Twenty-five years of market reform:
The political economy of change after communism

I survey the first twenty-five years of economic change in the former communist countries after the fall of the Berlin Wall. While diverging sharply from one another, these countries have converged economically and politically towards their nearest neighbors outside the Soviet bloc. The typical country experienced a spurt of economic reform in the early 1990s, slowing dramatically from around 1996. Speed in these early years determined which countries would achieve liberal market economies and which would get stuck halfway: the race went to the hares not the tortoises. A longer history of communist rule and an Islamic religious tradition correlate with less movement towards democracy after 1989; slower democratization, in turn, predicts less market reform. Even controlling for numerous aspects of the setting in which they governed, certain leaders' terms saw significantly more or less rapid reform, suggesting the importance of leaders' choices at critical historical junctures.

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The handful of liberal economists who found themselves suddenly occupying government offices in capitals east of Berlin in the early 1990s knew where they wanted to go. But neither they nor anyone else knew how to get there. To Andrei Shleifer and myself, writing around 10 years into the transition, these men—and a few women—seemed like explorers climbing through mountain ranges that had never been mapped. They had to trust their intuition and improvise around obstacles, all the while expecting to be swept away at any moment by an avalanche.

So how did they do? And where did they end up? Overall and on average, economic transformation has been a striking success. On numerous indicators, life has improved for citizens of the former communist countries. By 2012, in the average country, GDP per capita was 46 percent higher than it had been in 1990, and this probably underestimates the increase given inflated reporting of output at the outset.[1] Consumption by households was 59 percent higher. In the average country, life expectancy had risen from 69 to 73 years, and mortality among infants under five had dropped from 39 to 16 per 1,000 live births. For every hundred people, the number of phone lines had increased from 13 to 23 and cell phone subscriptions had soared from zero to 120. More than half of citizens were internet users, a higher rate than in Latin America, and more than half of school leavers were now enrolling in college, up from one quarter in 1990. While on some of these indicators the postcommunist countries lagged the world average—for example, world GDP per capita rose by 51 percent during these years—in others, such as cell phone and internet use, the postcommunist states had surged ahead.

Yet, statistics on average performance conceal some major differences. After 25 years of

[1] GDP per capita in 2005 dollars, at purchasing power parity; these and subsequent statistics are from the World Bank's *World Development Indicators* and refer to the average for all of the 30 post-communist countries of Eastern Europe, the former Soviet Union, and Mongolia for which data are available. Data and Stata do files will be posted at www.sscnet.ucla.edu/polisci/faculty/treisman/.

wandering, these countries today extend across the political and economic landscape. Some—like Poland—have market systems resembling those of their West European neighbors, as well as democratic regimes and economies that have doubled in size. Then there is Turkmenistan, a sultanistic petrostate, which only re-attained its 1990 output level in 2008, and which experts today rate as less of a free market economy than Yugoslavia was *before* its transition began.

What explains the different outcomes? The answer might lie at a number of levels—in the initial conditions inherited, the reform strategies chosen, the nature of the opposition to reform that emerged, the political institutions under which economic battles were fought, or even in the characteristics of individual leaders. I will consider each in turn. But first one must quickly review what happened.

Roads from serfdom

As of 1985, the countries of the Soviet Bloc had a lot in common. Of course, each had particularities, but communism had artificially compressed variation. They all exhibited distorted and unfree economies, Leninist party dictatorships, and relatively low levels of GDP per capita.

After the communist brace had been removed, differences were bound to reappear. And they did. The first quarter century has been characterized by rapid divergence. The income gap between the richest and poorest countries in this group grew from $11,000 in 1990 to almost $25,000 in 2010.[2] By that year, their political regimes ranged from oriental despotism to consolidated democracy. In terms of market liberalism, Georgia came in 8th on the World

[2] GDP per capita at purchasing power parity in current dollars. In 1990, the Czech Republic had GDP per capita of $12,465 and Uzbekistan $1,446. In 2010, Slovenia had $26,944 and Tajikistan $2,151.

Bank's ranking of ease of doing business in 2013, while Uzbekistan was 146th.[3]

To measure how these countries reformed—or failed to reform—their economies, I use indicators constructed by the European Bank for Reconstruction and Development (EBRD). Each year from 1989 to 2010, the bank's experts rated 29 former communist countries on how closely they resembled a free market economy. Separate sub-indexes measure eight dimensions: price liberalization, trade and foreign exchange liberalization, large-scale privatization, small-scale privatization, enterprise restructuring, competition policy, banking reform, and reform of securities markets and non-bank financial institutions. I rescale so that each indicator runs from zero (a completely unreformed communist economy) to one (a liberal market economy) and use the annual average of the eight dimensions as a summary measure of reform progress to date.[4]

The pattern of change these indicators reveal is not quite what anyone expected (see Figure 1). From their highly illiberal starting point, almost all the countries experienced a rapid burst of reform in the early 1990s. Seven years after the start of transition, 20 of the 29 had increased by at least 40 percentage points on the reform scale.[5] The extent of change varied, but the parallel surge is striking.

However, after 1996 almost all slowed to a crawl. All the countries reformed more in their first five years than in the subsequent ten except for war-torn Bosnia and Yugoslavia. For

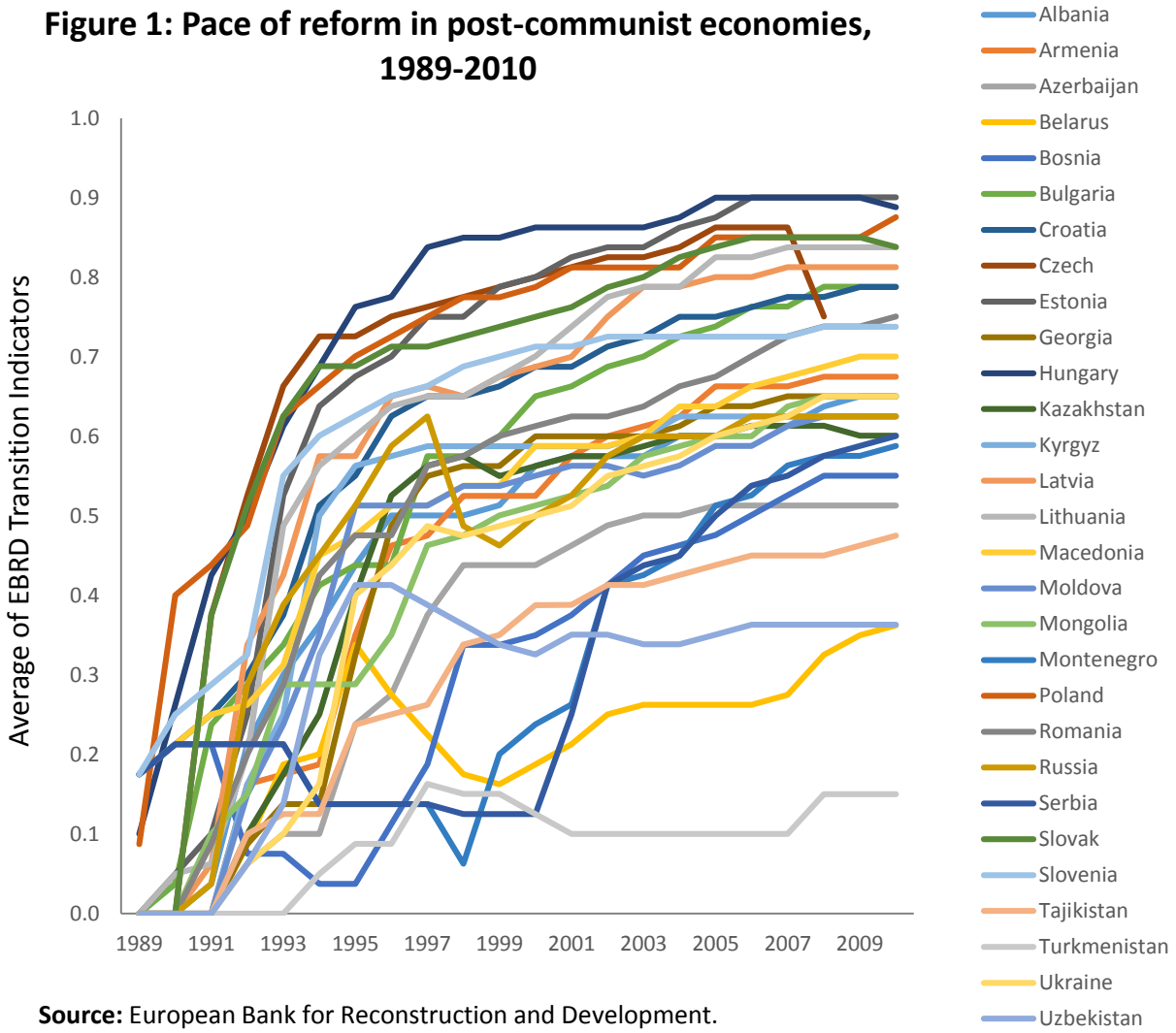
[3] See http://www.doingbusiness.org/rankings.

[4] Details on the EBRD's methodology are available at http://www.ebrd.com/pages/research/economics/data/macro/ti_methodology.shtml. These indicators do *not* measure the growth rate, welfare of the population, or invulnerability to financial crises, as some critics have noted (Myant and Drahokoupil 2012). They are intended to capture only the extent of free market institutions. Like any measures, they are imperfect, but nothing better has emerged in 25 years.

[5] The exceptions were Serbia, Montenegro, Macedonia, Belarus, Turkmenistan, Mongolia, and the civil-war-torn states of Azerbaijan, Bosnia, and Tajikistan. I consider the start of transition to have been 1989 for Eastern Europe, 1990 for the former Yugoslavia, and 1991 for the former Soviet Union.

the most rapid marketizers, the slowdown is not surprising since by 1996 they were almost at the top of the scale; still, all plateaued *before* they reached the top.

