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# The Spread of the Flat Tax in Eastern Europe

## A Comparative Study



ABSTRACT: *This paper is an exploratory comparative analysis of the spread of the flat tax in postcommunist Eastern Europe. The paper reviews the flat tax as a public policy prescription, discusses the various arguments that underpin its potential reception, introduces and applies a synthetic comparative method to study its spread in eleven East European countries, draws several conclusions regarding the conditions associated with implementing flat taxes, and suggests further research directions.*

One of the most interesting economic developments in postcommunist Central and Eastern Europe (CEE) is the spread of the flat tax. Unlike many other reforms, the flat tax is not merely a response to the past or an attempt to correct previous errors; thus, in implementing flat taxes, former communist countries are leading the way in liberal, free-market economic reforms. In less than fifteen years, the flat tax has gone from being deemed impossible to almost automatic, as more and more CEE countries have followed suit since Estonia's adoption of a flat tax in 1994. The lesson is that implementing radical economic policy is possible. However, despite increased interest in flat taxes from Western European countries and the United States, the diffusion of this policy idea has been somewhat contained to former socialist economies. A systematic study of how the policy has spread thus far throughout CEE, as of January 2008, is timely, to understand how it may spread further.

### The Flat Tax

The flat tax, or proportional tax, is neither new nor radical. It has been used throughout history and remains a common form of taxation (e.g., most sales taxes). The

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radical aspect of it lies in applying it to income, replacing sliding tax scales with a single fixed rate alongside a tax-free personal allowance.[1] Limited examples of flat income taxes exist. Hong Kong has had a flat tax for more than half a century (Reynolds 1999) and the Channel Islands of Jersey and Guernsey[2] both have had flat taxes on personal income for many years, but none of these are independent or autonomous nations. Flat-rate state income taxes in the U.S. states of Illinois, Indiana, Massachusetts, Michigan, and Pennsylvania are also outside the bounds of our study, as they are obviously part of the U.S. federal taxation system. Finally, the flat tax that the United States has imposed on Iraq (Milbank and Pincus 2003) does not count as a genuine adoption, and therefore it is not part of our analysis either. We study the adoption of flat-rate income taxes by self-governing nations, as such instances are more transformative in nature.

Before analyzing the processes through which the flat tax has spread, it is important to establish a clear chronology of countries that have adopted a flat tax.[3] The first mover was Estonia, which introduced a flat rate of 26 percent on personal income and corporate profits in 1994.[4] Estonia's Baltic neighbors soon followed. In the same year as Estonia, Lithuania flattened its tax system with a 33 percent rate on personal income.[5] In 1995, Latvia launched a flat tax at 25 percent. In January 2001, Russia established a flat rate of 13 percent on personal (but not corporate) income, followed by Serbia's introduction of a 14 percent rate on salaries in 2003.[6] In 2004, Ukraine adopted a flat tax of 13 percent and Slovakia launched a comprehensive flat-tax system, with income tax, corporate tax, and value-added tax (VAT) all levied at 19 percent. Georgia's parliament voted to introduce a flat tax in December 2004, implementing a 12 percent rate in January 2005. In that month, Romania also unveiled a flat tax of 16 percent following the election victory of the National Liberal Party/Democratic Party alliance in late 2004. The most recent countries to adopt a flat tax have been Macedonia in 2007 (at 12 percent and falling to 10 percent in 2008), and Bulgaria in January 2008 (at 10 percent). By the beginning of 2008, eleven separate countries had adopted a flat tax.

The chief advantage of a flat tax is its administrative simplicity. This factor is especially evident if tax evasion is high, as an increase in compliance reduces the deadweight loss of collection. The same logic applies to tax avoidance; though it is difficult to project hard numbers, a flat tax's incentives clearly favor economic activity and increased participation rates. The effect of flatter taxes on tax revenue is controversial and depends on the country's exact position on the infamous Laffer curve. However, the rule of thumb that what is lost from the rate is gained from the base seems typical. Public revenues rose in Estonia by 0.2 percent of gross domestic product (GDP) ("The Case for Flat Taxes—Simplifying Tax Systems" 2005), increased by over 20 percent in each of the first two years following Russia's adoption (Lynn 2004), and rose in Slovakia (Fund 2005) and Romania (Ionita 2006). Although these boosts to government coffers may stem from alternative but simultaneous economic reforms—or other factors entirely, such as surging oil prices—it is clear that many pessimistic predictions have not borne fruit (Aligica

and Terpe 2005). There are legitimate debates to be had over whether capital follows lower wages rather than lower taxes ("Flat Is Beautiful" 2005); whether a higher VAT offsets a low flat tax ("The Case for Flat Taxes—Simplifying Tax Systems" 2005); and whether the current "sprawling" complexity is simply an emergent and efficient response to the complexity of income (Kay 2005; see also Hettich and Winer 1999; Kay and King 1986). However, these arguments ignore the deeper properties of the flat tax, what has been called its theological element (Evans 2006). Opponents point to a decreasing marginal utility of wealth to justify progressive taxation, whereas advocates focus on the efficiency (allowing resources to flow to their highest return), equity (an even distribution of the tax burden), simplicity, and incentives for political responsibility. These normative dimensions allude to the certainty, convenience, and fairness criteria set forth by Smith (1991) that form the cornerstones of the classical liberal tradition. The twin champions of economic liberalism in the twentieth century—Hayek and Friedman—both advocated a flat tax (Friedman 1962, p. 175; Hayek 1956, pp. 265–284; 1960, p. 315). These statements formed the basis of the flat tax epistemic community that created and supports the policy idea, embodied by Hall and Rabushka's (1995) classic proposal.

