

Democratic and economic diffusion

Jos Elkind

Dublin, March 2003

Department of Political Science
Trinity College Dublin
Dublin 2, Ireland

jelkind@cantr.net

Introduction

The task of political science is to study the political process. Usually this means studying the behavior of political actors in settings that are more or less fixed – behavior within a certain constitutional context, or within a certain international configuration of actors. Crucial for the understanding of these processes, however, would be to understand how these structures come into existence in the first place. How and when do regimes change? In contemporary political science literature, the study of transitions to democratic regimes is an important and large field of research. Important, because it seems that explaining how and why a democratic regime comes into existence is one of the core tasks of the discipline. Understanding such processes is not only fundamental for our understanding of the political world, it is also of practical importance, as political advisors of international organizations use this knowledge to advise regimes that are trying to transform their political system into a more democratic one. Striking, however, is the fact that this research is focused on transitions to democracy only, while the literature on the breakdown of democratic regimes, or transitions other than from or to a democratic form are much more rare.

The field in which these studies into democratization take place is that of comparative politics. The difference between a group of case studies and a comparative study is not always very clear in those research projects, however. Often a book will simply contain different chapters per country, written by different authors and then said to be comparative. To be truly comparative one should not only study different cases, but also concentrate on specific aspects of those cases that are comparable. An example would be the well-known study by Linz and Stepan, in which they study several countries themselves and apply their theoretical framework to all those cases (Linz and Stepan 1996).

A purer form of comparative studies is not based on anything similar to case studies and takes only a limited number of variables. Those variables are then measured in many cases, after which the statistical correlations between the variables are studied to test certain specific theories. This way the researcher gets more insight in the extent to which the theory holds, but less in the different cases he or she is studying. This is the category of studies this paper falls into.

In this field of research usually two different phases of founding a new democracy are distinguished, namely the transition to and the consolidation of democracy. Sometimes more phases are distinguished, like the breakdown of the previous regime or the interim period between the breakdown and the transition (e.g. the phase of 'liberalisation' in: Gel'man 1999, 944), but the phases of transition and consolidation are the most important when applying the different theories that exist in those studies. Theories concerning the transition to democracy deal with the process of building the new democratic institutions and the factors that influence this process. Those concerning the consolidation of democracy deal with the period after the creation of the new institutions, in which the new system ought to get more stable. In the first period many people will still have non-democratic mindsets and ways of behavior and gradually they have to adjust to the new political reality; the democracy will be fragile and rather easy to break

down again, while after a certain period the people will be more adjusted to the democratic system and the system will be more steadily integrated into society. In most cases it will be members of the elite that introduce a new political system, not a mass movement. In this case the new system is probably more or less alien in the society at first and the consolidation process concerns the adaptation and acceptance over time.

In this paper the main focus will be on the transition itself – what factors influence whether or not a country will become more democratic or more autocratic? It should be emphasized that the aim of this paper is to describe the hypotheses that are being worked on and to present the results of a very preliminary quantitative analysis. Although theoretically I prefer not to make a distinction between transitions to and from democratic regimes and other transitions, the main theories on which this paper is based are from the field of studies in democratization, and the paper will thus mainly be concentrated on this particular type of transition. The data analyses presented are preliminary in the sense that certain assumptions behind the model are clearly violated, which has been more or less ignored, and which has to be done differently in future stages of this research.

In the literature on democratic transitions and consolidations, there are many theories that explain which factors stimulate the transition to a new democracy and which do not. In this study two explanations will be concentrated on. The first is the often-heard explanation that economic development of the country stimulates democratization of the regime (e.g. Lipset 1959). A second is the more recently developed theory of democratic diffusion, which says that a democratic sentiment spreads out over countries as if countries are infected by each other. In this theory the main explanation is not the economic performance but the geographical location – the kind of countries the country is bordering. The relative strengths of and the interaction between the two phenomena will be analyzed. This leads to the following main question for this paper:

To what extent does democratic diffusion at a national level, as compared to the more common explanation of economic performance, explain the transition of a regime?

The paper will start with a description of the theory of democratic diffusion. The following chapter will deal with the older theory of economic performance, and the next chapter with a somewhat new concept, namely that of economic diffusion. After a short chapter on the measurement of the main concepts, the final chapter will discuss the data used for the quantitative analyses and present the results.

Democratic diffusion

The first explanatory variable used in this paper will be what is called democratic diffusion. The theory around this concept is much less developed than is the theory around the correlation between economy and democracy. Democratic diffusion is a more recently developed perspective on democratization (Starr 1991; Starr 2000; O'Loughlin *et al* 1998; Kopstein and Reilly 2000; Bell

and Staeheli 2001). The basic idea behind the theory is that other explanations of democratization focus too much on domestic factors, while external pressure and example seems to be very important. The idea is that democracy spreads out over groups of countries; countries influence their neighboring countries in their democratization processes.

