

Relationships among democratic freedoms in the former Soviet Republics: a causality analysis

Jac C. Heckelman

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Abstract Empirical studies often use Freedom House ratings for Political Rights and/or Civil Liberties as institutional proxies for the degree of democracy. In this study, Granger-causality tests are used which reveal that Political Rights tend to precede Civil Liberties, but not the reverse, in a panel data set of former Soviet Republics. For transition nations, Freedom House also publishes a separate breakdown of democratic characteristics. Empirical tests suggest Civil Society and Judicial Framework Granger-cause Electoral Process, Governance Granger-causes Civil Society, and all four components Granger-cause Independent Media. Each measure of democracy is related to at least one other but no evidence for dual causation is found.

Keywords Democracy · Political rights · Civil liberties · Granger-causality

JEL Classification D72 · H11

1 Introduction

A large empirical literature has developed relating the importance of institutions to economic growth and development. Within this literature, democracy measures developed by Freedom House are often used as a proxy for governmental institutions.¹ Freedom House has created two sets of indexes, one for political rights

¹ Although widely used, the Freedom House democracy ratings are not without their share of critics. See for example, Scoble and Wiseberg (1981); Stohl et al. (1986); Inkeles (1991); Munck and Verkuilen (2002).

J. C. Heckelman (✉)
Wake Forest University, 110 Carswell Hall, Winston-Salem, NC 27109, USA
e-mail: heckeljc@wfu.edu

and another for civil liberties, and the average value of the two indexes represents their assessment of a nation's relative level of democracy.

While democracy is typically of interest to economists primarily as a means to further the goal of growth or other measures of development, several studies have also treated democracy as an important goal in and of itself by investigating which factors affect the Freedom House democracy scores over time. From among his various explanatory variables, Knack (2004) finds that only changes in illiteracy have a causal impact on the change of the democracy index. Neither foreign aid, wealth, growth, nor initial level of illiteracy has a significant impact at the margin. Conversely, Barro (1996) finds that the long run average value of the democracy index depends upon past values of the index, GDP, education, and infant mortality rates. Nieswiadomy and Strazicich (2004) report evidence that roughly half the 132 countries in their sample exhibit evidence of converging in their level of political freedom.

Although Freedom House documents that political freedoms are on the rise overall,² it continues to be the case that less than half the world's population resides in nations classified as "Free" by the Freedom House methodology (Puddington 2006).³ While the lack of political freedom continues to be of concern in many parts of the world, a ray of hope was triggered in the early 1990s with the breakup of the Soviet Union, signaling an end to repression by the Communist dynasty. Political and economic reforms in the new republics were expected to quickly foster a new era of openness and growth opportunities. With exception of the three Baltic Nations of Estonia, Latvia, and Lithuania, the track record overall has been mostly disappointing on both fronts. Gleason (2001) outlines the differing responses taken toward democratization among several of these newly independent nations, and the importance for renewed commitment to democratic reforms to ensure stability during the transition away from Communism. According to Bartlett and Hunter (1997, p. 105) "the central problem in Eastern Europe is to engender commitment to democratic ideals and practices". They further argue that "democratic consolidation requires state institutions that are simultaneously responsive to the needs of individual agents and capable of providing collective goods to society, such as universal law...[which] guarantees the civil liberties of citizens, protects economic elites from arbitrary seizure of property, and provides a medium through which aggrieved actors can seek redress" (p. 107).

Given the related, yet distinct, concepts of democratic freedom inherent in political rights and civil liberties which comprise the Freedom House democracy index, reform in one area may naturally lead to reform in the other, or be necessary before other reforms can occur. Several previous studies have at least indirectly identified expected relationships between some of the political rights and civil liberties components. The role of the media, in particular, has gotten much attention lately. Media freedom can affect the political selection of competency of leaders by

² Nieswiadomy and Strazicich (2004) show that the average level of political freedoms is increasing overall from 1972–2001, and also exhibit diminishing variation across countries during this time. However, their sample excludes the former Soviet republics which are the focus of this study.

³ The Freedom House classification scheme is detailed in a later section.

increasing voter awareness and government responsiveness and limiting corruption (Brunetti and Weder 2003; Stromberg 2004; Besley 2005). These studies would suggest that civil liberty (in the form of media freedom) would lead to changes in various political rights. Furthering this argument, other types of civil liberties in the form of judicial independence (La Porta et al. 2004) and civil society (Raik 2006) are also thought to lead to increased political rights.

