

Cross-Border Policies in Central America: Studying New Integration Paradigms

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Abstract

Much of the academic literature, mainly from Europe, has focused on regional integration as the formation of supranational institutions among many countries; however, little attention has been paid to alternative integration processes at the border levels. This paper explores integration dynamics in Central America through cross-border policies in border cities. The primary assumption of this paper is those border cities with a high level of decentralization, different economic statuses, a similar political ideology of the local parties, and similar territorial problems are more likely to engage in cross-border policies. This form of integration, known as Horizontal Integration, contrasts with the traditional processes inherited by the European Union. Therefore, the case of Horizontal Integration through cross-border policies in Central America shares new lights on the regional integration debate, replacing the need to create supranational institutions for cross-border policies instead. Based on a macro and micro context analysis of 20 cities (paired in 10 dyads or cases) across six countries, the paper uses fuzzy-set Qualitative Comparative Analysis (fs/QCA) to explain cross-border policies in Central America. The research found two solutions with a consistency of 0,9 in at least six cases. The first solution implied a combination of a similar political ideology of the political parties of the border cities ('POLITICS') and a high decentralization from the central government ('DECENTRALIZATION'). The second solution consisted of different economic statuses between the border cities ('NOT ECONOMICS'), similar territorial problems ('TERRITORY'), and a high level of decentralization ('DECENTRALIZATION'). This integration paradigm offers new insights into social, political, and economic relations among local communities at the border level.

Keywords: Horizontal Integration, Central America, fs/QCA, Cross-Border Policies.

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Introduction

Globalization has shaped how Central American countries relate to each other. Moreover, it has also determined how political and economic integration processes have unfolded during the last two decades. As a result, recent integration efforts in Central America have focused on creating supranational institutions similar to the ones generated by the integration model of the European Union. However, little attention has been paid to many areas of economic and social integration in Central America, especially around the borders of the countries. Indeed, cross-border development is a discipline in the social sciences—covering various areas such as International Relations, Public Policy, Political Science, and Regional Studies—that have not been explored adequately in Central America.

Given its economic and social importance, this paper examines integration in Central America through cross-border development policies. It offers novel analytical tools for the existing efforts of the countries to accomplish their regional integration. The analysis of the different integration processes includes a contrast between the typical “Vertical Integration,” achieved through the creation of supranational institutions, and “Horizontal Integration,” achieved through the implementation of cross-border policies. The main question is whether cross-border cooperation can generate integrated spaces between two or more countries.

This contrast between different theoretical approaches to regional integration has been evident for years. For example, after the formation of the European Union, the academic discussion has focused on creating supranational institutions as effective models for economic and political integration (Mattli, 1999; Rosamond, 2005). These supranational institutions, and the secession of sovereignty from the member states that followed soon after, changed the political and economic dynamics of the European countries (Morgan, 2005). However, more recently, other integration processes have focused more on the dynamics at the local level rather than the supranational levels. As borders began to open during the formation of the European Union, paradoxically, many States and new borders were established as the Soviet Union disintegrated in the early 1990s. Many of these states felt compelled to join the European Union either for economic reasons or for national security (Morgan, 2005). During this period, globalization and global commerce motivated an academic interest (especially in economics and international relations) in the effect of borders within the framework of regional integration (Ceglowski, 1998; Yeung, 1998). For the case of Central America, this research will contribute to the academic debate about supranationalism *vis-à-vis* localism, highlighting how the decision-making process at the local level contributes to regional integration through cross-border policies.

The method implemented for the research was a comparative configurational method, more specifically, the fuzzy-set Qualitative Comparative Analysis (fs/QCA). Fs/QCA evaluated how the combination of different causal conditions contributed to achieving cross-border development policies in Central America. With fs/QCA, it was possible to test the central working hypothesis of the research: a set of causal conditions facilitates the creation of cross-border development policies through economic, social, and political cooperation between the local governments at the border zone.