Before turning to the study of democratic diffusion, one has to pay some attention to what democracy is. There is a huge amount of literature on the question of what can be called democratic and what cannot.¹ Debates exist on whether it only means that the people have a right to vote for the most influential offices or whether it also means that people have certain liberties or that society or the political system is organized in a specific way. In this paper it does not seem fruitful to go too deeply into this debate. We only need to define broadly what is democratic and what is not in political ideas. One commonly used definition of democracy is the one by Schumpeter, who defines the 'democratic method' as "that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote" (Schumpeter 1976). In later works on the definition of democracy this very minimal definition has also been described as an 'electoral democracy', as opposed to a 'liberal democracy', where more requirements for example about civil freedoms have been taken into account (Schedler 1998). In this paper the two aspect of democracy that Dahl distinguishes, competition – comparable to Schumpeter – and participation, will be taken into account (see Doorenspleet 2001).

One main cause for this phenomenon in international relations is the existence of international organizations consisting of democratic countries that require new members to be democratic. The most prominent example is the European Union, of which the access requirements strongly influence the democratization processes in Eastern Europe (Kopstein and Reilly 2000). Although this might be a very strong explanation in some specific circumstances like the European Union, it does not seem to be a very general explanation.

Better applicable, but more linked with public opinion instead of the level of democracy of the regime is the idea that peoples' ideas are simply influenced by their contacts with others. It can be assumed that people will have more frequent contact with people living closer to them. The costs of traveling and other ways of contact will be lower when the distances are small. This will not only hold true for the close neighborhood, but also for the relations between citizens of different countries. Thus people in one country will probably have more frequent contacts and pay more visits to countries nearby than they do to countries further away. The kinds of contacts – for example personal visits to relatives or friends, holidays spent in other countries, migration between countries, or business contacts – do not matter for the basic theory.

The then following assumption in this theory is that those contacts will influence one's political ideas. When the neighboring country knows a strong democratic sentiment in its population one would expect that paying a visit to this country and talking to people might strengthen the democratic sentiment in the country itself. Or the other way around, people might be influenced

¹ See for a large number of references to definitions of democracy and its many identified subtypes: (Collier and Levitsky 1997).

by the non-democratic views of their neighbors. People usually get ideas because they are told to them and when the same kind of theory is heard often, one starts to believe it more easily. Thus also communicating a lot with clearly democratically minded people would make one more tempted to support the democratic idea. Kim and Fording find a comparable diffusion of political ideas in their study of voter ideology in 13 Western democracies (Kim and Fording 2001).

This mechanism of having the neighbors as examples works on two levels: the mass of the population is influenced by their neighbors directly and the elite of the country is influenced by the neighboring elite, while they can in the end be assumed to be more influential in the transformation of a political regime. The average farmer or worker will not frequently have contacts at greater distances than their own neighborhood, but they will be influenced by the ideas of their political elite. And this elite will have more frequent contacts and be more influenced by the neighboring countries.

The frequency of those contacts will presumably be influenced by a large set of factors that reduce the costs of contact. One factor that is more or less assumed to be dominant in this theory is distance – the idea that neighboring countries will influence each other more than countries far away from each other will do. There are many other factors, however, that could play a role, like geographical characteristics of the border between the two countries. For example, when there are large mountains in the border area, crossing will be more difficult, thus visits will be less frequent, and thus the influence on each other's ideas will be weaker. Other examples are when there is a desert or a sea in the border area. Some studies take this kind of characteristic into account when studying democratic diffusion (e.g. Starr 2000).

Economic performance and democracy

The second independent variable that will be used is economic performance. Economic performance refers to the wealth of a society, to the living standard of its citizens. In a society with good economic performance people earn their money, are able to live a decent life, have enough income to enjoy their free time and turn to some more luxury. In a society with poor economic performance there is a lot of unemployment, people have more problems managing their daily lives, incomes are low, companies are easily going bankrupt. Economic performance refers to the short term aspect of this – not the long term economic development of a society, but the current state of affairs in a 'fixed' point of development.

The idea that the economic situation and the level of democracy are linked has often been written about, tested and supported. Most of this literature deals with economic development instead of economic performance as defined above. It seems nevertheless useful to describe the arguments used in this literature, as several of the arguments will be at least partly valid in the short term also.

