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Democratization and Economic Liberalization in the Postcommunist World

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How does economic liberalization affect political regime? Economic liberalization is widely regarded as inimical to democratization. The "Washington Consensus," which generally endorses "shock therapy" and envisions a basic compatibility between economic liberalization and democratization, is widely disdained in social science. Many scholars hold that neoliberal economics depresses popular living standards and exacerbates socioeconomic inequalities, thereby compromising democratization. Focusing on the postcommunist region, this article tests this hypothesis. It examines the data that have been used to assess the relationship between economic liberalization and political democratization and presents analyses using more appropriate and differentiated techniques. The authors find that economic liberalization advances rather than undermines democratization. Using Engle-Granger analysis, they find that although economic liberalization has no discernible impact on democratization in the short term, democratization adjusts in the direction of a long-term equilibrium to which economic liberalization contributes substantially.

Keywords: democracy; democratization; liberalization; postcommunist; inequality

One of the most contentious and politically significant debates in social science focuses on the relationship between economic policy and political regime. An especially vigorous polemic swirls around how economic liberalization affects democratization.

Here, we investigate the effect of economic liberalization on democratization in the postcommunist region. We begin with an overview of the

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debate. We consider the logics of the arguments made by scholars who regard rapid economic liberalization as democratization's ally and those who see it as democratization's foe. We then undertake empirical tests. The evidence shows that economic liberalization has a positive long-run effect on democratization. We then consider why this relationship holds. We revisit the argument that economic liberalization counteracts democratization. The argument is based on the assumption that economic liberalization depresses living standards and exacerbates socioeconomic inequality and that these problems in turn endanger democratization. Although this argument is logically coherent, we find that the empirical evidence does not support it.

Our discussion is limited to the postcommunist region. We make no claims that the region is theoretically critical or that our findings may be generalized to the whole world, though they may be relevant to the larger debate.

A Great Debate

Overview of the Debate

The controversy is most salient and interesting in the realm of policy. It is particularly urgent in discussions of policy prescriptions for countries outside the advanced industrialized world. In roughest outline, the debate pits shock therapy against gradualism. Differences in outlook are often evident even in our language. Frequent resort to the term *neoliberalism* usually signals gradualist sympathies and skepticism about the influence of markets on democracy. Neoliberalism is usually bad; liberalism (plain and simple, unsullied by the prefix that updates it) is usually good or at least neutral.

To identify those who hold that rapid economic reform advances democratization, we adopt the widely used label *Washington Consensus*. The Washington Consensus is sometimes caricatured as a conspiratorial agreement-become-doctrine designed to subordinate developing countries to governments and business interests in the First World. The scholar who coined the term, John Williamson, has pointed out that the consensus he identified was never about such a doctrine nor about embracing Reaganesque supply-side economics. As Williamson (1990) stated in his original formulation, there was never a consensus in the United States about the advisability of such policies, whose popularity was limited to "right-wing political circles" (p. 10; also Williamson, 2002). As Williamson noted, however, U.S. policy has been shaped by a broad agreement on the virtues of an

essentially liberal approach to economic reform. The consensus that Williamson first identified in 1990 and that indeed persists in Washington from administration to administration and Congress to Congress, advocates fiscal discipline; investment in infrastructure, education, and health care rather than in subsidies for state enterprises; tax reform that combines a broad tax base with moderate marginal rates; deregulation that reduces state control and lowers barriers to entry and exit by private businesses; privatization of state-owned firms; and liberalization of policies on finance, trade, interest rates and inward foreign direct investment (Williamson, 1990). These polices indeed constitute a coherent liberal doctrine and have been the source of consensus, albeit not unanimous support, among policy makers in Washington for several decades. Partakers of the consensus have generally accepted not only that such economic policies are good for the economy but also that they promote democratization in the Second (postcommunist) and Third Worlds.

On the other side, critics of economic liberalism (or neoliberalism) have not yet enjoyed—or suffered—a label that subsumes their ideas. Here, we impose one. We refer to the opponents of the Washington Consensus as the "Social-Democratic Consensus." The Social-Democratic Consensus is prominent in Western academia. Certainly, there is no unanimity among scholars on economic liberalism's drawbacks just as there is no unanimity inside the Washington Beltway on its virtues. Still, scholars who are skeptical of the effects of liberal economic doctrine on democratization are numerous and prominent. The Social-Democratic Consensus favors deficit spending, support for state enterprises, steeply progressive tax rates, and extensive government regulation. It disfavors rapid privatization of state-owned firms and liberalization of policies on finance, trade, interest rates, and inward foreign direct investment.

Studies of the postcommunist region are a major site of debate. Some scholars claim that rapid and thoroughgoing economic reform may buttress democratization (Aslund, 2000; Frye, 2000; McFaul, 2001; Murphy, Shleifer, & Vishney, 1992; Sachs, 1994). Many others hold that it may jeopardize democratization (Appel, 2004; Burawoy, 1996; Fairbanks, 1999; Herrera, 2001; Hout & Gerber, 1998; Klein & Pomer, 2001; Millar, 1995; Ost, 2000; Reddaway & Glinski, 2001; Stark & Bruszt, 1998).

The Logic of the Washington Consensus

The Washington Consensus regards economic liberalization as an ally of open politics. Its proponents see an expansive realm of autonomous

economic activity as a bulwark against despotism. They hold that thorough-going economic reform separates economic power from political power and thereby enables the two to balance one another, thereby fostering pluralism. So too do they believe that it boosts individuals' proclivity to resist tyranny. It encourages personal and group independence and strengthens the ability of people to resist the encroachments of an overweening state (Bobbio, 1990; Diamond, 1995; Friedman, 1962; Hirschman, 1977). The logic of these arguments merits brief elaboration.

Economic liberalization pluralizes power. It takes economic power out of the hands of those who also control the coercive agencies of the state. In the absence of considerable nonstate economic power, open government is unlikely, unless one believes in the unflagging benevolence of rulers. Since the mid-18th century, when Montesquieu (1989) touted the advantages for liberty of separating economic and coercive power, liberals have accepted this logic. In a contemporary formulation, William Riker (1982) argued, "Although it has become fashionable in this century to deride economic freedom, capitalism remains essential for faction. No government that has eliminated economic freedom has been able to attain or keep democracy, probably because, when all economic life is absorbed into government, there is no conceivable financial base for opposition" (p. 7). This passage, which refers to absolute state control of the economy, provides a compact theoretical summary of why countries where markets are shut down completely become dictatorships. The statement applies to the Soviet Union, sovietized East Europe, Maoist China, and several Southeast Asian and African countries during the 1950s and 1980s where economies were thoroughly statized. But Riker's statement applies in a strict sense to these countries alone; only in them was "economic freedom" actually "eliminated" and "all economic life . . . absorbed into government." The logic of Riker's proposition may be rendered more useful by reformulating it as a matter of degree. A hypothesis offered by Robert Dahl (1971) does just that: "The likelihood that a government will tolerate an opposition increases as the resources available to the government for suppression decline relative to the resources of an opposition" (p. 48). If Riker and Dahl are right, greater latitude for private actors to pursue their interests independent of the state might promote political openness.

Political oppositions are essential to democracy, as some contemporary theorists have argued (Shapiro, 1996). But they are not the only politically relevant entities whose emergence may depend on economic transformation. Economic liberalization may also spur the growth of class and occupational identities and associations representing them, including labor

unions and professional associations, which some scholars have regarded as the societal infrastructure for popular rule (Durkheim, 1992). Many writers have argued that the formation of a large class of small property holders—that is, a middle class—facilitates democratization. Karl Marx regarded the bourgeoisie as the agent of democratization (which Marx thought would be superseded by proletarian dictatorship) because of its freedom from dependence on overlords—be they rulers, bosses, or landowners—and its ability to demand and pursue its rights as a result of its autonomy (Marx & Engels, 1998). Barrington Moore (1966) agrees with Marx and sums up part of his analysis of the origins of political regimes with the maxim "No bourgeoisie, no democracy" (p. 418).

