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Factors that influence cross-border cooperation between businesses in the Alps–Adriatic region

Stanka Setnikar Cankar*, Janko Seljak and Veronika Petkovšek

Faculty of Administration, University of Ljubljana, Gosarjeva 5, 1000 Ljubljana, Slovenia

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Cross-border cooperation is becoming an increasingly important factor in establishing a stimulating business environment. The aim of the article is to introduce factors that influence cross-border cooperation between businesses in the Alps–Adriatic region. A descriptive and analytical approach is used. On the basis of the results of empirical international research into cross-border cooperation in the Alps–Adriatic region between Carinthia, Friuli-Venezia Giulia (FVG) and Slovenia the article shows and analyses the barriers that businesses face in cross-border cooperation and the factors they consider to best stimulate cross-border cooperation. The results show that good personal relations, language skills and shared interests are the most important factors; the level of assistance and administrative/legislative barriers are the biggest barriers in cross-border cooperation. Different factors stimulating cross-border cooperation can be used to create a base for future strategies and training for business managers.

Keywords: cross-border cooperation; businesses; regional policy; international comparison; internationalisation

JEL classification: F59, K23, M38, O18, R12, R58

1. Introduction

Cross-border cooperation is subject to numerous political, economic and social impact factors. These can be divided into internal and external factors. The external factors are international political relations, which includes global trends and bi-national issues. Internal factors are primarily defined by cross-border regions, such as: local innovation and enterprise, decentralised administrative structures, openness to new contacts, cooperation and partnership on both sides, existing intellectual potential, knowledge of foreign languages (Stryjakiewicz & Tölle, 2009).

Cross-border cooperation includes different levels of cooperation between regions of neighbouring states. It can develop in short-term or long-term forms of cooperation across a range of fields. The forms of cross-border cooperation differ according to the type of cooperation, institutional framework, capabilities and capacities functioning in different policy areas and in relation to the actors involved in cross-border cooperation. The most common areas of cross-border cooperation are regional development, economic development, transport and trade, environmental protection, culture and sport, healthcare, tourism and leisure time, innovation and technology and education and communication (Engl, 2009). Cultural actors have functioned as founders, activators of

*Corresponding author. Email: stanka.setnikar-cankar@fu.uni-lj.si

development in cross-border areas and culture as the very purpose of such cooperation. Cultural cross-border cooperation covers all areas of cooperation and offers a basis for contacts and interaction. It is not possible to build strong links and cooperation between neighbouring areas without strengthening cultural cross-border cooperation (Stojkov & Nikolov, 2009).

The objective of cross-border cooperation is the development of cooperative forms, procedures and instruments that facilitate the elimination of barriers. The main objective is to transcend borders and to reduce their significance (Medeiros, 2010). Cross-border cooperation therefore helps to overcome structural weaknesses that are largely present due to the location at the periphery of a state. Local actors on each side of the border rapidly come to realise that they operate within different systems, but that they face similar problems and interests. In order to overcome or eliminate these problems, the border areas can pool resources and seek practical and rapid solutions together (Co-operation across borders, 2012; Ležaić, 2010). Cross-border cooperation offers opportunities for social, economic and organisational development in border areas. Cross-border cooperation makes border areas more competitive, more economically sustainable and integrated (Cividin, 2006). Cross-border cooperation has become a key factor in the competitiveness of border area economies. Cross-border cooperation between businesses in particular promotes the creation of competitive advantages within the economy (Bradley & Best, 2012). The main location-related factor within cross-border cooperation relates to the development of the institutional capacities and capabilities of the political and administrative authorities and where they are established. The challenge is to recognise the numerous ways in which European, national and regional components interact in creating border within or between different political cultures (Leick, 2011; Liikanen, 2010; Roeber, 2010).