An important part of this literature is the modernization school, which argues that there is a close correlation between the modernization of countries – and the correlated introduction of the

capitalist market economy – and the introduction of democracy. One major article in this school is the one by Lipset in 1959, which gives several reasons for the correlation between economic development and democracy. His argument is not new however, as he states himself:

“From Aristotle to the present, men have argued that only in a wealthy society in which relatively few citizens lived in real poverty could a situation exist in which the mass of the population could intelligently participate in politics and could develop the self-restraint necessary to avoid succumbing to the appeals of irresponsible demagogues.” (Lipset 1959, 75)

A main connection in this argument is the one between the level of economic development and the educational level of the citizens. A wealthy society is able to maintain a high level of education for a wide range of the population. When the educational level is high, people have learned to see things from different perspectives, are able to read different opinions, and have learned to think for themselves, to be critical about what they are told. Because of this form of independence they are able to prudently participate in the democratic political system and they are less vulnerable to irresponsible demagogues. And those educated people are not only better citizens, they are also conscious of this fact and will therefore more often demand to be able to participate in the political system of their society (Lipset 1959, 79).

Connected to this way of reasoning is the fact that communication is easier in a wealthy society. A person who can afford to read a newspaper, watch television, use the internet or use the telephone to talk to people at longer distances, will hear more different opinions and perspectives on his or her political environment than does one who only talks to his close colleagues and relatives. Again, being influenced by more than a few different opinions makes one less vulnerable to demagogues and better able to prudently participate (Lipset 1959, 82-83).

Another often heard argument in this modernization school is that economic development will lead to growth of a middle class, which is then supposed to be the driving force behind democracy. In a non-democratic regime the upper class benefits from the situation and will support the status quo, while the lower classes simply worry about their daily income and do not care about other aspects of the political system. The middle class however, which is based on its smaller companies – like shop-owners or smaller managers – and free application of their profession – like doctors and lawyers –, would benefit from a more free regime. On the other hand history in the West shows that those are arguments for the free market and the rule of law, but not for a democracy – it is actually the lower classes that demand suffrage (Lipset 1994, 2). Another argument used to explain the connection between a large middle class and democracy is that the middle class is said to have a moderating role: “A large middle class plays a mitigating role in moderating conflict since it is able to reward moderate and democratic parties and penalize extremist groups” (Lipset 1959, 83). Yet another argument is that democracy, human rights and equality are simply typical middle class values.

Another argument for the relation between economic development and the level of democracy is closely related to the sociological theory of Maslow – the theory that certain needs have to be at least partly fulfilled before other needs become prominent (Maslow 1970, 35-58). Basic needs such as food and safety have to be partly fulfilled before one starts to worry about the kind of

ethical environment one lives in. People that are worried daily about how to survive will not be concerned with the level of democracy in their country. And they will not have the resources or energy to protest or start a revolution – when we are talking about transition – or to successfully participate – when we are talking about consolidation. On the other hand however one could argue that only when people are poor enough and do not have anything to lose will they turn to revolution. This would follow Marx's theory of the *Verelendung* (Thomassen 1983, 72).

The extent to which poorer people will be tempted to turn to revolutionary behavior also has to do with their expectations of another regime. When living in a poor country, surrounded by other poor countries, with different political systems, one might think that any political system will get the same poor results, and a revolution will be useless. On the other hand when one lives in a poor country and one sees many rich countries abroad with a different political system, one might be more interested in trying to change the political system in one's own country. This assumption is closely related to the theory of relative deprivation, which says that people who are poor will not protest per se, but people who are poor and see others in their society or in neighboring societies being more wealthy, will more readily protest (Thomassen 1983, 74).

All the arguments mentioned so far are more closely related to the long-term process of economic development, and not so much with the more short-term economic performance of a certain country. An argument more specifically explaining the correlation between economic performance and democratic consolidation is connected to the legitimacy of the regime. When the economy is not going well, people might blame their government or maybe even their political system, which would bring the system in danger and therefore damage the consolidation. In a democratic regime there is always the possibility to change the government using peaceful means, while in an autocracy it always requires a coup. But even though the risk is lower in a democratic regime, it is still there (Linz and Stepan 1996, 76-81). Also here the theory of relative deprivation should be kept in mind.

Economic diffusion

If we want to compare the relative strengths of those two theories – economic performance and democratic diffusion – we at least need to control for one seemingly important control variable, namely economic diffusion. When we see a strong democratic diffusion effect and we think that a good economic performance might also influence the democratic sentiment, it might be the case that we are seeing a spurious effect, where it is in fact the economic performance that spreads over the countries, which in turn influences the democratic sentiment in those countries. Chua studied this effect of economic diffusion and finds significant effects using data on all countries over a period from 1960 to 1985 (Chua 1993, ch. 1), as did Moreno and Trehan using data from 1965 to 1989 (Moreno and Trehan 1997). Not every time this idea has been tested has it been confirmed. De Long and Summers show in their appendix how the effect of economic spillovers does not appear to be significant (Long and Summers 1991, appendix 1). Our model thus needs to include economic diffusion.

