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Source: *British Journal of Political Science*, Vol. 33, No. 4 (Oct., 2003), pp. 635-657
Published by: Cambridge University Press
Stable URL: http://www.jstor.org/stable/4092200
Accessed: 18/12/2009 09:12

B.J.Pol.S. **33,** 635–657 Copyright © 2003 Cambridge University Press
DOI: 1.1017/S0007123403000292 *Printed in the United Kingdom*

Fragmenting Protection: The Political Economy of Trade Policy in the Post-Communist World

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Scholars and policy makers have displayed a longstanding interest in the politics of economic reform, particularly over the 1990s as former Communist countries struggled to develop market economies. Yet remarkably little systematic research has been conducted on the political economy of commercial reform in the post-Communist world. We argue that the fragmentation of power within post-Communist countries has been a potent force for trade liberalization. In non-democracies where political power is highly concentrated in the hands of a small group of elites, state leaders face few impediments to rent seeking and are well insulated from interests favouring commercial reform. In non-democracies where power is fragmented within the national government, however, new elites with weak ties to the old regime are well placed to use trade liberalization as a weapon against their political opponents. Moreover, the dispersion of power in non-democracies creates space for groups favouring free trade to promote trade liberalization. Finally, in democracies, the dispersion of power within the national government combined with electoral competition creates an especially potent impetus to trade liberalization. To assess these arguments, we analyse the trade policy of post-Communist countries during the period 1990–98. The results support our claims, highlighting the importance of examining institutional differences within as well as across regime types in analyses of economic policy.

Scholars and policy makers have displayed a longstanding interest in the politics of economic reform. This topic has drawn particular attention over the last decade as countries emerging from Communist rule have struggled to develop market economies. Yet remarkably little systematic research has been conducted on the political economy of commercial reform in the post-Communist world. Filling this gap in the literature is important for both empirical and theoretical reasons. Having spent decades isolated from the global trading system, many post-Communist countries view commercial liberalization as a central component of economic reform. In addition, the received wisdom about the political economy of trade policy is based primarily on the experience of advanced industrial economies, almost all of which are parliamentary democracies. Analysing the post-Communist countries – with their highly diverse institutions – should help deepen our understanding of the impact on trade policy of institutional variations across and within regime types.

Central to our analysis is the extent to which authority is concentrated within a country's national government. The collapse of communist governments in the late 1980s and early 1990s led to the emergence of various institutional configurations. In some countries, power became quite fragmented, as democratic regimes replaced the highly autocratic

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regimes of the Soviet era. In other countries, democratic institutions have not taken hold. But whereas many non-democratic regimes are marked by considerable partisan competition and the dispersion of power among state leaders, others are characterized by power as highly concentrated as during the Soviet era.

We examine the impact of these institutional variations on trade policy in the post-Communist world. Using annual data from twenty-five countries during the period from 1990 to 1998, we find that democracies – like Poland and Estonia – have pursued liberal trade policies and that non-democracies marked by the concentration of governmental power – such as Belarus and Uzbekistan – have rarely liberalized trade. However, as long as political power is somewhat fragmented within the national government, liberalization is quite likely, regardless of a state's regime type. Like democracies, non-democracies in which power is even moderately fragmented – such as Russia and Armenia – have conducted extensive commercial reforms since the end of Communist rule. In democracies and non-democracies alike, new elites who come to office with weak ties to the old regime have pursued trade liberalization in an effort to harm their protectionist political opponents. Moreover, the dispersion of power from protectionist elites affiliated with the prior regime has created political space for interest groups favouring openness to increase their influence over trade policy in both democracies and non-democracies. These findings highlight the importance of institutional differences within as well as across regime types for analyses of economic reform. They also underscore that the institutional legacy of a command economy bears heavily on trade policy.

TRADE LIBERALIZATION IN THE POST-COMMUNIST WORLD

The fusion of economic and political power in pursuit of autarky was a key feature of countries in the Soviet orbit.[1] Over the past decade, however, these countries have become remarkably open with respect to trade. Each year, the European Bank for Reconstruction and Development (EBRD) assesses the progress that post-Communist states have made in liberalizing foreign commerce. Recently, this organization observed:

> it is striking that, within very few years of the beginning of the economic transition, import regimes have become highly liberal by international standards in most countries of the region ... In fact, of the 16 countries where average tariffs have been established or can be inferred, in ten countries it is lower than the current OECD average of 6.3%.[2]

[1] See Janos Kornai, *The Socialist Economic System: The Political Economy of Communism* (Princeton, NJ: Princeton University Press, 1992), pp. 341–59.

[2] Many countries in the region have experienced significant and rapid reorientation of trade. As Rosati notes: 'The share of OECD countries in Polish manufactured exports increased from 42.4 percent in 1988 to 73.9 percent in 1991, while the share of CMEA [Council for Mutual Economic Assistance] countries diminished from 41.1 to 16.7 percent.' In 1990 alone, convertible currency exports in Poland rose by 40 per cent (Dariusz Rosati, 'Changing Trade Patterns and Industrial Policy: The Case of Poland', in Janos Gacs and Georg Winckler, eds, *International Trade and Restructuring in Eastern Europe* (Heidelberg: Springer-Verlag, 1994), pp. 151–81, at p. 174). Even Bulgaria's share of exports to non-transition economies increased from 12 per cent in 1990 to 70 per cent by 1992. On these issues, see European Bank for Reconstruction and Development (EBRD), *Transition Report 1999* (London: EBRD, 1999), p. 204; Peter Murrell, 'How Far Has the Transition Progressed?' *Journal of Economic Perspectives*, 10 (1996), 25–44; and Dani Rodrik, 'Foreign Trade in Eastern Europe's Transition: Early Results', in Oliver Blanchard, Kenneth Froot and Jeffrey Sachs, eds, *The Transition in Eastern Europe*, vol. 2 (Cambridge, Mass.: MIT Press, 1992), pp. 319–56.

TABLE 1 *Trade Liberalization in the Post-Communist World, 1990–98*

Degree of trade liberalization	Frequency	Percentage
Extensive liberalization	124	73.4
Some liberalization	21	12.4
No liberalization	24	14.2
Total	169	100.0

Note: These figures are based on annual data for twenty-five post-Communist countries compiled by the EBRD (1999). A country is coded as having engaged in extensive liberalization in a given year, *t*, if it meets each of the following conditions by *t*: (1) eliminating its state monopoly on foreign trade, (2) substantially reducing barriers to exports, and (3) substantially reducing barriers to imports. A country is coded as having engaged in some liberalization if it meets one or two of these conditions by *t*. A country is coded as having engaged in no liberalization if it meets none of these conditions by *t*.

To provide a more concrete sense of how far trade liberalization has progressed, Table 1 summarizes annual data compiled by the EBRD for twenty-five post-Communist countries between 1990 and 1998.[3] Every year, the EBRD assesses whether a given country has eliminated its state monopoly on foreign trade, substantially reduced barriers to exports or substantially reduced barriers to imports. We consider states that meet all three conditions to have engaged in extensive trade liberalization, those that meet one or two of these conditions to have engaged in some liberalization and those that meet none of these conditions to have engaged in no liberalization. Especially striking is that countries have been engaged in extensive liberalization in almost three-quarters of the cases evaluated here.

Taken as a group, post-Communist states have made considerable headway in commercial reform. None the less, there is substantial variation across these states. Some, such as Uzbekistan, have made little effort to liberalize commerce. Others, such as Ukraine, were slow to open their economy to foreign competition. Still other countries, like Poland, have maintained liberal trade policies. The purpose of this article is to explain the variation in the extent of trade liberalization among post-Communist states.

DOMESTIC INSTITUTIONS AND TRADE POLICY

Analyses of trade policy focusing on other regions of the globe place considerable stress on the effects of domestic institutions.[4] Here, we do likewise, placing primary emphasis on a state's regime type and the extent of fragmentation within its national government. Various observers maintain that whether post-Communist countries have developed democratic institutions strongly influences their prospects of making economic reforms. Joan Nelson for example, argues that 'some version of democracy is ... a necessary,

[3] Table 1 includes only those observations used in our later analyses. See Table 3 and fn. 27, below.

[4] See Helen V. Milner, 'The Political Economy of International Trade', *Annual Review of Political Science*, 2 (1999), 91–114.

though far from sufficient, condition for sustainable and credible economic reform' in Eastern Europe and elsewhere.[5] Anders Aslund, Peter Boone and Simon Johnson concur, noting that democracy inhibits rent seeking, corruption and other impediments to reform in the post-Communist world.[6]

More generally, democracy may promote economic reform because constituents are able to monitor and punish government officials who mismanage the economy.[7] A free press and the relatively free flow of information about government activities enhance the transparency of foreign economic policies in democracies. Even if public officials disguise protectionist policies, the resulting distortions are likely to degrade a country's macroeconomic performance. There is considerable evidence that this performance influences voters' electoral decisions, thereby limiting the extent to which public officials in democracies can both mismanage the economy for their personal gain and retain office.[8] The greater ability of society to monitor and penalize leaders should yield lower trade barriers in democracies than those in other countries.

