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Education in the Anticommons: Evidence from Romania

ABSTRACT: *The process of administrative decentralization of the education system in Romania proceeded in chaotic steps. It was done under the pressure, on one hand, of the EU integration requirements and, on the other hand, of the local administrations who wanted more control over how their money were used in the schools and of the parents committees that wanted to have a say in the local schools. The road was scattered with new reform legislations coming with every change in government composition and ministers. The result was a combination of local autonomy and central control that had the potential to produce confusion and conflict. The multiple and complex blend of divided responsibilities and powers turned out in the process of setting up the new form or entry grade in the Romanian primary education cycle in a rational strategic play scholarly designated as anticommons. Each separated actor tries to obtain a maximizing share of the cooperatively generated benefit for a minimum possible cost. The interactions are modeled as a Game of Chicken where, because actors calculate separately, each selects a higher price/lower quantity position than is optimal, resulting in a lower net payoff both individually and collectively.*

KEYWORDS: Anticommons; Rational tragedies; Strategic Holdup; Non-Cooperative Games, Education Reform, Decentralization

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INTRODUCTION

The process of decentralization and devolution of education policy in almost all transition countries resulted in a complex and complicated combination of attributes, controls, and responsibilities (Prawda, 1993; Govinda, 1997; UNESCO, 2005; OSCE, 2011). Often, these processes have evolved ad hoc and fragmented with low attention to the overlapping of attributions between the different levels of public control. Two strong lines of social and political pressure were almost always present. On one hand, there is a strong pressure toward decentralization and devolution, to put control in the local communities, to adapt to local needs and context, and to engage parents. On the other hand, national governments stress the need to insure uniform national education standards and to align funding across regions and communities that differ in their wealth and educational interests and goals. Responses to these pressures resulted in a complex combination of responsibilities that required enhanced coordination across local and central public institutions.

In Romania, following the collapse of the communist regime, the process of education reform and decentralization unfolded as part of a wider process of EU accession requirements. The road was scattered with legislations that fluctuated with every change in government composition and depended on the remodeling in other sectors of the Romanian society, especially local administration and local public finances. The result was a mixture of local autonomy and central control that had the potential to produce confusion and conflict. The multiple and complex blend of divided responsibilities and powers turned out, in some cases, in a rational strategic play scholarly designated as anticommons—multiple separated actors all “own” a common resource whose degree of success is dependent on cooperative contributions from them all.

The solution to the anticommons tragedy most often requires the rebundling of decision-making authority. The means for this are either restored centralization or the establishment of an overseeing agency capable of enforcing cooperation and coordination. Societies in transition, quite reasonably, have an enduring fear of restored centralization; it connotes the hierarchical yet arbitrary

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exercise of power under communism. Despite high-minded pressures for decentralizing reform, societies in transition still fail to find achievement.

While the potential shortcomings of the Romanian education system are numerous, this article focuses only on one issue: what could happen if the various local and national authorities involved in organizing new developments in the education system cannot agree on project implementation?

The main argument is that the anticommons reasoning can work as a useful new apparatus to explain numerous cases of coordination breakdowns in the education sector policies and politics. Policy makers and analysts have mostly overlooked it, but just as in the case of any other pooled resources, the anticommons breakdown in the field of education can appear in all situations in which new political and administrative rights and entitlements are created. The goal is to explore the structure of the anticommons game and illustrate the strategic incentives motivating the players. Technically, the analysis is an analytic narrative: “it pays close attention to stories, accounts, and context ... it extracts explicit and formal lines of reasoning, which facilitate both exposition and explanation” (Bates et al. 1998, p.10).

This article problematizes and exemplifies how the anticommons logic has marked developments in the education policies in Romania—the introduction by the Education Law of 2011 of the “Grade Zero,” an adjustment grade between the kindergarten and primary cycle.

The article proceeds in five sections. The first section introduces the concept of anticommons. The second develops and operationalizes the analytical model. The third details the decentralization of the contemporary Romanian education system. The fourth proposes the tragedy of the anticommons as an explanation for the failing in organizing a new form or entry grade in the Romanian primary education cycle. The last offers concluding remarks regarding the inherent social and policy consequences of the anticommons model in the case of the Romanian “Grade Zero” educational project.