This research paper contains five sections. In the first section, I study the theoretical framework of the research and cover the evolution of concepts like integration and regionalism and their impact on cross-border cooperation between countries. Then, in the second section, I explain the methodology and the data collection process used in this study. Configurational methods were used to compare the conditions that cause horizontal integration between border cities in Central America. The study included ten (10) cases as units of analysis, formed by dyads of twenty cities across the six countries of Central America. In the third section, I discuss the main findings of the research. The study found two solutions for at least six cases. The paper concludes by offering insights into the research's empirical, theoretical and methodological implications.

Literature Review

The literature on supranational integration has increased in the last couple of decades. Historically, it has been associated as the result of political arrangements at the national level (Aspinwall, 2002; Hettne, 2005; Holod and Reed, 2004; Pollack, 2008; Riggirozzi, 2011). More recent studies have focused on national identity and the construction of the nation-state (Börzel and Risse, 2020; Hass, 2020; Kuhn and Nicoli, 2020). Others have paid attention to policy-driven integration, where policies play a significant role in creating regional institutions. Here supranationalism is contingent on the type of policies implemented in the region, such as defense (Haroche, 2020), environment (Bocquillon and Maltby, 2020), or welfare (Ferrera, 2020). Furthermore, after the formation of the European Union, the academic debate has focused on creating supranational institutions as effective models for economic and political integration (Aspinwall, 2002; Balassa, 1963).

Due to the European experience, the current understanding of regional integration includes a sequence of actions that start from the union of a specific market niche, e.g., coal and steel in the European case. This provisional market union soon became areas of cooperation among countries, such as the European Coal and Steel Community (ECSC), and expanded into atomic energy and agriculture (Mattli, 1999; Rosamond, 2005). Eventually, these unification processes required sophisticated coordination at higher institutional levels, giving more importance to creating supranational institutions (Morgan, 2005). This model of state interactions is an excellent example of vertical integration; namely, the main decisions are taken at the supranational level and applied vertically through a top-down approach.

However, other forms of integration focus more on the local level. Due to globalization and global commerce, many countries have been focusing on the effect of borders within the framework of regional integration instead of the construction of supranational institutions (Ceglowski, 1998; Yeung, 1998). Moreover, with this local approach, the characteristics of the borders tend to change. The evolution of this change was never unidirectional but relatively flexible and dependent on many factors that shape their nature. Accordingly, the origins and nature of cross-border cooperation are common. Due to commercial relations, customs unions, and globalization, the idea of traditional customs has changed. Accordingly, there are many possible definitions for cross-border cooperation, each of which depends on the context of the countries. From a policy perspective, the current scientific literature on cross-border cooperation tried to solve this problem by analyzing the impact of different policies in a region where borders are crucial variables for the countries (Leibenath et al., 2008; Perkmann and Sum, 2002).

The concept of borders, and their effect on the states that undergo integration processes, can be mapped into the concept of regionalism. Theoretically, under regionalism, countries can create (or not) common institutions that belong to the same geographical region. Authors like Wilfred Ethier (1998) and Perkmann and Sum (2002) argue that the mechanisms to achieve integration at the border zone within the framework of regionalism will depend on the actions of the countries that engage in deeper forms of economic, political, and social cooperation at the local level. The perspective that regionalism has in the social sciences, specifically in economics, international relations, and political science, is, therefore, flexible enough to consider integration and cross-border cooperation between border cities as part of its field of study. For example, Yurii Sotnikov and Ievgen Kravchenko (2013) define cross-border cooperation as a “joint action aimed at establishing and deepening the economic, social, scientific, technical, environmental, cultural and other relations between local communities and their representative bodies.” (p. 96).

In contrast with the definition of vertical integration explained earlier, the political, social, and economic relations between the states at the border (micro) level are different. The crucial difference is that no supranational institutions are required to coordinate the relations between cities located at the border level (Alesina et al., 2000; Frankel et al., 1995). Instead, the decision-making process is taken horizontally between local agents (Ethier, 1998; Perkmann and Sum, 2002). This horizontal dimension of regional institutional arrangements describes the delegation of policy tasks from a regional supranational organization to local agencies (both public and private) to achieve faster and deeper integration (Mattli, 2004). Therefore, horizontal integration takes place when agreements are generated at the local level by the political, social, economic, or cultural dynamics of border cities in two or more countries (Laursen, 2004; Mattli, 2004).