Economic liberalization also may have a psychologically liberating effect. Some theorists have argued that those who hold economic power are not only more able to stand up for themselves; they also are more disposed to do so. Writing in the early 19th century, Benjamin Constant (1988) argued, "Commerce inspires in men a vivid love of individual independence" (p. 315). Constant claimed that autocrats encountered resistance among those accustomed to engagement in commerce. He concluded that freer commercial life would undermine autocracy.

The Logic of the Social-Democratic Consensus

Many analysts do not embrace such a benign view of economic liberalization. They believe that it may require rulers to disregard popular demands and circumscribe popular participation (Callaghy, 1993; Huber, Rueschemeyer, & Stephens, 1999; Oxhorn & Ducantenzeiler, 1998). Their argument is based on assumptions about socioeconomic welfare and inequality. In the words of Stephen Cohen (2000), a critic of economic reform in Russia: "[Boris] Yeltsin opted for policies known as 'shock therapy.' By late 1992, these policies had impoverished a majority of Russian families" (p. 120). According to Cohen, although shock therapy straitened the majority, it created "an island of relative prosperity . . . among a thin stratum of Moscow-based businessmen" (pp. 150-151). Leaving aside the accuracy of the claim that Russian leaders actually pursued shock therapy, the statement summarizes what many regard as the effects of rapid economic liberalization: a reduction in welfare and a growth in inequality.

A similar argument his been made by Adam Przeworski (1992) who labels attempts to liberalize postcommunist economies "the greatest ideologically inspired experiment since Josef Stalin initiated the forced industrialization of the Soviet Union in 1929" (p. 45). In an esteemed work,

Przeworski (1991) argued, "Market-oriented reforms . . . breed voodoo politics." In their attempt to carry out the reforms, politicians "undermine representative institutions." As a result, "Democracy is thus weakened" and "technocracy hurls itself against democracy" (pp. 183, 186-187). According to Przeworski, neoliberal reforms are bad for public welfare and worse for public welfare than some non-neoliberal set of policies. Because neoliberalism is worse for public welfare than gradualism, publics resist it. Because publics resist it, policy makers who are bent on market reforms must undermine representative institutions.

Skepticism about the compatibility of major economic reform and democracy is not new. Alexander Gerschenkron (1962), who theorized the paths that "late developers" such as Germany and Japan took to modernization, held that transformation in economic policy required formidable state apparatuses to control social groups who suffered as a result of economic change. Many writers later applied a similar logic to the newly industrializing countries of East Asia. Policies that aimed at extraordinary economic growth in countries such as Korea and Taiwan, according to some, depended on suppressing workers' demands and stifling popular aspirations for participation and redistribution. Repression was necessary to ensure the brisk accumulation of capital and high investment rates (Deyo, 1987).

The East Asian countries followed a strategy of export-led growth. According to critics, this approach might post some achievements but would not improve popular welfare. Martin Landsberg (1979) argued that although the policy "leads to growth in industrial production and the industrial work force, it will not lead to the creation of an indigenous, self-expanding capitalist economy" (pp. 61-62). Because consumer demand in developed countries determined production decisions in developing countries and because multinational corporations played a leading role, industry would not be geared toward the needs of the majority. Indeed, "An externally based development strategy is likely to produce increased poverty for workers and peasants in the Third World." Given such effects, the model required an authoritarian regime.

The same logic of incompatibility between rapid economic reform and open politics was evident in writings on import-substitution industrialization. Although East Asia followed export-led programs, Latin America pursued import-substitution. In a celebrated elucidation of the economic logic and political consequences of these policies, Guillermo O'Donnell (1973) argued that the Argentine and Brazilian programs necessitated raising the incomes of the middle and upper classes to enlarge the internal market for increasingly complex and expensive domestic manufactures. Expanding the

consumption potential of those who were already relatively well-off came at the expense of the poor majority. What is more, the companies that dominated production and the banks that financed it were based largely in First World countries. These multinational corporations, together with local capital and state enterprises, created what Peter Evans (1979) called a "triple alliance" that fostered "dependent development" that benefited foreign companies and a thin stratum of domestic producers and government officials. The economic model dictated a political regime that O'Donnell called "bureaucratic authoritarianism," which excluded the majority from political life (also Cardoso & Faletto, 1979; Collier, 1979).

Present-day debate centers less on industrialization and more on macroeconomic stabilization and privatization. The economic problems of the 1990s and early 2000s, particularly in the postcommunist region, are not about achieving industrialization. They are rather about cutting government spending (to bring the fiscal house in order and induce stabilization) and privatizing and deregulating enterprises (to enhance productive efficiency). The apparent threats to popular welfare stem from reduction in state spending on social services and from the labor shedding that may result from privatization and enterprise restructuring.

Here is where we encounter the Social-Democratic Consensus. Its claim that crash liberalization jeopardizes popular rule is based on roughly the same logic that informed skepticism about previous efforts at radical economic policy change in the 1960s through the 1980s. Export-led industrialization required accumulating capital rapidly and reinvesting in export-oriented industries; import-substitution industrialization necessitated expanding the domestic market for costly manufactures; and postcommunist liberalization requires reducing government spending and carrying out deregulation and privatization. To critics, such dramatic policy shifts depress welfare and exacerbate inequality. What is more, in the arguments of the critics, all of the models on which such policies are based are foreign inventions or impositions that primarily benefit First World producers and financiers and their allies in the developing countries. Such effects logically encourage elites in developing countries to curtail popular participation and control over the state—in short, to thwart democratization.

Thus, the argument against radical liberalization in the postcommunist region in evidence since the beginning of the 1990s is based on a logic that resembles that which informed skepticism about major market-creating or market-transforming policies in earlier decades: Rapid reform undermines welfare and aggravates inequity. It is imposed from the outside and serves the interests of foreign actors and a small group within the developing

country in question. The consequent losses in popular welfare and social equity require a political program that prevents or circumscribes popular rule.

Empirical Analysis

Data and Methodological Issues

Sound logic underpins the tenets of both the Washington Consensus and the Social-Democratic Consensus. Debate between the rival consensuses, moreover, figures prominently in social science. Yet the dispute typically remains stuck in the realm of pure theory or interpretation of the experience of a single country or a handful of countries.

Several recent works have eased the deficit of hypothesis testing. An article by Marcus Kurtz and Andrew Barnes (2002) provides an especially welcome addition to the literature (also see Kwon, 2004). Although writings on the postcommunist region are replete with assertions that economic liberalization counters, or at least does not advance, democratization, Kurtz and Barnes's article is the only work that we are aware of that supports the claim with sophisticated cross-national statistical evidence. Although Kurtz and Barnes do not fall squarely in either camp, they highlight their negative finding—namely, that economic liberalization does not advance democratization. The authors are critics of the Washington Consensus, and the thrust of their argument places them in or near the Social-Democratic Consensus.

Kurtz and Barnes's (2002) work provides a good starting point for analysis. Kurtz and Barnes emphasize the dynamic nature of economic and political change and hold that pooled time-series analysis provides the best way to attack the problem. To measure the dependent variable, they use Freedom House freedom scores, which are published each year for all countries (Freedom House, 2005). The freedom scores are an average of scores on political rights and civil liberties. Scores range from 1 (*most free polity*) to 7 (*least free polity*). Here, we invert them to provide a more intuitive presentation, meaning that 7 stands for *most free* and 1 for *least free*.

Kurtz and Barnes's (2002) basic model tests the effects of four independent variables. The first is socioeconomic development, measured as GDP per capita at purchasing power parity at the beginning of the 1990s. The second is economic liberalization, lagged by one year. It is measured by Martha De Melo, Cevdet Denizer, and Alan Gelb's Economic Liberalization Index, which assigns a liberalization score, ranging between 0 (*least reformed economy*) and 1 (*most reformed economy*), for each country in the

postcommunist world except Bosnia and Mongolia, for each year from 1989 to 1997 (De Melo, Denizer, & Gelb, 1996 and updates). The indices capture three aspects of economic reform: liberalization of domestic trade and prices, liberalization of currency convertibility and foreign trade, and privatization of state assets. The indices were devised by analysts at the World Bank and outside experts. The third independent variable is what Kurtz and Barnes call "agrarian dominance," measured as the inverse of the percentage of the population living in cities. The fourth is "international incentives," measured by a dummy for whether a country had a good chance of joining the European Union (EU). The authors code Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia as 1 and all others as 0. Their regression corrects for first-order autocorrelation.