The flat tax has received academic attention, but mainly in the form of effect assessment or projections based on wider tax reform. Ventura (1999) found that a Hall–Rabushka flat tax has a positive effect on capital accumulation and aggregate labor in efficiency-unit increase; also, the distribution of wealth becomes more concentrated. Stokey and Rebelo (1995) claim that tax reform would have little effect on the U.S. economy. However, Heath (2006) offers a long list of academic literature that predicts various beneficial effects. Due to the freshness of the flat tax as a viable policy, most information about its dissemination and adoption is in popular press and takes the form of opinion editorials or other country-specific advocacy.[7] Deeper analyses appear as overviews (Forbes 2006; Grecu 2005), specific proposals (Armey 1996; Forman 1996; Teather 2005), or both (Heath 2006). The literature has looked specifically at how the flat tax has spread, but incorporating the rise of the flat tax into a theoretical framework is still in an incipient stage. Placing the flat tax in such a framework requires a systematic application of a comparative method.

## The Comparative Method

The standard methodological approaches have serious limits in dealing with topics that combine issues related to the spread of ideas and issues of comparative political economy. Analyzing the spread of economic policy ideas requires multiple cases, and at the same time, retaining the holistic properties that put us in the position to capture precisely the multiple causal paths to adopting a flat tax. Qualitative methods can become mired in details when comparing multiple cases involving intricate configurations of factors. Quantitative methods can oversimplify—sometimes to the point of irrelevance—complex and conjunctional causal relationships. An adequate

study of the spread of economic policy ideas requires a synthetic comparative method, a combination of qualitative and quantitative approaches, so that we can retain the holistic value of each individual case but also compare multiple cases. The right method will allow us to appreciate that the process of adoption in Estonia was different from that in Serbia, but also that they must be generalized somehow to help understand the possible implications for Hungary. One methodological technique that provides such a combination is the comparative method, which is "a technique that uses Boolean algebra to simplify complex data structures in a logical and holistic manner" (Ragin 1987, p. 14). Because this approach provides a frame into which multiple case studies are analyzed, it focuses on processes rather than static snapshots and adjudicate among alternative theories. Before we perform the comparative method, however, we must define the degrees of analysis (i.e., the number of cases and conditions), define the binary conditions, and state the theories being examined.

### *Degrees of Analysis: Number of Cases*

The comparative method takes a number of cases and ascertains the presence (or absence) of various conditions for each case. The intention is to uncover which conditions, and which combinations of conditions, lead to a predefined outcome. In our case, that outcome is whether the country has adopted a flat tax on personal income. As of January 2008, eleven countries have adopted a flat tax, and though there is no objectively correct way to decide which cases are of interest, it makes sense to keep the analysis close to the environs of the adopters. In other words, because flat-tax adoption is thus far a European phenomenon, this study focuses on Europe.

To be more precise, the flat tax is synonymous with post-Soviet economic reforms, and therefore, the initial cases of interest are European countries that were formerly communist. The traditional distinction between Western and Eastern Europe is becoming increasingly irrelevant, but it is more useful than a categorization along strict geographic or even cultural lines, as shared political institutions are important to studying the flat tax. As a compromise, we can use a concept of Central Europe, despite the notoriously subjective way of defining it. For our purpose, we focused on those CEE countries from behind the Iron Curtain. This excludes Germany and Austria on political grounds, and Armenia and Turkey on geographical and cultural grounds. Consequently, this study examines twenty cases—Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, and Ukraine.

### *Degrees of Analysis: Number of Conditions*

Having decided the number of cases, the second degree of analysis that needs to be established is the number of conditions. Many factors have legitimate claim to

being relevant, but because this is an exploratory study, it makes sense to begin with relatively few conditions that seem especially pertinent given preliminary analysis. A strength of the comparative method approach is that conditions can be expanded or neglected as appropriate in an iterative process. The first condition (A) focuses on the internal fiscal situation and whether a country has a monetary incentive to alter its taxation revenue, either to bring more people into the tax system and reduce tax evasion or to correct shortfalls in revenues due to budgetary pressures. The second condition (B) is the external fiscal situation, which looks at the threat of capital flight that a country faces. Levels of foreign direct investment (FDI) and the ratio of imports and exports to GDP help ascertain the degree to which an economy is interrelated with its neighbors. These two conditions show how fiscal pressure for its own sake, or fiscal pressure as a consequence of the actions of others, might make a flat tax a policy priority. The third condition (C) looks at how much a country belongs to an international community. It is similar to the second condition, as it measures the external relationships of a country, but it focuses on social rather than economic factors. The fourth condition (D) looks at civic culture to see how public debate might influence the policy adoption process. It is important to know whether having a literate, educated, and public debate alters the propensity for the flat tax to spread. The fifth condition (E) asks whether a policy champion promoted the flat tax, and if so, whether that person was a political opinion leader. In other words, to what extent is policy implementation dependent on having an individual proponent? The sixth condition (F) is a crude measure of contagion, looking at whether there has been a precedent of a neighboring country adopting a flat tax.