The key variables to achieve horizontal integration may vary across cases since they are contingent on the characteristics of the border cities (Beck, 2022). For example, two or more countries engage in integration when there is either political, cultural, and historical affinity or economic cooperation between them (Antràs and Costinot, 2010; Aspinwall, 2002; Balassa, 1961; Fligstein et al., 2012; Mattli, 1999; Chrysochoou, 1998). Other authors argue that two or more countries need common political and economic elements for a successful integration process (Dent, 2008; Devlin et al., 2003; Ruiz-Tagle, 2013). Since integration (either political or economic) is mainly promoted by the central or local governments, homogeneity or heterogeneity of conditions between the local cities seems to be a critical characteristic since it allows local governments to cooperate and create cross-border policies.

Also, the literature accounts for the success of cross-border relations where certain conditions of homogeneity exist (Alesina et al., 2000; Frankel et al., 1995; Goodman, 2010; Wei and Frankel, 1995). There could be cases where asymmetries of conditions (e.g., socioeconomic status) create a specific type of cooperation among border cities. Conversely, there could be cases where the homogeneity of other conditions (e.g., territorial problems like security or environmental issues) allows the creation of different types of cross-border policies. Therefore, the policies implemented at the local level (environmental, economic, or security) might activate different paths toward cross-border cooperation. Applying these policies requires separate political agreements (politics) that would foster or hinder the integration process in the region. For instance, the types of agreements that security policies might create at the local level differ from those created by

environmental policies. In this sense, policies not only meet politics in some specific contexts but also determines it.

Methodology and Data Collection

This research hypothesizes that a set of causal conditions facilitate the creation of cross-border policies through economic, social, and political cooperation between the local governments at the border zone. To create cross-border policies, we must identify and define the explanatory conditions or factors that may trigger, enable or hinder them. The academic literature provides different reasons why cross-border cooperation is attempted. Some authors, for example, suggest that countries engage in cooperation for economic reasons, even if the countries are geographically separated (e.g., the Association of South-East Asian Nations, ASEAN) (Dent, 2008; Murphy and O'Loughlin, 2009). Furthermore, other authors interpret this phenomenon regarding political reasons (e.g., the South American Nations Union, SANU) or cultural and historical reasons (e.g., the Caribbean Community, CARICOM). This seems true even if the countries have economic disparities and do not share common borders (Gómez-Mera, 2008; Martínez-Zarzoso, 2003).

The explanatory model consists of four meta-variables or *super-conditions* that foster the creation and implementation of certain types of policies. The super-conditions for this explanatory model are: i) Similar Political Ideology ('POLITICS') of the political parties at both the central and the local level (Goyal and Staal 2004; Kessel 2015; Cavazza et al. 2010; Zhu and Mitra 2009); ii) Different Socioeconomic Status ('ECONOMICS') at the local level (North 1994; Porter 2003; Rao and Holt 2005; Oakes 2008; Spencer and Castano 2007; Barham et al. 1995; Card 1999); iii) Common Territorial Problems ('TERRITORY') at the local (Brockett 1998; Cherrett 2001; Hiatt and Woodworth 2006; Cossio et al. 2012; Mitsch and Hernandez 2013); and iv) Decentralized Relations ('DECENTRALIZATION') between both state and local levels (Bardhan 2002; UNDP 1999; Falleti 2005; Cajina 2013; Finot 2005).

Moreover, I tested whether the intersection² among those four causal conditions that triggered a specific outcome, in this case, policies at the border level of Central America. Accordingly, the method implemented for this research is set-theoretic analysis, more specifically, fuzzy set Qualitative Comparative Analysis (fs/QCA). Fundamentally, I evaluated how the combination and relations between sets of conditions contribute to achieving cross-border policies (an outcome "Y") in Central America. In social sciences, fs/QCA is a valuable method to determine causal relationships of social phenomena (Elliott, 2006). Accordingly, the phenomenon of horizontal integration can be explained by establishing and explaining causal conditions, theoretically and empirically, to a specific outcome. In QCA, the causal relationships can be determined by the necessity and sufficiency of causal conditions, assessed by their kind (crisp) or degree (fuzzy) in each membership score. This methodology explores the links of institutional combinations to the outcome through necessary and sufficient conditions. These links are essential since they explore whether certain institutional features are only necessary or only sufficient for the cities of Central America to reach horizontal integration. These findings may, in return, be highly relevant to

² In set theory, the intersection of two or more sets (in this case, the causal conditions) creates a third set that contains all the elements of one set that also belong to the other. The third set could be considered as the combination of the causal conditions. For more information about a set interception or set combination, refer to "Elements of Set Theory" (Enderton, 1977) and "Handbook of Set Theory" (Dehornoy, 2010).

policymaking and decision-making at the central and local government from the perspective of the public administration.