Kurtz and Barnes (1996) conclude that only time-invariant, structural factors explain the variation in the dependent variable; international incentives and agrarian dominance are the only significant predictors. Economic liberalization has no discernible effects on Freedom House scores for the period 1989 to 1997. Using their data, we largely replicate their findings.

Here, we examine more closely how economic liberalization may affect democratization. First, and most important, we take a closer look at the time-series properties of the data, particularly the degree of stationarity, cointegration, and the potential for error correction mechanisms. Second, we extend the sample to the year 2000, using updated data on economic liberalization (Aslund, 2000). Third, we include additional explanatory variables not found in Kurtz and Barnes's (2002) analysis. The additional variables are annual rate of inflation, annual growth of GNP, the percentage of the population that is Muslim, the percentage of the population that is Orthodox Christian, and a dummy variable for whether the country endured the full brunt of Stalinism.[1] Fourth, to measure what Kurtz and Barnes call the extent of "agrarian dominance," we use the proportion of the workforce employed in agriculture, hunting, fishing, and forestry, rather than the data used by Kurtz and Barnes.[2]

We may begin by restating Kurtz and Barnes's basic model. It takes the form

$$FH_{it} = \alpha_1 + \alpha_2 Lib_{it-1} + \alpha_3 (GDP\ per\ capita_{1990}) + \alpha_4 (agri) + \alpha_5 (EU) + error \tag{1}$$

FH_{it} stands for the Freedom House score for country i in year t, and Lib_{it-1} stands for the extent of economic liberalization for country i in year $t\text{-}1$.

GDP per capita in 1990 controls for the initial level of development, *agri* denotes the size of the agricultural sector, and *EU* is a dummy variable for potential entrants to the EU. We are able to confirm that testing this equation reveals no systematic relationship between economic liberalization and democratization in the original sample.

Yet Equation 1 sidesteps two critical issues in dealing with time series: unit roots and long-run, equilibrium dynamics. If Freedom House scores and economic liberalization scores are stationary, then standard OLS techniques are sufficient for analysis. On the other hand, if there is extreme persistence in these scores from year to year, then the data are said to be nonstationary and to contain "unit roots."[3] Regressions involving data with unit roots can be spurious (Granger & Newbold, 1974; Greene, 1993). If Freedom House scores and economic liberalization scores are nonstationary, then we must be careful about any time-series analysis involving these variables. Casual observation suggests that Freedom House scores and economic liberalization scores exhibit marked persistence and may therefore have unit roots.

Unit Roots, Cointegration, and Error Correction Mechanisms

If a series, y_t, has a unit root, then it can be described by the following equation, $y_t = c + y_{t-1} + e_t$. Here, c is a constant and e_t is the standard, $N(0, 1)$ random shock. In this process, y_t is heavily dependent on its past values, and individual shocks persist indefinitely. Testing for unit roots is straightforward, various Dickey-Fuller or Phillips-Perron tests being the most common.[4] The tests essentially boil down to running the regression, $y_t = \rho_1 + \rho_2 y_{t-1} + u_t$. If ρ_2 is not statistically different from 1, then y_t is deemed nonstationary and said to have a unit root. Unit roots make statistical inference based on levels regressions problematic. Two completely unrelated, nonstationary variables may have a large R^2 and a statistically significant slope coefficient, simply because both series are moving together simultaneously. The first step in addressing this issue involves taking period-to-period differences of each series and conducting the regression in terms of the changes of the variables rather than the levels of the variables.[5]

Another shortcoming of Equation 1 is that it is ill-equipped to assess whether there is any long-run, equilibrium relationship between economic liberalization and democratization. The proper method for determining whether an equilibrium relationship exists between two nonstationary time series is to examine whether the series are cointegrated and then to conduct error correction regressions (Obstfeld & Taylor, 2004; Shambaugh, 2004).

The presence of an underlying equilibrium relationship hinges on the degree of cointegration in the data.

If a linear combination of nonstationary time series is stationary, then the series are said to be cointegrated. Cointegrated series can be thought of as series that are moving together simultaneously, presumably because of an equilibrium relationship (e.g., the money stock, the price level, and GDP; or consumption and GDP). Testing for the presence of such a relationship requires: (a) collecting the residuals from a regression involving the levels of the series; (b) testing those residuals for stationarity; and (c) if stationary, using them as an explanatory variable in a regression involving period-to-period differences of the series (Banerjee, Dolado, Galbraith, & Hendry, 1993).

Our analysis therefore proceeds as follows. We first assess whether Freedom House scores and economic liberalization scores contain unit roots. Second, we posit an equilibrium model of Freedom House scores and their hypothesized determinants and test the residuals for stationarity,

$$FH_{it} = \alpha_1 + \alpha_2 Lib_{it-1} + control\ variables + e_{it}. \tag{2}$$

If e_{it} is stationary, Freedom House scores are cointegrated with the explanatory variables. This allows us to test the following specification:

$$\Delta FH_{it} = \beta_1 + \beta_2 \Delta Lib_{it-1} + \lambda e_{it-1} + control\ variables + u_{it}. \tag{3}$$

This is the Engle-Granger, two-step procedure for estimating short-run and long-run, equilibrium relationships between variables with unit roots. The model, as expressed in Equations 2 and 3, offers a richer description of the course of economic reform and political regime change than does Equation 1 (see Engle & Granger, 1987).[6]

Equation 2 is a standard OLS regression of Freedom House scores on economic liberalization and various control variables. The specification is a candidate for a potential equilibrium relationship between Freedom House scores, economic liberalization scores, and any control variables that help to explain variation in Freedom House scores. Equation 3 specifies period-to-period changes in Freedom House scores as determined by lagged changes in liberalization scores and other control variables, which may or may not be the same as in Equation 2.[7] β_2 indicates the short-run relationship between liberalization and democratization. The error terms, e_{it-1}, are the lagged residuals from Equation 2, and they enter as an explanatory variable in Equation 3. The coefficient, λ, is interpreted as the rate of convergence back toward equilibrium. The inclusion of the lagged error

terms is the error correction mechanism that captures the extent of dynamic adjustment back to an underlying equilibrium.

To clarify, suppose that the coefficient on e_{it-1} is negative and significant. This would imply that when Freedom House scores lie above (below) the regression line, there is a tendency for Freedom House scores to fall (rise) in the next period. In other words, the further Freedom House scores are "away from equilibrium," the greater is the reversion toward equilibrium. If the coefficient on e_{it} is significant and negative, changes in Freedom House scores occur within a dynamic process moving toward equilibrium levels posited by Equation 2.

Results and Interpretation

Turning now to the data, Table 1 presents Dickey-Fuller test results for unit roots in the 1989 to 1997 and 1989 to 2000 periods for both Freedom House scores and economic liberalization scores. For 1989 to 1997, 15 countries have unit roots in Freedom House scores, 20 countries have unit roots in liberalization scores, and 12 of 26 countries have unit roots in both. For 1989 to 2000, 18 countries have unit roots in Freedom House scores, whereas 13 of 21 countries have unit roots in liberalization scores. These findings reflect the persistence in these series for a given country from year to year.[8]

Because Freedom House scores and economic liberalization scores exhibit a high degree of nonstationarity, we can use the Engle-Granger procedure.[9] We put forward three specifications for the first-stage regression. These are candidates for equilibrium relationships. First, the main control variables used by Kurtz and Barnes (2002)—GDP per capita in 1990 (expressed in logarithm form), agrarian dominance, and international incentives—are used. Second, the first-stage regressions are run with no control variables, allowing Freedom House scores to be explained only by liberalization scores. The final specification contains all of our own control variables. These three specifications are described in Table 2, and we refer to them as *Kurtz-Barnes*, *No-Controls*, and *All-Controls*.