However, the view that democracy fosters economic liberalization has met with considerable scepticism in certain quarters. One reason is that the institutional factors stimulating commercial openness in democracies also render government officials susceptible to demands by interest groups, including those that benefit from protectionist policies. Non-democratic governments are less vulnerable to such demands and therefore face fewer obstacles to reforming the economy. In addition, democratic rulers tend to have shorter time horizons than their autocratic counterparts, since they must compete in regular, fair elections.[9] Because the benefits from trade reform often take some time to materialize and the costs tend to be felt much more quickly, democrats who liberalize commerce run a greater risk of losing office than autocratic leaders. Consequently, autocratic regimes might be more likely to conduct economic reforms than democracies, an argument frequently advanced with reference to East Asia and Latin America.[10]

Whereas some observers claim that democracy promotes economic reform and others maintain that autocracy facilitates reform, a third position is that no systematic relationship exists between regime type and economic policy. This view accords with the findings of various empirical studies.[11] As Stephan Haggard and Steven B. Webb point out, 'these

[5] Joan M. Nelson, 'How Market Reforms and Democratic Consolidation Affect Each Other', in Joan M. Nelson, ed., *Intricate Links: Democratization and Market Reforms in Latin America and Eastern Europe* (New Brunswick, NJ: Transaction Publishers, 1994), pp. 1–36, at p. 10.

[6] Anders Aslund, Peter Boone and Simon Johnson, 'How to Stabilize: Lessons from Post-Communist Countries', *Brookings Papers on Economic Activity*, 1 (1996), pp. 217–311.

[7] See, for example, David A. Lake, 'Powerful Pacifists: Democratic States and War', *American Political Science Review*, 86 (1992), 24–38.

[8] See, for example, Michael S. Lewis-Beck, *Economics and Elections: The Major Western Democracies* (Ann Arbor: University of Michigan Press, 1988).

[9] See Stephan Haggard and Steven B. Webb, 'What Do We Know about the Political Economy of Economic Policy Reform?' *World Bank Research Observer*, 8 (1993), 143–67, at pp. 144–6.

[10] See, for example, Stephan Haggard, *Pathways from the Periphery: The Politics of Growth in Newly Industrializing Countries* (Ithaca, NY: Cornell University Press, 1990), p. 262; Guillermo O'Donnell, *Modernization and Bureaucratic-Authoritarianism: Studies in South American Politics* (Berkeley: Institute of International Studies, University of California, 1973); and Thomas Skidmore, 'The Politics of Economic Stabilization in Postwar Latin America', in James M. Malloy, ed., *Authoritarianism and Corporatism in Latin America* (Pittsburgh, Penn.: Pittsburgh University Press, 1977), pp. 149–90.

[11] See Barbara Geddes, 'Douglass C. North and Institutional Change in Contemporary Developing Countries', in James E. Alt, Margaret Levi and Elinor Ostrom, eds, *Competition and Cooperation: Conversations with Nobelists About Economics and Political Science* (New York: Russell Sage Foundation, 1999), pp. 200–27;

findings suggests that the debate should move beyond simple distinctions between authoritarian and democratic regimes to greater differentiation within each category.'[12]

Of the numerous ways to distinguish between types of democratic and non-democratic regimes, one factor that has generated particular interest is the extent to which power is concentrated or fragmented within the national government. As we discuss in more detail later, the fragmentation of power is determined by the extent to which a national government includes competing partisan and institutional actors whose agreement is necessary to make policy.[13] These actors include rival branches of government, as well as legislative and executive coalitions involving different political parties. The degree of power fragmentation varies significantly throughout the post-Communist world, in democracies and non-democracies alike. Consider non-democratic governments. Some face constraints from rival political parties or groups, while others do not. To varying degrees, Albania, Armenia, Croatia, Georgia, Kyrgyzstan, Romania, Russia and Ukraine have been marked by flawed electoral rules, disrespect for minority rights and widespread corruption during much of the 1990s.[14] However, political power has been far less concentrated among elites in these countries than in other non-democracies, such as Azerbaijan, Kazakhstan, Uzbekistan, Turkmenistan and post-1994 Belarus, where political power largely resides in a small group of elites and policy making is highly centralized.

These distinctions are important because there is broad agreement that a fair amount of concentration is needed to sustain an open trade regime. Stephen D. Krasner, for example, argues that the United States is marked by a fragmented political system and that this characteristic, 'which gives powerful domestic groups the ability to block the initiatives of central decision makers, made it necessary to implement selective protectionist measures' during the 1960s and 1970s.[15] Equally, various studies have concluded that highly concentrated power allows government officials to pursue policies, like open trade, that enhance the economy's performance without the interference of societal groups.[16] In this vein, Stephan Haggard and Robert R. Kaufman maintain that 'centralized executive authority plays a pivotal role in overcoming collective action problems and distributive conflicts associated with the initiation of comprehensive reforms.'[17]

(F'note continued)
Stephan Haggard and Robert R. Kaufman, *The Political Economy of Democratic Transitions* (Princeton, NJ: Princeton University Press, 1995); Haggard and Webb, 'What Do We Know about the Political Economy of Economic Policy Reform'; Karen L. Remmer, 'Democracy and Economic Crisis: The Latin American Experience', *World Politics*, 42 (1990), 315–35; and Dani Rodrik, 'Understanding Economic Policy Reform', *Journal of Economic Literature*, 34 (1996), 9–41.

[12] Haggard and Webb, 'What Do We Know About the Political Economy of Economic Policy Reform?' p. 146.

[13] See Nouriel Roubini and Jeffrey Sachs, 'Government Spending and Budget Deficits in the Industrial Countries', *Economic Policy: A European Forum*, 8 (1989), 101–27; and George Tsebelis, 'Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarianism, Multicameralism and Multipartyism', *British Journal of Political Science*, 25 (1995), 289–326.

[14] See Freedom House, 'Freedom in the World', at the website: www.Freedomhouse.org; and Keith Jaggers and Ted Robert Gurr, 'Tracking Democracy's Third Wave with the Polity III Data', *Journal of Peace Research*, 32 (1995), 469–82.

[15] Stephen D. Krasner, *Defending the National Interest: Raw Materials Investments and US Foreign Policy* (Princeton, NJ: Princeton University Press, 1978), p. 79.

[16] See Haggard and Kaufman, *The Political Economy of Democratic Transitions*; Haggard and Webb, 'What Do We Know about the Political Economy of Economic Policy Reform?'; Joan M. Nelson, 'The Politics of Economic Transformation: Is the Third World Experience Relevant in Eastern Europe?' *World Politics*, 45 (1993), 433–63; and Robert Wade, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (Princeton, NJ: Princeton University Press, 1990).

[17] Haggard and Kaufman, *The Political Economy of Democratic Transitions,* p. 163.

However, concentrated power may do more to spur trade liberalization in democratic than non-democratic regimes. By their very nature, democracies furnish societal groups with the ability to influence public policy, since leaders who fail to respond to demands made by influential segments of society are likely to face electoral retribution. Democracies in which power is more highly concentrated vest national officials with greater insulation and autonomy from groups opposing trade liberalization.

In contrast, leaders exercising concentrated power in an autocratic regime are well-placed to seek rents, since few checks exist on their activities. Unless such leaders are primarily interested in promoting social welfare, a highly concentrated autocratic regime is unlikely to engage in commercial reforms. Throughout the post-Communist world, there is particular reason to expect that concentrated power has impeded reforms in non-democracies. In Communist countries, this institutional feature allowed elites favouring autarky to squelch demands from groups favouring openness, an arrangement that provided considerable benefits for incumbents. In some countries, these elites faced few challenges and retained vast power following the fall of the Berlin Wall. Under these conditions, there is little reason to anticipate commercial reform.

In autocracies where power is relatively fragmented, however, there may be a greater prospect of economic liberalization. Anti-Communist elites who gain office may promote openness to weaken their political opponents who support protection.[18] Further, fragmentation creates political space for groups with an interest in openness to influence policy outcomes. Financial interests, the service sector and exporters who would benefit from a more open economy had little opportunity to sway policy in the highly concentrated political arena of the Soviet era. Where these groups have gained political clout, there is reason to expect a reduction in trade barriers.

A quick glance at Uzbekistan and Russia suggests that the degree of power concentration in non-democracies may have a potent impact on trade policy in the post-Communist world. Since 1989, elites in Uzbekistan have rebuffed demands from social groups for a greater say in decision making and have maintained the protectionist policies that served them well. After winning the presidency in 1991 in an election deemed unfair by international observers, Islam Karimov extended his term via a 1995 referendum, which passed with over 99 per cent approval.[19] As Bruce Pannier states, 'That Karimov is the supreme leader is beyond doubt.'[20] Karimov's Peoples' Democratic Party (PDP) retains control over parliament as well, largely by banning the nationalist opposition and harassing more moderate parties. One observer notes that 'the hegemonic role of the PDP constrains the political arena for other actors. The continued resort to repression and coercion has ensured that unsanctioned parties do not become serious rivals.'[21] Confronting few constraints, Karimov and his allies have maintained protectionist policies. Similarly, other highly concentrated non-democracies in the region – such as Azerbaijan, Belarus after 1994, Kazakhstan and Turkmenistan – have also followed protectionist policies.