THE ANTICOMMONS METAPHOR

Anticommons is an innovative metaphor that has become popular in the legal and economics literature on property rights in situations of pooled ownership and control (Buchanan & Yoon, 2000; Fennell, 2004; Heller, 1998; Parisi, Depoorter & Schultz, 2005; Heller, 2008; Major, King & Marian, 2016). Anticommons is an opposite tragedy to that of the commons. What distinguishes the two tragedies is the blend of privileges and exclusion powers. The “tragedy of the commons” is an incomplete property regime in which actors that have privileges to use a common pool resource have no enough property rights barriers to control the use of privileges of others (Hardin, 1968). The result is an inefficient overutilization and eventually the depletion of the resource. The “anticommons” is also an incomplete property regime in which each actor has privileges of exclusion over a common resource, but no way to ensure the use of privileges for himself/herself. The result is an inefficient underutilization of the resource.

Both metaphors highlight the costs that arise when political or administrative authorities allow too many agents to have access to scarce facilities. In both cases, too many parties interested in the resource make it founder. In the tragedy of the commons, facilities are overused because they are not held by autonomous agents and everyone wants to use as much as possible from what is held in common. In the tragedy of the anticommons, resources are underused precisely because they are to be given to autonomous agents and everyone entitled to access the privatized resource wants to get it or to block others from accessing it.

At the core of the anticommons, the problem is the need to assemble multiple discrete permissions over a resource whose degree of success is dependent upon cooperative contributions from all of the permission owners. However, each of the autonomous permission owners grasps only its own share of duties and rewards and each, independent of all others, is entitled to set his/hers own limits for permission granting. Still, less a collective bundle of all the permissions, the resource will not be exploitable. As a consequence, we have an anticommons tragedy—each actor rationally seeks to shift costs onto the others, resulting in “underutilization.”

MODEL DEVELOPMENT AND OPERATIONALIZATIONS

Before exemplifying the anticommons in the case of education sector in Romania, the rationality of the problem is modeled below. First, assume that two authorities, one local and one central, are required by law to construct a common infrastructure that is

supposed to help better deliver the respective public, and both authorities for various political, electoral, economic, administrative, and social reasons want to deliver it. Thus, the two independent authorities jointly control the delivery of a single public good. Let us assume that benefit of organizing a new infrastructure (B) is the sum of the benefits each separate agent has ($B_i + B_j$) and that B_i and B_j are both greater than zero. Yet, the central authority cannot independently shape its benefits completely ignoring the moves of the local authority and vice versa. The benefits of having the new infrastructure is a function of two separate investments (I_i and I_j), and each agent can control only its own. The local authorities know that their investment will affect the benefits of having organized the new infrastructure and that they have an impact on the benefits that the central authority can collect. Similarly, mandarins in the central authority know that their investment impacts on the benefits of organizing the infrastructure and, therefore, on the benefits that local councils can claim.

$$B = B_i(I_i, I_j) + B_j(I_i, I_j)$$

$$B_i(I_i, I_j) = (1 - I_i - I_j)I_i$$

$$B_j(I_i, I_j) = (1 - I_i - I_j)I_j$$

Acting as a unified cartel, they pledge to respect the requirements imposed by the other. The cartel's investment (I_c) is function of the investment each member of the cartel makes.

$$I_c = (I_i + I_j)$$

The cartel will pursue a maximizing benefit (B_c) that potentially satisfies each member of the cartel. The first-order maximization conditions for the two players are