The *Kurtz-Barnes*, *No-Controls*, and *All-Controls* scenarios yield coefficients that are largely consistent with theoretical expectations. Table 3 displays the results the first-stage regressions proposed in Table 2. Socioeconomic development, measured by per capita income in 1990, has an indeterminate effect on democratization. Its coefficient is unexpectedly negative, and it is significant in only two of the four regressions where it appears. Agrarian dominance has a more robust and negative effect on

Table 1
Unit Roots in Freedom House Scores and
Economic Liberalization Scores

Variable	Countries With Unit Roots, 1989 to 1997	Countries With Unit Roots, 1989 to 2000
Freedom House scores	Albania, Armenia, Azerbaijan, Belarus, Croatia, Estonia, Georgia, Kazakhstan, Latvia, Lithuania, Macedonia, Moldova, Romania, Ukraine, Uzbekistan	Azerbaijan, Belarus, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Ukraine
Economic liberalization scores	Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Mongolia, Russia, Slovakia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan	Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Poland, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

Note: Unit roots are determined at the 5% confidence level.

Table 2
Specifications for First-Stage, Engle-Granger Regressions

Specification	Explanatory Variables
Kurtz-Barnes	Economic liberalization scores, GDP per capita in 1990, agrarian dominance, EU dummy
No-Controls	Economic liberalization scores
All-Controls	Economic liberalization scores, GDP per capita in 1990, agrarian dominance, EU dummy, inflation, economic growth, Stalinization, percentage of population Muslim, percentage of population Orthodox

Freedom House scores, implying that a large rural sector inhibits democratic prospects. The coefficients for the Stalinization dummy, the percentage of the Muslim population, the percentage of the Orthodox population, and international incentives all have the expected signs. Economic liberalization appears to have a strong and consistent effect on Freedom House scores. It is positive and highly significant in every specification. This leads

Table 3
First-Stage, Engle-Granger Regressions for Freedom House Scores

Specification	Coefficients, 1989 to 1997	Coefficients, 1989 to 2000
Kurtz-Barnes	$FH_t = \textbf{5.2} + \textbf{1.5}Lib_{t-1} -$ .06$GDPpc_{1990} - \textbf{.04}agri +$ $\textbf{1.6}EU + e_t$ $R^2 = .61$	$FH_t = \textbf{6.6} + \textbf{1.3}Lib_{t-1} -$ 0.2$GDPpc_{1990} - \textbf{.05}agri +$ $\textbf{2.1}EU + e_t$ $R^2 = .74$
No-Controls	$FH_t = \textbf{3.0} + \textbf{2.8}Lib_{t-1} + e_t$ $R^2 = .26$	$FH_t = \textbf{2.1} + \textbf{4.0}Lib_{t-1} + e_t$ $R^2 = .35$
All-Controls	$FH_t = \textbf{9.8} + \textbf{0.8}Lib_{t-1} -$ $\textbf{0.5}GDPpc_{1990} - \textbf{.03}agri +$ $\textbf{0.7}EU - .00inflation + .01growth -$ $\textbf{0.8}Stalin - \textbf{.02}Muslim -$ $\textbf{.01}Orthodox + e_t$ $R^2 = .72$	$FH_t = 10.6 + \textbf{1.0}Lib_{t-1} -$ $\textbf{0.6}GDPpc_{1990} - \textbf{.04}agri +$ $\textbf{1.1}EU - \textbf{0.8}Stalin - \textbf{.02}Muslim -$ $\textbf{.01}Orthodox + e_t$ $R^2 = .80$

Note: Coefficients that are statistically significant at the 5% level or lower are indicated in bold.

us to anticipate that economic liberalization contributes to democratization in equilibrium.[10] An interesting finding is that the *Kurtz-Barnes* and *All-Controls* specifications produce R^2 statistics that are more than twice as large as those of *No-Controls*. We interpret this as an indicator of the importance of factors other than economic liberalization in the process of political regime change.

Because many of the coefficients are significant, can any of the equations in Table 3 be deemed an equilibrium relationship between Freedom House scores, liberalization scores, and the various explanatory variables? To address this question, we need to test for cointegration by confirming that the error terms are stationary. Nonstationary errors imply no cointegration and hence no scope for error correction regressions. Stationary error terms imply cointegration. They are a necessary condition for the presence of any equilibrium relationship between Freedom House scores and their determinants. Only when the coefficient on the lagged error terms in the second-stage regression is negative and significant can one begin to speak of equilibrium. Therefore, we need to perform the second-stage regressions in the Engle-Granger procedure. If the error terms are negative and significant in these regressions, then we can conclude that Freedom House scores are dynamically adjusting toward equilibrium levels governed by the equations in Table 3. Tables 4 and 5 report second-stage coefficients for the 1989 to 1997 and the 1989 to 2000 samples.

Table 4
Second-Stage, Engle-Granger Coefficients for Freedom House Scores, 1989 to 1997

Variable	Kurtz-Barnes, Model 1	SE	Kurtz-Barnes, Model 2	SE	No-Controls, Model 3	SE	No-Controls, Model 4	SE	All-Controls, Model 5	SE	All-Controls, Model 6	SE
ΔLib_{t-1}	-.02	.33	.21	.39	-.03	.32	.32	.44	.07	.36	.24	.40
e_{t-1}	-.27***	.08	-.43***	.09	-.06	.04	-.23**	.08	-.68***	.08	-.67***	.03
log GDP per capita, 1990	—	—	-.25	.15	—	—	-.19	.12	—	—	-.06	.21
Agrarian dominance	—	—	.004	.01	—	—	-.01	.01	—	—	.005	.02
EU accession dummy	—	—	-.31	.27	—	—	.25	.16	—	—	.06	.36
Inflation	—	—	-.00	.00	—	—	-.00	.00	—	—	-.00	.00
Economic growth	—	—	.01	.003	—	—	.00	.004	—	—	.01	.004
Stalinism dummy	—	—	-.42	.33	—	—	-.24	.25	—	—	-.11	.42
% of population Muslim	—	—	-.01*	.004	—	—	-.01	.003	—	—	-.002	.001
% of population Orthodox	—	—	.003	.002	—	—	.00	.002	—	—	.001	.003
Intercept	0.07	.08	2.40	1.5	0.06	.07	1.80	1.2	0.04	.11	0.35	2.14
R^2	.15		.29		.02		.16		.45		.45	
N	162		161		162		161		152		152	

Notes: Entries are unstandardized regression coefficients and standard errors.
$*p < .05.$ $**p < .01.$ $***p < .001.$

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Table 5
Second-Stage, Engle-Granger Coefficients for Freedom House Scores, 1989 to 2000

Variable	Kurtz-Barnes, Model 1	SE	Kurtz-Barnes, Model 2	SE	No-Controls, Model 3	SE	No-Controls, Model 4	SE	All-Controls, Model 5	SE	All-Controls, Model 6	SE
ΔLib_{t-1}	.09	.31	.20	.34	.06	.39	.88	.51	-.03	.29	.04	.32
e_{t-1}	-.68***	.07	-.34***	.09	-.06	.03	-.21**	.08	-.66***	.07	-.35***	.09
log GDP per capita, 1990	—	—	-.03	.20	—	—	-.002	.16	—	—	.09	.22
Agrarian dominance	—	—	.01	.01	—	—	-.001	.01	—	—	.01	.01
EU accession dummy	—	—	-.23	.29	—	—	.24	.18	—	—	.13	.27
Stalinism dummy	—	—	-.23	.27	—	—	-.14	.21	—	—	.03	.27
% of population Muslim	—	—	-.01**	.003	—	—	-.004	.002	—	—	-.002	.003
% of population Orthodox	—	—	-.001	.002	—	—	.001	.002	—	—	.002	.002
Intercept	.03	.11	.13	1.8	-0.00	.05	.06	1.5	.02	.08	-1.11	2.0
R^2	.46		.27		.02		.22		.45		.28	
N	185		185		185		185		185		185	

Notes: Entries are unstandardized regression coefficients and standard errors.
*$p < .05$. **$p < .01$. ***$p < .001$.