Clague (2003), however, claims that other democratic reforms are necessary before media can root out corruption, and Belsey and Prat (2006) further suggest that issues of governance affect media freedom which in turn influences how accountable is the government. Taken together, there is support for the notion that civil liberties and political rights could be jointly determined.

Mansfield and Snyder (1995) argue forcefully that the rule of law is the needed first step before other aspects of democratization, such as open political debate and mass political participation, can properly take place. Without the rule of law, movement toward what Zakaira (2003) dubs “illiberal democracies” results in newly elected leaders restricting other rights in their quest to retain power. Raik (2006) argues that for Eastern Europe, advancements in civil society are necessary before other aspects of democracy can be pushed forward or sustained.

In contrast, Plattner (1999) and Carothers (2007) claim such “sequentialism” actually inhibits democratization. They believe increased democratization is only successful when all aspects are simultaneously developed, due to their mutual reinforcement.

In this paper, the relationship between various political rights and civil liberties is investigated by the use of Granger-causality tests. Previous studies utilizing the Freedom House measures for democracy have determined if the combined index is Granger-related to other variables such as economic freedom or national wealth (Farr et al. 1998; Dawson 2003) but have not tested to see if the two components of political rights and civil liberties are Granger-related to each other. As explained further below, to take advantage of a more detailed democracy index recently created by Freedom House, the analysis here is limited to the former Soviet republics. These nations are also of particular interest due to their recent independence and therefore greater scope of potential reform with less likelihood of interference by entrenched interest groups which take time to form following significant upheaval (Olson 1982). Among this sample of nations which had formerly been Soviet republics, it is found that political rights Granger-cause, but are not Granger-caused by, civil liberties.

As explained in more detail later, the Freedom House indexes of political rights and civil liberties are themselves an agglomeration of various types of rights and liberties across several dimensions, including those discussed above. The ratings for the underlying components which comprise the political rights and civil liberties indexes are not released so it is not possible to directly investigate them in greater detail. However, in addition to these measures of democracy, Freedom House has also created a new index of democracy specifically for the transition nations. This latter index is based on five distinct areas of democracy which overlap with many of the political rights and civil liberties of the original democracy index allowing for greater precision in distinguishing among the various components of democracy,

although these series are available for only a shorter period of time. Tests on these components reveal that both Governance and Judicial Framework Granger-cause both Electoral Process and Independent Media, and Governance also Granger-causes Civil Society which itself Granger-causes Independent Media. No evidence for joint causality is found. Results from the components of both indexes suggest that democratic reforms in the former Soviet Republics have generally followed the path of sequentialism, rather than simultaneity.

2 The Granger-causality test design

The notion of Granger-causality is based on the premise that one series consistently precedes another series intertemporally. Although such a finding does not prove a causal relationship in the traditional econometric sense, it has often been used to answer the question of potential endogeneity. If one series Granger-causes another, then changes in the former tend to be followed by changes in the latter.

The intertemporal approach to causation determines if lagged values of a series helps predict another series while controlling for its own lagged values. In particular, to determine the Granger-relationship between political rights (PR) and civil liberties (CL), the regressions

$$CL_i(t) = a_0 + \sum_{k=1}^q a_k CL_i(t-k) + \sum_{k=1}^q b_k PR_i(t-k) + e_i(t) \quad (1)$$

and

$$PR_i(t) = c_0 + \sum_{k=1}^q c_k PR_i(t-k) + \sum_{k=1}^q d_k CL_i(t-k) + u_i(t) \quad (2)$$

are estimated, where i represents the individual countries and t denotes the particular year. If the b coefficient vector in (1) is statistically significant but the d coefficient vector in (2) is not, then political rights are said to Granger-cause civil liberties. If the reverse holds true, then civil liberties are said to Granger-cause political rights. If both coefficient vectors are statistically significant then political rights and civil liberties are jointly determined, potentially by an alternative variable not included here. Finally, if neither coefficient vector is statistically significant, then political rights and civil liberties are not Granger-related.

3 Freedom House measures of political rights and civil liberties

3.1 Data descriptions

Freedom House rates each nation annually on a scale of 1 (most freedom) to 7 (least freedom) for their perceived level of political rights and civil liberties where lower values represent more freedom. The rankings for PR and CL are based on points awarded on a range from 0 to 4 for each of 10 different questions related to political

rights, and 15 questions related to civil liberties. The total for the raw points assigned separately to the political rights and civil liberties categories are then each converted to the reported 1 to 7 integer scale. Each integer on the new scale represents its quantile range of raw points for either PR or CL. This serves to standardize the scores in order to account for the differing number of questions and consequently differing number of total raw points possible between PR and CL. The average of the scaled value for political rights and civil liberties represents the nation's "liberal democracy" score. Nations receiving a democracy score in the top third (1.0–2.5) are considered "Free", those in the middle third (3.0–5.0) are classified as "Partly Free", and those in bottom third (5.5–7.0) are designated as "Not Free".