By contrast, power is much more fragmented within the Russian government. The emergence of a liberal elite within Russia's executive branch in 1991 broke the grip of

[18] See Geddes, 'Douglass C. North and Institutional Change in Contemporary Developing Countries'.

[19] See Adrian Karatnycky, Alexander Motyl and Boris Shor, *Nations in Transit 1997: Civil Society, Democracy, and Markets in East Central Europe and the Newly Independent States* (New Brunswick, NJ: Transaction Publishers, 1997), p. 407.

[20] Bruce Pannier, 'The Search for Stability', in Peter Rutland, ed., *The Challenge of Integration: Annual Survey of Eastern Europe and the Former Soviet Union* (Armonk, NY: M.E. Sharpe, 1998), pp. 379–85, at p. 384.

[21] Gerald Easter, 'The Preference for Presidentialism: Post-Communist Regime Change in Russia and the CIS', *World Politics*, 49 (1997), 184–211, p. 202.

protectionist Communists who had dominated politics. Facing stiff opposition from the Russian Communist Party in the Duma, President Yeltsin none the less introduced sweeping economic reforms – including trade liberalization. Not only were such reforms consistent with Yeltsin's economic agenda, they also served his political interests by weakening his opponents in the government and in Russian society.[22] Thus, Yeltsin and his liberal allies used their control over the executive branch to gain a foothold over economic policy and liberalize trade, suggesting that fragmented political power may have contributed to economic reform in Russia. Similarly, in Kyrgyzstan prior to 1995; Ukraine under Kuchma; and Romania, Georgia and Armenia throughout the 1990s, non-democratic governments in which power was relatively fragmented liberalized trade. Clearly, these brief accounts are only suggestive. They do, however, indicate that the interaction between the concentration of power within the national government and regime type may influence trade policy.

Our analysis departs from the empirical work on the domestic politics of trade policy in various ways. Virtually none of that literature addresses the post-Communist world. Instead, it usually focuses on advanced industrial countries. As such, very little effort has been made to assess whether variations in regime type affect trade policy.[23] Nor has there been any systematic effort to analyse the relationship between the fragmentation of political power and commercial reform.

Our analysis also differs from most studies of economic reform in the post-Communist world. For example, although recent research has identified democracy as a potent impetus to economic reform in the region, scant attention has been paid to how institutional variations within non-democracies affect reform programmes.[24] As we explained earlier, fragmentation in non-democratic post-Communist countries is also likely to promote commercial liberalization by giving groups with a preference for free trade – including export-oriented firms, the financial sector and politicians bent on weakening protectionist old-regime elites – greater ability to push for policies that will serve their interests. As such, our work departs from the view that highly insulated executives with concentrated power are central to economic liberalization.[25]

Further, most of what little statistical work has been done on the domestic politics of economic reform in the post-Communist world is cross-sectional – analysing a single year during the 1990s – and much of this work relies on bivariate correlations.[26] In contrast, our analysis is based on cross-sectional and time-series data covering almost the entire

[22] See Andrei Shleifer and Daniel Treisman, *Without a Map: Political Tactics and Economic Reform in Russia* (Cambridge, Mass.: MIT Press, 2000).

[23] For some exceptions, see Edward D. Mansfield, Helen V. Milner and B. Peter Rosendorff, 'Free to Trade: Democracies, Autocracies, and International Trade', *American Political Science Review*, 94 (2000), 305–21; and Edward D. Mansfield, Helen V. Milner and B. Peter Rosendorff, 'Why Democracies Cooperate More: Electoral Control and International Trade Agreements', *International Organization*, 56 (2002), 477–513.

[24] See Aslund, Boone and Johnson, 'How to Stabilize'; EBRD, *Transition Report 1999*; Joel Hellman, 'Winners Take All: The Pitfalls of Partial Reform', *World Politics*, 50 (1998), 203–34; and Nelson, 'Is the Third World Experience Relevant in Eastern Europe?'

[25] See Adam Przeworski, *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America* (New York: Cambridge University Press, 1991). Przeworski does not subscribe to this view, but he presents the case most cogently. See also Haggard and Kaufman, *The Political Economy of Democratic Transitions*, p. 376; and Nikolai Mikhailov, 'Political Determinants of the Success of Economic Transformation', in David Weimer, ed., *The Political Economy of Property Rights: Institutional Change and Credibility in the Reform of Centrally Planned Economies* (New York: Cambridge University Press, 1997), pp. 50–80.

[26] See Aslund, Boone and Johnson, "How to Stabilize'; Stephen Fish, 'The Determinants of Economic Reform in the Post-Communist World', *East European Politics and Society*, 12 (1998), 31–78; and Hellman, 'Winners Take All'.

post-Communist era. Equally, our tests are multivariate rather than bivariate. Consequently, we are able to control for various well-known determinants of trade policy that might otherwise account for any observed relationship between commercial reform and either regime type or political fragmentation, permitting more rigorous statistical analyses than in most previous studies.

A STATISTICAL ANALYSIS OF TRADE POLICY

To test our argument, we focus on explaining the trade policy of every post-Communist country for which data are available during the period from 1990 to 1998.[27] Our dependent variable is a nominal, ordered measure of the extent to which each of these countries has reduced its quantitative barriers to trade. Developed by the EBRD, $Trade_{it}$ equals 2 if country i accomplishes all of the following in or before year t: (a) eliminating its state monopoly on foreign trade, (b) substantially reducing barriers to exports, and (c) substantially reducing barriers to imports. It equals 1 if i meets one or two of these conditions in or before t and 0 if i conducts no reform by t.[28]

Focusing on $Trade_{it}$ is entirely appropriate for our purposes. Not only is this variable one of the few direct measures of commercial liberalization in the post-Communist world, it is also an unusually high-quality measure. The three elements (described above) that compose $Trade_{it}$ are initially coded by the EBRD's country experts; then these coding decisions are defended before a panel of economists within the EBRD and subjected to scrutiny by analysts at the World Bank and the International Monetary Fund (IMF). Finally, these figures are reviewed by the editors of the EBRD's annual *Transition Report*. Alternative measures of commercial liberalization in the post-Communist world, by contrast, tend to be of lesser quality and often cover only a fraction of the countries and years addressed here.[29]

Independent Variables

Our independent variables include each state's regime type, the concentration of power within each state's national government, and the interaction between these factors. First, $Democracy_{it}$ measures i's regime type in t. This variable is generated using the Polity98 data, a recently updated version of the widely-used Polity III dataset.[30] These data measure the competitiveness of the process through which each country's chief executive is selected, the openness of the process used to select this individual, the extent to which there are institutionalized constraints on the executive, the competitiveness of political participation, and the extent to which binding rules regulate political participation. Relying on a procedure developed by Ted Robert Gurr and his colleagues, we construct an index (REG_{it}) of regime type that ranges from -10 to $+10$.[31] Larger values of this index correspond

[27] The only post-Communist countries excluded from our sample due to the absence of data are Mongolia and Yugoslavia. Note that countries that were a part of the former Soviet Union do not enter our dataset until after their independence in 1992.

[28] There are very few cases where countries meet only one of these conditions, which is why we combine such cases with those where countries meet two of these conditions. Note, however, that estimates derived without combining these categories are very similar to the findings reported below.

[29] See Rodrik, 'Foreign Trade in Eastern Europe's Transition'.

[30] Jaggers and Gurr, 'Tracking Democracy's Third Wave with the Polity III Data'.

[31] See Jaggers and Gurr, 'Tracking Democracy's Third Wave with the Polity III Data'; and Ted Robert Gurr, Keith Jaggers and Will Moore, 'Polity II: Political Structures and Regime Change, 1800–1986', Inter-University

to more democratic polities. Following Keith Jaggers and Gurr, we define i as a 'coherent democracy' if it achieves a score of 7 or higher in t (although, as discussed later, we also assess the robustness of our results with respect to this threshold). Under these conditions, $Democracy_{it}$ equals 1; otherwise it equals 0.

Secondly, $Fragmentation_{it}$ measures the concentration of political power within country i's national government in year t. Created by Timothy Frye, Joel Hellman and Joshua Tucker, this variable adapts to the post-Communist countries Nouriel Roubini and Jeffrey Sachs's measure of the number of partisan actors that can block policy change.[32] This measure has several useful features. It can be applied to states with different regime types, with either presidential or parliamentary systems, and it is straightforward to replicate.[33] As a result, it has been used in various influential studies of economic reform in the post-Communist world.[34]

$Fragmentation_{it}$ equals 0 if country i has a non-competitive system of government, allowing elites to make policy without institutional or partisan constraints. For example, in Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Ukraine in 1990 and post-1994 Belarus, the extent to which power is concentrated among government elites has changed little from the Soviet era. This variable equals 1 if i has a single-party parliamentary government or a presidential government with majority support in the assembly, situations that characterized Lithuania in the mid-1990s, Ukraine under President Kravchuk and Moldova under the Agrarian Democratic Party. $Fragmentation_{it}$ equals 2 if i has a two-party or a divided presidential government, as occurred in Russia, Kyrgyzstan and Poland during the coalition government of the Democratic Left Alliance and the Peasant Party. This variable equals 3 if i has a three-party government and 4 if i has a minority government.[35] Such situations, for example, existed in the Czech Republic during the coalition governments led by Prime Minister Klaus and in Estonia at various times during the 1990s, respectively.