The list of conditions is by no means exhaustive, and a number of additional conditions come to mind. Did the flat tax possess media support? Was it part of an electoral policy? How quickly was it adopted? Was the proposed flat tax revenue neutral? Was a rigorous impact assessment performed? All of these issues, however, are somewhat represented in the six chosen conditions, and at this stage of analysis, a broad understanding is more important than a crude list of preconditions, as we are in the midst of flat tax expansion. If we focus too much on the specific details of conditions in the adopted countries, then there is no scope for policy to spread farther, and we have created a closed system. Rather, we must look at fundamental conditions that can then be translated to countries that have yet to adopt a flat tax. This is the only way to straddle the middle ground, arguing that the flat tax can spread farther and common preconditions can be used to predict where. Broad conditions are required to prevent analysis from being merely descriptive.

### *Binary Conditions*

The comparative method is based on Boolean algebra, "the algebra of logic and sets" (Ragin 1987, p. 85), a key feature of which is the use of binary data. If a condition is present, we denote it with a 1; if it is absent, it receives a 0. Thus, we must tighten the definition of each condition and define our assessment criteria. We have already defined the outcome ($X$) as whether the country has a flat tax on personal income.

Thus, for countries that have adopted a flat tax, $X = 1$. For those that have not, $X = 0$. The conditions are somewhat more complicated for two reasons: time scale (i.e., at what moment in time we are focusing on) and the trade-off between accuracy and objectivity. Acknowledging such problems is the first step to solving them, and we offset the issue of which time period we are concerned with by using the following rule: for an adoptee, the time period is "prior to adopting," for a nonadoptee, it is "the present." Because we are performing process-driven analysis rather than taking a snapshot of an arbitrarily defined moment, the time scale depends on whether adoption has taken place. If it has, we are concerned with the conditions prior to adoption. If it has not, we are interested in the present situation.

The second issue is whether we wish to be vaguely right or precisely wrong. We choose the former, due to our intent to stimulate further research, enabling us to refine our judgment. Thus, rather than use a narrow question with an objective answer, we shall use the most accurate indicator of each condition and utilize a rigorous case study method to answer it as crisply as possible. It might be less subjective to define Condition A by asking whether the government budget was balanced, but this fails to fully reflect the fiscal situation in the country. Therefore, we will use the looser question of whether the country had or has a problem raising tax revenue, using levels of tax evasion and the budget deficit as evidence to answer it. If the country did or does have internal pressure to reform tax revenue, then A = 1. If it did or does not, then A = 0. Again, a number of objective statistics are relevant for Condition B, but the binary condition is the broader issue of whether the country feared or fears capital flight; B = 1 if the answer is yes, and B = 0 if not. Condition C = 1 if the country was or is an integrated part of the international community, and C = 0 if not. If the population was or is engaged in political debate, then D = 1; D = 0 if not. Condition E depends on whether an opinion leader led or leads the flat-tax campaign; E = 1 if so and E = 0 if not. Finally, Condition F = 1 if a neighboring country had or has previously adopted a flat tax, and F = 0 if they had or have not.

### *Theories Examined*

Before collecting and evaluating the evidence, we outline the theoretical frameworks under scrutiny so the results can be seen in context. We are conducting our analysis not simply to document what happened and when, but to tease out potential causal relationships that enlighten us as to why they happened when they did and how they might happen again.

Discussing alternate theoretical frames also reinforces the choice of conditions, as they each possess attributes of broader themes. Conditions A and B—the role of budgetary pressure and the threat of capital flight—are part of an interest explanation of policy change using the pecuniary incentives faced by actors[8]—that is, whether it is in a country's own domestic interest to adopt a flat tax, regardless of the activity of neighbors. Condition B asks whether the policies in other countries affect the

domestic interests, demonstrating that policy reform can be strategic. Together, conditions A and B answer both facets of interest-driven policy: whether it is domestically and strategically rational. Other explanations focus more on the roles of institutions and individuals (Braun and Busch 1999; Campbell 2001; Goldstein 1993; Goldstein and Keohane 1993; Hall 1989; Legro 2000), and in this respect, three of our conditions are relevant. Condition C examines international influence to gauge whether ideas are transmitted through shared institutions. Condition D looks at domestic institutions, and the actions of the media and public debate and opinion lead policymakers. Condition E captures the individual element by asking whether key individuals and outstanding leaders ultimately dictate policy (Harberger 1993). Condition F is a crude measure of contagion, confirming whether it is fruitful to study the adoption of the flat tax in the first place: If the spread is an automatic process with a clearly predictable pattern, it might suggest that economic explanations are irrelevant. If, however, Condition F is not enough, then something else must be at play.

