDRDEBT) which measures the instability associated with changes in public debt is negative and significant. Column 3 has SDRDEFICIT as the dependent variable as a measure of the instability associated with the frequent changes of the overall budget deficit. Again, the effect of political freedom on this variable is negative and significant.

Column 4 shows the effect of political freedom on a fiscal uncertainty variable (SDRGOV); the consumption of central government as a percent of GDP. The coefficient of political freedom in this equation is significant and of the expected negative sign. Columns 5 and 6 include trade policy variables (SDREXPORT and SDRIMPORT) as the dependent variables. These two variables are measures of the instability related to changes in imports and exports as a percent of GDP. The coefficient of political freedom is negative and significant in both equations. The correlation between monetary policy surprises (SDRINTEREST, SDRINFLATION and SDRMONEY) and political freedom are shown in columns 7, 8, and 9. Once more, the coefficient of political freedom is negative and significant in the SDRINTEREST and SDRINFLATION equations. The correlation between money growth surprises (SDRMONEY) and political freedom is negative and significant at the 10 percent level.

Column 10 adds fiscal policy instability variable (SDRTAXES) into the regression equation as the dependent variable, while column 11 includes trade policy instability variable (SDRTRADE) into the same regression equation as the dependent variable. The coefficient of political freedom is negative and significant at the 5 percent level in the fiscal policy equation while it is negative and significant at the 10 percent level in the trade policy equation. Column 12 uses the trade policy instability variable SDRXRATE as the dependent variable. Yet again, the effect of political freedom on exchange rate surprises is negative and significant.

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[5] See Appendix II for a description of the economic policy variables.

The statistical results in Table 2 indicate that there is significant relationship between political freedom and policy instability. The results in Table 2 suggest that higher levels of political freedom foster higher levels of stable economic policies. The coefficient of political freedom designated as the variable of interest is negative and significant in almost all the regression equations in Table 2. This tells a different story than the results in Table 1 where the coefficient of political freedom was negative and significant in less than fifty percent of the regression equations. Hence, the nature of the political regime is important not in terms of the durability of the regime per se but in terms of its effect on the stability of economic policies. As shown by the results in Table 2, countries with high levels of political freedom tend to be exemplified also by stable and durable economic policies.

IV.   Conclusion

This paper used political freedom as a proxy for democracy and tested the effect of political freedom on the stability of political regimes as well as the stability of underlying economic policies. The political freedom variable failed to capture the instability of constantly changing regimes. The coefficient of political freedom was negative and significant in less than half of the regression equations when most of the widely used measures of political instability such as coups, revolutions, etc. are used as dependent variables. The paper also presented the empirical results of the relationship between political freedom and several policy instability variables using appropriate and novel econometric techniques. The results show that political freedom has a more dramatic and significant effect on the stability of economic policies. The coefficient of political freedom is negative and significant in almost all the regression variables when a host of policy instability variables are used as dependent variables.   A further comprehensive research is needed on the multi-layered and the complex relationship among democracy, the durability and the stability of economic policies, and the resilience of the political order.   The central issue to be elaborated in future research is to explain the sources of policy instability. Rapidly changing economic policies could, for example, be a proxy for an unstable political system. Addressing these complex relationships is a major challenge, at least empirically, and hopefully future researchers would be able to separately evaluate the intricate relationship among the types of political regimes, the stability of these regimes, and their time-varying economic policies.

Table 1: The Effect of Political Freedom on Political Instability Dependent Variable: Political Instability (1960-1990)

	ANTIGOV DEMONS (1)	ASSASSINA-TIONS (2)	CABINET CHANGE (3)	GENOCIDE (4)	CONSTIT CHANGE (5)	GOV'T CRISIS (6)	PURGES (7)	RIOTS (8)	REVOLU-TIONS (9)	WAR (10)	CIVIL WAR (11)
GDP	-7.1E-7 (-2.207)	-1.2E-6 (-1.83)	-8.9E-7 (-2.26)	-6.8E-7 (-1.20)	-9.5E-7 (-2.82)	-9.9E-7 (-3.29)	-7.2E-7 (-1.21)	-9.5E-7 (-2.62	-6.7E-7 (-1.99)	-5.9E-7 (-0.17)	-2.4E.. (-16..
Lsec75	-0.0022 (-0.231)	-0.0025 (-0.259)	-0.0022 (-0.23)	-0.002 (-0.19)	-0.0007 (-0.07)	-0.0021 (-0.22)	-0.0017 (-0.18)	-0.002 (-0.19)	-0.0014 (-0.14)	-0.0011 (-0.11)	-0.00.. (-0.1..
Political Freedom	-0.001 (-1.52)	-26.389 (-1.94)	-0.0039 (-0.60)	-0.0741 (-2.05)	-0.0132 (-0.91)	-0.0126 (-2.54)	-0.0005 (-3.11)	-0.002 (-0.23)	0.0001 (0.060)	0.0068 (0.788)	-0.01.. (-2.3..
C	0.2263 (7.19)	0.2270 (7.25)	0.2282 (7.175)	0.236 (7.43)	0.2304 (7.24)	0.2264 (7.19)	0.2254 (7.11)	0.227 (7.03)	0.225 (7.15)	0.225 (7.18)	0.244 (7.1.
OBS.	90	90	90	89	90	90	90	90	90	90	90
Method Of Estimation	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
ADJ. R^2	0.005	0.113	0.007	0.094	0.1124	0.106	0.1029	0.083	0.0028	0.0100	0.12.