The operationalization of the conditions will be performed by evaluating many inter-exchangeable necessary and sufficient conditions in the fs/QCA (Hallerberg, 2010; Ragin, 2006; Schneider and Wagemann, 2015). The multiple combinations of conditions (or causal paths) that trigger the outcome are used to develop statements of necessity when no single condition, but rather a combination, are necessary for the outcome (Schneider and Wagemann, 2015, 74). With the establishment of necessary and sufficient conditions, the presence or the absence of cross-border policies was tested by evaluating the presence or absence of common conditions through the causal combination of configurations.

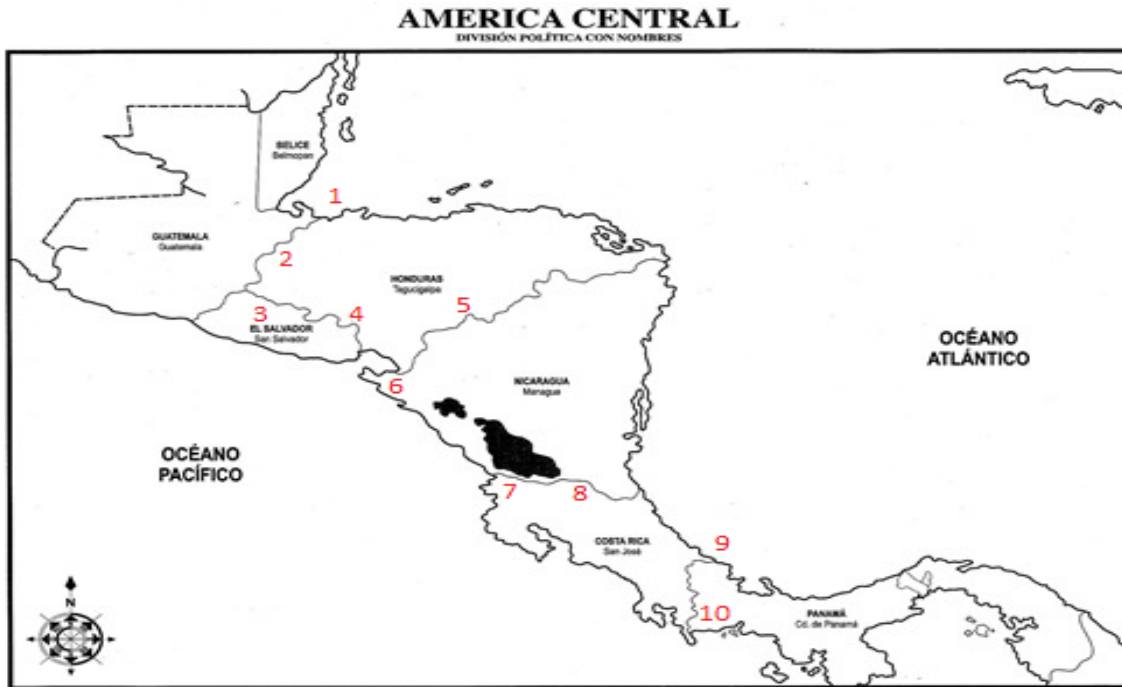
The units of analysis for this research belong to the micro-level: local cities located in the border areas in the six countries of Central America.³ The total number of cities is twenty (20), paired with ten (10) cases in the whole region (See Figure 1).⁴ This choice was based on the necessity to gather in-depth insights from the cases while trying to produce some level of generalization and replicability (Ragin, 2008; Rihoux et al., 2011). Only the most representative cases in the region were selected. What makes these cases representative relates to the socio-economic structures of the cities themselves: they are the most important cities located in the border zones, with similar infrastructure and related problems that border policies try to solve. The data was collected from July 2021 to July 2022, as mobilization through each country was possible after the COVID-19 restrictions. The data was calibrated using primary sources (i.e., interviews with local authorities of all the borders and policy experts *in situ*) and secondary sources (i.e., municipality budgets, policy analysis set in place, local newspapers, and legislation). Further research shall include more cities in the sample to modify or support the central hypothesis. Finally, the border zones between Guatemala and Belize were excluded from the analysis.⁵