Figure 1: Pace of reform in post-communist economies, 1989-2010

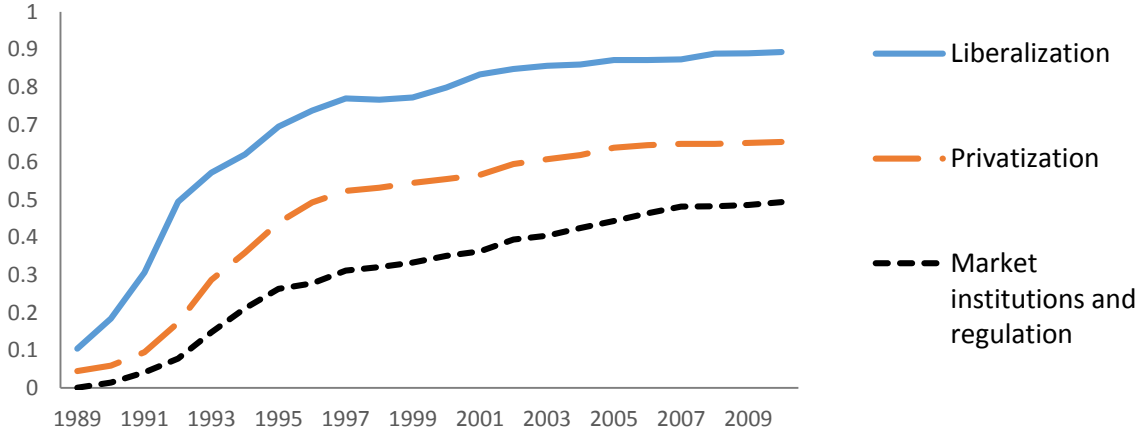


Source: European Bank for Reconstruction and Development.

By this point, countries already divided clearly into leaders and laggards, and their relative rankings changed little in subsequent years. Many moved up or down a few places, but not usually more than five. In fact, countries' reform scores in 1993 already correlate highly with their scores in 2010 (r = .79). Reforms followed a characteristic sequence: first liberalization,

then privatization, and finally reforms to create market institutions (Figure 2). Those countries that led on one type tended to lead on the others, and those that lagged on one tended to lag on all.

Figure 2: Pace on subcategories of reform, post-communist economies, 1989-2010



Source: European Bank for Reconstruction and Development.
Notes: Liberalization: average of price and trade liberalization. Privatization: average of small-scale and large-scale privatization and restructuring. Market institutions and regulation: average of competition policy, banking reform, and securities market and non-bank financial institutions reform.

The result was a divergence in economic institutions as noticeable as that in politics and income levels. Already by 1994 the range in EBRD scores had shot up from 18 percentage points to almost 70. The Czech Republic was in the lead, having reached a score of 0.73. Turkmenistan was at just .05. If all communist economies were, to a great extent, alike, the postcommunist countries appeared determined to be postcommunist in their own way.

Yet, even as they have been diverging from one another, these countries have been converging towards something else. To what becomes clear if one looks at a map: their neighbors. In income levels, political institutions, and economies, the postcommunist states have become more and more like the non-Soviet-Bloc countries nearest to their borders.

The Baltic states have converged towards Finland; the Caucasus countries towards Turkey and Iran; the states of Central Asia towards Iran, Afghanistan, and China. Central Europe has approached Germany and Austria, but with the occasional tug from its neighbors to the east. Russia appears disoriented by the contradictory pulls of Finland and China. Of course, there are exceptions: Mongolia is much more democratic than its neighbors, Belarus more authoritarian. But for the most part, having escaped the gravitational force that previously tethered them to Moscow, the erstwhile satellites have sped outward to merge into the neighborhood at the Soviet Bloc's nearest border.

Table 1 documents this pattern. Countries' democracy ratings on the Polity2 scale increased more between 1990 and 2010 if their closest neighbor or neighbors outside the Soviet Bloc were more democratic as of 1990 (column 1). They increased their GDP per capita more if their non-Soviet Bloc neighbor or neighbors were richer (column 2). And they improved their EBRD market liberalism scores more if their non-Soviet-Bloc neighbor or neighbors were more economically liberal as of the start of transition. (Since the EBRD scores are only available for the ex-communist countries, I use an index of economic freedom produced by the Fraser Institute (Gwartney, Lawson, and Hall 2012) to capture the neighbors' economic liberalism as of 1990.) In all three cases, controlling for the neighbors' initial scores, the country's own initial score enters negatively, suggesting conditional convergence. Figure 3 maps these trends for democratization (using the Polity2 measure: -10 is a perfect autocracy and +10 a perfect democracy) and market reform (using the Fraser Institute's index of global economic freedom). While the edge of the Soviet Bloc marks a clear divide in the late 1980s (especially in the West), after 20 years, the iron curtain had disappeared into the undergrowth.

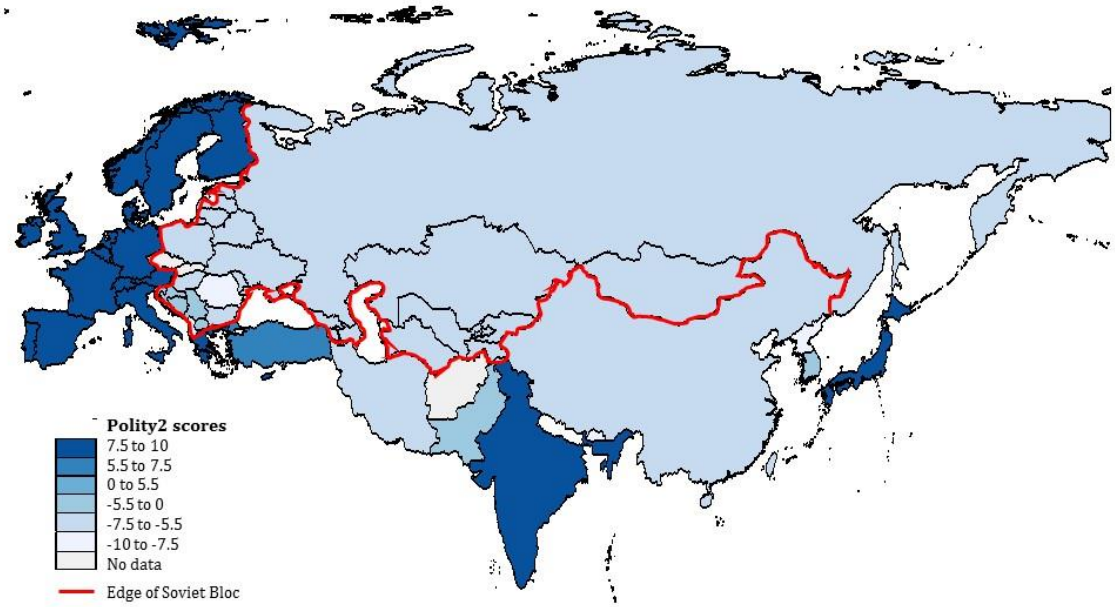
Table 1: Convergence toward neighbors outside the Soviet Bloc

	(1)	(2)	(3)
Dependent variable:	--------*Change 1990-2010 in*---------		*Change 1989-2010 in*
	Polity2 (on 0-1 scale)	GDP per capita (percent)	EBRD reform score (on 0-1 scale)
Polity2 of country in 1990	-0.864		
	(0.091)***		
Polity2 in 1990 of closest neighbor(s) outside Soviet Bloc	0.609		
	(0.159)***		
GDP per capita of country, PPP, thousand 2005 dollars, in 1990		-5.194	
		(2.576)*	
GDP per capita in 1990 of closest neighbor(s) outside Soviet Bloc		3.051	
		(1.353)**	
EBRD reform score of country in 1989 (0 to 1)			-1.048
			(0.326)***
Fraser Institute "Economic Freedom Score" of closest neighbor(s) outside Soviet Bloc 1985			0.097
			(0.040)**
Constant	0.222	31.927	0.131
	(0.133)	(20.581)	(0.218)
R^2	0.59	0.16	0.38
N	28	26	28

Sources: World Bank, EBRD, Fraser Institute, Polity IV database.
Notes: Robust standard errors in parentheses; * p <.10, ** p < .05, *** p < .01. EBRD reform scores not available for neighbors outside the Soviet bloc, so I use Fraser Institute index of World Freedom score of closest neighbor(s) outside Soviet Bloc. If several countries about equally close, average of their scores used. Change in EBRD reform score for Czech Republic for 1989-2008, last year for which data available.