Thirdly, in the preceding section, we argued that the interaction between regime type and power fragmentation is likely to influence trade policy. Consequently, we analyse $Democracy_{it} \times Fragmentation_{it}$. To provide a rough sense of how the post-Communist countries are coded, Table 2 shows the states that were democratic for at least five years during the period from 1990 to 1998, the states that were not democratic for at least five years during this period, and the average amount of fragmentation in each country over this period. Table 2, however, should be interpreted cautiously, since many countries in our sample have experienced changes over time in regime type, the degree of fragmentation, or both that are not reflected therein.

(F'note continued)

Consortium for Political Research study no. 9263. This index is $REG_{it} = DEMOC_{it} - AUTOC_{it}$, where $DEMOC_{it}$ is a measure of state i's democratic features in t and $AUTOC_{it}$ is a measure of its autocratic features in t. Both measures take on values ranging from 0 to 10. REG_{it}, therefore, takes on values ranging from -10 (maximal autocracy) to 10 (maximal democracy).

[32] Timothy Frye, Joel Hellman and Joshua Tucker, 'Data Base on Political Institutions in the Post-Communist World' (unpublished dataset, Ohio State University, 2000); Hellman, 'Winners Take All'; and Roubini and Sachs, 'Government Spending and Budget Deficits in the Industrial Countries'.

[33] Coding post-Communist parties is often difficult. This measure makes minimal demands on the coherence of parties as it requires only that parties in government can block policies that they oppose. See EBRD, *Transition Report 1999*; and Hellman, 'Winners Take All'.

[34] This measure bears a conceptual resemblance to the commonly used notion of veto points. On veto points, see Tsebelis, 'Decision Making in Political Systems'.

[35] It should be noted that, based on the sample used in the following analysis, the correlation between $Fragmentation_{it}$ and $Democracy_{it}$ is only about 0.55.

TABLE 2 *Codings of Regime Type and the Fragmentation of Political Power*

	Average fragmentation of power (1990–98)			
Regime type	0	1	2	3
Countries coded as democratic for at least 5 years, 1990–98		Lithuania Moldova	Bulgaria Hungary Macedonia Poland	Czech Republic Estonia Latvia Slovakia Slovenia
Other countries	Azerbaijan Belarus Kazakhstan Turkmenistan Uzbekistan	Albania Armenia Croatia Tajikistan Ukraine	Georgia Kyrgyzstan Romania Russia	

There is also considerable agreement that macroeconomic conditions affect trade policy. We therefore analyse a number of macroeconomic factors in the model of trade reform, data for which are taken from the EBRD.[36] Each variable is measured in year $t-1$ to minimize any possibility of a simultaneity bias stemming from the effects of trade liberalization on a country's economic performance.

Among the most important macroeconomic influences on commercial policy are the level of unemployment and inflation. Trade liberalization redistributes income within countries. Those segments of society that expect to suffer as a result have a clear incentive to oppose commercial reform. Moreover, the losers from trade liberalization are likely to face fewer collective action problems than the winners, thereby enhancing their ability to lobby state leaders.[37]

During macroeconomic downturns, the distributional costs to the losers from trade reform tend to be especially large, leading these groups to oppose reform with particular vehemence. For example, high levels of unemployment in inefficient sectors of the economy are likely to prompt demands for protection by individuals who are out of work, as well as those who fear that their jobs may be jeopardized by foreign competition. Equally, various studies have pointed out that increased inflation promotes imports, giving rise to demands for protectionism on the part of groups harmed by competition from abroad.[38] These arguments suggest that heightened unemployment and inflation tend to inhibit trade liberalization.[39]

[36] EBRD, *Transition Report 1999.*

[37] See C. Fred Bergsten and William R. Cline, 'Trade Policy in the 1980s: An Overview', in William R. Cline, ed., *Trade Policy in the 1980s* (Washington, DC: Institute for International Economics, 1983), pp. 59–98, at p. 77; and Dani Rodrik, 'The Rush to Free Trade in the Developing World', in Stephan Haggard and Steven Webb, eds, *Voting For Reform: Democracy, Political Liberalization, and Economic Adjustment* (New York: Oxford University Press, 1994), pp. 61–88. Our analysis of the losses imposed on groups hurt by reform centres on inflation, unemployment and import penetration. While it would also be useful to assess the effects of economic inequality, data limitations restrict our ability to do so. See Branko Milanovich, *Income, Inequality, and Poverty During the Transformation from a Planned to a Market Economy* (Washington, DC: World Bank, 1998).

[38] See, for example, Stephen Magee, William A. Brock and Leslie Young, *Black Hole Tariffs and Endogenous Policy Theory: Political Economy in General Equilibrium* (New York: Cambridge University Press, 1989), p. 188.

[39] In addition, increasing inflation may stimulate trade liberalization because a country facing growing inflation typically realizes a depreciation in its real exchange rate. The rising costs of imports may diminish any societal

Conversely, many observers argue that deteriorating macroeconomic conditions stimulate trade liberalization. As Dani Rodrik points out, 'if there is one single theme that runs through the length of the political economy literature it is the idea that crisis is the instigator of reform.'[40] Although liberalization runs the risk of harming influential constituencies, severe economic downturns are likely to elicit widespread demands for measures to improve economic performance. Leaders ignore such demands at their own risk.[41] When macroeconomic conditions erode, the anticipated benefits of reviving the economy overwhelm the distributional effects of trade liberalization. In sum, then, economic downturns provide the impetus for politicians to engage in liberalization that generally is not politically feasible during 'normal' times.[42] Furthermore, there is evidence that commercial reforms taken in response to economic crises are particularly likely to survive.[43]

To assess the impact of macroeconomic conditions on commercial reform, we analyse $Inflation_{i(t-1)}$, which is the rate of inflation in i from $t-1$ to t, as well as $Unemployment_{i(t-1)}$, which is i's unemployment rate in $t-1$.[44] We also analyse $ImportPen_{i(t-1)}$, which is i's ratio of imports to gross domestic product (GDP). It is widely argued that rising imports tend to stimulate pressures for protection by import-competing sectors. Alternatively, heightened import penetration may reflect an interest in commercial openness on the part of government officials and may lead societal groups to press for greater liberalization as they come to enjoy goods produced abroad.

In addition, we consider the effects on trade policy of $GDP_{i(t-1)}$, which is the real GDP of i in $t-1$.[45] Since economically large countries are usually less dependent on foreign commerce and can often improve their terms of trade by imposing an optimal tariff (or equivalent form of protection), these countries may be less open than smaller counterparts. Alternatively, higher levels of national income are likely to increase the demand for imports and the supply of exports, both of which may lead governments to liberalize trade.

Besides domestic institutions and macroeconomic factors, it is important to account for international influences on trade policy. Since the European Union (EU) has made economic liberalization a precondition for close relations, trade reform may be directly associated with the extent to which post-Communist countries demonstrate an interest in forging tighter links with this institution. Hence, we include $EU_{i(t-1)}$ in the model. This variable equals 0 if i has no formal relationship with the EU in $t-1$, 1 if i has applied for membership in the EU, 2 if i has signed an interim agreement with the EU, and 3 if i has signed an association agreement with the EU.

(F'note continued)
pressure for protection stemming from increased imports. See Magee, Brock and Young, *Black Hole Tariffs and Endogenous Policy Theory*, p. 189.

[40] Rodrik, 'Understanding Economic Policy Reform', p. 26.

[41] See Anne O. Krueger, *Political Economy of Policy Reform in the Developing Countries* (Cambridge, Mass.: MIT Press, 1993); and Rodrik, 'The Rush to Free Trade in the Developing World'.

[42] See Haggard and Kaufman, *The Political Economy of Democratic Transitions*; Nelson, 'Is the Third World Experience Relevant to the Post-Communist World?' and Przeworski, *Democracy and the Market*.

[43] See Michael Michaely, 'The Lessons of Experience: An Overview', in Geoffrey Sheppard and Carlos Geraldo Langoni, eds, *Trade Reform: Lessons from Eight Countries* (San Francisco: ICS Press, 1991), pp. 117–26.

[44] It is important to recognize that although the data on unemployment used here are the best available, they are not without well-known limitations. See EBRD, *Transition Report 1999*.

[45] Data on GDP are expressed in US dollars. The EBRD provides data on nominal GDP for each country included in our sample. We deflate these nominal values using data on inflation provided by the EBRD.