The conditions reflect competing theories. A theory that emphasizes the interests of actors predicts the importance of conditions A and B. A theory that emphasizes ideas and beliefs focuses on conditions C, D, and E. A lack of theory can be captured by E. Finally, a multicause, path-dependent theory may emphasize Condition E for some countries and A, B, and F for others. In other words, the very fact that conjunctional causation and multicause paths are a real issue legitimizes efforts to explore unorthodox methods and approaches.

## Generating the Truth Table

### *A Note on the Data*

To identify the presence or absence of the six conditions, case studies of all twenty countries of interest must be performed, focusing on the criteria outlined in the previous section. Aside from formal flat-tax proposals, scholarly articles on the effects of flat taxes, official data about relevant variables, and other archival records, such as survey data, these case studies extensively use mainstream media reports and interviews. Such sources are particularly relevant because, among them, they manage the difficulties created by the subjective nature of the analysis. It is possible to gather official statistics on the size of imports and exports relative to GDP and even to utilize projections and formal estimations of the size of the informal economy, and hence, the level of tax evasion. However, these objective facts are irrelevant for Condition A if domestic policymakers are either unaware of them or do not see them as a problem. We need to go beyond establishing retrospective evidence and uncover whether a flat tax is an issue for the public and policymakers. Analyzing mainstream media is a crucial way to judge whether the conditions are relevant. But the press is an imperfect measure of the local environment, as Condition D explicitly recognizes. In some countries, civil society is not developed,

and policy debate mirrors public debate. Interviews thus were required to acquire information on the local environment firsthand. Two types of information were of interest: first, information to compensate for imperfect secondary sources and fill in the missing gaps needed to judge whether conditions were present or absent, and second, interviews of key players to go beyond the public debate and shed light on the decisions of policymakers who actually implemented a flat tax.[9] The range of interviews was large, from international experts such as Allister Heath (Heath 2006), Daniel Mitchell, Alvin Rabushka (Hall and Rabushka 1995), Howard Scott, David Storobin, and Corin Taylor to key players including Mart Laar, former prime minister of Estonia, Martin Bruncko, former economic advisor to the Slovakian finance minister, Dusko Stojkov, advisor to the Serbian finance ministry, and other national experts and decision makers who wished to remain anonymous.



### *Applying the Conditions to the Cases*

#### *Condition A: Tax Evasion and Budget Pressure*

Because all twenty cases are transition countries, we might expect Condition A—internal pressure to generate revenues from taxation—to be prevalent throughout. However, the transitions in taxation occurred at different times, meaning that we can legitimately expect deviations. To Western eyes, the structural similarities may be blinding, but this belies the differences that are of special interest in trying to uncover why economic ideas spread to some countries and not others. Rather than seek absolute values that reinforce the original decision to group the cases under scrutiny, we are more concerned with relative indicators that separate the countries, taking their broader similarities as given. All twenty countries possess large informal sectors, but our concern is which countries have especially large shadow economies. By definition, the size of an informal economy is impossible to calculate accurately, but using figures provided by Schneider (2003), we can estimate that the average shadow economy labor force for selected former Soviet republics and CEE countries is 29.7 percent of the working-age population.[10] The only countries with levels of more than one standard deviation higher than this average are Belarus, Georgia, Russia, and Ukraine. We can also add Serbia to this list because budgetary issues were important in the buildup to the flat tax. Although VAT reforms contributed more to the budget surplus, there are estimates that 30 to 40 percent of national output avoids consumption tax.[11] It is also important to add Czech Republic, Hungary, and Poland, as their budget deficits are forecast to remain into 2007.[12]

#### *Condition B: Capital Flight*

With regard to tax regimes, a discrepancy between two neighboring countries provides an incentive for individuals or firms to choose more liberal rates, thereby

causing capital flight away from higher-tax nations. According to Kevin Wadell, "pressure comes from competing economies" (quoted in Tzortzis 2005). The two simplest proxies of the degree of competitiveness between countries are the ratio of exports to GDP and amounts of FDI. The former reflects how open the economy is and the latter measures its intake of foreign capital. The level of exports of goods and services as a percentage of GDP differs dramatically among the countries concerned, ranging from 23.7 percent in Serbia to 79.9 percent in Estonia, but Belarus, Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Moldova, Slovakia, Slovenia, and Ukraine[13] all also have exports above 50 percent of GDP.

Exports can be positive-sum between competing nations (e.g., countries benefit from reductions in trade barriers with neighbors), FDI better measures competitiveness because funds are scarce and therefore one country's ability to entice new investment is more likely to reduce the capital available to its neighbors. In 2000 and 2001, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Russia, Slovakia, and Ukraine received more than $500 million in FDI (UNCTAD 2002).