The competitiveness of the business environment in which companies operate is vitally important to the development and competitiveness of the entire economy. Cross-border cooperation can be used to improve the competitiveness of the business environment. Cross-border cooperation can include the transfer of best practice, experience and new knowledge, which can contribute to eliminating administrative barriers, thus generating a more competitive business environment. Cross-border cooperation can therefore primarily be used to improve the efficiency and effectiveness of the public administration responsible for the regulatory regime, and therefore contributes to simpler and shorter administrative procedures for businesses (Setnikar Cankar, & Petkovšek, 2011a; Petkovšek, 2012).

Cross-border cooperation offers many advantages. It promotes integration and connections between regions, municipalities and institutions, which provide the basis for targeted communication and cooperation and helps reduce the lack of knowledge about the neighbouring country. It promotes the exchange and transfer of knowledge and contributes to resolving everyday problems at the local and regional level. Cross-border cooperation is an important factor in economic competitiveness in border areas and contributes to increased awareness of those areas. Large- and medium-sized enterprises also frequently cooperate within cross-border networks, because they offer many advantages. Nevertheless, cross-border cooperation does also feature barriers and disadvantages. Cross-border incentives and forms of cooperation often do not have appropriate institutional conditions in place. Partners in cross-border cooperation face a range of administrative asymmetries, linguistic barriers and a lack of human resources. Partners often only engage in cross-border cooperation with the unilateral aim of meeting specific criteria to acquire EU funds, and fail to dedicate sufficient attention to developing a broader interest in

cooperation. The qualifications of people involved and how the cooperation is organised are frequently deficient, and there is also a lack of the finances required to fund joint projects, which can lead to competition between neighbouring local government units. A great deal of cross-border cooperation depends entirely on external funding and frequently comes to an end when the funds have been spent. These disadvantages can lead to disappointment among parties to cross-border cooperation and can even outweigh the advantages (Bufon & Markelj, 2010; Knippschild, 2009; Lessons learned from the preparation of cross-border projects, 2012; Lungwitz et al., 2006).

In the context of the aims of the tripartite research on cross-border cooperation between three Alps–Adriatic regions: Carinthia (Austria), Slovenia and Friuli-Venezia Giulia (FVG) (Italy), introduced in the following sections, three basic hypotheses were formed:

Hypothesis 1: *Businesses in the observed regions have different appreciation of the importance of the factors stimulating cross-border cooperation.*

Hypothesis 2: *Businesses in the observed regions have different appreciation of the importance of the barriers to cross-border cooperation.*

Hypothesis 3: *It is possible to form sets of factors stimulating cross-border cooperation on which basis a number of separate strategies for promoting cross-border cooperation could be designed.*

The introductory part of the article is followed by overview of cross-border cooperation in the Alps–Adriatic region. The next section introduces the research method and research sample, and is followed by the section with research results. The article ends with the conclusions.

2. Cross-border cooperation in the Alps–Adriatic region

The Alps–Adriatic cross-border region includes parts of Austria, Italy and Slovenia. More specifically, the cross-border region comprises the federal province of Carinthia in Austria, the autonomous region of FVG in Italy and the Republic of Slovenia (Table 1). This is a typical description of such an area, but there is no standard definition. The Alps–Adriatic cross-border region is a meeting point for linguistic, cultural, ideological and politico-administrative borders as well as geographical. The geographical boundaries are the Karavanke mountain range between Carinthia and Slovenia, the Carnic Alps between Carinthia and Italy, and the Julian Alps between Italy and Slovenia. The mountain areas are sparsely populated and the mountains and valleys hinder the transport of goods and daily travel between individual parts. There is a lack of good connections between different parts of the Alps–Adriatic region, which has a negative impact on the

Table 1. Basic data on participating regions – 2010.