The Statistical Model

To address the effects of the aforementioned independent variables on commercial liberalization in the post-Communist world, we use an ordered probit model.[46] The dependent variable in this model is latent: it is a continuum of trade policy outcomes ranging from highly protectionist to very liberal. What we observe, however, is $Trade_{it}$, an ordered, nominal measure of trade policy. The ordered probit model maps the latent dependent variable on to the observed variable. To this end, parameter estimates for the independent variables and for two thresholds are generated. The thresholds identify the points where the underlying continuum of trade policy outcomes is divided into the three values of $Trade_{it}$ (0, 1 and 2) that are observed.[47]

As we mentioned earlier, our dataset is made up of annual observations for every post-Communist country from 1990 to 1998. Hence, the data are organized as both a set of cross-sections (by year) and time series (by country). Analysing such data poses a number of difficulties, most notably the possibility that the ordered probit standard errors will be incorrect (and too small) due to panel heteroscedasticity or serial correlation. Under these circumstances, tests of statistical significance for the parameter estimates would be biased. In some recent research on the statistical analysis of time-series cross-section data with a binary dependent variable, Nathaniel Beck and his colleagues argue that one solution to this problem is to base significance tests on Huber (robust) standard errors, since they take account of any heteroscedasticity and the grouped nature (by country) of the data.[48] Consequently, we use Huber standard errors in all of the following analyses.

We also attempt to address any serial correlation by modelling temporal dependence in the data. Given the very short period of time analysed here and the nature of our dependent variable, the most feasible way to do so is by including a lagged dependent variable ($Trade_{i(t-1)}$), yielding what has been referred to as a 'partial adjustment' or 'restricted transition' model.[49] Introducing a lagged dependent variable in time-series cross-section

[46] On this type of model, see J. Scott Long, *Regression Models for Categorical and Limited Dependent Variables* (Thousand Oaks, Calif.: Sage, 1997), chap. 5.

[47] Note that while the underlying (or structural) model for the latent dependent variable includes an intercept, we do not estimate an intercept in the model for $Trade_{it}$. The reason is that in the latter model, a change in the intercept can be offset by shifting the thresholds. The resulting identification problem can be resolved by setting the intercept equal to zero. This procedure has no bearing on either the parameter estimates for the independent variables or the significance tests for those estimates. On this issue, see Long, *Regression Models for Categorical and Limited Dependent Variables,* pp. 122–4.

[48] Nathaniel Beck and Jonathan N. Katz, 'Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models', *Political Analysis*, 6 (1996), 1–36; Nathaniel Beck and Jonathan N. Katz, 'The Analysis of Binary Time-Series-Cross-Sectional Data and/or the Democratic Peace' (paper presented at the Annual Meeting of the Political Methodology Section of the American Political Science Association, Columbus, Ohio, 1997); Nathaniel Beck and Richard Tucker, 'Conflict in Time and Space' (Weatherhead Center for International Affairs Working Paper, No. 97–8, Harvard University, 1997); Nathaniel Beck, David Epstein, Simon Jackman and Sharyn O'Halloran, 'Alternative Models of Dynamics in Binary Time-Series-Cross-Section Models: The Example of State Failure' (paper presented at the Annual Meeting of the Political Methodology Section of the American Political Science Association, Atlanta, Ga., 2001).

[49] In principle, a number of alternative procedures exist. One is to estimate a model with serially correlated errors. However, some studies argue against using such models when analysing time-series cross-section data and a limited dependent variable. See Beck and Tucker, 'Conflict in Time and Space', p. 4; and Beck *et al.*, 'Alternative Models of Dynamics in Binary Time-Series-Cross-Section Models', pp. 6–7. Another alternative is to estimate a model with a latent lagged variable; that is, with the lagged value of the unobserved continuum of trade policy outcomes, ranging from highly protectionist to very liberal. Although political scientists have recently made efforts to estimate such a model in a binary probit specification, the difficulty of implementing this procedure is substantial

models is a common way to purge the error term of serial correlation when this variable is continuous.[50] Some studies have speculated that this procedure might also help generate more accurate standard errors when analysing a limited dependent variable.[51] However, since certain observers have cautioned that including a lagged dependent variable in a model like ours can lead to substantial underestimates of the independent variables' effects, we also assess the extent to which including $Trade_{i(t-1)}$ influences the estimates of the remaining variables in our analysis.[52]

The Statistical Results

Our initial results are shown in column 3.1 of Table 3. They indicate that both domestic political institutions and macroeconomic conditions heavily influence trade policy in the post-Communist world. Consistent with our argument, regime type and the extent of fragmentation within the national government are especially salient factors. When focusing on non-democracies (that is, cases in which $Democracy_{it} = 0$), the effects of fragmentation on commercial reform are given by the estimate of $Fragmentation_{it}$ alone.[53] As we discuss in more detail below, the fact that this estimate is positive, large and statistically significant indicates that non-democracies in which governmental power is highly concentrated are unlikely to engage in reform. By contrast, non-democracies marked by at least some fragmentation tend to be quite open with respect to trade, and the likelihood of such states conducting commercial reform depends little on the exact degree of fragmentation.

These results also indicate that democracies tend to be commercially open, regardless of the dispersion of power within the national government. Again, this issue is taken up at greater length below. But to see why this is so, note that the estimates of $Democracy_{it}$ and $Fragmentation_{it}$ are positive, the estimate of $Democracy_{it} \times Fragmentation_{it}$ is negative, and all three of them are statistically significant and very large. Moreover, since the absolute values of the estimates of $Fragmentation_{it}$ and $Democracy_{it} \times Fragmentation_{it}$ are similar, these estimates essentially 'offset' each other quantitatively. Consequently, for democracies, variations in fragmentation have little bearing on trade policy and the large, positive estimate of $Democracy_{it}$ means that these regimes are quite likely to be commercially open.

In addition, there is ample evidence that deteriorating macroeconomic conditions promote trade liberalization. As indicated by the positive and statistically significant

(F'note continued)
and we are unaware of any attempt to do so using an ordered probit specification. Note that the increasingly popular strategy of modelling the temporal dependence in time-series cross-section data with a binary dependent variable by including a function of the length of time since the observed value of the dependent variable last equalled 1 cannot be readily implemented when analysing an ordered dependent variable like ours. See Beck and Katz, 'Nuisance vs. Substance'; and Beck and Katz, 'The Analysis of Binary Time-Series-Cross-Sectional Data and/or the Democratic Peace'.

[50] See Beck and Katz, 'Nuisance vs. Substance'.

[51] See Beck and Katz, 'Conflict in Time and Space', pp. 10–11; and Beck *et al.*, 'Alternative Models of Dynamics in Binary Time-Series-Cross-Section Models', p. 7, fn. 13.

[52] See, for example, Christopher Achen, 'Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables', (paper presented at the Annual Meeting of the Political Methodology Section of the American Political Science Association, Los Angeles, 2000).

[53] On the interpretation of interaction effects, see Robert J. Friedrich, 'In Defense of Multiplicative Terms in Multiple Regression Equations', *American Journal of Political Science*, 26 (1982), 797–833.

TABLE 3 *Ordered Probit Estimates of the Political and Economic Influences on Trade Liberalization, 1990–98*

	Model			
Variable	3.1	3.2	3.3	3.4
Democracy	3.036*** (0.965)	3.715*** (0.861)	6.221*** (1.710)	1.235** (0.513)
Fragmentation	1.491*** (0.461)	1.676*** (0.455)	2.658*** (0.713)	0.563*** (0.181)
Democracy × Fragmentation	− 1.569*** (0.605)	− 1.895*** (0.558)	− 2.820*** (0.843)	− 0.537** (0.266)
Inflation	0.0029*** (0.0011)	0.0036*** (0.0011)	0.0031*** (0.0011)	0.0001 (0.0001)
Unemployment	0.388*** (0.095)	0.468*** (0.088)	0.812*** (0.235)	0.131*** (0.033)
Import Penetration	− 0.0008 (0.0036)	0.0013 (0.0031)	− 0.0033** (0.0015)	–
GDP	0.000037*** (0.000012)	0.000036*** (0.000014)	0.000066*** (0.000015)	1.00×10^{-6}* (5.68×10^{-7})
European Union	5.795*** (1.437)	6.875*** (1.404)	8.410*** (2.044)	2.321*** (0.224)
Lagged Trade Reform	0.514 (0.358)	–	–	–
Former Soviet Republic	–	–	3.866*** (1.292)	0.692 (0.430)
Cut Point 1	6.589*** (1.833)	7.503*** (1.836)	13.608*** (3.666)	1.590** (0.695)
Cut Point 2	7.772*** (1.820)	8.628*** (1.813)	15.041*** (3.881)	2.570*** (0.683)
Log Likelihood	− 16.99	− 17.66	− 14.28	− 65.48
χ^2	147.26***	188.03***	156.30***	213.22***
Pseudo R^2	0.75	0.74	0.79	0.49
N	108	108	108	169

Note: Entries are ordered probit estimates with Huber (robust) standard errors in parentheses. Statistical significance is indicated as follows: ***$p \leq 0.01$; **$p \leq 0.05$; *$p \leq 0.10$. Two-tailed tests are conducted for all estimates.

estimates of both $Inflation_{i(t-1)}$ and $Unemployment_{i(t-1)}$, heightened inflation and unemployment are strongly associated with commercial reform. Equally, the prospect of liberalization is greater for economically large post-Communist states than for their smaller counterparts, since the estimate of $GDP_{i(t-1)}$ is positive and statistically significant. And countries having close relations with the EU are especially likely to have an open trade regime, since the estimate of $EU_{i(t-1)}$ is positive and significant.