In a previous study in which the effects of democratic and economic diffusion were studied, this spurious relationship between the two was indeed found (Elkink 2001). In this study the concepts were analyzed not with countries but with the regions of the Russian Federation as cases. With this study there were two main problems, however. First of all, all concepts were measured as rough proxies only. Since there was no data available on the level of democracy in the regions, the study turned to the level of democratic sentiment among the population instead. And because also data on this level was not available for all regions, the support for the two most democratic parties in the Russian Federation, *Yabloko* and SPS, were taken as proxies for the level of democratic sentiment. The second problem was that the model was adjusted after the first analysis. First a model was tested without the effect of economic diffusion, and when the model did not fit, a second model with economic diffusion was tested. This approach was thus not based on theory, but on the statistical results themselves. This as such is not a serious violation of the rules of proper science, as long as the thus derived theory is tested again on a completely different set of data. It is exactly this that this paper is trying to do – test the theory on a different dataset, with better measures.

Theoretically, the concept of economic diffusion implies two different aspects: that countries influence each other economically and that bordering countries will influence each other more than do countries that are more distanced. The idea that countries influence each other economically is not very controversial. A good economy means more production and thus more demands for raw materials or half-products and it usually means higher wages, which also increases demands. Those increased demands will mean a market for foreign companies to sell their products on. Thus foreign economies will profit from the well-being of the economy of the country. And a good economy means more income to invest abroad, so that there will also be more capital available in foreign regions.

Chua gives three reasons for the existence of economic diffusion – which he calls ‘regional spillovers’. The first is that a “well-developed public infrastructure in a country, such as a port or a major airport, can benefit its regional neighbors” (Chua 1993, 11). This argument is of special importance when a country is land-locked. The costs of the transportation to and from those countries is thus in many cases dependent on the quality of the infrastructure in their neighboring countries. The second argument is that a prosperous neighboring country presumably means that part of the labor force of a country can work in the neighboring country. Because of this some individuals will learn-by-doing, so that some technological innovation might spill over and the productivity of those individuals might increase. Also, the fact that part of the workforce can work across the border means extra income for the country and a lower rate of unemployment, thus has a direct influence on the level of GDP. The third argument is that there will be more communication with and information on the neighboring country than there will be on more distant countries. “Neighbours often analyse one another’s policy successes and investment decisions as lessons of their own” (Chua 1993, 12; see also Moreno and Trehan 1997, 400). This argument is of course closely related to the argument used for the phenomenon of democratic diffusion – not only political successes or failures can be learned from, the same holds true for economic successes or failures.

An additional explanation for the effect of geographical proximity could be that countries that border each other have a higher chance of being dependent on the same markets as do countries that are more distant from each other. For example, when there is a large mining area, there might be several countries in this area and all their economies are dependent on the same markets: the ones they sell their mining products to. In this scenario, when one of the markets suffers from a lack of demand, the economic performance of all those countries in that area will go down. The term diffusion is slightly incorrect with this explanation as it is not one country influencing its neighbors, but neighboring countries being dependent on the same external factor, which explains the correlation between their economies (see also Moreno and Trehan 1997, 400).

Measuring the concepts

Measuring the level of democracy

Gurr c.s. have collected data on all political regimes since 1800 and measured the extent to which those regimes are democratic or autocratic. Based on content analysis of various sources, they assigned points to every country, both on a democracy and on an autocracy scale. Points were given based on the level of competitiveness and regulation of political participation, competitiveness and openness of executive recruitment and constraints on the chief executive. Each scale has a minimum of zero and a maximum of ten (Jagers and Gurr 1995). This dataset has been updated until 2000 and for this paper the data for the period from 1960 to 2000 has been used.² Gurr c.s. suggest to use a combined scale to measure the level of democracy, which is formed by deducting the score on the autocracy scale from the score on the democracy scale, so that the end result is a scale running from -10 for the most autocratic state to +10 for the most democratic one.

For her PhD dissertation, Doorenspleet constructed a revised version of this measure. The scale of Gurr c.s. is mainly based on measuring the level of competition in the political regime – one of the two key concepts behind democracy according to Dahl. The second concept, participation, is more or less ignored. Doorenspleet added this aspect and transformed the variable into a dichotomous one – democracy or not. It is this revised measure that has been used for this paper. We are thus not looking at a scale measuring the level of democracy, but simply whether or not a country is democratic. Since we try to explain transitions to (and from) democracy, this seems to be the obvious measure (Doorenspleet 2001).

Measuring democratic diffusion

In this paper only one factor will be measured concerning diffusion effects: distance. This is not enough when one wants to make a thorough study of how democratic diffusion works, but it does give an impression of whether or not democratic diffusion plays a role at all and in this

² The dataset is available at: <http://www.bsos.umd.edu/cidcm/polity/>.

paper the goal is to evaluate this theory against the older theory of democracy being dependent on the economic performance.