As shown in Appendix 1, the 10 questions for political rights are grouped into 3 basic areas covering Electoral Process, Political Pluralism and Participation, and Functioning of Government. The 15 questions for civil liberties cover 4 basic areas of Freedom of Expression and Belief, Associational and Organizational Rights, Rule of Law, and Personal Autonomy and Individual Rights. Only the converted scale values for PR and CL, and the corresponding democracy "average", are published by Freedom House, not the actual number of total raw points or breakdown within each category.

The first two columns of Table 1 present the average level of political rights and civil liberties for each of the 15 former Soviet Republics, beginning with the breakup of the Soviet Union in 1991 through to 2005. The correlation between these two elements of the democracy index is a very robust .88. Such a high correlation between political rights and civil liberties is often reported among various sample nations and may be a reason why many researchers use the two interchangeably,

Table 1 Ratings for political rights, civil liberties, and democracy average

	1991–2005			2005 Democracy
	PR	CL	Democracy	
Armenia	4.20	4.00	4.10	4.5
Azerbaijan	5.87	5.00	5.43	5.5
Belarus	5.60	5.33	5.47	6.5
Estonia	1.53	2.00	1.77	1.0
Georgia	3.93	4.27	4.10	3.0
Kazakhstan	5.87	4.87	5.37	5.5
Kyrgyzstan	5.00	4.20	4.60	4.5
Latvia	1.60	2.13	1.87	1.0
Lithuania	1.20	2.20	1.87	1.0
Moldova	3.27	4.13	3.70	3.5
Russia	4.07	4.40	4.23	5.5
Tajikistan	6.07	5.80	5.93	5.5
Turkmenistan	6.93	6.80	6.87	7.0
Ukraine	3.40	3.67	3.53	2.5
Uzbekistan	6.87	6.20	6.53	7.0

although important differences can still exist. Every nation with an above sample average level of democratic freedoms (democracy score less than 4.35), has more freedom (lower rank score) on average in terms of political rights compared to civil liberties, except for Armenia, whereas the reverse is true for all nations with a below average degree of democratic freedoms. Below, we seek to determine if the correlation between political rights and civil liberties also represents causation or not.

According to the Democracy rating in the penultimate column of Table 1, only the Baltic nations of Estonia, Latvia, and Lithuania, would, by the Freedom House standard, be considered “Free” on average since declaring independence in 1991. For the non-Baltic nations, half have been “Partly Free”, and the remainder have been “Not Free”. The experience of these nations has been quite divergent over time as well. The final column shows the democracy index score for the last rated year of 2005. Each of the Baltic nations has the best rating possible for both political rights and civil liberties in 2005. The majority (seven) of the remaining 12 former Soviet republics had worse democracy scores in 2005 than their historical average while the other five had improved. In fact, among the “Not Free” nations, only Tajikistan has shown any relative improvement in 2005 but still not enough to lose its “Not Free” designation. Ukraine would now be considered “Free” albeit at the end range of this classification. Furthermore, among the non-Baltic nations, only Armenia, Georgia, Moldova, and Ukraine are currently considered more democratic than they were initially in 1991. Meanwhile Turkmenistan and Uzbekistan are currently designated with the worst ratings for freedom in terms of both their political rights and civil liberties, whereas none of the former Soviet republics were considered so repressive back in 1991.

3.2 Relationships between political rights and civil liberties

In the previous section it was shown that the average levels of PR and CL are highly correlated when calculated separately for each nation over the sample time period. To examine the time-series dimension more explicitly, the average levels of PR and CL across nations are now calculated year by year and shown graphically in Fig. 1. Here we can see that respect for both political rights and civil liberties initially got worse on average (higher values for the indexes) in the early years after independence from the Soviet Union. In more recent years, however, civil liberties has begun trending back toward its original levels, whereas political rights remains worse on average than initially. It is also true that the time-series correlation between PR and CL is much weaker (.30) than the cross-sectional correlation (.88 reported above). The disparity between political rights and civil liberties becomes most evident in the latter part of the sample. From 1999 to 2004, the average PR index value alternates between increasing and staying the same. During this same time, the average CL index value also alternates but falls when PR rises. Thus, the average PR has been trending upward (worsening) recently while the average CL has been trending downward (improving) recently.