³ In QCA, there are three levels of analysis: The micro level, the meso level, and the macro level. Moreover, in many QCA analyses, these levels are often interconnected: the cases might belong to the macro level, but the conditions might be operationalized at the meso or the micro level. Conversely, the levels of analysis sometimes correspond with the cases under study. For example, Rihoux et al. (2011) argue that in cross-national cases, the QCA analysis treats such cases not as countries as whole systems but as policy programs with national settings.

⁴ The cases for this research will be considered as dyads of cities from different countries instead of individual cities for each case. For example, the bordering cities between Nicaragua (Cárdenas) and Costa Rica (La Cruz) will represent one case, not two cases. Comparing cases using this technique will allow knowing if those cities' common characteristics are relevant when observing the expected outcome.

⁵ Belize is part of the English Commonwealth, as it is a former colony of the British Empire. Belize has the same colonial history as other Anglophone Caribbean countries. Thus, it is ethically, culturally, and historically different from the rest of the countries of Central America. Although it formally belongs to the Integration System in Central America (SICA), the local dynamics of economic development and economic integration have always been different.

Figure 1: Map of Central America with the selected Border Cities.



Source: Retrieved from <https://www.teachingforchange.org/teacher-resources/central-america-teaching>.

Figure 1 shows the location of the cities in the border zones of Central America. The region shares around nineteen official borders, with around forty border cities. This research, therefore, studied at least half of them, allowing the results to make some predictions about the remaining cases.

Table 1 lists the cases and other necessary information, such as the department, the country they belong to, and the border name they share.

Table 1: General Information about the Cities under Analysis

Cases	Name of the City	Department	Country	Name of the Border
1	Omoa	Cortez	Honduras	Corinto
	Puerto Barrios	Izabal	Guatemala	
2	Esquipulas	Chiquimula	Guatemala	Agua Caliente
	Santa Fe	Ocatepeque	Honduras	
3	Ocatepeque	Ocatepeque	Honduras	El Poy-Ocatepeque
	Citalá	Chalatenango	El Salvador	
4	El Amatillo	La Unión	El Salvador	El Amatillo
	Goascorán	El Valle	Honduras	
5	El Paraíso	El Paraíso	Honduras	El Espino
	Somoto/Dipilto	Nueva Segovia	Nicaragua	
6	Somotillo	Chinandega	Nicaragua	El Guasaule

	El Triunfo	Cholulteca	Honduras	
7	Cárdenas	Rivas	Nicaragua	Peñas Blancas
	La Cruz	Guanacaste	Costa Rica	
8	Los Chiles	Alajuela	Costa Rica	Las Tablillas
	San Carlos	Río San Juan	Nicaragua	San Pancho
9	Sixaola	Limón/Talamanca	Costa Rica	Sixaola
	Guabito	Bocas del Toro	Panama	Guabito
10	Sabalito	Puntarena	Costa Rica	Sabalito
	Rio Sereno	Chiriqui	Panama	Río Sereno

Source: Own elaboration (2022)

Discussion of Results

The QCA analysis was performed given the conditions of ‘POLITICS,’ ‘ECONOMICS,’ ‘TERRITORY,’ and ‘DECENTRALIZATION.’ For this, the model for the sufficiency step is the following:

$$\text{POLITICS (P) * ECONOMICS (E) * TERRITORY (T) * DECENTRALIZATION (D)} \leq Y,$$

where \leq indicates that the causal conditions denote a subset of the outcome. In general, this model claims that the cases that display these enhancing conditions have cross-border policies. The question is to determine the combinations of conditions that fit the information reported in the data and which of those combinations pass the consistency test, set at 0,85. The following table shows the consistency test for the causal conditions.