Democratic diffusion is not very difficult to measure as we already have a measure of the level of democracy in all countries. In this paper the diffusion will be calculated by the average of the level of democracy in the bordering countries of a country. The effect of democratic diffusion itself is then represented by the correlation between this average and the level of democracy in the country itself. Only land borders have been taken into account, using the Correlates of War Direct Contiguity Data (Stinnett 2002).

It should be noted that by using this method, several important issues concerning spatial data analysis have been ignored. An important problem is that in this case part of the independent variable for some cases is the dependent variable in other cases. For example, the score for the Netherlands on democracy will be part of the average score for democracies surrounding Germany, while this value is also used as dependent variable when studying the case of the Netherlands. One general requirement for statistical analysis is that the different variables can be identified completely independent of the other variables, which is thus not entirely the case here. This will also cause some problems of autocorrelation, which is already a problem as we are talking about observations connected to each other both in terms of space and in terms of time. Within econometrics methods have been developed to deal with these problems (see Anselin 1988), but my research has not progressed far enough to deal with these issues. The intention of this paper is therefore to present the ideas behind the analysis, more so than the results of the analysis themselves.

Measuring economic performance

A common indicator used to measure the economic performance of a country is the gross domestic product (GDP) per capita.³ The more the country produces per citizen, the better it is performing economically. This way of measuring the economic situation in a country does have a serious drawback, namely that the distribution of wealth among the citizens of a country is not taken into account. This means that the level of GDP does give some indication of the level of the wealth of the country's citizens, but might also give the wrong impression. For example in some Middle East states some countries will be quite wealthy, but this wealth belongs to a very small proportion of its citizens, who own the oil producing companies. All the arguments used above however deal with the wealth of the majority of the citizens, not so much with a few members of the elite.

One measure that gives a slightly more realistic picture is that of the GDP per capita PPP. This measure is corrected for the prices in the country and thus gives a better picture of the consuming capability of the citizens of a country. This measure, however, is only available in more recent years and not from 1960 onwards, which is the period used in this paper.

³ Some other indicators could be used just as well – the gross national product (GNP) is even more common; the choice of GDP is simply based on the fact that that is the statistic available for all regions.

To find this data on all countries in the dataset, use has been made of the World Development Indicators 2002 dataset of the World Bank.⁴ This dataset, ranging from 1960 to 2002, contains a series of indicators related to the development of a country. Since this paper is mainly concerned not with the long term development of a country, but with the more short term economic performance, the GDP per capita was seen as the main indicator for the economic situation in a country.

Measuring economic diffusion

Measuring economic diffusion can be done in a fashion similar to that of democratic diffusion, namely by taking for each country the average of the neighboring countries on the level of GDP per capita. Other studies in economic diffusion, or regional spillovers, similarly take either adjacency (e.g. Chua 1993; Ades and Chua 1997) or distance (Long and Summers 1991; Moreno and Trehan 1997) as their way of measuring proximity or 'region'. Use has been made of the same set of contiguities as for the measurement of the level of democratic diffusion, thus again only taking land borders into account.

The model

One approach to test our model is to develop a structural equations model and use EQS or LISREL to analyze this model (see Dunn, Everitt and Pickles 1993). This is the approach that was used for the analysis on these phenomena in the Russian Federation. Such a model, however, would only take the covariance matrix into account and ignore the details of information on individual cases. And since only one indicator per concept was used, also the advantage of being able to use latent variables is not relevant for this paper. Furthermore, since the dependent variable is dichotomous, it seems not appropriate to use this kind of modeling. Hence, for this paper I chose to use logit regression instead.

With a regular logit analysis it is not possible to define paths other than direct relationships between the dependent and the independent variables. We can, however, by running different models, get some idea of which effects are operating and which are not. For that aim I have created four different models, that include not only the independent variables under study but also a lagged dependent variable of one year. There is little reason to assume that the level of democracy two years ago has an effect on the level of democracy now other than thru that of the level of democracy one year ago. Because one requirement of a causal relationship is that the cause takes place prior to the effect, all independent variables have been lagged by one year. Here, the one year period is in fact a more or less arbitrary choice – one could consider doing a similar analysis with the independent variables measured at different lags to see what lag has the strongest effect, or, in other words, how long it takes before the effect of democratic diffusion affects a country neighboring a new democracy.

⁴ This dataset can be found at: <http://www.worldbank.org/data/wdi2002/index.htm>.