Import penetration, however, has a much weaker influence on trade policy. The estimate of $ImportPen_{i(t-1)}$ is negative, suggesting that trade liberalization is inhibited by rising imports. But this estimate is not statistically significant. Nor is the estimate of $Trade_{i(t-1)}$, indicating that trade policy is not marked by temporal dependence in the post-Communist world. Moreover, as shown in column 3.2, omitting the lagged endogenous variable has very little bearing on the remaining estimates. For this reason and because some observers have argued that including a lagged dependent variable in models like ours can have adverse statistical consequences, we do not include $Trade_{i(t-1)}$ in the following analyses.[54]

The Measurement of Democracy

Having generated some initial estimates of the model, it is important to assess the robustness of our results. We begin by addressing whether our findings hinge on how democracy is measured. Recall that we followed Jaggers and Gurr in coding state *i* as democratic in year *t* if it scores 7 or higher on an index (REG_{it}) ranging from $+10$ to -10. Although this operational definition has been used repeatedly, it is obviously somewhat arbitrary and we need to assess whether relaxing it affects our findings. Therefore, we estimate the model after redefining the threshold for democracy as: (a) 6 and higher, (b) 5 and higher, (c) 4 and higher, (d) 3 and higher, (e) 2 and higher, and (f) 1 and higher. We also estimate the model after redefining $Democracy_{it}$ as REG_{it}.

Table 4 reports the coefficients of $Democracy_{it}$, $Fragmentation_{it}$, and $Democracy_{it} \times Fragmentation_{it}$ based on these analyses. The estimates of the remaining variables are omitted to conserve space. Not surprisingly, as we relax the criteria for what constitutes a democracy and include more states with shakier democratic credentials under this heading (for example, Kyrgyzstan, Armenia and Croatia), the size of regime type's impact on commercial openness declines. None-the-less, consistent with our earlier findings, the estimates of $Democracy_{it}$ and $Fragmentation_{it}$ are always positive, the estimate of $Democracy_{it} \times Fragmentation_{it}$ is always negative, and each estimate is statistically significant.[55] Equally, the signs and significance levels of the remaining variables are virtually identical, regardless of how $Democracy_{it}$ is measured.

Besides Jaggers and Gurr, Freedom House has compiled data on regime type covering the countries and years analysed here.[56] Freedom House assigns each country an annual score from 1 to 7, based on the political rights it grants citizens. To further assess the robustness of our initial results, we follow Freedom House in setting $Democracy_{it}$ equal to 1 if political rights in country *i* are given a score of 1 or 2 in *t*, and 0 otherwise. As shown in the last row of Table 4, the estimates of $Democracy_{it}$, $Fragmentation_{it}$, and

[54] See Achen, 'Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables'.

[55] However, the strength of these results declines somewhat as the operational definition of democracy is relaxed (that is, as the value of REG_{it} required for *i* to be considered democratic is reduced).

[56] Freedom House, 'Freedom in the World'.

TABLE 4 *Ordered Probit Estimates of Democracy, Fragmentation and the Interaction Between Democracy and Fragmentation, Based on Different Measures of Regime Type*

Measure of democracy	Democracy	Fragmentation	Democracy × Fragmentation
REG ≥ 6	4.176*** (1.086)	1.656*** (0.477)	− 1.884*** (0.585)
REG ≥ 5	5.412*** (1.526)	2.408*** (0.770)	− 2.581*** (0.921)
REG ≥ 4	5.151*** (1.273)	2.386*** (0.792)	− 2.531*** (0.914)
REG ≥ 3†	5.151*** (1.273)	2.386*** (0.792)	− 2.531*** (0.914)
REG ≥ 2	2.624** (1.328)	1.576*** (0.446)	− 1.314** (0.598)
REG ≥ 1	1.952* (1.004)	1.794*** (0.355)	− 1.468** (0.575)
REG	0.282** (0.118)	1.518*** (0.553)	− 0.187** (0.075)
Freedom House	2.739*** (0.996)	1.039*** (0.282)	− 1.713*** (0.440)

Note Entries are ordered probit estimates with Huber (robust) standard errors in parentheses. Statistical significance is indicated as follows: ***$p \leq 0.01$; **$p \leq 0.05$; *$p \leq 0.10$. Two-tailed tests are conducted for all estimates. Note that the remaining variables in Model 3.2 of Table 3 are included in these ordered probit analyses, but their parameter estimates are not presented to conserve space.
†These results are identical to those when Democracy is defined as REG ≥ 4, since there is no case in this analysis where REG = 3.

$Democracy_{it} \times Fragmentation_{it}$ continue to accord with our previous results. Also, the signs and significance levels of the remaining variables are much the same as the corresponding estimates in column 3.1 of Table 3.[57] Hence, our results do not depend on the measurement of democracy.

The Effects of Individual Countries and Years, Omitted Variables and Missing Data

We also need to determine whether our results are unduly influenced by a particular country or year in the sample. To this end, we remove each country, one at a time, from the sample and then re-estimate our model. Similarly, we re-estimate the model after omitting each year in the sample, one at a time. Except for import penetration, there is not a single case in which the sign of a parameter estimate changes; and there are only two instances ($Democracy_{it}$ when Belarus is excluded and $GDP_{i(t-1)}$ when 1993 is omitted) in which a

[57] The only noteworthy difference is that the estimate of $ImportPen_{i(t-1)}$ is statistically significant (at the 0.10 level).

statistically significant estimate in column 3.2 is no longer significant when these analyses are conducted. Clearly, then, our results are not being driven by any single country or year.

Next, we address whether our results are robust with respect to the inclusion of certain factors omitted from the model. First, we analyse the effects of economic growth, defined as the percentage change in the real per capita GDP of i from $t-1$ to t. Economic growth may promote trade reform because it both reduces the incentives for interest groups to press for protection and increases domestic demand for goods, including imports.[58] Secondly, we examine the influence of government spending on trade policy by including the ratio of i's government spending to GDP in $t-1$. High levels of government spending cushion the distributional effects stemming from free markets.[59] However, governments marked by extensive spending may also have more resources available to intervene in the economy and therefore may be less likely to favour liberalizing foreign trade.[60]

Thirdly, international financial institutions may have fostered economic reform in the post-Communist world by making reform a precondition for badly-needed loans. Hence, we analyse two dummy variables, one indicating whether country i has a structural adjustment loan from the IMF in $t-1$ and the other indicating whether i is receiving any IMF assistance in $t-1$.[61]

Fourthly, we examine the effects of various domestic political factors that have been linked to economic reform in the post-Communist world.[62] We analyse whether t is an election year in country i as well as the number of years until the next election in i, since the effects of elections are stressed in research on both economic reform in the former Soviet bloc and the political economy of trade policy.[63] We also assess the extent of turnover in i's national government from $t-1$ to t. Greater turnover may be an indicator of political instability, which is likely to inhibit reform; conversely, it may signal the arrival of new state leaders with an interest in reform.[64]

In addition, we would like to account for the ideological position of a country's leadership, particularly its position on economic reform. Direct measures of this factor are not available, but we can examine some indirect measures of whether state leaders are oriented towards economic reform. Since Communist regimes were highly autarkic, there is ample reason to expect that heads of state who held senior positions in those regimes when they fell would be less inclined to undertake reforms than heads of state that either did not hold such positions when those regimes fell or never held such positions. Equally, the greater the percentage of seats in a country's legislature held by the Communist Party

[58] See Jagdish Bhagwati, *Protectionism* (Cambridge, Mass.: MIT Press, 1988), p. 6.

[59] See Luiz Carlos Bresser Pereira, José Maria Maravall and Adam Przeworski, *Economic Reforms in New Democracies: A Social-Democratic Approach* (New York: Cambridge University Press, 1993). Of course, the fact that government spending as a portion of GDP is relatively high indicates nothing about the content or beneficiaries of that spending.

[60] Data on economic growth and the ratio of government spending to GDP are taken from EBRD, *Transition Report 1999*.

[61] Data on IMF loans are taken from the International Monetary Fund's website: www.imf.org/external/np/tre/tad.

[62] See Aslund, Boone and Johnson, 'How to Stabilize'; Fish, 'The Determinants of Economic Reform in the Post-Communist World'; and Hellman, 'Winners Take All'.

[63] See Timothy Frye and Edward D. Mansfield, 'Timing is Everything: Elections and Trade Liberalization in the Post-Communist World' (unpublished paper, Ohio State University, 2002); Hellman, 'Winners Take All'; and Magee, Brock and Young, *Black Hole Tariffs and Endogenous Policy Theory*.