$$B_i = dB_i/dB_i = dB_i(I_i, I_j)/dI_i + dB_j(I_i, I_j)/dI_i = 0$$

$$B_j = dB_j/dB_j = dB_i(I_i, I_j)/dI_j + dB_j(I_i, I_j)/dI_j = 0$$

However, the members of the cartel will have to agree simultaneously over the joint investment (I_c) and over the benefits that were produced by their common actions. Now the prospects for a Game of Chicken become evident for each member of the cartel. The Game of Chicken is a model of a social dilemma arising from non-coordination among rational players. Each player in the game benefits more from bilateral cooperation than from bilateral defection; however, if one player expects the partner to cooperate, he/she will have incentives to defect in order to save its resources and still benefit from the realization of the project. There are rational maximizing strategies, Nash best response, which consists of one side playing the best strategy possible by recognizing the preferences of other side across options, and each of the other sides doing correspondingly. The Nash equilibrium results in suboptimal returns both in the aggregate and to each of the separate game players than had there been a central authority assigning compulsory tasks. The Game of Chicken as operationalized in the argument of this article develops in multistage and is described below. Classically, in the Game of Chicken, there is an initial stage where each player states his/her initial position. If, in the initial stage, both sides make the necessary concessions and keep their pledges, the result is a quick resolution and the game is terminated (each player gets his/hers second preferred payoff; in the notation below: payoff_2). However, if no side concedes and players do not keep their promises to contribute, the game is played again with a cost (C) subtracted from the previous stage payoffs. If the players are bound by law or by their mission to continue the game, each time the game is played (n stages), the costs are subtracted from the previous stage payoffs.

Stage 1:		Side 2	
		Concede	Not concede
Side 1	Concede	(payoff_2 , payoff_2)	(payoff_3 , payoff_1)
	Not Concede	(payoff_1 , payoff_3)	(go to next stage)

where $\text{payoff}_1 > \text{payoff}_2 > \text{payoff}_3$; the first payoff in each bracket belongs to Side 1 and the second payoff belongs to Side2 for their respective strategies.

Stage 2:		Side 2	
		Concede	Not concede
Side 1	Concede	($\text{payoff}_2\text{-C}$, $\text{payoff}_2\text{-C}$)	($\text{payoff}_3\text{-C}$, $\text{payoff}_1\text{-C}$)
	Not Concede	($\text{payoff}_1\text{-C}$, $\text{payoff}_3\text{-C}$)	(go to next stage)
	.		
	.		
	.		
<i>n</i> Stage:		Side 2	
Side 1	Concede	($\text{payoff}_2\text{-C}$, $\text{payoff}_2\text{-C}$)	($\text{payoff}_3\text{-C}$, $\text{payoff}_1\text{-C}$)
	Not Concede	($\text{payoff}_1\text{-C}$, $\text{payoff}_3\text{-C}$)	(go to next stage)

THE DECENTRALIZATION OF THE CONTEMPORARY ROMANIAN EDUCATION SYSTEM

From 1948, the Romanian education system was state controlled and financed. All forms of education were nationalized and centralized. All education units were run by the Ministry of Education (Decree Law 175/1948). The system remained centralized under the supervision of the Ministry of Education until 1972 when changes in the law made possible the setting up of university departments or research units that would be jointly supervised and financed by the other departments and agencies within the government. The aim was to link closer the education with the economic production and needs. However, the Ministry of Education remained the main voice in the management of these departments.

Following the collapse of the communist regime, reforms were also initiated in the field of education. Albeit the ideological cleansing of the process itself, the first reforms were hesitant. The process of administrative decentralization of the education system proceeded in chaotic steps. It was done under the pressure, on one hand, of the EU integration requirements and, on the other hand, of the local administrations who wanted more control over how their money were used in the schools and of the parents committees that wanted to have a say in the local schools.

A new education law adopted in 1995 (Law 84/1995) kept the system mostly unaltered, with the Ministry of Education in full control. New regulations issued in 1999 (Law 151/1999) initiated a process of decentralization. The process was fragmented and piecemeal. In 1999, local authorities were given a large role in the financing the building and maintenance of the infrastructure of the kindergartens and schools. The government through a local agencies—County School Inspectorates—was still responsible for financing and administrating an important part of the education process (hiring and firing teachers, wages, buying and printing books and manuals, transportation, etc.) In addition, the school system, as a whole, was administrated by the government.