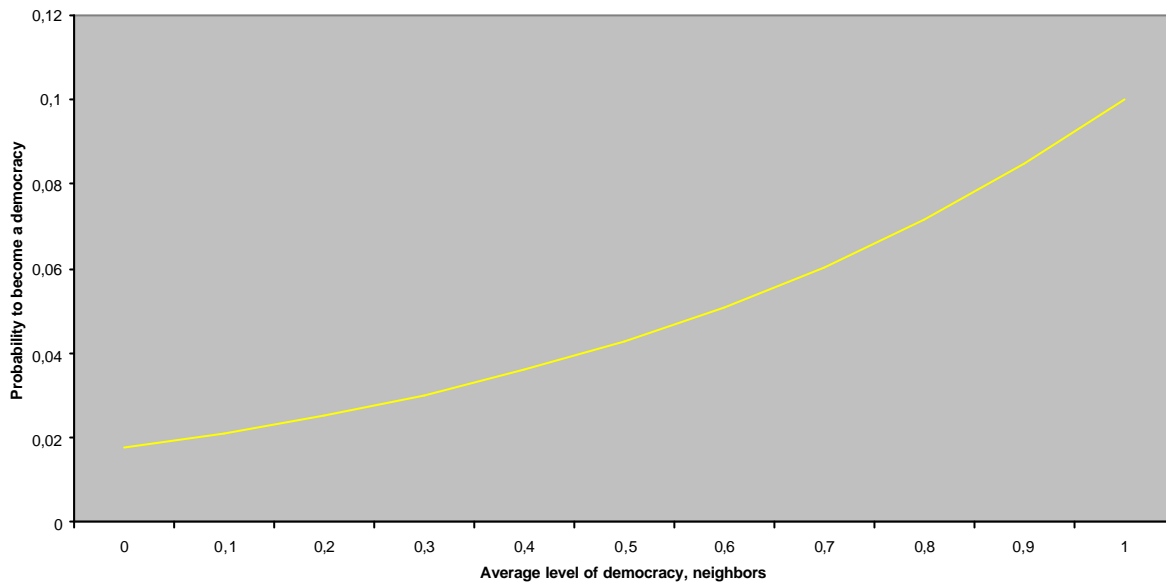
Four models explaining whether a country is a democracy or not				
	Model 1	Model 2	Model 3	Model 4
Economic performance	.000**	.000		.000*
Democratic diffusion	1.916**		1.851**	1.820**
Economic performance, neighbors		.000**	.000**	.000
Lagged dependent variable	7.472**	7.601**	7.557**	7.462**
(constant)	-4.354**	-3.975**	-4.569**	-4.431**
Pseudo R ² is .86 in each model. The analysis is based on 157 countries over 40 years (4053 observations).				
* significant at $\alpha = .05$; ** significant at $\alpha = .01$				

The coefficients in this table are not directly interpretable and should not be interpreted at first sight. What is interesting, however, are the results of the tests whether the coefficients differ significantly from zero, or, in other words, whether there is a significant relation between the independent variable and the dependent variable or not. The first model shows that both the level of economic performance and the level of democracy in neighboring countries have a significant effect on the level of democracy in the country under study. In this model the effect of economic diffusion has been ignored, however, and the effect of democratic diffusion might thus be a spurious effect. Model 2 shows, strikingly enough, that when taken only the level of economic performance and the level of economic performance in neighboring countries into account, only that of the neighbors is significant. This would suggest that there is an effect of the level of economic performance in the neighboring countries on the level of democracy in the country itself, independent of the effect of economic diffusion. Model 3 shows that, when taking the level of economic performance of the neighbors into account, the effect of democratic diffusion is still significant. Model 4, taking all variables into account, shows a situation where the effect of democratic diffusion is clearly significant, even when taking the mechanism of economic diffusion into account, thus the hypothesis that democratic diffusion is merely a spurious effect of economic diffusion is not supported by this analysis.

Based on this analysis, a probability density function can be drawn for the relation between the level of democracy at the neighboring countries and the probability that the country itself has a democracy, keeping all other factors in the model at their mean and the lagged variable of the level of democracy at 0 (autocracy) or at 1 (democracy).