Combining the GDP and FDI proxies to see which countries feature in both suggests that Condition B is present in Bulgaria, Czech Republic, Hungary, Slovakia, and Ukraine. But this fails to tell the whole story. As discussed previously, these objective statistics are irrelevant unless they are present in the minds of the decision makers, and therefore further sources are required to validate the initial picture and possibly alter the list above. The Czech Republic was confirmed by the words of the shadow finance minister, Vlastimil Tlusty, who believes that "if a neighboring country [adopts a flat tax] it's necessary to follow suit" (quoted in Reynolds 2005). Similarly, in Hungary, former president and leader of the opposition party FIDESZ-MPP Viktor Orban opined that "Budapest will have 'no choice' but to jump on the 'flat-tax bandwagon' to retain the country's share of foreign investments that will otherwise flow to flat-tax nations" (quoted in Storobin 2006). However, Latvia should be on the list; Heath claims that "at 25 percent, the rate was chosen to undercut Estonia's; the fact that Latvia felt forced to follow Estonia's lead confirms the power of tax competition and the need for countries to attract capital" (2006, p. 82). Georgia's rate of 12 percent was no coincidence if it was deliberately chosen to undercut Russia's, and Serbia also feared capital flight.[14] Interestingly, although Slovakian politicians knew that a flat tax would provide a competitive edge, it was not a key consideration and therefore not a precondition of flat-tax adoption.[15]

*Condition C: Membership in International Community*

Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia, and Slovenia joined the World Trade Organization in 1995 and 1996. Albania, Croatia, Estonia, Georgia, Latvia, Lithuania, Macedonia, and Moldova joined between 1999 and 2003. Belarus, Bosnia, Russia, Serbia, and Ukraine are not members. Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia are EU members, and Bulgaria and Romania joined in 2007.

*Condition D: Civil Society*

There are various means to judge whether a country's population is engaged in political debate, none of which are perfect. It is possible to use indicators that determine capacity for civil society, such as literacy rates or tertiary education, but these are crudely elitist. Constitutional factors can be used, such as the existence of a free press and whether it generates independent media. Institutions that might indicate civil society, such as the Catholic Church, help as well. Opinion polls help to establish whether political issues are known to the public, but not whether they are understood; thus, voter turnout and other measures of voter apathy are required to offset a reliance on instrumental factors. As before, expert judgement provides the narrative that binds the story together. Garton-Ash contrasts two of the cases under scrutiny: "Slovakia had a vibrant civil society—or what Slovaks call 'the third sector.' There was the Catholic Church. There were independent radio stations, magazines, and the private television channel Markiza. And there were numerous nongovernmental organizations [NGOs]. . . . When I described this civic campaign to opposition friends in Serbia a week later, they threw up their hands in envious despair" (1999, p. 358).

It is important to distinguish among the presence of external networks that disseminate ideas (i.e., epistemic communities), external NGOs that influence domestic policy (e.g., the Soros Fund), and genuine domestic organizations that stimulate and facilitate debate. All three contribute to civil society generally, but we are interested only in the last type. These are apparent in larger countries (e.g., Bulgaria), especially those with an established dissident culture (e.g., Czech Republic, Hungary, and Poland), but not in those most tightly controlled during communism (e.g., Albania, Russia, and Romania), or those governed by more authoritarian means (Belarus). Because civil society relies on an established middle class and stable governance, the Balkan nations afflicted by war (Bosnia, Croatia, Macedonia, and Serbia) lack the requisite domestic institutions. Of those remaining, the relatively recent revolutions (Georgia and Ukraine) are too fresh to have created a genuine civil society or too small (e.g., Moldova).

*Condition E: Policy Champion*

Establishing the presence of a policy champion runs the danger of appealing to hindsight, as it would be easy to identify a key proponent of a flat tax in countries where such a tax has been adopted. The criteria must be strict, revealing someone who believes in the flat tax's theological properties (Evans 2006) and is in a position of political influence, as president, prime minister, minister of finance, or a chief advisor to either position. Despite the degree of influence people such as Alvin Rabushka have regarding the flat tax, he does not qualify as a policy champion because he does not hold a domestic position. Such international advocates spread the ideas but do not implement them. The advantage of defining the policy champion

relatively precisely is that the burden of proof shifts from the motivations of the many actors involved in the adoption process to assessing the merits of those claiming to steer events. To avoid trawling through the evidence for a policy champion, we assume that if that person exists, he or she makes himself or herself known. Therefore, each country is assigned a 0 unless it can prove otherwise. The policy champions that emerge are Mart Laar (Estonia), Andrei Illarionov (Russia), Ivan Miklos (Slovakia), and Theodor Stolojan (Romania). Vickor Orvan in Hungary is a known flat-tax advocate, but a new election or coalition government would be required to push him into the position of becoming a policy champion.