	Carinthia	FVG	Slovenia
Population (thousands)	558	1,213	2041
Area (km ²)	9,536	7,845	20,273
No of municipalities	132	155	210

Source: Author's calculations.

region's economic development. The Alps-Adriatic region therefore includes three different political and administrative systems that also differ in culture and language. The region is the meeting point for the three main strands of the European cultural tradition – Germanic, Romance and Slavic. Formal cooperation between territories in the region is also complex given that any negotiations or agreements are reached between three different kinds of politico-administrative contexts. Carinthia is a federal state, FVG an autonomous region from a regionalising state, while Slovenia is a democratic state that does not have formal regional level (Seger, 2007).

There have been various forms of cooperation throughout the history of the Alps-Adriatic region, from personal and business networks, political cooperation, associations with various degrees of structure, and a number of working groups. The first forms of cooperation in cross-border regions were cooperation on tourism and spatial planning. An Alps-Adriatic working community was also founded and became a leading force within the Alps-Adriatic region. Today the Alps-Adriatic Working Community plays a somewhat lesser role in cross-border cooperation than previously. It operates primarily in the fields of political, economic, socio-political and cultural activities (Valentin, 2007).

The Alps-Adriatic region has many small- and medium-sized enterprises, and tourism is an important part of the economy. In Carinthia the main economic sector and leading companies are found in wood processing, raw material, machinery and equipment, the FVG region's economy is dominated by precision instruments, shipbuilding, iron and steel, chemicals, furniture and agriculture, while in Slovenia the main sectors are electrical machinery, equipment and car production, iron and steel, chemicals, pharmaceuticals and agriculture. The Alps-Adriatic region also features a traditional manufacturing base that produced considerable growth in the high technology sectors, especially information technology. Carinthia's microelectronic industry is another example of development in the high technology sector, while Slovenia and FVG have advanced telecommunications and integrated logistics (Knappitsch et al., 2011).

There have already been many attempts in the Alps-Adriatic region to establish a 'euroregion'. This form of macroregion typically consists of a free or integrated cross-border structure that includes governmental and non-governmental actors representing public and private interests. Actual forms of euroregion range from working communities to not-for-profit associations or public bodies. In some cases these structures symbolise good neighbourly relations at the political level, while in some cases they involve the implementation of different forms of administration. In most cases the key objective is to attract EU funds. One problem that has occurred in attempts to establish a euroregion in the Alps-Adriatic region has been the fact that different initiatives have been partly run in parallel by different regional groupings, which has led to a kind of inter-regional competition (Knappitsch et al., 2011).

There have been many initiatives to develop cross-border cooperation in the Alps-Adriatic region, however, the region still faces a clear lack of comprehensive information on cooperation. Empirical data on cross-border cooperation in the region are very limited and there has never been a comprehensive analysis of such cooperation that would elucidate and determine actual needs and potential for cross-border cooperation. For this reason, the founding partners of the cross-border research and training network from Carinthia, FVG and Slovenia agreed on a tripartite cross-border research project on cross-border cooperation between these three Alps-Adriatic sub-regions. The objective of the project was to define the current state and future possibilities of cross-border cooperation between the three regions, discover potential administrative barriers

to cooperation and opportunities to reduce or eliminate them, to determine areas for cross-border cooperation and the advantages of cross-border cooperation for each state (Knappitsch et al., 2011; Setnikar Cankar et al., 2011).

3. Research method and research sample

The plan for the form and content of the questionnaire was decided at a meeting in April 2010 in Udine of partners from Carinthia University of Applied Sciences in Austria, the Forser Institute in Italy and the Faculty of Administration from Ljubljana, Slovenia. The questionnaire was then updated and formatted several times based on communications between the partners. Each partner translated the final version of the questionnaire into their language. In terms of content, the questionnaire covered a broad field of cross-border cooperation, while this article will present results on the extent of cooperation, factors promoting cross-border cooperation and barriers to successful cross-border cooperation. Generally, a quantitative approach was used to ensure international data comparability (Petkovšek, 2012).