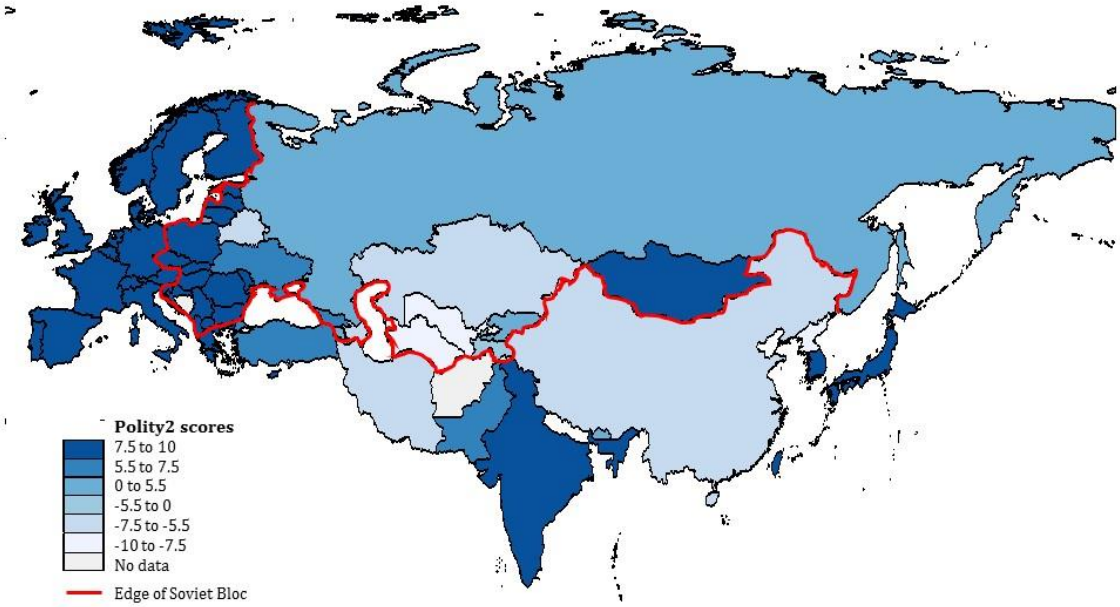
While the regressions show this pattern to be strong, they do not explain it. Countries could be converging with their non-Soviet-Bloc neighbors because of some interaction with those countries. Norms or beliefs might diffuse from those neighbors—and the nature of these might differ depending on the neighbor's political regime, level of economic development, or liberalism. Trade with richer and more market oriented neighbors might prompt more development and reform than trade with less modern countries. Alternatively, the convergence might be driven not by interactions but by underlying—previously concealed—similarities. Countries located next to Western Europe might differ from those next to Asia because of historical or cultural factors or comparative advantage in the international economy. These might lead to geographical convergence after the old regime's fall. To understand this better requires a closer examination of the correlates of economic reform.

Figure 3A: Political regimes in 1985



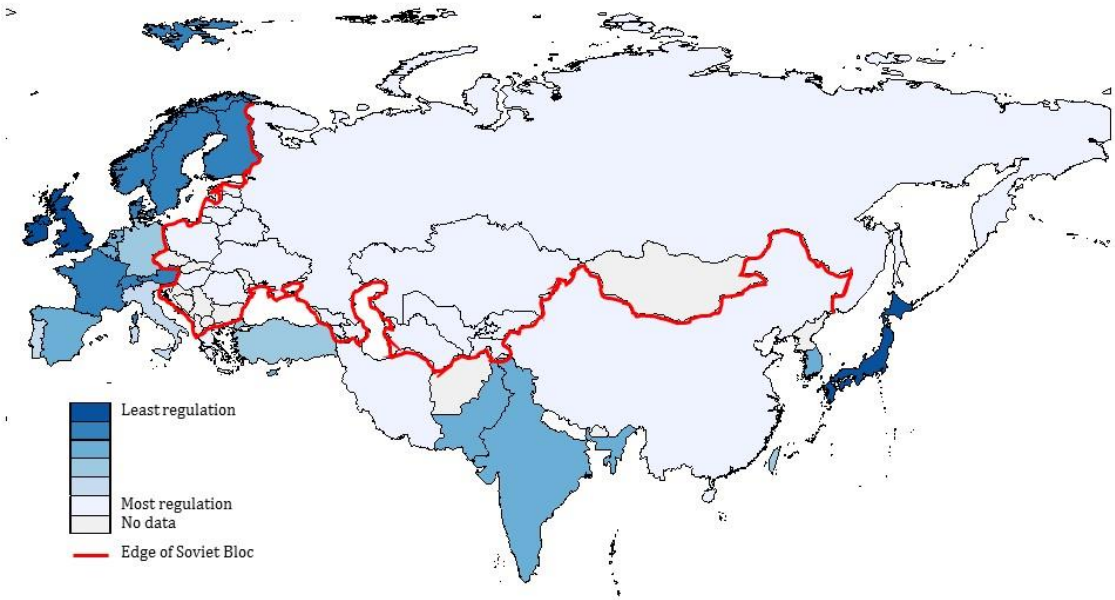
Source: Polity IV.

Figure 3B: Political regimes in 2010



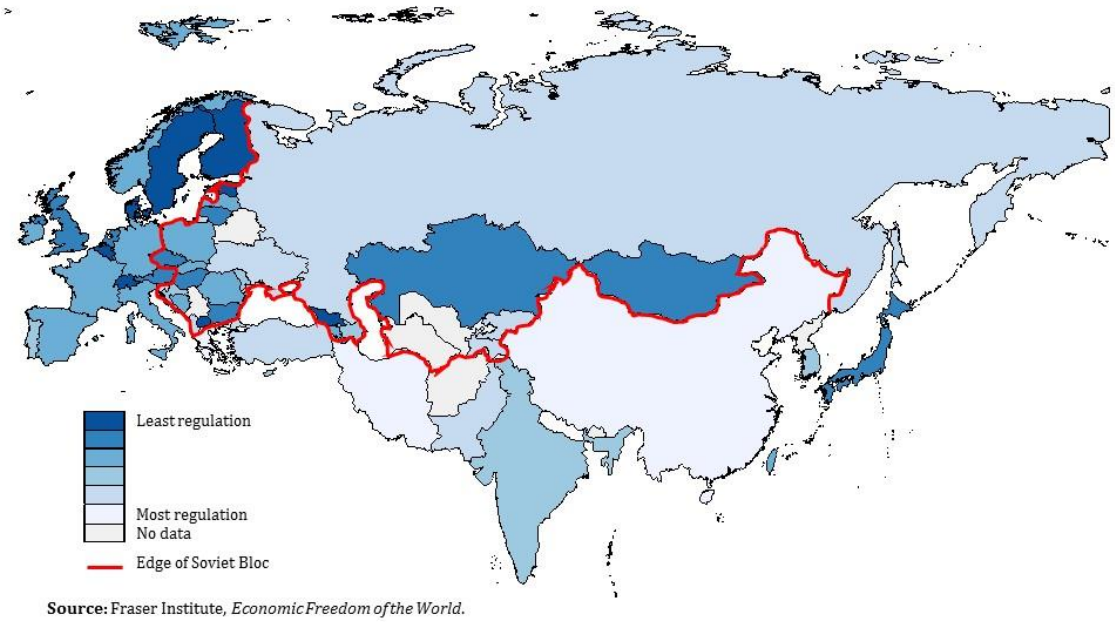
Source: Polity IV.

Figure 3C: Economic regulation in 1985



Source: Fraser Institute, *Economic Freedom of the World.*

Figure 3D: Economic regulation in 2011



Source: Fraser Institute, *Economic Freedom of the World.*

Historical legacy?

Did countries' different historical paths leave them with cultures more or less favorable towards free market capitalism? Assessing attitudes at the start of transition is difficult because few cross-national surveys were conducted until after reforms had begun—and results were often quite volatile. Yet two aspects of countries' historical traditions could have left lasting marks. First, many scholars associate particular religions with pro- and anti-market orientations. Following Weber (1905), one might expect more economic reform in countries with Protestant traditions, and less in those where Islam predominates.[6] Second, communist regimes sought to eradicate any cultural support for markets and capitalism, and those in power for longer might have succeeded more completely. While some countries were communized shortly after the Bolshevik Revolution, others joined the camp only in the late 1940s.

As Table 2 shows, both the length of exposure to communism and the religious composition of the population correlate with subsequent change in countries' economic reform scores. The strongest religious effects are for the proprtions of Protestants and Muslims in the population—more Protestants predict more reform, more Muslims less reform.[7] (Of course, given the small number of countries, one should be cautious interpreting this.) A longer exposure to communism is robustly significant: for each year a country had been communist, it reformed 0.5 to 0.7 percentage points less. These historically-rooted factors can more than account for the convergence towards neighbors on economic liberalism (the 1985 economic freedom score of

[6] The empirical support for Weber's thesis is far from clear (see, e.g. Iannaccone 1998).

[7] I use data on religious adherents from the National Religion Dataset in the Association of Religion Data Archives at www.thearda.com/Archive/Files/Downloads/WRDNATL_DL2.asp. It is necessary to use data for 1995 since the archive does not have data for the sub-republics of the Soviet Union and Yugoslavia in 1990.

non-communist neighbors becomes insignificant and negative: column 3). Two other features of countries' initial conditions that might influence their readiness to reform are their starting income levels and the degree of economic distortion, measured as their level of trade with the outside world. Column 4 shows that neither of these correlates with the pace of reform, and Islam and communist history remain significant. This is also true controlling for closeness to Western Europe, as measured by distance from Düsseldorf.

Table 2: History and economic reform

	Dependent variable: Change 1989-2010 in EBRD Reform Score			
	(1)	(2)	(3)	(4)
EBRD reform score 1989 (0 to 1)	-1.019	-1.352	-1.298	-0.834
	(0.286)***	(0.252)***	(0.239)***	(0.299)**
Proportion of population Protestant or Anglican, 1995	0.924	0.543	0.660	0.348
	(0.288)***	(0.227)**	(0.326)*	(0.238)
Proportion of population Catholic, 1995	0.174	0.079	0.100	
	(0.070)**	(0.079)	(0.096)	
Proportion of population Orthodox Christian, 1995	0.008	-0.042	-0.083	
	(0.050)	(0.060)	(0.088)	
Proportion of population Muslim, 1995	-0.245	-0.232	-0.285	-0.249
	(0.116)**	(0.112)*	(0.119)**	(0.114)**
Years under communism		-0.005	-0.005	-0.007
		(0.002)*	(0.002)**	(0.003)**
Fraser Institute "Economic Freedom Score" of closest neighbor(s) outside Soviet Bloc 1985			-0.038	
			(0.055)	
Transition year GDP per capita				0.009
				(0.008)
Transition year exports (percent GDP)				-0.001
				(0.001)
Distance from Düsseldorf, thousand kms				0.000
				(0.000)
Constant	0.651	0.987	1.218	0.994
	(0.054)***	(0.147)***	(0.418)***	(0.131)***
R^2	0.64	0.70	0.69	0.68
N	28	28	27	25

Sources: World Bank, EBRD, Fraser Institute, Polity IV database, ARDA National Religion Database, author's calculations.
Notes: Robust standard errors in parentheses; * p <.10, ** p < .05, *** p < .01.