*Condition F: Precedent*

As precedent is a crude measure, it is easy to determine: for flat-tax countries, if a neighboring country adopted a flat tax before they did; and for non-flat-tax countries, if a neighboring country has already adopted a flat tax. Estonia, Russia, and Serbia are the only countries that fail to satisfy the first condition and only Slovenia fails to satisfy the second. This condition highlights the few instances in which geographical proximity is not a precondition for flat-tax adoption, and is of interest for two reasons. First, it indicates cases in which ideas might dominate interests, as adoption cannot be explained by a domino effect. Second, it helps us to identify isolated countries in which idea channels, such as epistemic communities, might be required to offset the lack of interest channels, such as structural similarities with neighboring states.

## Reduction and Boolean Analysis

Table 1 shows the truth table constructed from the analysis in section four, following the technique laid out by Ragin (1987). To maintain close dialogue with the cases, the name of each country is retained and equivalent cases, such as Albania and Bosnia, have not been combined. Although six conditions imply a far greater number of logically possible combinations of conditions (i.e., $2^6 = 64$ rows), for simplicity, only observed cases are reported. Note that this does not affect the final analysis, as only cases that lead to a flat tax are used in the data-reduction stage of the analysis.

Before reducing the truth table to a set of results, it is worth reiterating the tentative nature of the comparative method. Two separate matters of judgement are open to debate; the first is the choice of conditions (A, B, C, D, and E); the second is the establishment of presence or absence for each of the cases. The plausibility of the results can be used to reassess both matters of judgement, but we should not confuse validity (0 or 1 given A) and soundness (the choice of A). As this is an exploratory study, the results are intended to lead toward a refined version of the initial conditions and insights into which ones require elaboration and further enquiry.

Table 1

**Truth Table for Flat-Tax Adoption in Central and Eastern Europe, 1994–2007**

| | Conditions | | | | | | Outcome |
|---|---|---|---|---|---|---|---|
| Country | A | B | C | D | E | F | X |
| Albania | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Belarus | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| Bosnia and Herzegovina | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Bulgaria | **0** | **1** | **0** | **0** | **0** | **1** | **1** |
| Croatia | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Czech Republic | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| Estonia | **0** | **0** | **0** | **0** | **1** | **0** | **1** |
| Georgia | **1** | **1** | **0** | **0** | **0** | **1** | **1** |
| Hungary | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| Latvia | **0** | **1** | **0** | **0** | **0** | **1** | **1** |
| Lithuania | **0** | **1** | **0** | **0** | **0** | **1** | **1** |
| Macedonia | **0** | **0** | **0** | **0** | **1** | **1** | **1** |
| Moldova | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Poland | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| Romania | **0** | **0** | **0** | **0** | **1** | **1** | **1** |
| Russia | **1** | **0** | **0** | **0** | **1** | **0** | **1** |
| Serbia and Montenegro | **1** | **1** | **0** | **0** | **0** | **0** | **1** |
| Slovakia | **0** | **0** | **1** | **1** | **1** | **1** | **1** |
| Slovenia | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Ukraine | **1** | **1** | **0** | **0** | **0** | **1** | **1** |
| $N = 20(11)$ | | | | | | | |

*Note:* Boldface denotes that the country has adopted a flat tax.



### *Results*

Using uppercase letters to denote presence and lowercase to denote absence for each condition, the primitive form of the data is as follows:

$$X = \text{aBcdeF} + \text{abcdEf} + \text{ABcdeF} + \text{aBcdeF} + \text{aBcdeF} + \text{abcdEF} + \text{abcdEF} + \text{AbcdEf} + \text{ABcdef} + \text{abCDEF} + \text{ABcdeF}.$$

Notice that there are repetitions and therefore the eleven results can be condensed into seven unique products:

$$X = \text{abcdEf} + \text{ABcdeF} + \text{aBcdeF} + \text{abcdEF} + \text{AbcdEf} + \text{ABcdef} + \text{abCDEF}.$$

At this point, we can utilize Boolean minimization: "If two Boolean expressions differ in only one causal condition yet produce the same outcome, then the causal condition that distinguishes the two expressions can be considered irrelevant and can be removed to create a simpler, combined expression" (Ragin 1987, p. 93).

Hence,

1. abcdEf combines with abcdEF to produce abcdE
2. ABcdeF combines with ABcdef to produce ABcde
3. ABcdeF combines with aBcdeF to produce BcdeF
4. abcdEf combines with AbcdEf to produce bcdEf
5. abCDEF remains.

The first minimization shows that geographical proximity is an irrelevant condition if a policy champion exists, there are no budgetary or trade pressures, and there is no influence from international institutions or a developed civil society. The second shows that precedent is also immaterial if both measures of financial pressure exist, and there is no civil society, institutional influence, or policy champion. The third shows that budgetary pressures make no difference if there are external financial pressures and a precedent. The fourth shows another situation in which Condition A is irrelevant, this time when a policy champion is the only present condition. Finally, we retain the only primitive form that cannot be reduced—namely, the lack of internal and external financial pressure, but the presence of civil society, international influence, a policy champion, and precedent.