Romania started its process of negotiating the chapters for EU integration in 2000 with the one on education, which, at that time, was the most correlated with the EU requirements regarding administrative decentralization and curricula compliance. In the period 2000–2001, school buildings passed into the patrimony of the local authorities (Government Ordinance 206/2000, Law 713/2001) and the local councils become responsible for financing the infrastructure and to build new facilities. The County School Inspectorates became responsible for administrating their activity (Law 713/2001). In 2001, the central government transferred the financing of teacher salaries to the local authorities (Law 215/2001). The local authorities became pay agencies for the Ministry of Education but had no control over the human resources in the schools or over the level of salaries, which remained under the control of the government.

Pressures for more control from the local authorities continued, and they were included in 2005 in the process of designating school directors. It was an intricate design that divided responsibilities: the local authorities draft a proposal, which is approved by the county education authorities (County School Inspectorates), and the final decision is made by the Ministry of Education. In 2006, a new law on the local administration (Law 286/2006) clarified and separated own, shared, and delegated attributions among local, regional, and central authorities. The international financial crisis that started in 2007–2008 made the government less willing to pay for local costs, while the local authorities wanted more control over what they paid for. In the case of education sector, this resulted in the transfer of the responsibility for organizing the school system to the local authorities (Law 1/2011).

A new education law issued in 2011 (Law 1/2011) enhanced the role of the local authorities by specifically stating that the school system was organized by the local authorities, in addition the financing of the schools was mostly passed to the local authorities. The Ministry of Education still kept important attributions: has the initiative in financial decisions and in the management of the human resources (recruitment, promotion, dismissal of teachers, final decision on hiring directors at the pre-school, primary, and secondary level), has the initiative of setting up and closing schools, elaborates school manuals, and generally manages and monitors the education process.

“GRADE ZERO” IN ROMANIAN AS TRAGEDY OF THE ANTICOMMONS

The implementation of “Grade Zero” in the Romanian education system, starting in 2012, is accounted for in terms of the situations of the model specified above. The goal is to explore the structure of game of induced crisis and reveal the strategic incentives of the players. Methodologically, the purpose is to use a deductive model to improve the understanding of real life episodes that were selected.

*Initial Stage of the Game of the Chicken: Pledging commitments—*The Romanian school year in September 2012 started with a one-week delay. In addition, only 59% of the children aged 6 years have been enlisted in the newly established “Grade Zero”, the remaining 41% were either registered in kindergartens or in the First Grade of the primary education cycle. Of those registered in “Grade Zero,” about 12% were taught by staff who was not qualified, 13.9% of the total “Grade Zero” classes were located in kindergartens and not in schools, and an additional 1.4% were located in other facilities than schools or kindergartens (Institute of Education Sciences 2013). The situation was caused because multiple bodies (Ministry of Education, local councils, and county councils) with fragmented responsibilities and combined sway over the education process. The Ministry of Education was responsible to elaborate and print manuals and open positions for teachers to be hired; the wages of the teachers would be covered by the municipalities; local authorities were to allocate money to build and arrange classrooms and to provide busses for transporting children.

None of these institutional actors opposed the creation of a Grade Zero. Quite the contrary, all of them agreed and publicly claimed that this new development envisaged as an adjustment period between kindergarten and primary cycle would help them carry out their mission of better educating Romania’s children. The Ministry of Education wanted it for a few reasons: (i) it showed concern for educating Romania’s children; (ii) it was showing attention to the parents’ requests of organizing a more competitive education system that is adequate to children’s needs; (iii) it responded to schools requests, which claimed that teachers work too hard with new pupils who reach the first grade without any preparation; (iv) the government wanted to decongest the kindergartens, which were a point of debate with parents’ committees. Daniel Funeriu, the Minister of Education, just weeks before the beginning of registration for the “Grade Zero” in early 2012 in an interview for Mediafax News Agency clearly states the arguments, “The first consequence of these measures is that over 20,000 children that under the old legislation were not included in any form of education will be found among those who attend the preparatory [Grade Zero] class in 2012. These children would have been in school failure in their first day of school under the old law ... Parents will receive an information campaign unprecedented in Romanian education, all of Ministry and the School Inspectorates infrastructure is mobilized for this purpose ... In the preparatory grade [Grade Zero], children will not have to pass any assessment test and will not receive any marks or grades. ... Children assessment is made at the end of the school year in the form of a teacher written report. From this report parents will find out the degree of physical and psycho-intellectual development of the child, language and communication skills progress, the learning capacity and children’s attitudes towards learning. Such report shall be prepared based on the systematic observation by the teacher of children’s progress throughout the school year. The role of the report is to establish priorities for when the child enters Grade One ... The preparatory class helps diminish the brutal transition from kindergarten to school. Children learn by playing and in the same time become familiar with the school environment ... Furthermore, the preparatory class will relieve kindergartens, more children aged three will have the chance of a place in kindergarten” (Gheorghită, 2012).