It may well be that the geographical convergence on reform strategy reflected underlying cultural commonalities, associated with countries' different religious and communist-era

legacies. But how did such legacies translate into slower or faster reform? I will return to this question. But first, I turn to the consequences of adopting different reform strategies.

Tortoises or hares?

Among those committed to economic reform at the start of the 1990s, the desired endpoint was clear: a flourishing, globally integrated, market system. Consensus also existed on the main elements of reform—price and trade liberalization, macroeconomic stabilization, privatization, competition policy, the creation of market institutions, and the construction or reconstruction of a social safety net. But how to do all this? Economists quickly split into two camps. Some favored moving on all fronts simultaneously in a strategy known to its supporters as "radical reform" and to its critics as "shock therapy." Others, who advocated a more measured pace and deliberate sequencing of elements, were dubbed "gradualists."

Both sides drew on a battery of arguments—some economic and technical, others practical and political. Radical reformers noted that the individual reforms were complementary and likely to fail unless introduced together. Partial liberalization—if not combined with measures to enhance competition—would create opportunities for rent-seeking (Murphy, Shleifer, and Vishny 1992; Balcerowicz 1994, p.82). The bureaucrats ensconced in state offices—ignorant of economics, inefficient, often corrupt—were not up to the task of managing a carefully sequenced program. Many were already busy grabbing assets (Aslund 1995). The economic collapse in which reformers came to office ruled out delay. With only a few months' worth of grain reserves and no hard currency to buy more, Russia's Yegor Gaidar saw no choice but to leap to market pricing (Gaidar 2000).

On the political side, radicalists urged speed to exploit the fleeting public euphoria after communism ended and before the communists regrouped. This honeymoon of "extraordinary politics" would soon yield to dismay at the pain of adjustment. As the Polish economist Leszek Balcerowicz put it: "Bitter medicine is easier to take in one dose" (Balcerowicz 1994, pp.84-6). Others hoped that rapid reform—in particular, privatization—would create a class of property owners who would then fight to preserve and expand market relations (Aslund 1995, Bocyko et al. 1995, p.151).

For their part, gradualists often asserted—or sometimes assumed—that radical reforms would bring more economic pain than a slower approach (Przeworski 1991, 1995). Changing too much at once would lead to disorganization and waste of resources.[8] Murrell (1992a, 1992b) argued that reform should proceed by means of localized experiments, thus reducing risk to the population. Invoking Edmund Burke, he insisted that new market institutions would have to evolve at their own pace and could not be willed into being by technocrats in a hurry. Others saw political advantages to sequencing: reformers could forge different coalitions to back parts of the program even if no broad coalition would support the package as a whole (Dewatripont and Roland 1992, 1995). Many were inspired by apparent successes of a gradual approach in China (Murrell 1992a, p.80).

So who was right? To begin, did radical reform entail greater economic costs? In fact, countries with faster early reforms tended to have *smaller* output contractions and lower unemployment. It was the slow reformers that suffered most. Starting from each country's transition year, I added up the annual shortfalls in real GDP per capita (relative to the transition

[8] Blanchard and Kremer (1997) later formalized this idea.

year) in all years until output recovered to the initial level (or until 2010 if that came first). On this metric, Tajikistan was the absolute champion, registering a total contraction equal to almost 10 times its transition-year output. By contrast, the Czech Republic, Estonia, Poland, Slovenia, and Mongolia all had decreases of less than one transition year's output. I will call "radical reformers" those countries that increased their score on the EBRD scale by at least 40 percentage points in their first three years of transition. "Moderate reformers" are those whose scores rose by between 25 and 40 points, and "slow reformers" are those whose score rose by less than 25 points. Table 3 shows that speed of reform is *negatively* associated with output contraction.

Of course, the early national accounts data should be treated with caution. Much informal production avoided detection, and the initial level of output was inflated by counting shoddy goods that no free consumer would choose to buy. Still, the relationship remains negative if we adjust the GDP figures to include estimates of unofficial output, using the electricity-consumption-based measures of Kaufmann and Kaliberda (1996) (Table 3, column 2).

Unemployment data in the early years are sketchy. But restricting attention to those countries for which figures on unemployment using the ILO definition are available, it turns out that average unemployment rates were *lower* in the first five years of transition in the more radical reformers. One should not put too much trust in statistics collected in the middle of an economic revolution, and the differences are not always statistically significant given the small number of countries and large variation. Still, there is no evidence that a slower approach to reform reduced the disruption of transition. All signs point in the opposite direction.

With hindsight, the impassioned debates between gradualists and radical reformers look like a distraction. In the intellectual jousting, Hungary was often pitted against Poland. Hungary's leaders prided themselves on moving more judiciously than Warsaw's ideologues.

The finance minister, Mihaly Kupa, in June 1991 rejected a "very rapid transition to markets," and pledged to "proceed more prudently," and "not to exclude anyone from this process of transition" (quoted in Przeworski 1993, p.150). Yet looking at the two countries' paths on the EBRD graphs, it is hard to tell them apart. In some years Hungary lagged slightly behind Poland, in others it took the lead. They were never separated by more than 14 percentage points—and that only in the first year, 1990. Compared to the huge gaps that opened up between, on one side, Hungary and Poland, and, on the other, Turkmenistan (about 75 points below both of them in 2010), the nuances of strategy look secondary.

Table 3: Radical reform and output in the transition

	(1)	(2)	(3)
	Average output contraction, up to 2010 or recovery year (% of transition year output)	Average output contraction, first 3 years of transition, *including estimate of unofficial output* [a] (% of adjusted transition year output)	Average unemployment rate, first five years of transition [b]
Radical reformers	-202	-37	9.0
Moderate reformers	-295	-43	10.3
Slow reformers	-409	-57	17.7

Sources: World Bank, EBRD, Kaufmann and Kaliberda (1996) for estimates of unofficial output 1989-1994.
Notes: Radical reformers: increased EBRD score by at least 40 percentage points in first 3 years of transition; moderate reformers: increased EBRD score by 25-40 percentage points in first 3 years of transition; slow reformers: increased EBRD score by less than 25 points in first 3 years of transition. GDP per capita in real terms, adjusted for purchasing power parity. GDP per capita for Poland, Czech Republic, Lithuania, Belarus, and Kazakhstan in 1989 calculated using EBRD Macroeconomic Indicators. [a] Data on unofficial output only available for: Czech Republic, Estonia, Poland, Moldova, Hungary, Latvia, Russia, Uzbekistan, Ukraine, Bulgaria, Georgia, Romania, and Azerbaijan, and only up to 1994.
[b] Data on unemployment (by ILO definition) only available for Estonia, Czech Republic, Slovakia, Latvia, Lithuania, Russia, Poland, Hungary, Slovenia, Bulgaria, Albania, Mongolia, Croatia, Georgia, Macedonia, Yugoslavia, and Montenegro.

That said, speed *was* of the essence. Advocates of radical reform were mostly right. Hungary did so well not because it was gradualist but because, in practice, it was *not*. It reformed as rapidly and comprehensively as Poland. While most countries did some reform in the early 1990s, speed in those years determined which made it to the endpoint and which got stuck

halfway. Those that started more slowly never caught up. And, as noted, they suffered larger output contractions and higher total unemployment. The race went to the hares, not the tortoises.

Were the gradualists entirely mistaken? They were right that some types of change would take longer. While in a narrow sense the reformers could create new market institutions—unemployment insurance, regulatory regimes—they could not dictate how the laws and agencies they formed would operate in the field. In this sense, new institutions did have to evolve. Compared to liberalization and privatization, the creation of market institutions proceeded more slowly; the EBRD ratings for this show much less of an early surge and a steadier rise, continuing after 2000. Where the gradualists erred was in thinking that the best environment for market institutions to evolve was a stagnating or very slowly reforming communist economy. If this were the case, institutional reforms would have advanced the fastest in countries where liberalization and privatization were slowest. In fact, the opposite was true: as of 1996, the extent of institutional reforms correlated strongly and positively with the extent of liberalization and privatization ($r = .77$ and $r = .85$, respectively). The best setting for institutions to evolve turned out to be a country that was undergoing rapid marketization (cf. Mau 1999, Havrylyshyn 2006).

In light of the subsequent slowdown, the collective surge of reform in the early 1990s is surprising. What made countries that would later stall or slide backwards (e.g., Belarus, Uzbekistan) nevertheless start out quite strong? Was this "extraordinary politics" on a continental scale, as liberal reformers everywhere raced to act before opposition could reappear? This seems unlikely. The period is too long to plausibly be considered "extraordinary." Moreover, the reformers in these years were not all liberals. Much of Lithuania's dash to the market occurred under a former communist president and government in 1993-6.

These years were clearly different. Disintegration of the Comecon bloc forced all to react. In many places, the explosion of macroeconomic crises as the old economic bureaucracies disintegrated left leaders without the option to regulate prices and trade as before. Liberalization occurred in part by default. At the same time, given the porous borders, Russia's freeing of prices made it hard for other former Soviet states to keep them controlled; consumer goods would have disappeared across the Russian border where traders could pocket a huge profit. Fashion may also have played a role, with the new leaders of former Soviet republics copying Moscow's economic policies out of confusion about what else to do.[9] However, there was another reason as well, to which I will return.