Table 2: Consistency test for Cross-Border Policies

Configuration	Conditions				Outcome	Consistency	Number	Cases
	P	E	T	D	Y			
1	1	1	0	1	1	1	2	C ₄ and C ₁₀
2	1	0	1	1	1	1	1	C ₉
3	1	1	1	1	1	1	1	C ₂
4	1	0	1	1	1	0,969828	1	C ₁
5	0	0	1	1	1	0,957831	1	C ₃
6	0	0	0	0	0	0,586207	1	C ₅
7	0	1	0	0	0	0,586207	1	C ₇
8	0	0	1	0	0	0,586207	1	C ₆
9	0	1	1	0	0	0,586207	1	C ₈
...		...			?
16							0	

Source: Own elaboration (2022)

Three critical pieces of information are presented for the four causal conditions. The first thing is the column of consistency values. The second is the total number of cases that show the outcome—only six out of ten have a membership score significantly higher than 0,5. Finally, the third thing

is the outcome (Y) column that shows the combination of causal conditions that pass the sufficiency criteria (0,85 as the threshold for consistency) and contains observable cases—membership score higher than 0,5. If the mentioned circumstances are met, the combinations of causal conditions pass the consistency test, meaning that there are sufficient conditions for the outcome Y. It is, however, necessary to apply the proper procedure for logical reduction of the complexity of the model—which is, in the end, one of the main advantages of QCA. The Quine-McCluskey algorithm was used to reduce the complexity of the outcome-enabling conditions (Ragin, 1987). For the computational analysis, the rows with the outcome whose value equals “1” are set to be “true,” and the values of “0” are set to be “false.” Logical remainders will be set to “do not care.” In other words, the software is minimizing the logical combination of the positive outcome (Y=1) because we are looking for those combinations to facilitate the creation of cooperation policies. Table 9 shows the result of the fs/QCA truth table using the Quine-McCluskey algorithm for the remote conditions.

The following table discloses the different solutions of the Truth Table analysis.

Table 3. Truth Table Analysis of Causal Conditions.

Model	Y = f [P, E, T, D]		
Algorithm	Quine-McCluskey		
---Truth Table Solution---			
	Raw Coverage	Unique Coverage	Consistency
P * D	0.694231	0.261539	0.980978
~E * T * D	0.484615	0.0519231	0.947368
Solution coverage	0.746154		
Solution consistency	0.965174		
Cases with greater than 0.5 membership in term P * D	Case 1: Omoa – Puerto Barrios	(0.67, 0.6)	
	Case 2: Esquipulas – Santa Fe	(0.67, 0.9)	
	Case 4: Amatillo – Goascoran	(0.67, 0.7)	
	Case 9: Sixaola – Guabito	(0.67, 0.9)	
	Case 10: Sabalito – Rio Sereno	(0.67 – 0.9)	
Cases with greater than 0.5 membership in term ~E * T * D	Case 1: Omoa – Puerto Barrios	(0.67, 0.6)	
	Case 3: Ocotepeque – Citala	(0.67, 0.6)	

Source: Own Elaboration (2022)

The solution of the truth table analysis (see Table 3) is presented with a consistency threshold higher than 0,9—the highest for a robust QCA result. The Truth Table shows two results (causal paths) to create cross-border policies in Central America. The first solution implied ‘POLITICS’ and ‘DECENTRALIZATION.’ This means that a combination of a similar political ideology of the political parties of the border cities and a high decentralization from the central government can create cross-border policies. The second solution is ‘NOT ECONOMICS,’ together with ‘TERRITORY’ and ‘DECENTRALIZATION.’ This combination means that different economic statuses between the border cities (which incentivizes migration from one city to the other), similar territorial problems, and a high level of decentralization allow cross-border policies. Finally,

setting all logical remainders in the computation procedure to “do not care” will lead to the most parsimonious solution.⁶

The following table accounts for the cases in which the outcome is present for the remote conditions.

Table 4. Truth Table Results of Causal Conditions for Cross-Border Policies.