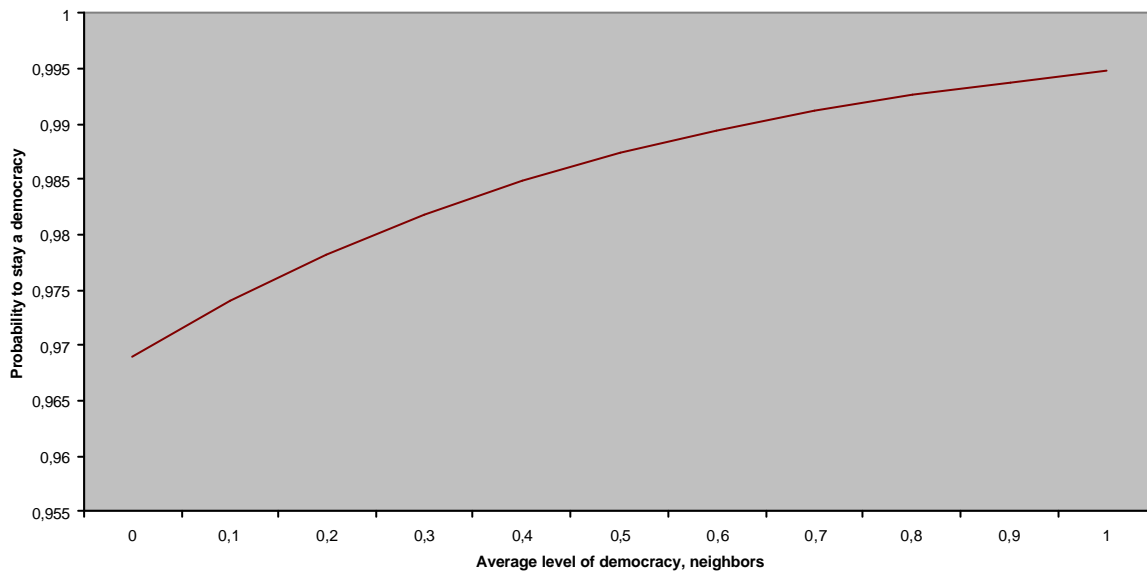
If there is one thing these graphs make clear, it is that although the effect of democratic diffusion is significant, it is in fact of a very small impact. It can, however, increase the probability of a transition to democracy from a 2 percent chance to a 10 percent one.

Democratic diffusion affecting autocracies



One might argue that the breakdown of a democratic regime – or, autocratic diffusion affecting

Democratic diffusion affecting democracies



democratic countries – is something completely different from democratization – or, democratic diffusion affecting autocratic countries. In that case, one would expect a different result for those cases where the lagged dependent variable is 0 (non democracy) and those where this variable is 1 (democracy). Below, the two different groups of countries are analyzed.

Four models explaining whether a country becomes a democracy or not				
	Model 1	Model 2	Model 3	Model 4
Economic performance	.000	.000		.000
Democratic diffusion	1.705**		1.810**	1.688**
Economic performance, neighbors		.000	.000	.000
(constant)	-4.170**	-3.765**	-4.384**	-4.205**

Pseudo R² is .03 in each model, except model 2, which has a Pseudo R² of .00. The analysis is based on 157 countries over 40 years (2399 observations).
* significant at $\alpha = .05$; ** significant at $\alpha = .01$

In this model, in which only those cases have been taken into account that were not a democracy a year before the observed year, the economic effects seem to completely disappear and only the coefficients related to that of democratic diffusion are significant. It should be noted, however, that the R squared is very low, so that we would almost conclude that although the effect of democratic diffusion is the only effect in this model that is significant, the model as such hardly explains whether a country democratizes or not.

Four models explaining whether a country stays a democracy or not				
	Model 1	Model 2	Model 3	Model 4
Economic performance	.000*	.000		.000
Democratic diffusion	1.913**		1.550*	1.780*
Economic performance, neighbors		.000	.000**	.000
(constant)	2.463**	2.826**	2.552**	2.373**

Pseudo R² is .18 in models 1 and 4, .15 in model 2 and .14 in model 3. The analysis is based on 157 countries over 40 years (1654 observations).
* significant at $\alpha = .05$; ** significant at $\alpha = .01$

The opposite model is that where only those cases have been taken into account where the country was a democracy the year before the observation. The effect of democratic diffusion does thus not explain the transition to a democratic regime, but the stability or consolidation of it. Again, the economy-related coefficients are not contributing significantly to the main model – although economic performance does seem to matter in the first model. Democratic diffusion does seem to play a role in the consolidation of regimes. Again, however, the R squared is

relatively low, albeit slightly higher than in the previous analysis, so that we are clearly missing the main explanations of stability of democratic regimes.

Conclusion

The main goal of this paper has been to present the idea that democratic diffusion might be a spurious effect of the much earlier observed effect of economic development explaining the level of democracy, through the effect of economic diffusion or spillovers. Although support for this idea was found in data on the regions of the Russian Federation, this cannot be observed using data on the level of democracy in countries over the world, between 1960 and 2000. Economic performance does seem to matter to a certain extent, but it does not explain the visible effect of democratic diffusion. Democratic diffusion seems to have a significant, albeit small effect on the chances for transitions to and consolidation of democracy.