This process sharpens the thinking on flat-tax adoption and applying the results to the original cases yields several insights. A number of cases validate the interest explanation that predicts that internal budget pressures, external capital–flight pressures, and precedent lead to flat-tax adoption. This holds for Ukraine and Georgia, neither of which had institutional influences, an active civil society, or a real policy champion. However, the idea explanation is relevant for two reasons: first, the absence of a policy champion is offset by precedent, and second, both countries had recent revolutions. These genuine constitutional moments (Ackerman 1992) are an occurrence of circumstance, represented by the lack of a developed civil society. To understand the relation between the two interest explanations (A and B), compare Latvia and Lithuania with Belarus. All three have low institutional influence, weak civil societies, and no policy champion, but they all have precedent. Also, Belarus has internal pressure to raise tax revenue and Latvia and Lithuania have external pressures regarding capital flight. This supports the interest explanation, but also shows that external factors are more telling than are internal factors. Were Belarus to feel pressure from competing countries, it would take the same expression as Latvia and Lithuania, and thus be expected to adopt a flat tax; as only one condition is missing, we might call Belarus ripe for adoption. Also, there are no cases with AbcdEF, which is one condition away from Belarus. Although this case lies in counterfactual space, we might expect the addition of a policy champion to make flat-tax adoption in Belarus more likely, showing another

possible avenue that would lead to a flat tax, the former being an interest channel, the latter an idea channel.

Intuitively, we might expect all conditions to independently increase the likelihood of flat-tax adoption, and the only way to test this is to find a case with all conditions present. Such a case does not exist, however, suggesting two things. First, the two cases that come closest to having all conditions present are Czech Republic and Hungary: both lack only a policy champion (E). Because we know that the Hungarian opposition party advocates a flat tax, this is another ripe country, should the opposition come to power. Second, that no current adoptee has all conditions present suggests that they might offset each other, and we have the evidence to speculate how. Slovakia is the only flat-tax country that we judged to have international influence and a developed civil society. We could reappraise the initial judgement and question whether Slovakia warrants a 1 for each condition. The alternative is to expand the two conditions to see what they are really representing. Condition C might merely be proxying size or development, demonstrating why the flat tax is associated with small, poorer countries and also why it has thus far failed to spread to Western Europe. But if this is the case, Russia should be adapted to have this condition present. This implies that we have defined the condition inadequately, either being too imprecise to capture the current situation succinctly or too tight to let Russia through the net. But the reason for the original definition was to establish the legitimacy of the traditional idea explanation: that ideas transmit by becoming embedded within institutions. This analysis contradicts that assertion, as the flat tax is more consistent with separate, isolated countries rather than members of the same club, sharing institutional structures. Our understanding is not complete, but we have dealt adequately with one of the competing theories: If ideas do matter, we need a more refined concept than that captured by Condition C.

Thus, countries that appear to be lacking only a policy champion, such as Bulgaria, Czech Republic, Hungary, and Poland, might be an illusion. As we have no cases with any of their condition combinations but with a policy champion, we do not know if that would make the difference. On the contrary, as discussed above, the presence of some conditions may offset an ideologically committed opinion leader. Whereas Condition C might reflect general size and influence, Condition D might represent the lack of a constitutional moment. As constitutional moments are characterized by "procedural irregularities" (Ackerman 1992), they are harder to achieve under the watchful eye of the public. Constitutional moments involve an "energized, proactive public taking an active and maybe even directive part in the extended deliberations of a constitutional moment" (Burnham 1999, p. 2249) but it is unclear that mass media is a necessary condition. On the contrary, we might see people shouting in the streets, politicians seizing the moment, and a silent press. For this reason, we might expect D and E to offset each other: If there is no real civil society and a constitutional moment appears, radical reforms can be made without a policy champion (e.g., Georgia, Ukraine, and, to a lesser extent, Latvia, Lithuania, and Serbia); however, if the policy is going to run up against the

gatekeepers of public debate, it takes a strong politician with convictions to pass it through (e.g., Slovakia).

Finally, one case—Serbia (ABcdef)—appears to contradict the theory either that interest explanations (captured within conditions A and B) combined with precedent (F) matters or that an idea driver or policy champion (E) has to lead and define the reforms. Two important caveats must be applied, however. First, the measure of precedent is crude and only looks at geographical proximity. When Serbia adopted a flat tax, Estonia, Latvia, Lithuania, and Russia had all already done so, and though it represents the crossing from Eastern Europe to Central Europe, the Serbian debate was influenced by the knowledge that flat taxes had already been done elsewhere. Second, it is debatable whether Serbia's flat tax should count as being analytically equivalent to the others. As already mentioned, Alvin Rabushka contests whether Lithuania's flat tax truly qualifies, and in Serbia, only salaries are taxed at a flat rate, whereas other forms of personal income are taxed at different rates. Also, Serbia's adoption of its flat tax was part of broader reforms the centerpiece of which was the introduction of a VAT. The VAT was seen as the weapon to solve fiscal imbalances and the flat tax involved significantly less political capital than in other adopting countries.[16] Finally, other reports fail to include Serbia as a flat-tax adoptee.[17]