Cases	P	E	T	D	Y
Case 1: Omoa-Puerto Barrios	0.67	0.33	0.67	0.67	0.6
Case 2: Esquipulas-Santa Fe	1	0.67	0.67	0.67	0.9
Case 3: Ocotepeque-Citala	0.33	0.33	0.67	0.67	0.6
Case 4: Amatillo-Goascoran	1	0.67	0.33	0.67	0.7
Case 5: El Paraiso-Dipilto	0	0.33	0.33	0	0.2
Case 6: Somotillo-El Triunfo	0.33	0.33	0.67	0	0.3
Case 7: Cardenas-La Cruz	0	0.67	0.33	0	0.1
Case 8: Los Chiles-San Carlos	0	0.67	0.67	0	0.1
Case 9: Sixaola-Guabito	0.67	0.33	0.33	1	0.8
Case 10: Sabalito-Rio Sereno	0.67	0.67	0.33	1	0.9

Source: Own Elaboration (2022)

As discussed earlier (Table 3), the Truth Table analysis revealed two solutions with a consistency value higher than 0,9. Moreover, Table 4 shows the cases with those consistency levels. Only the borders of Nicaragua (cases 5, 6, 7, and 8) have a consistency below the threshold of 0,6. Conversely, one case is repeated in both solutions, namely, Case 1. The border of Case 1 meets with both solutions, i.e., it is a case with a high level of decentralization, with the similar political ideology of both border cities, with different socioeconomic statuses between cities, and similar territorial problems.

In addition, notice that only two border cities (case 2 and case 10) have a consistency of 0,9. This is the highest possible result of policy cooperation between two border cities. These two cities are located between Guatemala, Honduras, and El Salvador, known as *El Trifinio*, and between Costa Rica and Panama (East Coast). There is only one case with Y=0.8 (Case 9: Costa Rica and Panama, West Coast), one case with Y=0.7 (Case 4: Honduras and El Salvador), and two cases with Y=0.6 (Case 1: Guatemala and Honduras, and case 3: Honduras and El Salvador). The rest of the cases have a score of Y<0.5, meaning that no policies or cooperation were observed.

The analysis of the causal conditions that lead to the outcome is:

⁶ The advantage of presenting the parsimonious solutions vis-à-vis an intermediate or a complex solution is very straightforward. While the intermediate and complex solutions offer multiple possibilities to reach for the outcome, only the parsimonious solution shows the conditions, both necessary and sufficient, to reach the outcome.

$$\text{DECENTRALIZATION} * (\text{POLITICS} + [\sim\text{ECONOMICS}] * \text{TERRITORY}) \rightarrow Y$$

As stated in the previous sections, two solutions exist to create cross-border policies in Central America. The variable ‘DECENTRALIZATION’ is the only standard variable for both solutions. A high decentralization level is necessary for cross-border policies between border cities. Moreover, additional elements are also required to reach such policies. For example, combining a highly decentralized country with a homogenous political ideology from the border ruling political party (‘DECENTRALIZATION’ * ‘POLITICS’) boosts the capacity of these cities to engage in cross-border policies. It does not matter where the parties belong in the political spectrum (left or right) as long as both parties have a similar ideology. Furthermore, the second solution includes a high level of decentralization with the different economic statuses of the cities—which incentivizes migration—and similar territorial problems—which incentives similar solutions from both cities.

The type of governance model for solution #1, i.e., highly decentralized governments with similar political ideology at the local level, is decentralized in some policy areas, with the capacity to actively intervene in the polity at the local level (Cherrett, 2001; Faguet, 2004; Bird and Vaillancourt, 1998). The implications of these solutions are many. First, there is minimal chance of creating cross-border policies in centralized countries with different ideological positions. Second, although the combination DECENTRALIZATION * POLITICS represents a fostering context for the presence of “Y,” it might not be needed for successful “Y” because it is not usually necessary in all the existent cases. In other words, it alone will not constitute a sufficient context for “Y” because it is not usually sufficient.

The type of governance model for solution #2, i.e., socioeconomic differences between cities with similar territorial problems and decentralized relations, is found in countries where local cities have an elevated share of autonomy to create either local organizations or joint policies to tackle common exogenous territorial problems (Basurto, 2013). For this solution, the difference in socioeconomic status is crucial for people to have incentives to commute to the neighboring cities to work. Similarly, when the border cities share similar territorial problems (e.g., shared natural disasters due to river floods or droughts), the local governments find incentives to collaborate to create cross-border policies.