[64] Hellman, 'Winners Take All'.

(or the largest successor to that party), the less likely a post-Communist country is to engage in commercial liberalization.[65]

Finally, we analyse whether *i* was a republic of the Soviet Union. Aslund, Boone and Johnson point out that whether a country was part of the Soviet Union is a proxy for various 'different underlying structural factors, such as the greater reliance on military-industrial production, a longer history of communism, greater reliance on trade within the communist bloc, and membership in the ruble zone when control over money creation disintegrated.'[66] In light of their finding that there is a systematic difference in the extent of economic reform between countries that were part of the Soviet Union and other countries in the post-Communist world, we include this variable in our analysis of trade liberalization.

Not only is there reason to expect the factors just discussed to influence trade policy, many of them are likely to be closely linked to the domestic political and economic variables included in our model. As such, we need to ensure that they do not account for the results reported earlier. In fact, there is no evidence of this sort. Introducing these variables in the model one at a time yields a few cases where the parameter estimate of $ImportPen_{i(t-1)}$ changes sign, but no instance where the sign or statistical significance of any other parameter differs from that in column 3.2 of Table 3.

Furthermore, only one of these additional variables has a statistically significant effect on trade policy. As shown in column 3.3 of Table 3, there is evidence that former Soviet states are more commercially open than other post-Communist countries: the estimate of a dummy variable indicating whether or not *i* is such a state is positive and significant. Also, when this variable is included, the estimate of $ImportPen_{i(t-1)}$ becomes negative and statistically significant. However, accounting for whether *i* was part of the Soviet Union has little bearing on the other results in Table 3 and, as discussed below, the strength of this variable's effect on trade policy is quite fragile.[67]

We also examine whether trade liberalization is linked to other economic reforms. In a recent study of the post-Communist world, Joel Hellman argues that partial reforms – that is, situations in which some aspects of the economy are reformed while other aspects remain distorted – create rents for certain segments of society.[68] These groups have an incentive to press the government to partially reform the economy, but not to fully reform it since doing so would eliminate such rents. The implication of this argument for our analysis is that the absence of liberalization along other economic dimensions might be associated with trade liberalization. Hellman analyses eight facets of economic reform in addition to commercial reform. We include seven of these eight dimensions in our model, one at a time (and exclude one facet – legal reform – for which there is not enough data to generate reliable results).[69] In only two cases (enterprise restructuring and competition policy) is another aspect of economic reform significantly associated with trade liberalization. Moreover, there is no case where including another dimension influences the results shown in Table 3. Thus, whether trade liberalization is part of a partial reform package has no bearing on our findings.

Our final robustness check centres on whether the relatively limited amount

[65] Data on these factors are taken from Frye, Hellman and Tucker, 'Data Base on Political Institutions in the Post-Communist World'.

[66] Aslund, Boone and Johnson, 'How to Stabilize', p. 219.

[67] Note also that including the per capita GDP of each state in the model has virtually no bearing on the estimates of the remaining variables.

[68] Hellman, 'Winners Take All'.

[69] Data on these variables are taken from the EBRD, *Transition Report 1999*.

of data on import penetration for the post-Communist countries leads to distortions in the estimated effects of the remaining variables in the model. For every independent variable except $ImportPen_{i(t-1)}$, we are able to obtain reliable data on the bulk (between 175 and 225, depending on the variable) of the 225 observations in our dataset. In the case of $ImportPen_{i(t-1)}$, by contrast, data are available for only 121 observations, which is why the sample in our earlier analyses is relatively small.

In a preliminary effort to determine whether expanding the sample of country-years influences our results, we estimate the model used to derive the findings in column 3.3 after omitting $ImportPen_{i(t-1)}$. Obviously, this tack is not without drawbacks, most notably the possibility that our model will be misspecified after removing import penetration and, consequently, that the parameter estimates of the remaining variables will be biased. None the less, doing so increases the sample size by almost 60 per cent. As shown in column 3.4, most of our results are quite robust with respect to the omission of $ImportPen_{i(t-1)}$. There is no case in which an estimate's sign changes when the larger sample is analysed. In addition, while the effects of inflation and former Soviet states are no longer statistically significant when $ImportPen_{i(t-1)}$ is dropped, each of the other variables remains significant.

Quantitative Effects

Having established that domestic institutions and macroeconomic conditions influence trade liberalization and that their effects are relatively robust, it is important to assess the quantitative impact of these factors. We begin by analysing the influence of regime type and fragmentation. Table 5 presents the predicted probability that country i engages in extensive trade liberalization (i.e., the probability that $Trade_{it}$ equals 2) in year t when i is a democracy and when i is not, varying $Fragmentation_{it}$ from 0 to 2. Note that we do not present the predicted probabilities when $Fragmentation_{it}$ equals 3 or 4, since they are virtually identical to the probability of extensive liberalization when it equals 2. To generate these values, we rely on the estimates in column 3.3. Unemployment and relations with the EU are evaluated at their means; GDP, inflation and import penetration are evaluated at their medians, since each of these variables has a rather skewed distribution; and we assume that i was not a part of the Soviet Union.

The results in Table 5 indicate that, regardless of the degree of fragmentation, democracies are almost certain to engage in extensive liberalization. This finding is not surprising since $Trade_{it}$ equals 2 in roughly 90 per cent of the cases in our sample where i is democratic. By contrast, non-democracies are quite unlikely to liberalize commerce when power is highly concentrated. However, moderately concentrated non-democracies (that is, those where $Fragmentation_{it}$ equals 1) are only about 5 to 10 per cent less likely than democracies to conduct open trade. Non-democracies are equally likely to do so when fragmentation is more extensive (that is, when $Fragmentation_{it}$ is greater than or equal to 2). Thus, as long as there is some dispersion of power within the government, the odds of trade liberalization depend very little on a country's regime type.

In addition, most of the remaining variables in our model have a quantitatively large, as well as a statistically significant, influence on $Trade_{it}$. If, for example, we focus on non-democracies marked by highly concentrated power (i.e., where $Fragmentation_{it}$ equals 0), changing $Inflation_{i(t-1)}$ from its median value to the seventy-fifth percentile found in the data yields more than a three-fold increase in the probability of extensive trade liberalization. A similar change in the value of $GDP_{i(t-1)}$ generates more than a four-fold rise in this probability. Furthermore, a one standard deviation rise in the value of either

TABLE 5 *Effects of Regime Type and Fragmentation on the Predicted Probability of Extensive Trade Liberalization*

	Fragmentation†		
Regime type	0	1	2
Democracy	0.99	0.99	0.99
Non-democracy	0.11	0.92	0.99

Note: These predicted probabilities are computed using the estimates in Model 3.3 of Table 3. To generate these values, $Unemployment_{it}$ and EU_{it} are evaluated at their means; GDP_{it}, $Inflation_{it}$ and $ImportPen_{it}$ are evaluated at their medians, since the distributions of these three variables are quite skewed; and we assume that country *i* was not a part of the Soviet Union.
†The predicted probability of extensive trade liberalization is 0.99 when Fragmentation equals 3 or 4, regardless of whether country *i* is a democracy or a non-democracy.

$Unemployment_{i(t-1)}$ or $EU_{i(t-1)}$ increases the predicted value of $Trade_{it}$ from 0.11 to 0.99. Shifting from a country that was not part of the Soviet Union to one that was has the same effect. In fact, of the variables analysed here, only $ImportPen_{i(t-1)}$ has a relatively small quantitative impact on commercial liberalization.

FRAGMENTATION AND OPENNESS IN THE POST-COMMUNIST WORLD

The preceding results indicate that domestic institutions strongly influence trade liberalization in the post-Communist world. Extreme concentrations of power in non-democracies hinder trade liberalization, while even a modest amount of political fragmentation can promote openness.

Our results differ from various studies based on other regions of the world that associate greater fragmentation of political power with protection. That fragmentation has fostered openness, however, is consistent with recent work on economic reform in the post-Communist world. Hellman, for example, reports 'a strong positive correlation … between coalition governments and economic reform.'[70] The roots of this difference in the effects of fragmentation seem to lie in the institutional legacies of the Communist system. Under a command economy, elites used concentrated political power to pursue autarkic trade policies that produced great benefits for incumbents. After 1989, elites in several countries faced few challenges to their authority and continued to favour protection. Where new elites or interest groups have not dispersed political power from the old guard, trade liberalization has been minimal. Uzbekistan, Turkmenistan and Azerbaijan provide clear examples of this outcome.