The next section presents the formal Granger-causality tests. But a crude design can be presented initially by plotting the lead and lagged values of one of the series and comparing against the other series. Granger-causation implies one series

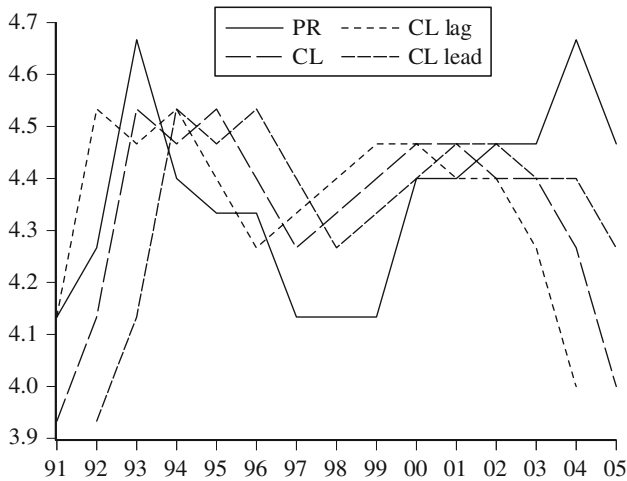


Fig. 1 Trends for averages of political rights and civil liberties among former Soviet republics, 1991–2005

consistently leads the other. So if, for example, the pattern of one series is best matched by directional changes of the lag of the other series, this might suggest the latter precedes the former and could Granger-cause it. If the first series is best matched by the lead of the other series, it could be that the latter Granger-causes the former. If the first series is best matched by the unaltered other series, then they may be jointly determined. To facilitate the comparisons, the lead and lagged CL indexes are also plotted in Fig. 1. None of the CL series appear to match the PR patterns in several successive years at once. Overall, the correlations lag with PR between both the CL lag and CL lead series are even weaker than for between PR and CL itself. The preliminary exploration therefore suggests a lack of any Granger relationship between PR and CL.

Simply comparing one series to the lead or lag of the other, though, is not the same as the Granger test design. Recall from (1) and (2) that Granger tests control for a series' own lags as well. It is also possible that higher order lags or leads of one series will result in still better matches, thereby potentially changing the conclusion regarding Granger-causality from only one lag. Finally, the Granger tests will be conducted treating the data as a panel, comparing each nation's index against past values of its own indexes only, rather than aggregating the PR and CL values into two single series of averages for comparison.

Before proceeding to the Granger framework, unit root tests are performed separately on the PR and CL series to check for stationarity. There are not enough observations to conduct stationarity tests for each nation separately, so panel tests are applied. The number of lags is chosen which minimizes the Schwarz Information Criterion (SIC) and Akaike Information Criteria (AIC). The SIC and AIC are inversely related to the log likelihood function but positively related to the number of parameters (lags) which serves as a "penalty" for the inclusion of additional variables (lags) which do not help to substantially improve the regression fit.

Table 2 Panel data unit root tests

	Common unit root process		Individual unit root process	
	Intercept only	Intercept and trend	Intercept only	Intercept and trend
PR	-6.24*	-6.54*	-4.67*	-3.52*
CL	-2.69*	-5.97*	-1.90*	-2.34*

Notes: Null in each case is unit root. Common unit root process test based on Levin et al. (2002) *t*-value. Individual unit root process test based on Im et al. (2003) *W*-statistic

* Significant at 10%

As shown in Table 2, both series reject the null of a unit root, whether using tests assuming a common unit root process for all countries (Levin et al. 2002), or allowing for individual unit root processes (Im et al. 2003). Thus, both series can be considered stationary, allowing for meaningful time-series tests directly on the unadjusted series values.

3.3 Granger tests for political rights and civil liberties

Test statistics for Granger-causation between PR and CL are presented in Table 3. Although $q = 1$ appears to be optimal based on the Information Criteria values, alternative selection criteria could potentially yield a different optimal number of lags. For robustness purposes, then, up to three lags are considered to determine the sensitivity of the Granger results to the number of lags included. The first three rows are for specification (1) and the last three rows for specification (2), with each row representing a different lag choice for $q = 1, 2, 3$. Significance of the test statistic is not dependent on the number of lags included. In each case, the null that PR does not Granger-cause CL can be rejected at the 10% level, but the null that CL does not Granger-cause PR is never rejected. Thus, the conclusion is that PR does Granger-cause CL, or in other words, that a change to the level of political rights tends to precede a change in the level of civil liberties but not vice versa.