The following table summarizes the solutions for cross-border policies in Central America.

Table 5. Solutions for cross-border policies in Central America

Solution	Consistency level	# Cases	Name of the cases
DECENTRALIZATION* POLITICS	0,980978	5	Case 1: Honduras / Guatemala Case 2: Honduras/ Guatemala Case 4: El Salvador / Honduras Case 9: Costa Rica / Panama Case 10: Costa Rica / Panama
DECENTRALIZATION* ~ECONOMICS * TERRITORY	0,947368	2	Case 1: Honduras / Guatemala Case 3: El Salvador / Honduras

Source: Own elaboration (2022)

Conclusions

Over the past couple of decades, the phenomena of integration, regionalism, and cross-border relations have called the attention of the social sciences and academic inquiry. Many disciplines, such as comparative politics, international relations, sociology, political science, and economics, have tried to study the effect of integration on the relations between states, societies, and people. Accordingly, the perspective of cross-border policies in Central America was explored throughout this research as an alternative to the region's historical and institutional integration paradigms. Hence, the main objective of this research was to assess if a combination of causal conditions—both at the macro and the micro levels—contributed to the generation of cross-border policies in Central America.

The theoretical argument of this research was framed as causal statements using necessary and sufficient conditions for a specific outcome. The primary assumption is that those border cities with a high level of decentralization, different economic statuses, similar political ideologies of the local parties, and similar territorial problems are more likely to engage in cross-border policies. This form of integration contrasts with the traditional processes inherited by the European Union. Therefore, the case of horizontal integration through cross-border policies in Central America shares new lights on the regional integration debate, replacing the need to create supranational institutions for cross-border policies instead.

Fuzzy-set QCA was the chosen methodological tool for studying complex causal theories with a middle-size number of cases. In addition, with fs/QCA, it was possible to compare the different policy cases throughout the borders of Central America, identifying those conditions that contributed to the creation of horizontal integration. The study included 10 cases as units of analysis, formed by dyads of twenty cities across the six countries of Central America. The data was calibrated using primary sources (i.e., interviews with local authorities of all the borders and policy experts *in situ*) and secondary sources (i.e., municipality budgets, policy analysis set in place, local newspapers, and legislation).

The research found at least two solutions with a consistency of 0,9 in at least six cases, i.e., twelve out of twenty cities. The first solution implied a combination of the similar political ideology of the political parties of the border cities ('POLITICS') and a high decentralization from the central government ('DECENTRALIZATION'). Whenever these two conditions were observed, border cities created cross-border policies. From all the cases analyzed, five cases were found for this solution: two borders between Guatemala and Honduras, one border between Honduras and El Salvador, and two borders between Costa Rica and Panama. The second solution consisted of different economic statuses between the border cities ('NOT ECONOMICS'), similar territorial problems ('TERRITORY'), and a high level of decentralization ('DECENTRALIZATION'). Similar to the previous solution, cross-border policies were created whenever these three conditions were found. The cases observed under this solution are one border between Honduras and Guatemala and one border between Honduras and El Salvador. No shared borders with Nicaragua had cross-border policies, either with Honduras or Costa Rica.

The city with the highest consistency value were the cities located on the borders between Guatemala, Honduras, and El Salvador (known as *El Trifinio*) and the eastern border between

Panama and Costa Rica. The case of *El Trifinio* represents one of the two places with a joint border of three countries and where the shared territory creates incentives for the governments to cooperate. Similarly, the borders of Panama and Costa Rica showed high levels of consistency in the explanatory model, meaning that decentralization and local politics are crucial elements for cross-border policies.

Although Central America has engaged in economic and political integration, cross-border cooperation is still an area to explore more in-depth. However, the lack of consensus between scholars from their various theoretical standpoints—especially those who specialized in the integration process of the European Union—has made the study of integration from a “standard” perspective very problematic. As argued throughout this paper, the integration process in Central America could also be understood through different lenses. Horizontal integration could be a policy-driven process that could bring many benefits of proper regional integration to the people of Central America.

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