As shown in Table 4, no control variable has a discernible effect on the change in Freedom House scores for the period 1989 to 1997. Theory offers only suggestions and no clear prediction on the signs of the coefficients for the change in Freedom House scores. GDP per capita is again negative and not significant in any of the regressions. The coefficient for the share of the population in agriculture is miniscule, has a positive sign, and is not significant in any regression, which runs contrary to expectations. The Stalinization dummy is consistently negative but never significant. The coefficient on the lagged change in liberalization scores is not significantly different from 0, which suggests that economic liberalization has no short-term effect on democratization. The error correction term, however, is statistically significant in all but one of the *Kurtz-Barnes*, *No-Controls*, and *All-Controls* scenarios. The negative sign indicates the extent of dynamic adjustment, which implies the presence of a long-run equilibrium relationship. The error correction term is the only robust explanatory variable in the second-stage regressions.

Furthermore, Table 4 reveals a subtle aspect of the dynamic adjustment. The *No-Controls* scenarios have markedly lower R^2 statistics than *Kurtz-Barnes* and *All-Controls*. This result is not surprising, given that in the first-stage regressions, the *No-Controls* specifications yielded the lowest R^2 statistics. The low R^2 statistics in columns 3 and 4 suggest that including controls in the second stage does not alleviate this deficiency. The results imply that the control variables explain more variation when they are included in the first stage and not in the second stage. Put another way, control variables contribute more to determining the levels of Freedom House scores than they do to explaining changes in Freedom House scores.

When significant, the average coefficient on the error correction term is −.46. This implies that when Freedom House scores are one unit (on a 1 to 7 scale) above the equilibrium level predicted by all explanatory variables in a given year, then they will decrease on average by −.46 in the next year. That is, when Freedom House scores overshoot their equilibrium value, they exhibit reversion toward equilibrium. Similarly, when Freedom House scores are below equilibrium by one unit in a year, they rise by .46 units in the next year. The first-stage equations in Table 3 describe those potential equilibrium relationships. In each of the equations, the sizable and statistically significant coefficients on economic liberalization, agrarian dominance, and international incentives indicate that these variables play a role in determining long-run, equilibrium Freedom House scores.

The results are similar for the extended sample. They are reported in Table 5.[11] None of the control variables stands out in any of the second-stage

regressions. The coefficient on the lagged change in liberalization scores is again indistinguishable from zero. We conclude, therefore, that there is no evidence for any short-term effect, positive or negative, of economic liberalization on democratization for 1989 to 2000. Yet the error correction term continues to be significant and negative in the second-stage regressions for the change in Freedom House scores. The average coefficient on the error correction term is –.45, very much like in Table 4. This result strongly indicates that Freedom House scores are reverting to an equilibrium described by the first-stage equation. As in Table 4, the *No-Controls* scenarios of columns 3 and 4 have lower R^2 statistics than those of *Kurtz-Barnes* and *All-Controls*. Again, the finding suggests that factors such as agrarian dominance and international incentives contribute more to determining levels of Freedom House scores than they do to determining changes in Freedom House scores.

The upshot of the analysis is that the two-stage Engle-Granger procedure describes reasonably well the dynamic process of democratization. Structural control variables play a large role in determining political regime type, a fact highlighted by the relatively large R^2 statistics in the *Kurtz-Barnes* and *All-Controls* specifications. Economic liberalization does not have a discernible impact on Freedom House scores in the short term. But because the error correction terms are robust, highly significant, and carry a negative sign in the second-stage regressions, Freedom House scores apparently move in the direction of an equilibrium in which economic liberalization makes a significant contribution. Freedom House scores adjust by about half a unit when they deviate from equilibrium by one unit. Low R^2 statistics for the first-stage, no-controls regressions in Table 3 indicate that liberalization should not be considered the only factor in this equilibrium. The results for *Kurtz-Barnes* and *All-Controls* reveal that economic liberalization, agrarian dominance, the percentage of the Muslim population, and international incentives govern the underlying dynamics of political regime change.

Our findings are not entirely inconsistent with those of Kurtz and Barnes (2002), who claim that economic liberalization has no effect on democratization whereas other variables do. We find that economic liberalization does not have a short-run effect on democratization but that it does have a long-run, equilibrium effect on democratization. The model tested by Kurtz and Barnes is equipped only to elicit short-term effects. The model we use is designed to separate the short run from the long run and to examine the dynamics of each. The specification in our analysis also accounts for the presence of unit roots in the data, which Kurtz and Barnes do not address. Our findings in some respects resemble those of Nichter and Gans-Morse

(2006), who examine economic liberalization and democratization in Latin America. The authors use a one-stage error correction model and find that economic liberalization has a negative short-term effect and a positive long-term effect on democratization. The J-curve for which Nichter and Gans-Morse find evidence suggests that although economic liberalization may harm democratic prospects in the short run, it may enhance them in the long run. In our analysis of the postcommunist region, we do not find evidence of a J-curve. We find no evidence that economic liberalization is harmful in the short run, but we do find support for the hypothesis that liberalization is good for democratization in the long run.

A Tentative Explanation for the Findings

Consideration of the bases for the findings leads us back to the debate between the Washington Consensus and the Social-Democratic Consensus. We cannot explore at length the nature of the causal links between economic policy and political regime, but we can revisit the logics that underlie the debate and offer a preliminary test of the soundness of the connections.

According to the Washington Consensus, economic liberalization pluralizes power, creating a financial basis for opposition and spurring the growth of a middle class. It also frees people from a psychology of dependence and makes them more politically assertive. These are the intervening variables that link liberalization of the economy to democratization of the polity.

We lack the data needed to test these claims. Assessing the relationship between economic statism and pluralism is difficult. We lack measures for the extent of pluralism (or pluralization) and the growth of middle classes in cross-national context in the postcommunist region. Some scholars have begun to undertake the task, and there is some preliminary evidence that faster economic reform stimulates the growth of political organizations and a middle class (Balzer, 1998; Fish, 2005; Titma, Tuma, & Silver, 1998). Our state of knowledge is still in its infancy, however, and hard conclusions are not yet possible.

So too is it difficult to evaluate Benjamin Constant's hypothesis that free commerce liberates individuals from a psychology of dependence. A handful of pioneering studies may provide some insight. Timothy Frye (2003) has found that support for free elections in Russia is especially high among the owners of new private firms. He finds that proprietorship of property and working in new private business may affect individuals' political orientations. He concludes, "Often chided for engaging in semi-legal transactions and for colluding with protection rackets, the much-maligned entrepreneurial class

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in Russia is a potentially important constituency for the holding of elections, a central practice of democracy" (p. 42). Frye's findings are suggestive and provide support for thinking consistent with the Washington Consensus. Still, testing the hypothesis would require more extensive data than we now have on the political loyalties of various social strata within and among postcommunist countries.

The Social-Democratic Consensus's arguments about the link between economic liberalization and democratization are more tractable to empirical test, because socioeconomic welfare and inequality are easier to measure than socioeconomic pluralism, the magnitude of the middle class, and popular psychology. Testing the Social-Democratic Consensus's claims about the nature of causal links reveals why that Consensus's assumptions about the incompatibility of economic liberalization and democratization do not hold in practice.
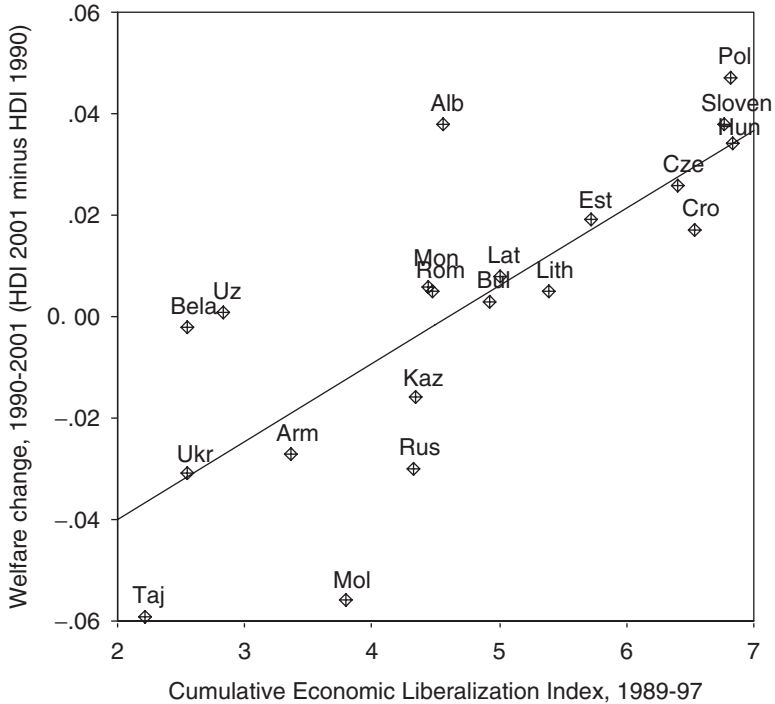
Przeworski's assertion—an axiom of the Social-Democratic Consensus— is that more rapid economic liberalization is worse than more gradual economic liberalization for socioeconomic welfare and inequality. Is it?