The Granger test results are somewhat in contrast to the studies described above which would predict changes in the level of civil liberties to precede changes in the level of political rights, or possibly be jointly determined. However, it could be that

Table 3 Granger-causation tests between political rights and civil liberties

Null	Lags	<i>N</i>	<i>F</i> -stat	SIC	AIC
PR does not Granger-cause CL	1	210	17.20*	1.43	1.39
PR does not Granger-cause CL	2	195	7.25*	1.49	1.41
PR does not Granger-cause CL	3	180	4.85*	1.59	1.47
CL does not Granger-cause PR	1	210	0.49	1.62	1.59
CL does not Granger-cause PR	2	195	0.96	1.70	1.61
CL does not Granger-cause PR	3	180	0.55	1.75	1.62

* Significant at 10%

the specific types of civil liberties these scholars focused on (civil society, judicial independence, media freedom) do have the proposed relationship to certain political rights (corruption, governance, electoral process) but are overwhelmed by the multitude of other civil liberties and political rights which comprise the Freedom House indexes. Further exploration of some of the underlying components of civil liberties and political rights will be conducted in the next section.

4 Alternative indicators for democracy

4.1 Data descriptions

Just as the Freedom House concept of democratic freedom is comprised of related but distinguishable categories of political rights and civil liberties that have differential effects on each other, the categories of political rights and civil liberties are also comprised of related but potentially distinguishable components, as detailed in Appendix 1. Thus, knowing that PR Granger-causes CL does not indicate *which* political rights in particular will be more likely to precede changes to the overall level of civil liberty, or if all or only a subset of civil liberties components are preceded by changing levels of political rights. Furthermore, it is still possible that a subset of civil liberties could Granger-cause political rights, and also that certain types of political rights can Granger-cause other types of political rights and certain types of civil liberties can Granger-cause other types of civil liberties.⁴ Unfortunately, Freedom House does not publish the ratings assigned to the underlying components of PR and CL.

Freedom House does, however, publish an alternative democracy index beginning in 1997 specific to the transition nations for which separate component scores are available. The series *Nations in Transit* presents a democracy rating for transition nations based on components in Electoral Process (EP), Civil Society (CS), Independent Media (IM), Governance (GV), and Judicial Framework (JF). Each of these are also ranked on a 1 to 7 scale, although here quarter point increments are part of the range as well, allowing for greater differentiation among the nations. The democracy score is the simple average of these category scores. Many of these categories translate very closely to components which comprise the more general PR and CL ratings. Appendix 2 describes these components in greater detail.

Table 4 presents the averages over the period 1997–2004 for each of the individual transition democracy components, and the subsequent democracy average based on them, along with the democracy average based on the PR and CL ratings over the same period for comparison.⁵ The overall correlation between

⁴ For example, Beer (2006) argues judicial independence influences respect for the rule of law, both of which are components of the Civil Liberties index (category F1 and F2).

⁵ Beginning in 2004, Freedom House replaced the Governance rating with separate National Democratic Governance and Local Democratic Governance scores. It is not clear if the previous Governance rating necessarily treated national and local governance equally, so the analysis here only uses ratings through 2004 rather than continuing the Governance series with the average of the national and local governance ratings.

Table 4 Averages for democracy and its components, 1997–2004

	EP	CS	IM	GV	JF	Democracy (EP, CS, IM, GV, JF)	Democracy (PR, CL)
Armenia	5.54	3.50	5.00	4.57	4.96	4.71	4.14
Azerbaijan	5.71	4.64	5.57	6.07	5.39	5.48	5.29
Belarus	6.57	6.14	6.64	6.32	6.54	6.44	6.07
Estonia	1.75	2.18	1.71	2.25	1.96	1.97	1.43
Georgia	4.79	4.00	3.96	5.00	4.43	4.44	3.71
Kazakhstan	6.07	5.25	5.86	5.61	5.71	5.70	5.50
Kyrgyzstan	5.50	4.50	5.39	5.21	5.07	5.14	5.14
Latvia	1.82	2.11	1.71	2.36	2.11	2.02	1.50
Lithuania	1.79	1.79	1.71	2.50	1.93	1.94	1.57
Moldova	3.50	3.82	4.39	4.75	4.18	4.13	3.29
Russia	4.29	4.04	4.96	4.79	4.43	4.50	4.64
Tajikistan	5.54	5.14	5.82	6.25	5.86	5.72	5.79
Turkmenistan	7.00	7.00	7.00	6.79	6.89	6.94	7.00
Ukraine	3.86	3.86	5.14	4.86	4.39	4.42	3.71
Uzbekistan	6.61	6.54	6.64	6.14	6.50	6.49	6.50

the two democracy scores is a very robust .988, suggesting the two sets of democracy indexes are closely aligned, and interpretations based on the observed components in the transition democracy index will adequately reflect the latent components of the original democracy index.