### *Factoring: How and When Do Interest Explanations Matter?*

As the prevailing theory of concern is the interest explanation, it would be useful to perform a technique called factoring to focus in more detail on the interest conditions. We have already established that Condition B, rather than A, is the most important factor, and indeed, the appeal to competitiveness over FDI is most evident in reports. Thus, we can separate the minimized expressions into two sets, those consistent with the presence of B and those consistent with its absence (b):

$$X = b(aCDEF + acdE + cdEf) + B(Acde + cdeF).$$

Strikingly, for each case in which there was no real consideration over the threat of capital flight, Condition E is present. For each case in which there was financial pressure from external sources, Condition E is absent. In other words, a policy champion was unnecessary in countries that had an interest in adopting a flat tax anyway, but if that interest is nonexistent, idea drivers can still get the policy implemented. Thus, both are necessary conditions to explain the spread of the flat tax.

## Conclusion

This paper explored the case of adopting the flat tax in CEE, using the CEE case to gain exploratory insights into the ways in which ideas and interests affect the adoption of a specific economic policy. With a single-cause deterministic assumption

discarded, one could explore multiple paths and patterns of causality through a comparative method. Although theories based on the driving force of interests could explain some cases, they could not explain all. Even with six simple conditions, an epistemic element has to be integrated. We have seen that ideas, interests, and consequences are all requisites for a complete explanation, but for some cases, an idea-based approach sufficiently explains adoption, and these cases act as precedents for others to follow. Finally, it is worth commenting on the predictive power of this analysis and the implications for other countries in other regions. The truth table synthesizing our data appears deterministic, as it is purely descriptive. However, the table is liable to change over time, as it only reflects current information that is subject to change. Conflicting data and the emergence of new evidence might highlight a miscategorization; refined theory and deeper knowledge of the cases might alter judgement. But assuming this table is accurate, what prediction insights have we gained? One of the strongest conjectures is that if a policy champion emerges, for instance, in China, the flat tax could begin a fresh wave of adoption in the Far East. From there, new avenues for its diffusion may open up. Of course, we are in the realm of speculation. But at least this is the beginning of a conversation based not on pure intuitions, but on an attempt to methodically analyze the existing cases of the phenomenon of interest.

## Notes

1. This personal allowance creates a degree of progressiveness in the flat tax, but a debate as to whether this makes it truly flat is largely semantic. If the allowance is defined as a percentage of income earned below a particular threshold, then we have a progressive system with two rates, one of which is zero. If instead the allowance is defined as a non-taxable exemption, then it is a single flat rate system. The distinction is largely irrelevant because it does not alter the substance of the policy or the novelty of its implementation. Our view is that the flat taxes under scrutiny are genuine because all taxable income is taxed at a flat rate.

2. The Channel Islands lie just off the northern French coast and possess a special constitutional status in Great Britain.

3. Different studies provide different years for the adoption of a flat tax depending on whether the author is referring to when the legislation was passed or when it actually came into effect. Focusing on the legislative passage means having to define for each country the precise stage at which it becomes adopted. For clarity and to fit into existing studies, the year of adoption refers to when the flat tax is imposed on the people.

4. According to Evans-Pritchard, "Estonia kicked off the trend in 1991 with a flat-rate of 26pc on personal income, later cut to 20pc" (2005). Estonia "has just cut its flat income tax by two percentage points to 24 percent and has promised that the tax will fall to 20 percent in two years' time" (Heath 2006, p. 83).

5. Some commentators do not consider that Lithuania's 33 percent rate is equivalent to its neighbors, as it is too high to be competitive and fails to account for other forms of income (see Rabushka 2005).

6. Like Lithuania, Serbia levies different flat rates on alternative sources of income.

7. See, e.g., Bartlett (2005); Epstein (2005); Gurdgiev (2005); Pirie (2005); "The Case for Flat Taxes—Simplifying Tax Systems" (2005).

8. The predominant method of rational-choice political science, which stems from the interest groups theories of Becker (1983) and Olson (1965).

9. We deliberately chose broad conditions, and therefore cannot fulfill the binary conditions by simple recourse to objective facts. Interviews are used to show that subjective criteria do not mean arbitrary criteria; they simply acknowledge that the analysis is tied to personal judgement. Subjectivism can be both help and hindrance, but the crucial point is that it exists, and therefore must be countered. And the potential pitfalls caused by a reliance on judgement have been checked by ethnographic fieldwork in a key case (Romania) and formal interviews.

10. See Schneider (2003), table 2, figures for 1998–99, not including Albania, Bosnia, and Serbia.

11. Anonymous interview, September 2006.

12. See "Regional Overview: Central and Eastern Europe," EBRD Annual Meeting, Institute of International Finance, May 2006, table 4: Fiscal Balance.

13. Eurostat (figures are an average of 2000–2004).

14. Anonymous interview, September 2006.

15. Anonymous interview, September 2006.

16. Anonymous interview, September 2006.

17. See Keen et al. (2006), table 1.

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