Welfare may be assessed using the Human Development Index (HDI), the measure of socioeconomic well-being used by the United Nations (United Nations Development Programme, 2003). The index takes income, life expectancy, and education into account. Countries are scored on a 0 to 1 scale. In 2001, the range in the postcommunist region extended from 0.881 (for Slovenia) to 0.661 (for Mongolia). Assessing change requires comparing the recent numbers with those from the time of the demise of Communist-party regimes. For the year 2001, data are available for all postcommunist countries; for 1990, for 20 of them. The analysis is therefore limited to 20 countries. To measure change, we subtract each country's score for 1990 from its score for 2001. Higher scores are better. Scores higher than 0 represent improvement in welfare between 1990 and 2001; scores below 0 show regression. These scores measure the dependent variable. To measure economic liberalization, the independent variable, we again turn to De Melo and colleagues' (1996) data. Here, we use their Cumulative Economic Liberalization Index, which is the total of scores on economic liberalization for 1989 to 1997.

Figure 1 illustrates the correlation. The relationship between economic liberalization and change in the HDI is positive, which defies the claims of the Social-Democratic Consensus.

The simple bivariate relationship illustrated in Figure 1 might be misleading, because countries that started with higher welfare might have had an easier time both undertaking economic liberalization and containing the

Figure 1
Change in Social Welfare and Economic Liberalization

Note: Rsq = 0.5934.

human cost of it. Yet controlling for starting points does not change the picture. In a partial correlation controlling for HDI in 1990, the relationship between the change in HDI and the Cumulative Economic Liberalization Index remains strong ($r = .77$; $p < .001$). The positive link between economic liberalization and welfare improvement holds when controlling for starting points in welfare.

What about socioeconomic equality? Does faster economic liberalization lead to greater expansion in inequalities? Socioeconomic inequality is usually measured as the Gini score. We seek to assess change in Gini scores between the onset of regime change and the present day. Even a wide-ranging search does not turn up data for all countries; for six countries, no data are available for any years that are useful for our analysis. For the base year for

Table 6
Data on Socioeconomic Inequality

Country	Base-Year Gini Score	Year	Posttransition Gini Score	Year	Change in Gini Score: Posttransition Score Minus Base-Year Score
Armenia	35.5	1992	37.9	1998	2.4
Belarus	34.1	1992	30.4	2000	−3.7
Bulgaria	20.7	1989	31.9	2001	11.2
Croatia	32.9	1988	29.0	2001	−3.9
Czech Republic	20.1	1988	25.4	1996	5.3
Estonia	35.8	1992	37.6	1998	1.8
Georgia	36.9	1992	38.9	2000	2.0
Hungary	23.3	1989	24.4	1998	1.1
Kazakhstan	32.7	1993	31.2	2001	−1.5
Kyrgyzstan	30.0	1992	29.0	2001	−1.0
Latvia	33.3	1992	32.4	1998	−0.9
Lithuania	37.2	1992	36.3	2000	−0.9
Macedonia	32.9	1988	28.2	1998	−4.7
Moldova	41.1	1992	36.2	2001	−4.9
Poland	26.7	1989	31.6	1998	4.9
Romania	23.4	1989	30.3	2000	6.9
Russia	37.1	1992	45.6	2000	8.5
Slovakia	20.1	1988	25.8	1996	5.7
Slovenia	32.9	1988	28.4	1998	−4.5
Turkmenistan	35.8	1993	40.8	1998	5.0
Ukraine	25.7	1992	29.0	1999	3.3
Uzbekistan	33.3	1993	26.8	2000	−6.5

each country, we use the year closest to the time of regime change for which data are available. For the endpoint, we use the latest year for which data are available. For the base year, we had to tap several sources; no one source has data for all countries.[12] Table 6 presents the data on Gini scores and the years of the surveys on which the scores are based.

The data reveal several interesting facts. First, countries ruled by Communist-party regimes had extraordinarily low levels of socioeconomic inequality. It is hard to know to what extent Communist-party regimes were responsible for low inequality, because we lack good data on the distribution of income in, say, Czechoslovakia in 1935 or Russia in 1915. Still, the numbers we have for the 1980s and 1990s, along with anecdotal historical evidence and some common sense about how Communist-party regimes operated, allow us to suppose that such regimes indeed compressed socioeconomic differentials. Lower Gini scores indicate lower levels of inequality, and

throughout the region, scores are low in international perspective. In 1990, the United States' Gini score was 37.8, which indicates higher socioeconomic inequality than obtained in any communist or postcommunist countries except Moldova at the time. In the same year, Japan's score was 35.0 (*Deininger and Squire Data Set*, 2001).

The numbers also show that countries have maintained low levels of inequality in the postcommunist setting. The mean base-year Gini score in the region is 30.7; the mean for the latest year is 32.1. This difference is insubstantial. To the extent that Communist-party regimes created or maintained low inequality, this "gain of socialism"—to borrow a phrase popular among communist-era leaders—has been preserved. Inequalities have increased substantially in some places, but they remain low. For comparative purposes, one may consider the following Gini scores (all for 1998): Italy, 36.0; China, 40.3; Mexico, 51.9; and Chile, 57.5 (United Nations Development Programme, 2003).
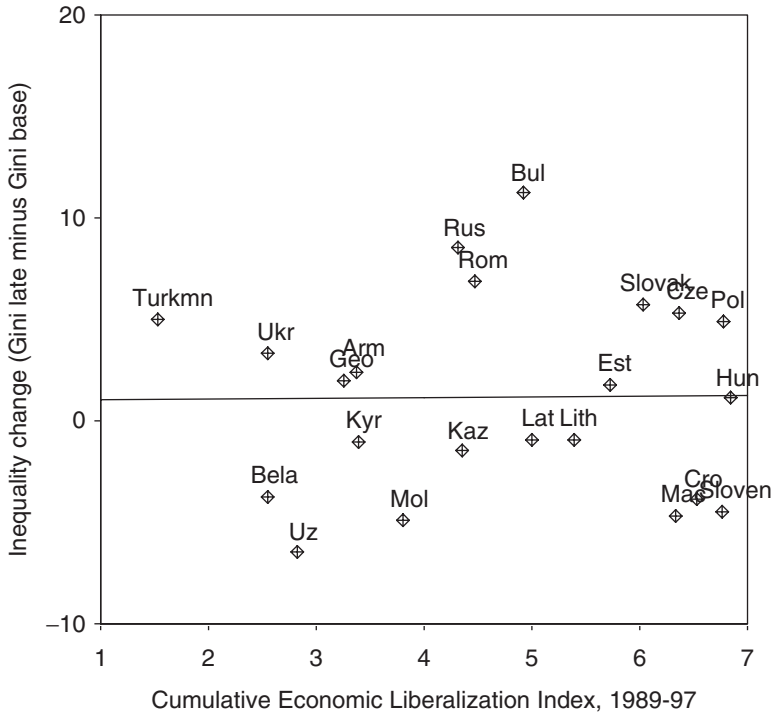
Of greatest importance for our discussion is the relationship between economic reform and changes in inequality. If the Social-Democratic Consensus is right, shock therapy induces a more pronounced increase in inequalities than gradualism.

Figure 2 plots the relationship between economic liberalization and changes in Gini scores. Change is measured by subtracting each country's score for the base year from its score for the later year. Because higher scores mean greater inequalities, lower scores are better. Scores higher than 0 show a worsening of inequality between the base year and the latest year; scores lower than 0 indicate improvement. Figure 2 illustrates the nonrelationship between economic liberalization and change in socioeconomic inequality.