Local and regional authorities also supported the new “Grade Zero.” They were committed to ensure a better education for the children and wanted to solve the problem of congestions and agglomeration of the kindergartens that posed a problem in many municipalities, especially in the big cities that attracted young population in the previous years of economic development. For example, the head of the Cluj County education authority considers that “Schools are impeccably prepared to organize the

new preparatory class. Parents will be informed” (Adevarul 2012). The head of Sibiu County education authority states in a local newspaper that “Until now we had 30–35 kids in a kindergarten class because there were not enough spaces. The transition to primary education cycle is beneficial for the children in preparatory class [Grade Zero] since we have 20 students in a class” (Tribuna, 2012).

No benefits from organizing the “Grade Zero” can be gained unless there is concurrence between agents acting independent of each other. Both the Ministry of Education and the local authorities have rights of exclusion while neither can organize the “Grade Zero” by itself. Public statements from the Minister of Education and a number of representatives of local authorities prove that they are aware of the need for concurrence. Daniel Funeriu, Minister of Education, states that “The Ministry of Education organizes very carefully this grade. Despite apocalyptic predictions of some, the Ministry of Education showed in everything he did before, that is organized very seriously. I am sure that things will be also impeccably organized for the preparatory [Grade Zero] class, I have data in this sense and insurances from the general school inspectors, the directors and mayors with whom I am in constant dialogue” (Mediafax 2012c). Mayor of Suceava Municipality, for example, declared that “Suceava Municipality will cover the costs for the preparatory classes ... if the Education Ministry will not allocate the money promised, the city has 5 million lei available for education. Most likely, this amount will be allocated on 30 August, at the City Council meeting” (Suceava News, 2012).

Stage 2 of the Game of the Chicken: giving up the commitment pledges and replaying the game—Mission development would succeed only if all carried out their duties concurrently, but each might seek to shift the costs onto other. The gain from organizing Grade Zero would be the same, but the cost to Authority X would be lower, thus improving the cost/benefit calculation for Authority X. What ensues is a Chicken Game, in which each authority tries to get others to absorb costs for the common gain. The Education Ministry wished for local and regional authorities to take a more visible role, so that they would become the focus of attention for public opinion, parents’ committees, and educational unions. The local authorities delayed in the hope that the Ministry, allegedly armed with adequate financial and human resources, would eventually absorb more of the burdens of organization and finance. In addition, 2012 was an electoral year for both the parliament-government and the local authorities. Nevertheless, timing was different. Local elections were set in spring, whereas the parliamentary ones were to be held in late fall. As a consequence, each actor had a different agenda and each tried to show that they care about the public budgets they administered. Each tried to extract a higher advantage for itself and impose as much concessions on the other part. Initially, the representatives of the local authorities (incumbent mayors and local councilors) eager to gain votes took measures to implement the Grade Zero. For example, on March 19, 2012, before the local elections, Bucharest City education authority announces that it supplemented the numbers for enrollment in the preparatory class (Mediafax, 2012a). Yet, after the local elections, the focus of the mayors and local councils shifted to some extent from the Grade Zero problems. To keep its charm with the parents and unions, the government, given the fall elections, stressed the need for adequate schooling conditions for the Grade Zero children. Yet, costs for buildings are in the burden of the local councils that may not agree with the new facilities or have other priorities. Over the summer of 2012, the Ministry of Education multiplies requests for the local authorities to invest in the infrastructure needed for the preparatory class. For example, in a press release on May 29, 2012, the Ministry states that “Schools will choose the right way of acquisition, thus avoiding the risk of not having the furniture available to students at the beginning of the school year. Ministry of Education, Youth and Sports has taken all steps so that the furniture for the preparatory meet all standards of compliance, safety and functionality required by to the European regulations for children of 6–7 years” (Mediafax, 2012b). In the same line, in late August 2012, the same ministry requests that schools do not neglect the problem of toilets, requesting that for the children in preparatory classes separate toilets need be arranged and that this problem should be dealt with by the municipalities, who are in charge of administrating the schools (Mediafax, 2012c). The local councils, concerned with covering the personnel and infrastructure costs and to show that they can manage the local finances and still have kids educated, insist that they have no money to pay for extra teachers and extra facilities for the new grades and the government should agree to allocate more money for wages and also finance part of the infrastructure. Public statements of local representatives illustrate this line of reasoning. For example, the mayor of Bethausen [municipality] in Vaslui County claims that “...we have big expenses with fuel. We have school buses for transporting students, but the fuel is six lei per liter. It is very expensive and our budget is low. We simply do not have money to modernize schools” (Mediafax, 2012d). In the same line, the mayor of Coarnele Caprei [municipality] in Iași County avers that “I have no money for street lighting, it’s pathetic. I’m a happy because I rebuilt the schools in my previous term, because now there is no money for restoring the tiled stoves” (Mediafax, 2012d).