By contrast, in those post-Communist countries where new elite groups entered the political arena following 1989, thereby dispersing power from the Communist-era political

[70] Hellman, 'Winners Take All', p. 231.

elites, the prospects for economic liberalization have been greater. Fragmented political power has created political space for elite groups with stronger preferences for openness to influence policy outcomes. Moreover, by liberalizing trade, these new groups can weaken their political opponents who favour protectionism and are lodged in state bureaucracies.[71] Removing political power from the hands of bureaucrats appointed by Communist-era politicians has been a common element of reform in many countries. In Kyrgyzstan, for example, Askar Akaev, a former academic with weak ties to the state and party apparatus, ran for the presidency against Absamat Masaliev, the former head of the Kyrgyz Communist Party, in October 1990. Akaev was elected by a razor-thin margin. He quickly championed trade liberalization as a key element of economic reform and made Kyrgyzstan one of the most open economies in the region.[72] This strategy of rapidly liberalizing foreign trade fits nicely with the goal of weakening political opponents largely based in the state bureaucracy and parliament.[73]

In addition, the fragmentation of political power in a post-Communist setting may create space for social interests to push for openness. Financial interests, the service sector, and importers who would benefit from a more open economy had little opportunity to sway policy in the highly concentrated political arena of the command economy. However, the dispersion of power from protectionist elites in the post-Communist era has given these groups some leverage to promote commercial openness. Even in Ukraine, for example, where protectionist lobbies are legion, the head of the parliamentary Tax and Customs Subcommittee pointed out that 'numerous agreements on free trade, the pressure of the World Trade Organization, and the *pressures of large Ukrainian importers* have all resulted in a sharp reduction in customs receipts'.[74] One observer of Russia mentioned that 'the protectionism of producers is increasingly being countered by trade lobbies in the big cities, whose trade suffers from import tariffs that raise prices'.[75] More broadly, given the highly autarkic regimes from which post-Communist governments were emerging, it is quite likely that social groups entering the political arena generally had·a stronger preference for open markets than their predecessors.

CONCLUSION

In recent years, a burgeoning literature has emerged on the political economy of trade. Very little systematic research, however, has been conducted on commercial policy in the post-Communist world. In this article, we find that the fragmentation of power within post-Communist countries has been a potent force for trade liberalization. In non-democracies where political power is highly concentrated in the hands of a small groupof elites, state leaders face few impediments to maintaining the protectionist remnants of Communist rule and are well insulated from interests favouring commercial reform. In

[71] See Geddes, 'Douglass C. North and Institutional Change in Contemporary Developing Countries'.

[72] See Marek Dabrowski and Rafael Antczak, 'Economic Reforms in Kyrgyzstan', *Russian and East European Finance and Trade*, 31 (1995), 5–31; and EBRD, *Transition Report 1999*, chap. 2.

[73] A similar story can be told about Russia, where much of the reform strategy centred on removing control rights over economic assets from President Yeltsin's political opponents in the state bureaucracy. See Shleifer and Treisman, *Without a Map*.

[74] Sergei Teriokhin, 'Tax Policy', in Anders Aslund and Georges de Menil, eds, *Economic Reform in Ukraine: The Unfinished Agenda* (Armonk, NY: ME Sharpe, 2000), pp. 144–64, at p. 157; emphasis added.

[75] Anders Aslund, *How Russia Became a Market Economy* (Washington, DC: Brookings Institution, 1995), p. 149.

non-democracies where power is fragmented within the national government, however, new political groups with different economic interests are thrust on to the political stage, spurring commercial reform. Finally, in democracies, the dispersion of power within the national government combined with greater accountability creates an especially strong impetus to trade liberalization. Moreover, our findings are quite robust with respect to the measurement of regime type and the model's specification; and they are not unduly influenced by any single country or year in the sample.

These results bear heavily on the longstanding debate over the links between regime type and economic reform. Democracies are especially likely to liberalize trade. However, so too are non-democracies in which political power is at least somewhat dispersed within the national government. In contrast, the leaders of non-democracies characterized by highly concentrated political power have pursued protectionist policies.

Our analysis therefore qualifies the widespread view that democracy is necessary for economic reform in the post-Communist world.[76] Non-democracies in which power is somewhat fragmented have been as likely as democracies to engage in open trade. These results are especially important, since various scholars have criticized the existing empirical literature on regime type and economic performance for ignoring the effects of institutional variations within both democracies and non-democracies.[77] Such variations are central to the political economy of trade liberalization in the post-Communist world.

Studies based on other regions often suggest that domestic political concentration is a force for commercial openness, since politicians are insulated from the demands of protectionist interests. This literature assumes that politicians have a preference for unfettered trade, but that political fragmentation frustrates their aspirations by vesting protectionist groups with greater access to the policy process. Consistent with the underlying logic of this claim, fragmentation has spurred changes in commercial policy throughout the post-Communist world. However, post-Communist countries inherited highly concentrated political systems and protectionist trade policies; as such, fragmentation in these countries has promoted rather than inhibited commercial openness.

Secondly, our findings indicate that the EU has been a key force for commercial reform in the post-Communist world. By 1998, all but one of the former Soviet states had signed Partnership and Cooperation Agreements with the EU. These agreements call for granting most-favoured nation status and removing all quantitative trade barriers.[78] The lure of these benefits has proven a powerful trigger for commercial reform. More generally, our findings strongly indicate the need to account for the EU in studies of economic reform in the post-Communist world and to consider both domestic and international factors in studies of trade policy.

Thirdly, the strength and nature of the links between macroeconomic factors and economic reform have been sources of heated debate. We find that deteriorating macroeconomic conditions have not enabled groups harmed by liberalization to impede reform. Instead, post-Communist countries experiencing high unemployment and inflation have been especially likely to engage in extensive trade liberalization, a pattern similar to

[76] See Aslund, Boone and Johnson, 'How to Stabilize'; and Nelson, 'How Economic Reform and Democratic Consolidation Affect Each Other'.

[77] See Robert H. Bates and Anne O. Krueger, 'Generalizations Arising from the Country Studies', in Robert H. Bates and Anne O. Krueger, eds, *Political and Economic Interaction in Economic Policy Reform* (Oxford: Blackwell, 1993), pp. 444–72; Haggard and Kaufman, *The Political Economy of Democratic Transitions*; and Haggard and Webb, 'What Do We Know about the Political Economy of Economic Policy Reform?'

[78] EBRD, *Transition Report 1997* (London: EBRD, 1997).

that in various developing countries.[79] However, it diverges from the pattern in various advanced industrial countries, where macroeconomic dips often generate protectionist demands from segments of society that are threatened by foreign competition.

The inability of the losers from high inflation and unemployment to roll back trade liberalization in the post-Communist world has surprised many observers. Both the literature on trade policy and studies of the politics of economic reform have concluded that the social groups harmed most by free trade – especially organized labour and import-competing sectors – often are potent obstacles to commercial reform. In the post-Communist world, however, opposition from these groups has not halted trade liberalization.[80]

Clearly, our analysis has various limitations. For example, we have focused solely on trade policy. There is good reason to do so, since it is widely regarded as a central facet of economic reform. Further, addressing additional facets of economic reform is beyond the scope of this study and focusing on discrete aspects of economic policy rather than offering a general explanation for economic reform is typical in empirical studies of the post-Communist world.[81] Still, it would be useful to determine whether our argument can be applied to other areas of economic reform in future research.

Equally, the regimes in our sample tend to be transitional. As such, caution is warranted in applying our conclusions to analyses of other types of economic reform and to more politically stable settings. Finally, we have argued that on balance previously excluded groups entering politics in the 1990s have had a greater interest in commercial openness than did their Soviet-era predecessors. Our data, however, do not provide direct measures of the preferences of these actors.[82] Research on the preferences of social groups entering politics in the post-Communist world would be a valuable addition to the literature on the politics of economic reform.

Despite these limitations, our findings have important implications for the study of trade policy and the politics of economic reform. Over the past few decades, there has been a heated debate over the links between political and economic liberalization. Whereas much of this debate has centred on the effects of regime type, our results suggest that this focus is too narrow. A modest amount of political liberalization – even in non-democracies – can generate a considerable amount of commercial reform. Beyond that, however, additional liberalization – including the establishment and consolidation of democratic institutions – has relatively little incremental impact on trade policy. As such, this article demonstrates the value of expanding the range of institutional variation typically addressed in research on both trade policy and economic reform.

[79] See Haggard and Kaufman, *The Political Economy of Democratic Transitions*; Krueger, *Political Economy of Policy Reform in Developing Countries*; and Rodrik, 'The Rush to Free Trade in the Developing World' and 'Understanding Economic Policy Reform'.

[80] This finding is echoed by Hellman, 'Winners Take All'.

[81] See Hillary Appel, 'The Ideological Determinants of Liberal Economic Reforms: The Case of Privatization', *World Politics*, 52 (2000), 520–49; Steven Freis and Anita Taci, 'Banking Transition: A Comparative Analysis', in Lajos Bokros, Alexander Fleming and Cari Votava, eds, *Financial Transition in Europe and Central Asia* (Washington, DC: World Bank, 2001), pp. 173–88; and Jeffrey Kopstein and Steven Reilly, 'Geographic Diffusion and the Transformation of the Postcommunist World', *World Politics*, 53 (2000), 38–73.

[82] Nor does other research that analyses political fragmentation directly tap the preferences of groups influencing policy. See Hellman, 'Winners Take All'; and Roubini and Sachs, 'Government Spending and Budget Deficits in the Industrial Countries'.