Again, we must control for initial conditions. Doing so does not change the result. In a partial correlation controlling for Gini scores in the base year, economic liberalization has no significant effect on the change in socioeconomic inequality. The correlation is actually negative, suggesting that faster economic reform is associated with more favorable change in equity, though the relationship is not statistically significant ($r = -.24$; $p = .30$). The data provide no evidence that shock therapy induces a greater rise in inequalities than does gradualism.

The analyses speak to why leaders ever pursue economic liberalization. Why any politician who must face the voters would implement economic liberalization has vexed many writers. According to the Social-Democratic Consensus, neoliberal reforms straiten the majority; why, then, would any rational politician ever carry them out? Some writers believe that they have solved the puzzle by showing that politicians expect neoliberal economic policies to bear fruit before the politicians must again face the electorate

Figure 2
Change in Inequality and Economic Liberalization

Note: Rsq = 0.0001.

(Stokes, 2001a, 2001b). But perhaps the pursuit of economic liberalization is not such a conundrum. If more economic liberalization improves welfare more quickly than less economic liberalization, and if economic liberalization does not exacerbate socioeconomic inequalities, there is no riddle to solve.

The evidence does not show, nor do we mean to suggest, that economic reform in postcommunist countries has been easy on people. Pain and trauma have accompanied economic transformation, as many studies have recounted. Where so many authors have erred is not in detecting pain but in arguing that faster, more thoroughgoing economic reform induces more pain than slower, more partial economic reform. The evidence does not support that argument.

Conclusion

The claim that economic liberalization stands in tension with, or is unrelated to, democratization in the postcommunist region is untenable. The Engle-Granger analysis used in this article demonstrates that although economic liberalization has no discernible impact on democratization in the short term, Freedom House scores adjust in the direction of a long-term equilibrium to which economic liberalization contributes substantially. Comparing the extent of economic reform with socioeconomic outcomes further reveals that more liberalization is associated with higher measures of welfare. Many writers have claimed that economic liberalization damages, or at least does not advance, democratization. But the empirical evidence shows that economic liberalization, far from impeding popular rule, may be its ally.

Notes

1. Data on annual inflation, measured by the GDP deflator, and annual growth of per capita GNP are from *World Development Indicators* (various years) and serve as proxies for the general macroeconomic environment. Inflation and economic growth are both time varying, and each is lagged by one year. Data on religious affiliation are from the Central Intelligence Agency, 2003, and *Muslim Population Worldwide*, n.d. The countries that endured the full brunt of Stalinism are those that underwent Sovietization in the late 1910s and early 1920s, which encompasses the countries of the former Soviet Union minus Estonia, Latvia, Lithuania, and Moldova. These last four countries, as well as those of East Europe, underwent Sovietization in the 1940s.

2. Kurtz and Barnes (2002) assess the dominance of agrarian elites using the inverse of national figures for urbanization. This is not an ideal measure. Cross-national data on urbanization are problematic for use in cross-national analysis, because numbers depend on how officials in particular countries define a city or metropolitan area (see United Nations Development Programme, 2002, p. 165). The percentage of the workforce engaged in agriculture, hunting, fishing, and forestry provides a superior measure of occupational and class structure, which Kurtz and Barnes say they seek to measure. The use of the alternative indicator does not appreciably affect the results.

3. Nonstationarity can be thought of as autocorrelation with a coefficient indistinguishable from 1, hence the term *unit root*. Nonstationary time series tend to grow with time, whereas stationary series oscillate around a fixed mean. Nonstationarity is common in macroeconomic time series such as interest rates, income and consumption levels, and price-level data.

4. Unless otherwise indicated, we use augmented Dickey-Fuller tests to detect the presence of unit roots.

5. This assumes, of course, that the differences are stationary and hence well behaved. Otherwise, one would have to calculate differences again until stationarity is attained (Granger & Newbold, 1977).

6. It should be emphasized that error correction regressions can only be run when the residuals are stationary (i.e., when Freedom House scores are cointegrated with the explanatory

variables). If nonstationary series are not cointegrated, then the Engle-Granger two-step procedure is infeasible. Keele and De Boef (2004) detail models for one-step error correction techniques for series that are not cointegrated. We tested these models on the data and found them to be inconclusive.

   7. The Engle-Granger procedure does not place any restrictions on which control variables may enter the first-stage or second-stage regressions.

   8. For instance, Azerbaijan's Freedom House scores between 1991 and 2000 are 3, 3, 2, 2, 2, 2.5, 3, 3, 3, and 2.5. The Czech Republic's liberalization scores are 0, .16, .79, .86, .90, .90, .93, .93, and .93 for 1989 to 1997. It is therefore not surprising to find evidence of unit roots in the data. Updating the liberalization data was limited to 21 of the original 26 countries. Albania, Croatia, Macedonia, Mongolia, and Slovenia do not have liberalization data for the updated period.

   9. The literature on unit roots in panel data sets leaves the question of whether the Engle-Granger procedure must be used unresolved for now. Panel-unit root tests would ideally be better suited for assessing nonstationarity in our sample of two dozen countries. Yet most panel-unit root tests assume panel independence, clearly an unreasonable assumption for post-communist countries. Because recently developed methods for testing panel-unit roots assuming no independence are not widely used and not available in commercial software, we use standard Dickey-Fuller tests to the individual countries and to the entire sample to determine the extent of nonstationarity (see Hlouskova & Wagner, 2005). Casual observation and augmented Dickey-Fuller tests confirm a high level of persistence in Freedom House scores and economic liberalization scores. We conclude on this basis that the Engle-Granger procedure is appropriate for the analysis. We cannot and do not claim, however, that it necessarily is the only tool for analyzing the data.

   10. There is an important distinction to be made here. The reason why economic liberalization scores are significant in our *Kurtz-Barnes* specification is that we, unlike Kurtz and Barnes, do not correct for serial correlation. Doing so would be inappropriate in the Engle-Granger procedure, as error terms are to be left uncorrected, producing clean deviations that enter into the second-stage regressions as an explanatory variable (i.e., as the error correction mechanism).

   11. Because inflation and economic growth add no explanatory power in the 1989 to 1997 sample, we exclude those variables in the analysis of the 1989 to 2000 sample.

   12. No data are available for Albania or Bosnia for any year, and none from any year before the late 1990s are available for Azerbaijan, Mongolia, or Tajikistan. Nor are data available for Serbia and Montenegro and Yugoslavia following the breakup of the old Yugoslavia. Our analysis is limited to the remaining 22 countries. For the base year for Croatia, Macedonia, and Slovenia, we use the figure for the (old) Yugoslavia in 1988, the final year of the old Yugoslavia's existence. For the Czech Republic and Slovakia, we use data for Czechoslovakia as a whole in 1988. For the later years, all data are taken from a single source; data for the late 1990s and the turn of the decade are more plentiful than for earlier years, though no data are available for any country for a year later than 2001. Data for base years for Armenia, Belarus, Georgia, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, and Turkmenistan from *Transition Report 2001*; for Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kazakhstan, Macedonia, Poland, Romania, Slovakia, Slovenia, and Ukraine from *Deininger and Squire Data Set*, 2001; for Turkmenistan, *World Development Indicators 1999*; for posttransition years for all countries, United Nations Development Programme, 2003.

References

Appel, Hilary. (2004). *A new capitalist order*. Pittsburgh, PA: University of Pittsburgh Press.

Aslund, Anders. (2000). *Building capitalism*. New York: Cambridge University Press.

Balzer, Harley. (1998). Russia's middle classes. *Post-Soviet Affairs*, *14*(2), 165-186.

Banerjee, Anindya, Dolado, Juan, Galbraith, John W., & Hendry, David. (1993). *Co-integration, error-correction, and the econometric analysis of non-stationary data*. New York: Oxford University Press.

Bobbio, Norberto. (1990). *Liberalism and democracy*. London: Verso.

Burawoy, Michael. (1996). The state and economic involution. *World Development*, *24*(6), 1105-1117.

Callaghy, Thomas M. (1993). Political passions and economic interests. In Thomas M. Callaghy & John Ravenhill (Eds.), *Hemmed in* (pp. 463-519). New York: Columbia University Press.