Suboptimal Equilibrium—We can assume that the authorities involved in organizing Grade Zero independently calculate their self-interest. All can see positive benefit from having Grade Zero, but each wishes to minimize its assumed costs, and each anticipates that all the others have a similar reasoning. There is a rational maximizing strategy for each actor involved and a logical equilibrium

among them. This strategy, Nash best response, consists of one actor picking the best strategy possible by recognizing the preferences of other actors across options, and each of the other actors doing correspondingly. The Nash equilibrium results in lower contributions for each of the authorities involved than had there been a central authority assigning compulsory tasks. There is a positive externality from having the new preparatory grade, yet actors will not achieve it because of their individual strategic calculations that would result in inefficiency. The problem is that multiple separated actors all “own” a common project whose degree of success is dependent on cooperative contributions from them all. Yet, each actor appreciates only its own share of burdens and benefits, and thus each rationally seeks to shift costs onto the others, resulting in “underutilization.” It is not merely that the Grade Zero would function better with more contributions from each authority but that that benefits would increase faster than the costs. More contributions would produce correspondingly even larger gains. The inefficiency is at both the aggregate level and the level of each actor involved. Had its contribution been larger, each authority would benefit proportionally more.

Benefits that could have been shared and gained may now be torn and lost. No new teachers specially trained for the Grade Zero will be hired; no specially adequate facilities for the Grade Zero kids are likely to be constructed; even the existence of Grade Zero is under discussion. Again, public statements of the actors involved bear evidence. Liviu Pop, the newly appointed Minister of Education, in May 2012, declares that “I will do improvisations for the preparatory grade in terms of staff. I’ll ask inspectors, and school directors that these preparatory classes be allocated teachers that are already in the education system ... In terms of getting ready the preparatory grade, we are talking of about 130,000 students, for whom we have ready, up to now, only the school curricula. Schools were not equipped. I will withdraw [facility] acquisition auctions next week. We have suspended all payments made by the Ministry of Education for a week until the audit is completed” (Mediafax, 2012e). In the same argument, Victor Ponta, the prime-minister of the moment, declared that “If we keep or not the preparatory class, is a decision that we will take after a more serious analysis. Our option is that it was better not to have it, but since we did have it, the damage would have been higher if we told children and parents that they enlisted for this grade for nothing. It was a pragmatic decision” (Mediafax, 2012e).

Given the fragmented owners of the Grade Zero project and collective advantages, the result is underparticipation and loss of efficiency than had there been a more unified authority regime. However, given that (i) one actor cannot control the behavior of others, (ii) the collective value depends on the voluntary contributions of all involved, (iii) each actor is aware that all the others calculate only their own costs and benefits, no actor is willing to change his/her behavior. Grade Zero has the potential to provide the value—collectively and individually to each of the authority involved—but this value risks not being pulled off. The anticommons model is a logical paradox with tragic implications. Individually, rational maximizing strategies turn worse overall and for each of the component players. There needs to be some authority or rules outside this rational game that is exerted on those involved in order to enforce cooperation at maximally constructive levels.