Beginning in 1999, Freedom House added an additional Corruption component to the transition democracy index. The correlation between the transition democracy average for 1999–2004 with and without the corruption component included is .998. Given the small number of years of data for these transition democracy components, the two additional years available for all the components other than corruption will be beneficial for the Granger-causality tests. As it turns out, the correlation between the transition democracy index with corruption using the shorter time sample beginning in 1999 and the original democracy index for PR and CL over the same period is .981, which is roughly equivalent to the correlation of .988 between the two democracy indexes without including corruption for the longer sample period beginning in 1997 anyway. Therefore, Granger tests will be utilized on all the components of the transition democracy index as it first appeared, which did not include corruption, for the 1997–2004 period.

4.2 Granger tests for components of the alternative democracy index

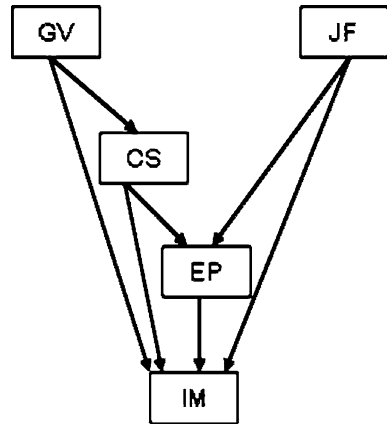
Based on the descriptions in Appendix 2 for the separate components of the alternative democracy index, one interpretation of Besley (2005) would be that Independent Media should precede Governance, while Belsey and Prat (2006) make a case for joint determination. Independent Media could also precede Electoral Process, based on Stromberg (2004). Political rights broadly defined (identified here

Table 5 Statistics for testing democracy component X does not Granger-cause democracy component Y

X	Y				
	EP	CS	IM	GV	JF
EP		0.73	2.67*	0.87	0.21
CS	1.76*		3.05*	1.10	1.50
IM	-0.43	0.05		0.56	-1.19
GV	1.01	1.89*	2.34*		1.00
JF	2.29*	1.10	4.60*	1.18	

* Significant at 10%

Fig. 2 Granger-causal relationships among the components of democracy



by measures for Governance and Electoral Process) are expected to be preceded by Judicial Framework (Mansfield and Snyder 1995; La Porta et al. 2004) and Civil Society (Raik 2006).

Recall the Granger tests on PR and CL from the original democracy index were invariant to the number of lags included. Because the newer transition democracy index is only available starting in 1997, only 1 lag will be included on Granger-causality tests among the five components comprising the transition democracy index in order to preserve as many observations as possible.⁶ The test statistics presented in Table 5 represent the null hypothesis that the row component does not Granger-cause the column component.

Test statistics imply that each of the democracy components is Granger-related to at least one other component, but no evidence for joint determination is revealed. This corroborates the finding of sequentialism revealed among the original Political Rights and Civil Liberties indexes, but at a more detailed level. Civil Society and Judicial Framework are both found to Granger-cause Electoral Process and Independent Media, and Electoral Process in turn is also found to Granger-cause

⁶ In considering the relationships between economic freedom indicators and economic growth, Heckelman (2000) presented Granger-causality tests utilizing up to the maximum number of 3 lags on a data set consisting of only four data points per nation, but included far more countries (94) in the panel than are used here.

Table 6 Test statistics for joint Granger-causality on Independent Media

	(I)	(II)	(III)	(IV)
EP		1.89*	-0.65	-0.50
CS	2.53*	2.38*		0.39
GV	1.65			0.44
JF			3.65*	2.40*

* Significant at 10%

Independent Media. Governance is found to Granger-cause Civil Society and Independent Media. Therefore, Governance may have an indirect Granger-relationship to Electoral Process as well through its Granger-causation of Civil Society. These relationships are presented graphically in Fig. 2.

The most surprising aspect of these relationships perhaps pertains to the Independent Media index. Each of the other components Granger-causes Independent Media, but Independent Media does not itself Granger-cause any of them. The supposed purpose of an independent media is to serve as a watch-dog on those in power (Brunetti and Weder 2003; Stromberg 2004, Besley 2005). However, in the former Soviet republics at least, it appears that greater independence for the media tends to *follow* reforms in governance, judicial framework, electoral process, and civil society, but does not precede reforms on any of these other democratic freedoms.