Cardoso, Fernando E., & Faletto, Enzo. (1979). *Dependency and development in Latin America*. Berkeley: University of California Press.

Central Intelligence Agency. (2003). *World factbook*. Washington, DC: Brassey's.

Cohen, Stephen F. (2000). *Failed crusade*. New York: Norton.

Collier, David. (Ed.). (1979). *The new authoritarianism in Latin America*. Princeton, NJ: Princeton University Press.

Constant, Benjamin. (1988). *Political writings*. Cambridge, UK: Cambridge University Press.

Dahl, Robert A. (1971). *Polyarchy*. New Haven, CT: Yale University Press.

Deininger and Squire data set. (2001). [Data file]. Available worldbank.org/research/growth/dddeisqu

De Melo, Martha, Denizer, Cebdet, & Gelb, Alan. (1996). Patterns of transition from plan to market. *World Bank Economic Review*, *10*(3), 397-424.

Deyo, Frederic C. (Ed.). (1987). *The political economy of the new Asian industrialism*. Ithaca, NY: Cornell University Press.

Diamond, Larry. (1995). Democracy and economic reform. In Edward P. Lazear (Ed.), *Economic transition in Eastern Europe and Russia* (pp. 107-158). Stanford, CA: Hoover Institution Press.

Durkheim, Emile. (1992). *Professional ethics and civic morals*. New York: Routledge.

Engle, Robert F., & Granger, C. W. J. (1987). Co-integration and error correction. *Econometrica*, *55*(2), 251-276.

Evans, Peter B. (1979). *Dependent development*. Princeton, NJ: Princeton University Press.

Fairbanks, Charles H. (1999). The feudalization of the state. *Journal of Democracy*, *10*(2), 47-53.

Fish, M. Steven. (2005). *Democracy derailed in Russia*. New York: Cambridge University Press.

Freedom House. (2005, October). *Annual survey of freedom, country ratings*. Available from http://freedomhouse.org.

Friedman, Milton. (1962). *Capitalism and freedom*. Chicago: University of Chicago Press.

Frye, Timothy. (2000). *Brokers and bureaucrats*. Ann Arbor: University of Michigan Press.

Frye, Timothy. (2003). Markets, democracy, and new private business in Russia. *Post-Soviet Affairs*, *19*(1), 24-45.

Gerschenkron, Alexander. (1962). *Economic backwardness in historical perspective*. Cambridge, MA: Harvard University Press.

Granger, C. W. J., & Newbold, Paul. (1974). Spurious regressions in econometrics. *Journal of Econometrics*, *2*, 111-120.

Granger, C. W. J., & Newbold, Paul. (1977). *Forecasting econometric time series*. New York: Academic Press.

Greene, William H. (1993). *Econometric analysis*. Englewood Cliffs, NJ: Prentice Hall.

Herrera, Yoshiko M. (2001). Russian economic reform, 1991-1999. In Zoltan Barany & Robert G. Moser (Eds.), *Russian politics* (pp. 135-174). New York: Cambridge University Press.

Hirschman, Albert O. (1977). *The passions and the interests*. Princeton, NJ: Princeton University Press.

Hlouskova, Jaroslava, & Wagner, Martin. (2005). *The performance of panel unit root and stationarity tests*. Discussion papers, University of Bern, Department of Economics. Available from http://130.92.195.20/publikationen/download/dp0503.pdf

Hout, Michael, & Gerber, Theodore P. (1998). More shock than therapy. *American Journal of Sociology*, *104*(1), 1-50.

Huber, Evelyne, Rueschemeyer, Dietrich, & Stephens, John D. (1999). The paradoxes of democracy. In Lisa Anderson (Ed.), *Transitions to democracy* (pp. 168-192). New York: Columbia University Press.

Keele, Luke, & De Boef, Suzanna. (2004, December). *Not just for cointegration*. Available from www.nuff.ox.ac.uk/Politics/papers/2005/Keele%20DeBoef%20ECM%20041213.pdf

Klein, Lawrence R., & Pomer, Marshall. (Eds.). (2001). *The new Russia*. Stanford, CA: Stanford University Press.

Kurtz, Marcus, & Barnes, Andrew. (2002). The political foundations of post-communist regimes. *Comparative Political Studies*, *35*(5), 524-553.

Kwon, Hyeok Yong. (2004). Economic reform and democratization. *British Journal of Political Science*, *34*(2), 357-368.

Landsberg, Martin. (1979). Export-led industrialization in the Third World. *Review of Radical Political Economics*, *11*(4), 50-63.

Marx, Karl, & Engels, Friedrich. (1998). *The German ideology*. Amherst, NY: Prometheus Books.

McFaul, Michael. (2001). *Russia's unfinished revolution*. Ithaca, NY: Cornell University Press.

Millar, James R. (1995). From utopian socialism to utopian capitalism. *Problems of Post-Communism*, *42*(3), 7-14.

Montesquieu (Charles de Secondat). (1989). *The spirit of the laws*. Cambridge, UK: Cambridge University Press.

Moore, Barrington. (1966). *Social origins of dictatorship and democracy*. Boston: Beacon.

Murphy, Kevin M., Shleifer, Andrei, & Vishney, Robert. (1992). The transition to a market economy. *Quarterly Journal of Economics*, *107*(3), 889-906.

Muslim Population Worldwide. (n.d.). Retrieved June 28, 2003, from http://islamicpopulation.com

Nichter, Simeon, & Gans-Morse, Jordan. (2006). *Neoliberal reforms and democracy: Evidence of J-curve in Latin America.* Unpublished manuscript, University of California–Berkeley.

Obstfeld, Maurice, & Taylor, Alan M. (2004). *Global capital markets*. Cambridge, UK: Cambridge University Press.

O'Donnell, Guillermo. (1973). *Modernization and bureaucratic-authoritarianism*. Berkeley: University of California International and Area Studies.

Ost, David. (2000). Illusory corporatism in Eastern Europe. *Politics and Society*, *28*(4), 508-530.

Oxhorn, Philip D., & Ducatenzeiler, Graciela. (Eds.). (1998). *What kind of democracy? What kind of market?* University Park: Pennsylvania State University Press.

Przeworski, Adam. (1991). *Democracy and the market*. New York: Cambridge University Press.

Przeworski, Adam. (1992). The neoliberal fallacy. *Journal of Democracy*, *3*(3), 45-59.

Reddaway, Peter, & Glinski, Dmitri. (2001). *The tragedy of Russia's reforms*. Washington, DC: U.S. Institute of Peace.

Riker, William H. (1982). *Liberalism against populism*. Prospect Heights, IL: Waveland Press.

Sachs, Jeffrey. (1994). *Poland's jump to the market economy*. Cambridge, MA: MIT Press.

Shambaugh, Jay C. (2004). The effect of fixed exchange rates on monetary policy. *Quarterly Journal of Economics*, *119*(1), 301-352.

Shapiro, Ian. (1996). *Democracy's place.* Ithaca, NY: Cornell University Press.

Stark, David, & Bruszt, Laszlo. (1998). *Postsocialist pathways*. New York: Cambridge University Press.

Stokes, Susan C. (2001a). *Mandates and democracy*. New York: Cambridge University Press.

Stokes, Susan C. (Ed.). (2001b). *Public support for market reforms in new democracies*. New York: Cambridge University Press.

Titma, Mikk, Tuma, Nancy Brandon, & Silver, Brian. (1998). Winners and losers in the postcommunist transition. *Post-Soviet Affairs*, *14*(2), 113-146.

Transition report 2001: Energy in transition. (2001). London: European Bank for Reconstruction and Development.

United Nations Development Programme. (2002). *Human development report*. New York: Oxford University Press.

United Nations Development Programme. (2003). *Human development report*. New York: Oxford University Press.

Williamson, John. (1990). What Washington means by policy reform. In John Williamson (Ed.), *Latin American adjustment* (pp. 7-20). Washington, DC: Institute for International Economics.

Williamson, John. (2002). *Did the Washington Consensus fail?* Retrieved September 14, 2003, from http://iie.com/publications/papers/williamson

World development indicators. (annual reports, various years). Washington, DC: The World Bank.

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