Losers, winners, and communists

Countries' contrasting reform paths might reflect differences in the way opposition to reform emerged. Observers had expected a counterattack; the question was from which direction it would come. At the outset two views prevailed. The first considered the main obstacle to de-communization to be communists. Everywhere, members of the old party elite retained high political—or at least bureaucratic—offices (Balcerowicz 1994, p.77). These apparatchiks lacked the human capital and motivation to create a market system. Successful reform would require replacing them—through elections, or, perhaps, lustration (Shleifer 1997).

The second view saw the main opponent of reform as the general public, which—it was assumed—would turn against the reformers as the pain of transition materialized. The path to the new order ran through what Przeworsksi called the "Valley of Transition" and Ralf Dahrendorf,

[9] I thank John Odling-Smee for these observations.

more evocatively, dubbed the "Valley of Tears." Consumption would have to fall for the majority of citizens and would only recover after some time. In the interim, the "losers" could be rallied by "populists" to vote the reformers out of office, reinstate the communists, and reverse progress towards the market.

If the main threat was the organized opposition of the losers, the solution seemed clear but unpalatable. In some Latin American and Asian countries, authoritarian rulers had managed to introduce far-reaching market reforms while repressing resistance (Haggard and Webb 1993, p.145). The German political thinker Claus Offe wondered whether "democratic rights must be held back to allow for a healthy dose of original accumulation" (Offe 1996, p.41). Even those who rejected authoritarian options sometimes saw a strong, insulated executive as necessary.[10]

But were the old communist elite or the new "losers" from reform the real problem? After a few years, another possibility emerged. As predicted, partial reforms had created huge opportunities for arbitrage and rent-seeking (Aslund 1995). Hellman (1998) argued that it was not the "losers" but precisely the rent-seeking "winners" from early reform—state managers turned private owners, new bankers, oligarchs, and mafiosi—that were conspiring to freeze it midway. Having grown rich on "transitional" rents, they "captured the state" in order to preserve such income streams. Challenging the argument that new property owners would lobby for rule of law, Sonin (2003) showed with a formal model how the rich in transitional societies might prefer the state *not* to protect the property rights of the poor.

[10] Przeworski (1991, 1995), having articulated the dilemma, made it clear he would choose full-fledged democracy over market reform, but he sometimes suggested that one could achieve a better, "social democratic" version of economic reform through inclusive negotiations with all social forces, culminating in a "pact." Pacts made some sense—and had occasionally worked in the past—as a means of levering an authoritarian elite from power. Their usefulness was less obvious in a democracy. If, as assumed, the "losers" constituted a majority and blamed reform for their hardship, it was unclear why they would settle for a pact with the reformers rather than simply voting them out of office and returning to communism.

If this were the correct diagnosis, what would be the solution? Hellman argued for more inclusive and competitive democracy—"more frequent elections and shorter executive tenures," as well as broad coalition governments (Hellman 1998, p.205). More leader turnover would undermine corrupt alliances, and coalition governments would help dissipate rents. Of course, if the "winners" of reform had captured the state, they were unlikely to take Hellman's advice and institute competitive, inclusive arrangements that would undermine their profits. And frequent turnover might just empower successive teams of rent-seekers, each hungrier than the last.

Shleifer and Treisman (2000) suggested that reformers could sometimes design context-specific strategies to wean both new and old elites from their opposition to particular measures. Some could be coopted, persuaded to exchange their rents for other less socially costly benefits. Others could be isolated and deprived of leverage. This required skill and courage on the part of reformers, who would have to turn on their erstwhile allies, shaping new coalitions to push marketization forward.

To what extent were these views borne out by events? The argument that "losers" would reverse reforms relied on assumptions that turned out to be flawed. First, economic reforms—especially radical ones—were assumed to lead to recession in the short run. Second, voters were expected to respond to such recessions by voting out the incumbents in favor of populists, who would undo the reforms. In fact, as already noted, it was not just rapidly reforming countries that experienced a transitional recession: they all did. The countries that reformed the *least* in the first three years suffered the largest output drops. Moreover, what the voters really disliked turned out to be not painful reform but simply pain. They rejected incumbents who presided over bad economic times whether they were shock therapists, gradualists, or conservative communists.

And that meant rejecting almost everyone. Andrew Roberts (2010, pp.57-84) examined the 34 legislative elections that occurred up to 2004 in 10 of the more democratic postcommunist countries.[11] In almost 90 percent of these elections, the government coalition lost votes—usually a lot. On average, its total fell by 15 percentage points. These vote losses were completely unrelated to the government's reform record, as measured by the EBRD scores. But they did correlate with poor economic performance—especially high unemployment. Governments that presided over poor performance were more likely to be thrown out of office. In short, what cost incumbents votes and often control of the government was not reform but the economic crises that sometimes prompted it.

Despite economic pain, majorities in many countries continued to favor the market. The Central and Eastern Eurobarometer polled the populations of 21 postcommunist countries repeatedly between 1990 and 1997. Even in the year of their country's maximum GDP per capita contraction, the majority in Albania, Slovenia, Romania, Poland, Estonia, Bulgaria, the Czech Republic, and Lithuania still said that "the creation of a free market economy, that is one largely free from state control," was right for their country's future. In addition, in Hungary, Latvia, and Macedonia more thought the free market economy was right for them than thought it was wrong.[12] In the year of maximum contraction, more respondents said reforms were going "too slow" than said they were going "too fast" in all 13 countries for which data were available; on average, 34 percentage points more respondents thought reforms were too slow.

[11] Specifically, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. He did not include the first semi-free elections in each country, in which communist parties still set the terms and stacked the deck.

[12] See data at http://zacat.gesis.org/webview/index.jsp?object=http://zacat.gesis.org/obj/fStudy/ZA3648, and also Roberts (2010) and Aslund, Boone, and Johnson (2006).

Thus, although turnovers to left-wing governments (not to mention right-wing governments) did occur as economies crashed, the new "populists" generally resisted the temptation to reverse reforms. Roberts found no relationship between what parties promised on the issue of reform before elections and what they did in office (as measured by the EBRD). Hungary's experience is instructive. There, as GDP per capita bottomed out in 1993-4, about 18 percentage points below its 1989 level, angry voters returned the reconfigured former communists to power in a landslide. This would seem to fit the populist revanche story—except that a majority of Hungarians that year, 56 percent, thought economic reform was progressing not too fast but too slowly.[13] The new socialist government under Gyula Horn wisely disregarded ideology to continue reforms, introducing a necessary but painful fiscal austerity package.

Was it the power of insider, pseudo-market elites that caused the reform slowdown from the mid-1990s? On the one hand, this seems plausible. Virtually everywhere, one heard stories of newly minted oligarchs or bureaucrats corrupting the government and courts to seek private advantages. Whenever reforms slowed, the delay seemed to be making someone rich.

But this argument also has some problems. First, its timing is off. Market reforms surged in the early 1990s, then logjammed after 1995. However, most estimates of rents suggest they started out huge and fell sharply by the mid-1990s (Aslund, Boone, and Johnson 1996). Subsidies were cut from budgets; inflationary policies were reined in; state enterprises were privatized, at least partly depriving them of fiscal support. To some extent, this reflected successful maneuvering by reformers, cutting out the "winners" by shifting coalitions midstream (Shleifer and Treisman 2000). Rents were also eroded as other market actors adapted or

[13] CEEB data at http://zacat.gesis.org/webview/index.jsp?object=http://zacat.gesis.org/obj/fStudy/ZA3648.

arbitraged away the opportunities. Of course, some rents remained, especially around the still-regulated energy sectors, but far less in most countries than a few years earlier.

It could be that by the mid-1990s the early "winners" had accumulated enough capital to capture the state. Measuring state capture is difficult. But Hellman and colleagues (Hellman, Jones, and Kaufmann 2000) present one index of the extent of state capture as of 1999. The index is based on answers by firm managers to a set of survey questions about whether their business had been affected by the purchase (by others) of presidential decrees, parliamentary legislation, court decisions, and other regulatory outputs. On this measure, state capture was highest in Azerbaijan and lowest in Uzbekistan. If capture were associated with less reform in the period from the mid-1990s, we should expect to see a negative correlation between the index of state capture and the change in countries' reform scores between 1995 and 1999. In fact, the correlation is slightly positive ($r = .22$), suggesting that countries where corrupt lobbying was most effective reformed slightly more on average. Azerbaijan, for instance, recorded substantial increases in liberalization and privatization.

If the "losers and populism" story seems to be mostly wrong and the "winners and state capture" one plausible but problematic, what about the view that the old communists would be the main obstacle? Later I will show that there is some evidence for this, but not as strong as one might expect. Simply comparing the average increase in reform score in years when a former high communist official was the head of the executive to years in which the head was not a communist or member of a communist successor party and had not been a high communist official, there is almost no difference. I also found no clear relationship between the speed of reform and the share of seats in the legislature held by communist parties and their successors. This might seem strange, but former communists were far from homogeneous. While some

certainly blocked reforms, others—for instance, Lithuania's Brazauskas—oversaw periods of rapid progress. The Gaidar reforms in Russia occurred under a president who, a few years before, had been a member of the Soviet Politburo.

Democracy and markets

The fear that democracy would empower the "losers" to reverse marketization got it exactly backwards. Democracy turned out to be the single strongest predictor of reform speed. All the communist countries were highly authoritarian as of the late 1980s. Some made quick transitions to much more accountable regimes; others did not. Quite early in the transition, scholars noted a strong correlation between economic liberalism and democracy among these countries in a given year. (EBRD 1999, Aslund 2013, p.240). Using the Polity2 measure of democracy, I show here that this relationship remains strong in a dynamic setting, focusing not just on the differences across countries but on differences between more and less democratic periods in the same country. Estimating an error correction model, I demonstrate that there is a long-run equilibrium relationship between how democratic a postcommunist country's political system is and how economically liberal is its economy (Table 4). In those countries that remained authoritarian, the economy tended to converge to a partially reformed state around the middle of the EBRD scale. Those that became highly democratic also moved comprehensively towards free markets.