Given the interrelationships found between the various components, some of the estimated Granger-relationships to Independent Media may be more complex than presented. For example, the previous tests indicated that Judicial Framework Granger-causes Independent Media, but also Granger-causes Electoral Process which in turn Granger-causes Independent Media. Thus, Judicial Framework may have both a direct Granger-relationship to Independent Media, and an indirect relationship through the direct relationship of Electoral Process to Independent Media. Conversely, the direct effect of Electoral Process on Independent Media may be merely capturing the Granger relationship between Judicial Framework and Independent Media. Thus, it is not clear if reform in Judicial Framework or Electoral Process, or possibly both, is the actual trigger for reform to Independent Media. The same is true between Governance and Civil Society for Granger-causing Independent Media. In addition, the Granger-relationship between Electoral Process and Independent Media may be determined through the Granger-relationships of Civil Society to Electoral Process and Independent Media.

To better determine the true Granger-relationships, additional Granger tests were conducted for Independent Media. Results are presented in Table 6.⁷ In column (I), a lag for both Governance and Civil Society were simultaneously included. Controlling for Governance, Civil Society remains statistically significant but the reverse does not hold true, with Governance just missing the standard 10% threshold. Thus it appears Civil Society's Granger-relationship to Independent Media is independent of Governance's influence on Civil Society, and the Granger-causation found for Governance on Independent Media in the binary relationships

⁷ The lag of Independent Media was always included as a Granger control in all tests presented in Table 6.

testing in Table 5 may be an artifact of Governance's Granger-causality of Civil Society, and has no true direct effect on Independent Media on its own.

In contrast, when lags for both Civil Society and Electoral Process are included at the same time in column (II), both remain statistically significant. This suggests Civil Society's influence on Independent Media is indeed direct on its own, and additionally indirect through Electoral Process, which has its own direct Granger-causation on Independent Media confirmed.

However, Electoral Process is also Granger-caused by Judicial Framework. Controlling for lagged Judicial Framework in column (III) eliminates significance of Electoral Process whereas Judicial Framework remains significant. Thus, it appears that Judicial Framework Granger-causes Independent Media, but Electoral Process may not, and its significance in column (II) and in the binary Granger test of Table 5 may have just been capturing the Granger relationship of Judicial Framework for both Electoral Process and Independent Media.

Finally, just for completeness, in the last column a Granger test was run on Independent Media by including a lag for each component at once. In this case, only the Judicial Framework variable remained statistically significant, suggesting it has the strongest Granger-relationship to Independent Media. Lags of Governance, Civil Society, and Electoral Process, while not individually significant, were found, however, to be jointly significant.

5 Summary

According to recent scholarship, civil liberties in the form of media independence (Brunetti and Weder 2003; Stromberg 2004; Besley 2005), judicial independence (La Porta et al. 2004) or civil society (Raik 2006) are necessary pre-cursors for the development and sustainment of various political rights, such as government accountability and limited corruption. Results from Granger-causality tests analysis performed here are not consistent with this view. Using aggregated data from the Freedom House democracy indicators for the former Soviet Republics, it was found that political rights tend to precede civil liberties but not the other way around. The result was robust to the number of lags considered in the test specifications. This finding indicates empiricists need to be cautious interpreting the impact of civil liberties on other attributes of interest as estimated effects from civil liberties may capture independent effects from recent political rights. It also runs counter to previous arguments and suggests, perhaps, that policies designed to improve civil liberties are less likely to be successful unless political rights are improved first.

Breaking down a related democracy index into more disaggregated components, it is also found that: Governance Granger-causes Civil Society, Independent Media, and Electoral Process; Judicial Framework Granger-causes Electoral Process and Independent Media; and Civil Society Granger-causes Independent Media. No support is found for dual causation between any two democracy freedom components. Further analysis confirms Civil Society has both a direct effect on Independent Media, and an indirect effect on Independent Media through Electoral

Process. However, the Granger relationship of Electoral Process to Independent Media appears to have been driven by the Granger relationship of Judicial Framework, and may not have an independent effect of its own. In addition, the Granger-relationship of Governance to Independent Media may be strictly due to its Granger-causation of Civil Society, rather than any true direct effect of its own. Finally, the Granger-causation of Judicial Process to Independent Media appears to be the most robust.