T-statistics are in parentheses.

Antigovdemons: is Anti-government demonstrations; **Assassinations**: is political assassinations; **Cabinet Changes**: Major cabinet changes; **Genocide**: Genocidal incidents; **Const. Change**: Major constitutional change**; Coups**: Coup d'etat; **Gov't Crisis**: Major government crisis; **Purges**: Systematic elimination of political opposition; **Revolutions**: Illegal change of the elite; **Riots**: Violent demonstrations; **War**: Border wars

Table 2: The Relationship Between Political Freedom and Policy Instability Dependent Variable: Policy Instability

INDEP. VARIABLES	SDR DCREDIT 1	SDR DEBT 2	SDR DEFICIT 3	SDR GOV 4	SDR EXPORT 5	SDR IMPORT 6	SDR INTEREST 7	SDR INFLATION 8	SDR MONEY 9	SDR TAXES 10	SDR TRADE 11
GR7594	-1.481 (-1.154)	-2.483 (-1.766)	-1.451 (-1.10)	-1.148 (-0.85)	-0.821 (-0.67)	-0.296 (-0.24)	-0.6741 (-0.512)	-0.674 (-0.512)	-1.804 (-1.43)	-1.435 (-1.15)	-1.353 (-0.65)
LSEC75	-0.1667 (-7.69)	-0.1039 (-3.96)	-0.164 (-7.23)	-0.161 (-7.62)	-0.1425 (-6.619)	-0.149 (-7.32)	-0.1679 (-7.848)	-0.1679 (-7.848)	-0.1651 (-7.16)	-0.167 (-7.28)	-0.208 (-5.30)
POLITICAL FREEDOM	-0.054 (-2.27)	-2.1E-4 (-3.159)	-0.012 (-3.12)	-0.025 (-2.41)	-0.79 (-3.3)	-0.909 (-3.83)	-0.030 (-2.60)	-0.103 (-2.47)	-0.007 (-1.89)	-0.025 (-3.3)	-0.002 (-1.79)
C	0.2131 (3.276)	0.2215 (4.08)	0.2053 (3.344)	0.2302 (3.433)	0.3869 (4.611)	0.3815 (5.102)	0.1880 (3.276)	-1.126 (-5.63)	0.1893 (3.32)	0.2117 (3.423)	0.153 (1.474)
OBS.	90	84	87	89	90	90	83	89	88	87	87
METHOD OF EST.	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS	OLS
ADJ. R^2	0.578	0.482	0.464	0.529	0.582	0.458	0.4516	0.679	0.561	0.549	0.543

T-statistics are in parentheses.

SDRDCREDIT: Standard deviation of the residual (SDR) of domestic credit; **SDRDEBT**: SDR of public and publicly guaranteed debt; **SDRDEFICIT**: SDR of Overall budget deficit; **SDREXPORT**: SDR of export of goods and services; **SDRGOV**: SDR of government expenditure as a percent of GDP; **SDRIMPORT**: SDR of import of goods and services; **SDRINTEREST**: SDR of deposit interest rate; **SDRINFLATION**: SDR of GDP deflator; **SDRMONEY**: SDR of money and quasi-money; **SDRTAXES**: SDR of tax revenues; **SDRXRATE**: SDR of exchange rate.

Appendix I: Measures of Political Instability

- *Anti-government Demonstrations*: Any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of distinctly anti-foreign nature.
- *Assassinations*: The average number of political assassinations per year per million populations. *Major Cabinet Changes:* The number of times in a year that a new premier is named and/or 50% of the cabinet posts are occupied by new ministers.
- *Communal and Political Victims:* Dummy = 1 for a country with genocidal incidents involving communal (ethnic) victims or mixed communal and political victims.
- *Major Constitutional Changes*: The number of basic alterations in a state's constitutional structure, the extreme case being the adoption of a new constitution that significantly alters the prerogatives of the various branches of the government.
- *Coups*: The number of extra-constitutional or forced changes in the top government elite and/or its effective control of the nation's power structure in a given year. Unsuccessful coups are not counted.
- *Major Government Crises*: Any rapidly developing situation that threatens to bring the downfall of the present regime- excluding situations of revolt aimed at such overthrow.
- *Purges:* Any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition.
- *Revolutions***:** Any illegal or forced change in the top government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government.
- *Riots*: Any violent demonstration or clash of more than 100 citizens involving the use of physical force.
- *War:* Dummy for war on national territory.
- *Civil War:* Dummy for civil war.

Appendix II: Economic Policy Variables

Fiscal Policy Variables:

> *Debt:* Public and publicly guaranteed debt (current US dollars).
> *Deficit:* Overall budget deficit including grants (% of GDP).
> *Expenditure*: Central government consumption (% of GDP).
> *Taxes*: Tax revenue (% of GDP).

Monetary Policy Variables:

> *Domestic Credit*: Net domestic credit (local currency unit).
> *Exchange Rate*: Real effective exchange rate index (1990 = 100).
> *Inflation*: GDP deflator (Annual %).
> *Interest Rate*: Deposit interest rate (%).
> *Money:* Money and quasi-money (M2) as percent of GDP.

Trade Policy Variables:

> *Exports*: Export of goods and services (% of GDP).
> *Imports*: Import of goods and services (% of GDP).
> *Trade:* The value of imports plus exports (% of GDP).

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Notes