But was it really democracy that led to economic reform? Or was it that certain countries, for other reasons were positively predisposed towards both economic and political reforms? Could some global shock have caused political and economic reforms to cluster in the same years purely by coincidence?

Table 4: Democracy and Economic Reform in the Post-Communist World

	----------Dependent variable: Δ Ec. Reform Score$_t$----------					
	(1)	(2)	(3)	(4)	(5)	(6)
Ec. Reform Score$_{t-1}$	-0.173	-0.134	-0.315	-0.307	-0.306	-0.317
	(0.019)***	(0.016)***	(0.035)***	(0.035)***	(0.040)***	(0.036)***
Democracy$_{t-1}$	0.089	0.060	0.064	0.064	0.062	0.066
	(0.018)***	(0.012)***	(0.033)*	(0.031)**	(0.031)*	(0.033)*
Δ Democracy$_t$	-0.032	0.008				
	(0.025)	(0.030)				
Δ Democracy$_{t-1}$		0.118	0.053	0.037	0.041	0.052
		(0.042)***	(0.024)**	(0.022)	(0.019)**	(0.023)**
Δ Ec. Reform Score$_{t-1}$		0.222	0.126	0.151	0.148	0.122
		(0.038)***	(0.043)***	(0.041)***	(0.040)***	(0.042)***
Ln GDP per capita$_{t-1}$				-0.003	-0.001	
				(0.015)	(0.016)	
Δ Ln GDP per capita$_{t-1}$				0.047	0.051	
				(0.045)	(0.045)	
Ln oil income p.c.$_{t-1}$					-0.003	
					(0.005)	
Δ Ln oil income p.c.$_{t-1}$					-0.003	
					(0.009)	
Economic crisis$_t$ (growth <-5 percent)						-0.008
						(0.009)
Country and year fixed effects	NO	NO	YES	YES	YES	YES
Long-run elasticity ($-\gamma / \beta$)	0.51	0.45	0.20	0.21	0.20	0.21
Constant	0.057	0.048	0.146	0.175	0.169	0.153
	(0.013)***	(0.011)***	(0.043)***	(0.147)	(0.151)	(0.045)***
R^2	0.38	0.46	0.63	0.62	0.60	0.63
N	530	519	519	517	508	519

Sources: World Bank, EBRD, Polity IV database, ARDA, Michael Ross Petroleum Income database.
Notes: Democracy: Polity2 score, rescaled to 0 - 1. Economic Reform Score: EBRD score (average of 8 sub-indicators), rescaled to 0 - 1. Standard errors clustered by country in parentheses; * p <.10, ** p < .05, *** p < .01. Equation estimated: $\Delta EBRD_{it} = \alpha + \beta EBRD_{it-1} + \gamma Democracy_{it-1} + \delta \Delta Democracy_{it} + \lambda Controls + \varepsilon_{it}$. The long-run relationship between democracy and economic liberalism is characterized by the long-run elasticity.

Table 4: (cont.)

Dependent variable:	---------- *Δ Ec. Reform Score$_t$* ----------					*Δ Democracy$_t$*
	(7)	(8)	(9)	(10)	(11)	(12)
Ec. Reform Score$_{t-1}$	-0.336	-0.306	-0.295	-0.315	-0.315	-0.034
	(0.036)***	(0.036)***	(0.037)***	(0.035)***	(0.035)***	(0.097)
Democracy$_{t-1}$	0.067	0.064	0.062	0.062	0.064	-0.193
	(0.029)**	(0.033)*	(0.036)*	(0.033)*	(0.033)*	(0.054)***
Δ Democracy$_{t-1}$	0.044	0.046	0.038	0.054	0.053	0.047
	(0.023)*	(0.025)*	(0.026)	(0.024)**	(0.024)**	(0.069)
Δ Ec. Reform Score$_{t-1}$	0.112	0.135	0.130	0.124	0.126	0.029
	(0.043)**	(0.044)***	(0.052)**	(0.042)***	(0.043)***	(0.093)
War$_{t-1}$	-0.029					
	(0.014)**					
Civil War$_{t-1}$	-0.027					
	(0.023)					
Ln foreign aid $_{t-1}$		-0.001				
		(0.001)				
Δ Ln foreign aid $_{t-1}$		-0.001				
		(0.002)				
EBRD score of neighbors$_{t-1}$			-0.003			
			(0.012)			
Δ EBRD score of neighbors$_{t-1}$			0.042			
			(.025)			
Will join EU within 5 years				0.002		
				(0.006)		
Joined EU in previous 5 years				-0.005		
				(0.008)		
Country and year fixed effects	YES	YES	YES	YES	YES	YES
Long-run elasticity $(-\gamma / \beta)$	0.20	0.21	0.21	0.20	0.20	Not sig.
Constant	0.152	0.135	0.112	0.148	0.146	0.170
	(0.041)***	(0.040)***	(0.037)***	(0.043)***	(0.043)***	(0.044)***
R^2	0.64	0.61	0.57	0.63	0.63	0.22
N	519	497	469	519	519	520

Sources: World Bank, EBRD, Polity IV database, ARDA, Michael Ross Petroleum Income database.
Notes: Democracy: Polity2 score, rescaled to 0 - 1. Economic Reform Score: EBRD score (average of 8 sub-indicators), rescaled to 0 - 1. Standard errors clustered by country in parentheses; * p <.10, ** p < .05, *** p < .01. Equation estimated: $\Delta EBRD_{it} = \alpha + \beta EBRD_{it-1} + \gamma Democracy_{it-1} + \delta \Delta Democracy_{it} + \lambda Controls + \varepsilon_{it}$. The long-run relationship between democracy and economic liberalism is characterized by the long-run elasticity.

Using year and country dummies to control for any common global shocks and country characteristics that were fixed throughout the transition period, one can isolate the relationship between democracy and markets within individual countries. The link remains strong. Moreover, democracy helps explain why, as noted earlier, countries with Islamic traditions and longer histories of communism reformed less. Adding countries' average democracy scores in the first 18 years to the regression in Table 2, column 4, democracy has a strongly significant positive effect (not shown). The Islam effect falls to insignificance and actually turns positive, while the influence of years under communism is cut by more than half (and rendered insignificant). The proportion of variance explained jumps from .68 to .76. A plausible interpretation is that a Muslim religious tradition and a longer experience of communism reduced a country's odds of democratization, and less political reform meant less economic reform.[14]

Democracy also remains significant controlling for a variety of other possible causes of economic reform—countries' income levels and growth rates, economic crisis, their revenue from oil and gas, wars, civil wars, foreign aid, EU membership (planned or consummated), even the average reform scores of their neighbors (in case reform diffused across borders). Among these variables, the only one that proved significant, controlling for democracy as well as country and year, was war (if the country was at war the previous year, its EBRD score increased by three percentage points less that year on average). Present and future EU members did marketize more—but in all years, not just those preceding or following accession. The negotiations and admissions process themselves had no discernible effect.

In which direction does causation run? Did political reforms induce economic ones or

[14] Treisman (2012) found precisely that a Muslim religious tradition and more years under communism correlated robustly with less democratization in the postcommunist countries.

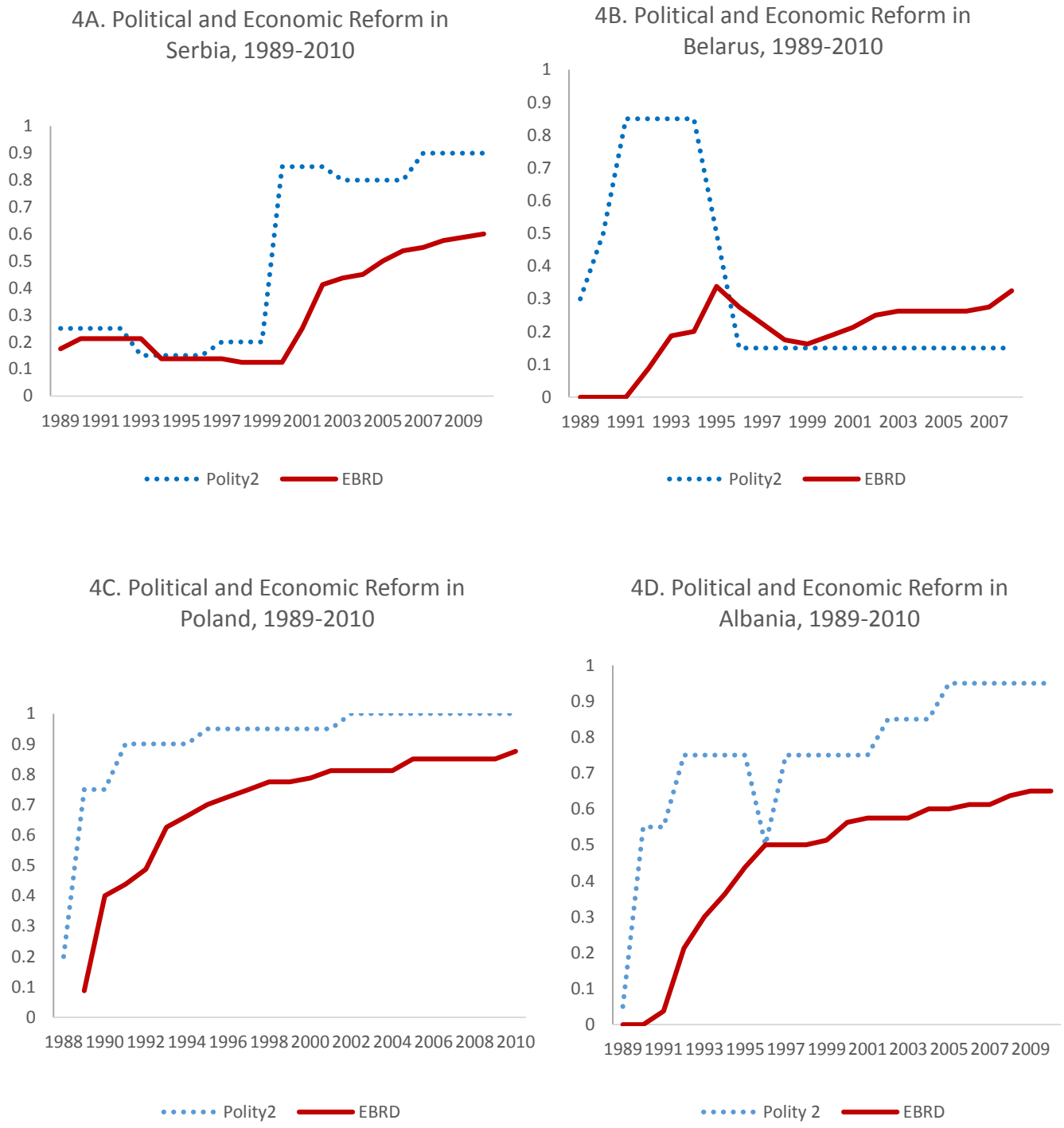
vice versa? After all, many have argued that free markets and private property—along with the economic development they stimulate—foster stable democracy. There is no sure way to answer this, but some evidence is offered by tests of Granger causality, which explore whether changes in one series tend to precede changes in the other, or vice versa. In fact, a rise in democracy in one year strongly predicts a rise in economic reform in the next (Table 4, column 11). But faster economic reform in one year has no significant effect on political reform the following year (Table 4, column 12). Free markets may well support democracy in a longer perspective. But in the very short run there is evidence that political reforms induced economic liberalization.