CONCLUDING REMARKS

The Romanian education system evolved in the transition period in a sequence of rapid shifting from one problem to the other in order to resolve to latest and most critical problem in order to satisfy instantaneous crisis. There is no sustained attention and no systematic ability to plan or to coordinate among the parts. In turn, autonomous bureaucracies learn to respond with visible show when emergency attention is focused on them and to revert to inaction or to the pursuit of self-interested advantage as soon as the spotlight shifts. The outcome of this process in the case of the Romanian education case is anticommons—multiple distinct actors all owning a common project, each taking into account only its share of the burden and benefits, and each trying to shift as much of the costs to the others, resulting in underutilization of potential resources.

The solution to anticommons tragedy most often requires the rebundling of decision-making authority. The means for this are either restored centralization or the establishment of an overseeing agency capable of enforcing cooperation and coordination. Societies of transition, quite reasonably, have an enduring fear of restored centralization; it connotes the hierarchical yet arbitrary exercise of power under communism. Yet, despite high-minded pressures for decentralizing reform, societies of transition that still fail find achievement.

The puzzle of education anticommons logic may not be just a Romanian problem. Many societies in transition in the Easter Europe have implemented decentralization policies in the education sector, and, potentially, in all cases of fragmented responsibilities and joint command, the logic of anticommons is present. Albania, Bulgaria, Czech Republic, Hungary, and Poland have all

decentralized control and responsibilities to the local and regional authorities while keeping some decisions at national level (Fiszbein, 2001). A similar pattern of fragmented obligations and collaborative control over the education sector was implanted in countries in Africa (Namukasa & Buye, 2007), South America (Prawda, 1993), and some Indian states (Mukundan and Bray, 2004). In all these and other similar cases, potential failure in the work and functionality of the education sector may be due to rational agents that try to extract as much advantage for themselves and impose as much compromise on the other agents while trying to maintain the appearance of cooperation.

This study is important in two ways. First, it tries to bring a new explanation for deadlocks that have restricted the creation and/or the use of new policies and innovations in the education sector in Romania. Second, this study hints at rising awareness over the potential risks of fragmenting responsibilities and entitlements over a pooled item among separate stakeholders with effective exclusion rights. There are many other practical political considerations for which the logic of the anticommons evidence matters. For example, looking from the anticommons perspective one can assume that a single actor with all entitlements would produce more and more time effective policies and policy decisions than multiple and fragmented supervising bodies with overlapping prerogatives and rights. However, changing the angle, one might assume that concentration of entitlements could result in policy decisions resistant to adjustments, diversity, and contrary argumentation. Translating to the education case, one might hypothesize that when need of acting together and, simultaneously, the Ministry of Education, the county education authorities, the local councils, and the parents associations should be less policy adaptable, actions will be implemented with some delay and, most probably, the outcomes will be diminished than the potential. Similarly, one can imagine that a single education authority will be less inclined to take into account the local needs and particularities and would be highly resistant to regional cultural differences.