The research sample included public administration organisations at the local, regional and national level, chambers of commerce, non-governmental organisations, businesses and others in order to acquire a comprehensive overview of cross-border cooperation between Carinthia, FVG and Slovenia in the Alps–Adriatic area in the public and private sector. All the organisations from the three regions included in the study were sent an invitation to cooperate in the research by email, with a link to the online questionnaire. A total of 1,000 emails with the invitation were sent out in the second half of July 2010 in each of the three regions, 500 to for-profit and 500 to not-for-profit organisations, and the responses were collected until November 2010. The data was collected separately for each region (Table 2). The data analysis for all three countries was carried out together in a single sample, using the SPSS 19 statistics programme (Setnikar Cankar & Petkovšek, 2011b).

In total 399 participants from the for-profit and not-for-profit organisations were involved in the study from total 3,000 addressees. The response rate for businesses was 10.5%, indicating that only 158 businesses participated in the study from total 1,500 business addressees. In continuation (Table 3), it is shown that almost 40% of respondents came from the business sector and the remainder of 60% from public administration.

Table 2. Basic sample data.

	Region			Total
	Carinthia	FVG	Slovenia	
Sample total	1,000	1,000	1,000	3,000
Business sample	500	500	500	1,500
Public Administration sample	500	500	500	1,500
Sample total – number of responses	94	127	178	399
Response rate total	9.4%	12.7%	17.8%	13.3%
Business sample – number of responses	37	70	51	158
Response rate for businesses	7.4%	14.0%	10.2%	10.5%
Public administration sample – number of responses	57	57	127	241
Response rate for public administration	11.4%	11.4%	25.4%	16.1%

Source: Author's calculations.

Table 3. Respondents sample data.

Respondent	Region			Total
	Carinthia	FVG	Slovenia	
Business – number of responses	37	70	51	158
Business – % of total responses	39.4%	55.1%	28.7%	39.6%
Public administration – number of responses	57	57	127	241
Public administration – % of total responses	60.6%	44.9%	71.4%	60.4%
Total – number of responses	94	127	178	399
Total – % of total responses	100%	100%	100%	100%

Source: Author's calculations.

4. Research results

4.1. Cross-border cooperation between Carinthia, FVG and Slovenia in the Alps-Adriatic region

A total of 25.3% of surveyed organisations had already cooperated with partners in the two other countries before, while 38.8% of organisations had not taken part in cross-border cooperation. The surveyed organisations were divided into two groups: for-profit (businesses) and not-for-profit (public administration, chambers of commerce, education, NGOs, healthcare and social sector) (Table 4). There was a statistically significant difference between these two groups for cross-border cooperation ($\chi^2=23.1$, $\alpha < 0.001$). In the company group, 53.2% had not yet cooperated with partners in the two cross-border regions, while only 29.5% of not-for-profit organisations had had no cooperation.

Not-for-profit organisations were more active among those that had already participated in cross-border cooperation, with 48.6% having participated in two or more areas, while this figure was only 39.1% for the for-profit sector. Not-for-profit organisations were also more active in planning for future cooperation, with 55.1% of those surveyed currently considering entering into existing cooperation agreements or launching new agreements with cross-border partners, while the figure for the for-profit organisations was 48.4%.

Based on these results, one can conclude that cross-border cooperation between businesses in the Alps-Adriatic region is less widespread than in the not-for-profit sector. This paper presents a detailed analysis of two areas for the business sector only: factors that stimulate cooperation and factors that are a barrier to cooperation. The factors that stimulate cooperation are positive in nature and are connected to a vision of successful cooperation. The surveyed parties had not necessarily experienced these

Table 4. Cross-border cooperation with partners in another cross-border region.