Yugoslavia provides a vivid illustration (Figure 4A). Under Milosevic in the 1990s, politics at first grew even less democratic than under the late communist regime. Milosevic also reintroduced price regulations in 1994. It was only after Milosevic's fall from power and a rapid democratization under his successor, Vojislav Kostunica, that Serbia embarked on major economic reforms to catch up with the rest of post-communist Europe. Belarus shows the dynamic in the opposite direction. The country began moving towards the market during its democratic period in the early 1990s. After it succumbed to authoritarian rule under Aleksandr Lukashenko, economic reforms also reversed (Figure 4B).

After accounting for most other factors, the long run level of market liberalism is about 20 percentage points higher in a perfect democracy than in a perfect autocracy. In the short run, a jump in democracy leads to an increase in economic reform. The post-communist countries' experience strongly rebuts the argument that authoritarian insulation is necessary for reform.[15]

[15] Giuliano, Mishra, and Spilimbergo (2010) find in a broader dataset that around the world democracy tends to support adoption of economic reforms. Amin and Djankov (2009) also found that democracy predicts better performance on the World Bank's Doing Business indicators.

Figure 4: Trajectories of four postcommunist countries, 1989-2010



Why did democracy matter? In what ways did it facilitate economic changes? The Polity democracy indicator is composed of several elements. One measures the extent to which the chief executive was constrained by the legislature, judiciary, or other institutional checks and balances. A second captures whether the chief executive was chosen in competitive elections.[16] Table 5 shows that both of these are related to the pace of economic reform, but in different ways. The introduction of competitive elections for the chief executive was associated with a short-run increase in countries' reform scores, but there was no tendency for systems with such elections to converge to any particular level of market liberalism. On the other hand, an increase in constraints on the executive had no short-run impact on reform—but more constrained executives *were* associated in the long run with more liberal economies (column 1).

Did democracy prompt reform by stimulating leader turnover? According to the EBRD: "new political leaders, and the new elite that support them, have had greater incentive to introduce reforms" (EBRD 1999, p.106). Worldwide, new leaders are more likely to introduce constitutional reforms than leaders in office for a long time (Treisman 2014). This did not appear to be the crucial element. Controlling for country and year as well as for war, the pace of economic reform among the postcommunist countries was not significantly higher in the year after leader change (column 2). Nor did the frequency of elections appear to make a difference (columns 3-4). Turnover of bureaucratic or local political officials could have facilitated reform—I lack the data to explore this—but the replacement of central leaders did not, in itself, have an easily discernible general effect.

[16] I convert Polity's "xrcomp" to a dichotomous variable.

Did it help when elections were more competitive? As shown already (column 1), increasing the competitiveness of executive elections had a short-run positive effect on reform—although the level of competitiveness did not have a clear long-run effect. When a single party dominated the legislature, marketization was slower. The greater the vote share won by the largest government party, the less that government reformed (column 6). Hellman argued that broader government coalitions would "have a lower risk of being captured exclusively by the net winners of reform," who would want to lock in their gains. In fact, the more parties there were in a government coalition, the less marketization took place (column 7). Presumably, the additional veto players created by multiparty government protected rent-seekers as well as the public.[17] Finally, although leader turnover did not prompt reform in general, turnover to the first non-communist head of government did. Countries where all leaders since the start of transition had been communists, members of communist successor parties, or former high communist officials, were slower to create markets (columns 8-9).[18]

In short, over the longer run the checks and balances of democracy led to a higher level of economic liberalism; at the same time, competitive and frequent elections helped to dislodge the old communist leadership and motivate presidents to reform. Other aspects of democracy, such as a free press, may also have mattered, but I lacked adequate data to explore them here.

[17] Another argument that more veto players blocked economic reform was made by Tim Frye, who pointed out that political polarization—the coexistence of a right wing head of government with a strong faction of communists in the parliament (or vice versa)—correlated with slower marketization (Frye 2010).

[18] A communist or former communist leader taking office after turnover to a non-communist had occurred at least once did not on average slow reform. The effect of more communists in the legislature was negative but not significant.

Table 5: Aspects of the Political Process and Economic Reform

	(1)	(2)	(3)	(4)	(5)
Economic Reform Score$_{t-1}$	-0.347	-0.297	-0.310	-0.340	-0.316
	(0.042)***	(0.034)***	(0.044)***	(0.068)***	(0.046)***
Democracy$_{t-1}$		0.065	0.069	0.156	0.071
		(0.023)***	(0.027)**	(0.066)**	(0.031)**
Δ Democracy$_{t-1}$		0.028	0.020	-0.074	0.022
		(0.025)	(0.021)	(0.035)*	(0.023)
Δ Economic Reform Score$_{t-1}$	0.087	0.116	0.197	-0.088	0.197
	(0.040)**	(0.049)**	(0.044)***	(0.099)	(0.052)***
War$_{t-1}$	-0.082	-0.079	-0.077	n.a.	-0.085
	(0.033)**	(0.031)**	(0.020)***		(0.023)***
Competitive elections for chief executive$_{t-1}$	0.004				
	(0.008)				
Δ Competitive elections for chief executive$_{t-1}$	0.025				
	(0.009)***				
Constraints on the executive$_{t-1}$	0.072				
	(0.028)**				
Δ Constraints on the executive$_{t-1}$	0.019				
	(0.025)				
Leader changed $_{t-1}$		0.001			
		(0.005)			
Years since last presidential election [a]			-0.002		
			(0.001)		
Years since last legislative election[b]				-0.001	
				(0.001)	
Proportion of votes for winner, first round of pres. election [a]					-0.007
					(0.020)
Country and year Fixed Effects	YES	YES	YES	YES	YES
Long-run elasticity $(-\gamma / \beta)$	0.21 [c]	0.22	0.22	0.46	0.22
Constant	0.168	0.104	0.050	0.093	0.052
	(0.035)***	(0.029)***	(0.033)	(0.080)	(0.039)
R^2	0.65	0.62	0.61	0.76	0.64
N	500	512	285	169	288

Sources: World Bank, EBRD, Polity IV database, Database on Political Institutions, author's calculations.
Notes: Democracy: Polity2 score, rescaled to 0 - 1. Economic Reform Score: EBRD score (average of 8 sub-indicators), rescaled to 0 - 1. Standard errors clustered by country in parentheses; * p <.10, ** p < .05, *** p < .01. Equation estimated: $\Delta EBRD_{it} = \alpha + \beta EBRD_{it-1} + \gamma Democracy_{it-1} + \delta \Delta Democracy_{it} + \lambda Controls + \varepsilon_{it}$. The long-run relationship between democracy and economic liberalism is characterized by the long-run elasticity. [a] only presidential systems [b] only parliamentary systems [c] elasticity for constraints on the executive.

Table 5: (cont.)

	(6)	(7)	(8)	(9)
Economic Reform Score$_{t-1}$	-0.305	-0.292	-0.292	-0.294
	(0.060)***	(0.038)***	(0.035)***	(0.034)***
Democracy$_{t-1}$	0.134	0.074	0.061	0.068
	(0.060)**	(0.028)**	(0.019)***	(0.020)***
Δ Democracy$_{t-1}$	-0.075	0.065	0.030	0.027
	(0.036)*	(0.033)*	(0.023)	(0.023)
Δ Economic Reform Score$_{t-1}$	-0.186	0.131	0.110	0.090
	(0.089)*	(0.046)***	(0.047)**	(0.051)*
War$_{t-1}$	n.a.	-0.067	-0.078	-0.073
		(0.042)	(0.033)**	(0.034)**
Proportion of votes for largest	-0.045			
government party, legislative election [b]	(0.022)*			
Number of parties in		-0.004		
government coalition		(0.022)*		
Leader is communist or former comm.			-0.013	-0.012
official, no turnover has occurred			(0.007)*	(0.007)*
Leader is communist or former comm. official,			-0.003	-0.001
turnover to non-comm. government *has* occurred			(0.002)	(0.004)
Proportion of seats in legislature held by				-0.021
communist or successor parties				(0.018)
Country and year fixed Effects	YES	YES	YES	YES
Long-run elasticity				
$(-\gamma / \beta)$	0.44	0.25	0.21	0.23
Constant	0.133	0.110	0.110	0.116
	(0.075)	(0.041)**	(0.026)***	(0.025)***
R^2	0.78	0.62	0.62	0.63
N	161	448	512	504

Sources: World Bank, EBRD, Polity IV database, Database on Political Institutions, author's calculations.