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REFERENCES

- Bates, R. H., Avner, G., Levi, M., & Rosenthal, J.L. (1998). *Analytic Narratives*. Princeton: Princeton University Press.
- Buchanan, J. M. & Yoon, Y. J. (2000). *Symmetric Tragedies: Commons and Anticommons*. *The Journal of Law and Economics*, 43, 1–14.
- Fennell, L. A. (2004). *Common Interest Tragedies*. *Northwestern University Law Review*, 98, 907–90.
- Fiszbein, A. [editor]. (2001). *Decentralizing education in transition societies : case studies from Central and Eastern Europe* (English). WBI learning resources series*World Bank Institute (WBI). Washington, D.C. : The World Bank. Retrieved from: <http://documents.worldbank.org/curated/en/819771468767697137/Decentralizing-education-in-transition-societies-case-studies-from-Central-and-Eastern-Europe>
- Gheorghiuță, E. (2012, January 22). *Clasa pregătitoare, obligatorie din septembrie. Ce vor învăța copiii și cum vor fi evaluați*. Mediafax. Retrieved from: <http://www.mediafax.ro>
- Govinda, R. (1997). *Decentralization of educational management: experiences from South Asia*. In R. Govinda (ed.), *Decentralization of Educational Management: Experiences from South Asia*. Research Report No. 107, Paris: UNESCO International Institute for Educational Planning.
- Hardin, G. (1968). *The Tragedy of the Commons*. *Science*, 162, 1243–48.
- Heller, M. A. (1998). *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*. *Harvard Law Review*, 111, 621–88.
- Heller, M. A. (2008). *Gridlock Economy*. New York: Basic Books.
- Institute of Education Sciences. (2013). *Implementarea Clasei Pregătitoare în Sistemul Educațional Românesc în Anul Școlar 2012-2013*. Retrieved from: http://www.ise.ro/wp-content/uploads/2013/12/Studiu_CP_clasapregatitoare.pdf
- Major, I., King, R.F. & MARIAN, C.G. (2016). *Anticommons, the Coase Theorem and the problem of bundling inefficiency*. *International Journal of the Commons*, 10(1), 244–264.
- Mediafax. (2012a, March 19). *Inspectoratul Școlar al Capitalei: Am suplimentat cu 10-12 clasele pentru înscrierea în învățământul primar*. Mediafax. Retrieved from: <http://www.mediafax.ro>
- Mediafax. (2012b, May 29). *La clasele pregătitoare nu vor preda cadre didactice debutante*. Mediafax. Retrieved from: <http://www.mediafax.ro>
- Mediafax. (2012c, August 29). *ANALIZĂ: Clasa pregătitoare - un experiment pentru copii, părinți și dascăli, din 10 septembrie*. Mediafax. Retrieved from: <http://www.mediafax.ro>

- Mediafax. (2012d, August 31). DOSAR MEDIAFAX: Mii de copii încep școala în clădiri care stau să cadă. Pentru unii, școala e un canton silvic. Situația pe județe a unităților de învățământ. Mediafax. Retrieved from: <http://www.mediafax.ro>
- Mediafax. (2012e, May 20). Liviu Pop: Voi retrage licitațiile la clasa pregătitoare. Anul acesta facem improvizatie. Mediafax. Retrieved from: <http://www.mediafax.ro>
- Mukudan, M.V. & Bray, M. (2004). The Decentralization of Education in Kerala State, India: Rhetoric and Reality. *International Review of Education – Internationale Zeitschrift für Erziehungswissenschaft – Revue Internationale de l'Education*, 50, 223–243.
- Namusaka, I. & Buye, R. (2007). Decentralization and Education in Uganda. *Canadian and International Education / Education canadienne et internationale*, 36, 93–116.
- OSCE Mission to Skopje. (2011). Decentralization Assessment Report 2006–2011. Retrieved from: <http://www.osce.org/skopje/87514>
- Parisi, F., Depoorter, B., & Schultz, N. (2005). Duality in Property: Commons and Anticommons. *International Review of Law and Economics*, 25(4), 578–591.
- Pop, F. (2012c, January 25). Prezența obligatorie în clasa zero. *Adevarul*. Retrieved from: www.adevarul.ro
- Prawda, J. (1993). Educational decentralization in Latin America: Lessons learned. *International Journal of Educational Development*, 13(3), 253–264.
- Suceava News. (2012, August 22). Primăria Suceava va asigura fonduri pentru funcționarea claselor pregătitoare. *Suceava News*. Retrieved from: <https://svnews.ro>
- Tribuna. (2012, January 23). În județul Sibiu 3.457 de copii intră în clasa pregătitoare. *Tribuna*. Retrieved from: <http://www.tribuna.ro>
- UNESCO. (2005). Decentralization in education: National policies and practices. ED 2005/WS/31. Retrieved from: <http://unesdoc.unesco.org/images/0014/001412/141221e.pdf>