Raik (2006) argues that civil society is essential for democratization to take place in Eastern Europe. However, these last sets of results suggest the building blocks for democracy are a stable, transparent and decentralized government, and independent judiciary. Civil Society appears to be less important to increased democratization than these two other political freedoms because the only components of democracy civil society precedes are electoral process and independence of the media, which are also preceded by the degree of judicial independence, and civil society itself is preceded intertemporally by the quality of governance, which also precedes independent media.

Establishment of the rule-of-law (part of the judicial framework component) was argued by Mansfield and Snyder (1995) to be critical to the foundation of democracy and other political rights, especially in establishing free and fair elections. The Granger analysis suggests that judicial independence does indeed precede reform in electoral process.

Independence of the media, often argued to be a critical component necessary for democratic reforms and the maintenance of governmental responsiveness (Brunetti and Weder 2003; Stromberg 2004; Besley 2005), appears to be reflective of, rather than a contributor to, increased democratization. This would suggest the media itself is somewhat dependent on other forms of political rights and civil liberties to ensure its own protection.

The uni-directional Granger relationships support the belief that sequentialism is taking place within the former Soviet republics. In particular, decentralization of power and transparency in governmental decisions (governance) and judicial independence and equality under the rule-of-law (judicial framework) appear to be the necessary ingredients to trigger other aspects of democratic reforms (civil society, electoral process, independent media).

Appendix 1: Political rights and civil liberties checklist

Political rights

A. Electoral process

1. Is the head of government or other chief national authority elected through free and fair elections?
2. Are the national legislative representatives elected through free and fair elections?
3. Are the electoral laws and framework fair?

B. Political pluralism

1. Do the people have the right to organize in different political parties or other competitive political groupings of their choice, and is the system open to the rise and fall of these competing parties or groupings?
2. Is there a significant opposition vote and a realistic possibility for the opposition to increase its support or gain power through elections?
3. Are the people's political choices free from domination by the military, foreign powers, totalitarian parties, religious hierarchies, economic oligarchies, or any other powerful group?
4. Do cultural, ethnic, religious, or other minor groups have full political rights and electoral opportunities?

C. Functioning of government

1. Do the freely elected head of government and national legislative representatives determine the policies of the government?
2. Is the government free from pervasive corruption?
3. Is the government accountable to the electorate between elections, and does it operate with openness and transparency?

Civil liberties

D. Freedom of expression and belief

1. Are there free and independent media and other forms of cultural expression?
2. Are religious institutions and communities free to practice their faith and express themselves in public and private?
3. Is there academic freedom and is the educational system free of extensive political indoctrination?
4. Is there open and free private discussion?

E. Associational and organizational rights

1. Is there freedom of assembly, demonstration, and open public discussion?
2. Is there freedom for nongovernmental organizations?
3. Are there free trade unions and peasant organizations or equivalents, and is there effective collective bargaining? Are there free professional and other private organizations?

F. Rule of law

1. Is there an independent judiciary?
2. Does the rule of law prevail in civil and criminal matters? Are police under direct civilian control?
3. Is there protection from political terror, unjustified imprisonment, exile, or torture, whether by groups that support or oppose the system? Is there freedom from war and insurgencies?

4. Do laws, policies, and practices guarantee equal treatment of various segments of the population?
- G. Personal autonomy and individual rights
1. Does the state control travel or choice of residence, employment, or institution of higher education?
 2. Do citizens have the right to own property and establish private businesses? Is private business activity unduly influenced by government officials, the security forces, political parties/organization, or organized crime?
 3. Are there personal social freedoms, including gender equality, choice of marriage partners, and size of family?
 4. Is there equality of opportunity and the absence of economic exploitation?

Appendix 2: Description of components in democracy index for transition countries

Electoral process

Examines national executive and legislative elections, electoral processes, the development of multiparty systems, and popular participation in the political process.

Civil society

Assesses the growth of nongovernmental organizations (NGOs), their organizational capacity and financial sustainability, and the legal and political environment in which they function; the development of free trade unions; and interest group participation in the policy process.

Independent media

Addresses the current state of press freedom, including libel laws, harassment of journalists, editorial independence, the emergence of a financially viable private press, and Internet access for private citizens.

Governance

Considers the stability of the governmental system; the authority of legislative bodies; decentralization of power; the responsibilities, election, and management of local governmental bodies; and legislative and executive transparency.

Judicial framework and independence

Highlights constitutional reform, human rights protections, criminal code reform, judicial independence, the status of ethnic minority rights, guarantees of equality

before the law, treatment of suspects and prisoners, and compliance with judicial decisions.

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