The role of leaders

Did individual leaders make a difference? Certain reform programs quickly became associated with the economists who designed them. One talks of the "Gaidar reforms," the "Balcerowicz Plan." "Successful domestic reform depends on vigorous political leadership" Jeffrey Sachs insisted, as Russia's leader wavered in 1994 (Sachs 1994, p.503, quoted in Aslund 2013, p.249).

Yet, in evaluating what happened, how can one separate out the contribution of the individual leader from that of the context in which he acted? Was it the man or his times?

To begin, one can look at how much the country's EBRD score changed each year during a particular leader's tenure. Doing this for the roughly 120 leaders who served in the postcommunist countries during the transition period, one finds considerable variation. (By "leader," I mean the president in presidential systems and the prime minister in parliamentary and semi-presidential ones; in addition, I included Yegor Gaidar and Leszek Balcerowicz, who served as acting prime minister of Russia and deputy prime minister of Poland). Gaidar had the highest average annual reform score increase (.25 in Russia in 1992), followed by Dimitar Popov (.2 in Bulgaria in 1991) and Balcerowicz (.18 in Poland in 1990-91) (see Table 6).

However, simply to compare the extent of reform ignores the huge differences in setting. A leader inaugurated when his country was already near the top of the scale obviously could not reform much more. For other reasons, particular years may have been more or less favorable, distorting the scores of those who served in those years. Needless to say, reforming in a country like the Czech Republic poses a different set of challenges than reforming in Azerbaijan.

A more informative comparison would control for the factors other than leadership believed to influence the pace of marketization. I calculated the extent to which actual reform levels under given leaders diverged from the levels that would be predicted on the basis of the country's level of democracy, its previous-year level of economic liberalism, any fixed characteristics of the country, any common shocks to all countries in a given year, whether the country was at war, and the proportion of legislative seats held by communists or communist successor parties. These estimates now compare each leader not to all the other postcommunist

leaders but to the other leaders who served during the postcommunist period in the same country, under roughly similar conditions.

Adjusting in this way, Gaidar's reforms in Russia in 1992 stand out even more. Not only was Gaidar's annual reform score higher than that of any other reformer, the gap was greater taking into account Russia's middling level of democracy and Supreme Soviet dominated by former communists. He is now followed by Balcerowicz and then Popov.

Table 6: Speed of reforms under different leaders, postcommunist countries

	Leader	Country	Years evaluated	Average annual change in EBRD score	Divergence from level predicted on basis of country and year characteristics	
					Coefficient	*S.E.*
1	Gaidar	Russia	1992	.25	0.167	0.015
2	Balcerowicz	Poland	1990-1991	.18	0.090	0.022
3	Popov	Bulgaria	1991	.20	0.067	0.023
…						
113	Videnov	Bulgaria	1995-1996	.01	-0.068	0.009
114	Roman	Romania	1989-1991	.04	-0.083	0.024
115	Kravchuk	Ukraine	1991-1993	.05	-0.086	0.012

Sources: EBRD and author's calculations.
Notes: Leaders ranked on the speed of reform occurring in the years in which they were in office, as judged by change in EBRD score, adjusting for lagged EBRD score, fixed characteristics of the country, and for year, country's democracy level, war, and the proportion of seats in parliament held by communist or communist successor parties. Leaders examined are presidents in presidential systems and prime ministers in parliamentary systems, plus acting prime minister Gaidar in Russia and deputy prime minister Leszek Balcerowicz in Poland. Years are assigned to the leader who was in office as of October 1 of the given year (to avoid evaluating leaders who had been in office less than three months by year's end). Note that reforms could be faster or slower in the given years for additional reasons other than the leader's actions for which I have not controlled.

Although the same names are in the top three, some of the other cases show the importance of context. For instance, more reform occurred in Lithuania under Vytautas Landsbergis in 1992 (an increase of 14 percentage points) than in Tajikistan that year under President Rahmon Nabiyev (an increase of 10 points). However, Landsbergis was leading a small nation on the fringe of Scandinavia which had just undergone a democratic revolution. Nabiyev headed a Central Asian autocracy descending into civil war. Judged against their countries' later experiences, Nabiyev's liberalization, although limited, looks unexpectedly

vigorous (he comes in ninth in the adjusted ratings). That of Landsbergis seems rather tepid (he places near the bottom).

Of course, one should not take such measures—especially small differences in them—too seriously. Reforms are generally accomplished not by individuals but by teams. The head of government, whom I credit here for reforms that occurred on his watch, may sometimes have resisted those reforms rather than spearheading them. Since the ratings adjust for democracy, dictators' economic reform performance is judged against the authoritarian institutions they themselves sustain. Other idiosyncratic events in the country that year could explain the result rather than the political leader's actions (as noted, some early liberalization was probably spontaneous). The timing of the ratings is imperfect since EBRD scores are annual but leaders often take office mid-year.[19]

Still, the point remains that leaders clearly mattered. Had Ukraine's economy in 1992 been overseen by Yegor Gaidar and Russia's by Leonid Kravchuk, short-run outcomes in the two countries would probably have been quite different.

Conclusions

Twenty-five years later, a considerable accumulation of data exists with which to assess the course of economic reform in the post-communist countries. The number of cases is small and the complexity of the processes makes strong inferences difficult. Still, on various questions, the evidence clearly points in one direction rather than the other.

[19] In each year, I focused on the leader who was in office as of October 1 to avoid attributing results to leaders who took office very late in a given year.

When achievable, a strategy of rapid, simultaneous reform on multiple fronts worked better than a slower approach. It generally resulted in less, not more, economic dislocation. In theory, this might have been otherwise, but in practice that is how things worked out. There is no evidence that starting more slowly or conducting reforms in a particular sequence helped either in a technical economic sense or as a political tactic. Opponents of reform were able to exploit delays at least as effectively as its supporters.

Attempts to understand the politics of reform in terms of stylized groups of supporters and opponents—"winners," "losers," former communists—were popular at the time, but turned out to have limited purchase. That may be because the identities and interests involved were too fluid and complex to fit a single script. Many "losers" continued to believe they would be better off under a full-fledged market system than following a return to communism. Almost by definition, rent-seekers opposed reforms that would eliminate their income streams. Nevertheless, most rents—except for those associated with oil, gas, and natural monopolies—dissipated over time, either automatically or as a result of the reformers' maneuvering. As for ex-communists, they turned out to be a mixed bunch, with some actively supporting market reform and few outright reversing it.

In the end, what mattered most was the nature of the political institutions that processed the changing conflicts between economic groups. Democratic institutions seem to have nudged decisionmaking in the direction of more economic freedom. Reforms that made government more responsive, accountable, and transparent also increased the odds of marketization.

Historical traditions shaped the odds. They seem to have worked largely through their influence on political reform. Democracy broke through more quickly in countries where communism had been installed more recently. The predominantly Muslim countries of Central

Asia and Azerbaijan became consolidated autocracies. Where democracy triumphed, freer markets usually followed. Where it failed, economic freedom often also suffered.

Finally, certain individual leaders made a clear difference. At times, what was needed was the type of leadership required to devise a competent and sufficiently ambitious plan and then plunge ahead against a typhoon of criticism. At other moments, successful leadership meant having the flexibility and strategic sense to switch coalitions at crucial moments, disappointing former allies, compromising with former opponents, doing whatever was necessary to move things forward.

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Appendix

Table A1: Data sources

Variable	Notes	Source
Democracy	Polity2, rescaled to take values from 0 to 1.	Polity IV Dataset, Version 2012, http://www.systemicpeace.org/inscr/inscr.htm
Competitive elections for chief executive	Dummy = 1 if xrcomp = 3	Polity IV Dataset, Version 2012, http://www.systemicpeace.org/inscr/inscr.htm
Constraints on the executive	Exconst	Polity IV Dataset, Version 2012, http://www.systemicpeace.org/inscr/inscr.htm
EBRD reform scores	Average of 8 sub-indexes, rescaled to take values from 0 to 1	European Bank for Reconstruction and Development, Transition Indicators, http://www.ebrd.com/pages/research/economics/data/macro.shtml.
GDP, GDP per capita, GDP per capita growth	In 2005 international dollars, at purchasing power parity.	World Bank, *World Development Indicators*.
Exports as share of GDP, foreign aid		World Bank, *World Development Indicators*.
Fraser Institute "Economic Freedom Score"		Fraser Institute, http://www.freetheworld.com/release.html
Leader turnover		Archigos, downloaded from Henk Goemans' website http://www.rochester.edu/college/faculty/hgoemans/data.htm.
War, civil war.		Correlates of War intrastate and interstate wars datasets, v.4.0, Militarized interstate disuptes v.3.10, National material capabilities, v.4.0, downloaded from http://www.correlatesofwar.org/datasets.htm
Oil and gas income per capita		Michael L. Ross, 2011-04, "Replication data for: Oil and Gas Production and Value, 1932-2009", http://thedata.harvard.edu/dvn/dv/mlross
Leaders' characteristics		My compilation from multiple sources.
Votes for government parties, parties in coalition, dates of presidential and legislative elections.		Database of Political Institutions (Beck et al. 2001) http://go.worldbank.org/2EAGGLRZ40
State capture		Hellman, Jones, and Kaufmann (2000)