Further study has yet to be done to get a much more precise grasp of how democratic diffusion works and under what conditions. In these studies, the possibility of having a spurious relationship explained by the effect of economic spillovers should be kept in mind, even though in this paper – in which, it should be emphasized, the effects of spatial autocorrelation have been conveniently ignored – there has been no support for this spurious relation hypothesis.

Bibliography

Ades, Alberto, and Hak Bin Chua, “Thy Neighbor’s Curse: Regional Instability and Economic Growth”, *Journal of Economic Growth*, 2 (1997), pp. 279-304.

Anselin, Luc, *Spatial Econometrics: Methods and Models*. Dordrecht: Kluwer Academic Publishers (1988).

Bell, James E., and Lynn A. Staeheli, “Discourses of Diffusion and Democratization”, *Political Geography*, 20 (2001), pp. 175-195.

Chua, Hak Bin, *On Spillovers and Convergence*. PhD dissertation, Department of Economics, Harvard University (1993).

Collier, David, and Steven Levitsky, “Democracy with Adjectives. Conceptual innovation in comparative research”, *World Politics*, 49:3 (1997), pp. 430-451.

Doorenspleet, Renske, *The Fourth Wave of Democratization. Identification and explanation*. PhD dissertation, Leiden University (2001).

Dunn, G., B. Everitt and A. Pickles, *Modelling Covariances and Latent Variables using EQS*. London: Chapman and Hall (1993).

Elkink, Jos, *Differences in Democratic Sentiment in Russia's Regions Explained*. Paper presented at the 29th Joint Sessions of Workshops of the European Consortium of Political Research, Grenoble (April 6-11, 2001).

Gel'man, Vladimir, "Regime Transition, Uncertainty and Prospects for Democratisation: The politics of Russia's regions in a comparative perspective", *Europe-Asia Studies*, 51:6 (1999), pp. 939-956.

Jagers, Keith, and Ted R. Gurr, "Tracking Democracy's Third Wave with the Polivy III Data", *Journal of Peace Research*, 32:2 (1995).

Kim, HeeMin, and Richard C. Fording, "Voter Ideology, the Economy, and the International Environment in Western Democracies, 1952-1989", *Political Behavior*, 23:1 (2001), pp. 53-73.

Kopstein, Jeffrey S., and David A. Reilly, "Geographic Diffusion and the Transformation of the Postcommunist World", *World Politics*, 53 (2000), pp. 1-37.

Linz, Juan, and Alfred Stepan, *Problems of Democratic Transition and Consolidation. Southern Europe, South America, and Post-Communist Europe*. Baltimore: The Johns Hopkins University Press (1996).

Lipset, Martin Seymour, "Some Social Requisites of Democracy: economic development and political legitimacy", *American Political Science Review*, 53 (1959), pp. 69-105.

Lipset, Martin Seymour, "The Social Requisites of Democracy Revisited", 1993 Presidential Address, *American Sociological Review*, 59 (1994), pp. 1-22.

Long, J. Bradford de, and Lawrence H. Summers, "Equipment Investment and Economic Growth", *Quarterly Journal of Economics*, 106:2 (1991), pp. 445-502, Appendix I, "Spatial Correlation", pp. 487-490.

Maslow, Abraham, *Motivation and Personality*. New York: Harper and Row (1970).

Moreno, Ramon, and Bharat Trehan, "Location and the Growth of Nations", *Journal of Economic Growth*, 2:4 (1997), pp. 399-418.

O'Loughlin, John *et al*, "The Diffusion of Democracy, 1946-1994", *Annals of the Association of American Geographers*, 88:4 (1998), pp. 545-574.

Schedler, Andreas, "What is Democratic Consolidation?", *Journal of Democracy*, 9:2 (April 1998).

Schumpeter, Joseph A., *Socialism and Democracy*. New York: Harper and Row (1976).

Starr, Harvey, "Democratic Dominoes. Diffusion approaches to the spread of democracy in the international system", *Journal of Conflict Resolution*, 35:2 (1991), pp. 356-381.

Starr, Harvey, *Opportunity, Willingness and Geographic Information Systems (GIS): reconceptualizing borders in international relations*. Paper prepared for the conference "New Methodologies for the Social

Sciences: the development and application of spatial analysis for political methodology”, Boulder: Institute of Behavioral Sciences, University of Colorado (March 10-12, 2000).

Stinnett, Douglas M., Jaroslav Tir, Philip Schafer, Paul F. Diehl, and Charles Gochman, “The Correlates of War Project Direct Contiguity Data, Version 3”, *Conflict Management and Peace Science*, 19:2 (2002), pp. 58-66.

Thomassen, J.J.A., “Relatieve Deprivatie, Politieke Ontevredenheid en Protestgedrag”, in: J.J.A. Thomassen *et al*, *De Verstomde Revolutie*. Alphen aan den Rijn: Samsom (1983), pp. 71-107.