	Has your organisation ever participated with partners in another cross-border region?			Total
	Yes, with partners in both countries	Yes, with partners in one country	No	
For-profit organisation (business)	28	46	84	158
Public administration/not-for-profit organisation	73	97	71	241
Total	101	143	155	399

Source: Author's calculations.

factors in practice, it was sufficient for them to consider them as stimulators of cooperation. Factors that are a barrier to cooperation are negative in nature. A barrier is defined in the research as any activity or measure that blocks or restricts the free movement and reciprocal function of people, capital, products, services and ideas. Barriers are usually linked to tangible (negative) experiences, with respondents usually considering that they do not have the capacity to eliminate them themselves, or that others are responsible for them. Questions in which the respondents were asked for opinions or scores (rather than facts) often indicate the personality traits of the leaders or other people who completed the questionnaire or cultural traits of the environment they come from (Fink & Meierewert, 2004; Gulev, 2006).

The authors attempted to define which factors or barriers were the most important and which factors or barriers differ according to the individual region. The factors stimulating cooperation were arranged in sets according to the importance given to them by specific business groups. This will make it possible to create different strategies aimed at different groups of businesses.

4.2. Factors stimulating cross-border cooperation in the Alps–Adriatic region

The survey participants were asked about the factors they consider important in promoting cross-border cooperation. Respondents scored 15 factors that have an influence on the promotion of cross-border cooperation (Table 5). On average business respondents defined good personal relations, language skills and shared interests as the most important factors promoting cross-border cooperation. The lowest scores on average were given for the size of the area of cooperation and similar administrative structure. The

Table 5. Factors promoting cross-border cooperation in the business sector.

	Region				F-test	sig
	Carinthia	FVG	Slovenia	Total		
Size of cooperation area	3.12	3.33	3.29	3.26	0.55	0.58
Cooperation experiences of the partners involved	3.52	3.79	4.02	3.80	3.08	0.05
Good personal relations (contacts)	4.26	4.02	4.35	4.18	1.98	0.14
Common interests or problems	4.09	3.87	4.27	4.05	3.24	0.04
Existence of transnational organisations	3.25	3.59	3.20	3.39	2.72	0.07
Linguistic and cultural similarities	3.20	3.26	3.37	3.28	0.24	0.78
Linguistic skills	3.89	3.92	4.40	4.10	2.92	0.06
Need to foster economic development	3.77	3.77	4.11	3.89	2.11	0.13
Positive experience with previously successful cross-border cooperation	3.61	3.48	3.89	3.64	2.53	0.08
Availability of funding for cooperation	3.61	3.98	4.13	3.94	2.40	0.09
Low transaction costs	3.77	3.73	3.80	3.76	0.05	0.95
Similar business structures	3.19	3.44	3.48	3.39	0.93	0.40
Similar local and regional administrative structures	2.93	3.47	3.35	3.31	3.47	0.03
Existence of experts for cross-border cooperation within the organisation	3.45	3.75	3.73	3.67	0.89	0.41
Availability of external experts for cross-border cooperation	3.30	3.51	3.41	3.43	0.46	0.63

Note: *1 – factor not important; 5- factor very important.

Source: Author's calculations.

factors defined as the most important factors promoting cross-border cooperation, indicate the importance of personal contacts in cooperation (personal familiarity with partners and therefore easier communication, past cooperation and shared interests). The businesses find it easier to build on personal contacts and direct communication between partners.

Statistically significant differences ($\alpha < 0.05$) were only found in three areas, while in four these differences were borderline ($\alpha < 0.10$). The statistically significant differences were in these fields: (1) cooperation experience of the partners involved – this area is less important to Carinthian businesses, and much more important to Slovenian businesses; (2) shared interests or problems – this area is less important to businesses from FVG, and the most important to businesses from Slovenia; and (3) similar local and regional administrative structures – this was the most important for businesses from FVG and less important for businesses from Carinthia. There was also a relatively large difference, though not statistically significant, in these areas: (1) the existence of transnational organisations – the most important for FVG businesses, much less important in the other two regions; (2) language skills – by far the most important in Slovenia, considerably less in the other two regions; (3) positive experience with previously successful cross-border cooperation – most important in Slovenia, less so in FVG; and (4) availability of funding for cooperation – most important in Slovenia, much less important in Carinthia.

Factorial analysis was used to create sets of factors that pertained to a larger group of businesses, i.e. that seemed to be the most important factors promoting cross-border cooperation to that business group. The reliability of the measuring instrument was verified with Cronbach's alpha ($\alpha = 0.872$). The value indicates a high level of reliability for the measuring instrument. For the business four factors were extracted, which accounted for a 79% share of variability (Table 6).

The stimulation factors were defined according to respondents' opinions on which were the most important. In surveys involving organisation representatives, the question always arises whether respondents are giving their own position or that of their organisation. This problem is usually found with 'soft indicators', i.e. where opinions or definitions are requested. When asking about the importance of a specific stimulation factor to cooperation, one is generally asking for an opinion on what it is that encourages a business to cooperate, rather than about specific activities.

Comparing factor analysis with cluster analysis means to approach a data-set from two complementary perspectives. The underlying logic of both procedures is classification (Krebs et al., 2000). Hierarchical cluster analysis, which has been widely applied in cluster analyses, was used to classify the variables (questions). Among the several options in determining the strategy for merging clusters, Ward's method was chosen. This analysis produced four or five clusters solution (Dendrogram – Figure 1). Sets of questions have been defined, which can be compared with sets of factors defined in the factorial analysis (Table 6). The comparison shows that the only question which markedly deviates is the question 'size of cooperation area'. This question represents independent cluster in the five clusters solution and goes over to fourth cluster in the four clusters solution. The analysis of other questions by both methods gives the same results.

The first set comprises factors that are most focused on the economic field. In this set, the availability of funding and low transaction costs were deemed important by businesses. This is, of course, easiest if the area of cooperation is as broad as possible, if the business has already collaborated with the partners, and if the cooperation

Table 6. Factor loading – rotated component matrix* and cluster membership.**

Factors promoting cross-border cooperation in the business sector	Component				Cluster membership	
	1	2	3	4	Five clusters	Four clusters
Positive experience with previously successful cross-border cooperation	0.784				5	4
Low transaction costs	0.766				5	4
Availability of funding for cooperation	0.654				4	3
Need to foster economic development	0.646				5	4
Size of cooperation area	0.516				2	1
Good personal relations (contacts)		0.844			4	3
Cooperation experiences of the partners involved		0.771			4	3
Common interests or problems		0.738			4	3
Linguistic skills		0.644			4	4
Existence of transnational organisations			0.835		3	2
Availability of external experts for cross-border cooperation			0.741		3	2
Existence of experts for cross-border cooperation within the organisation			0.625		3	2
Similar local and regional administrative structures				0.806	1	1
Similar business structures				0.648	1	1
Linguistic and cultural similarities				0.507	1	1

Note: *Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation.

** Hierarchical cluster analysis. Method: Ward Linkage. Interval: Squared Euclidean Distance.

Source: Author's calculations.

promotes economic development (cost efficiency and development-oriented). The second set comprises factors that indicate the importance of personal relations in cooperation (personal relation-oriented). The most important factors for businesses in this set are cooperation factors in the field of personal familiarity with partners and hence easier communication, past cooperation and shared interests. The organisations relating to this set find it easier to build on personal contacts and direct communication between partners. In the third set are factors demonstrating an emphasis on the importance of expert analyses. This set relates to businesses that find it easier to build cooperation on the basis of expertise and external stimuli, if possible within transnational organisations, which would offer the highest level of objectivity in decision-making. They build their cooperation based on expert opinions both from within the business and from external consultants (expertise-oriented). In the fourth set are factors that demonstrate the importance of operating in a known environment. The management of such businesses consider it important that they operate within similar administrative and business structures, ideally on the basis of linguistic and cultural similarities (oriented towards operating in a stable environment).

4.3. Barriers to cross-border cooperation in the Alps–Adriatic region

Beside the factors promoting cross-border cooperation, it is also interesting to draw attention to the barriers which can present skepticism to the number of cross-border cooperations which may be entered into in future in the Alps–Adriatic region. The

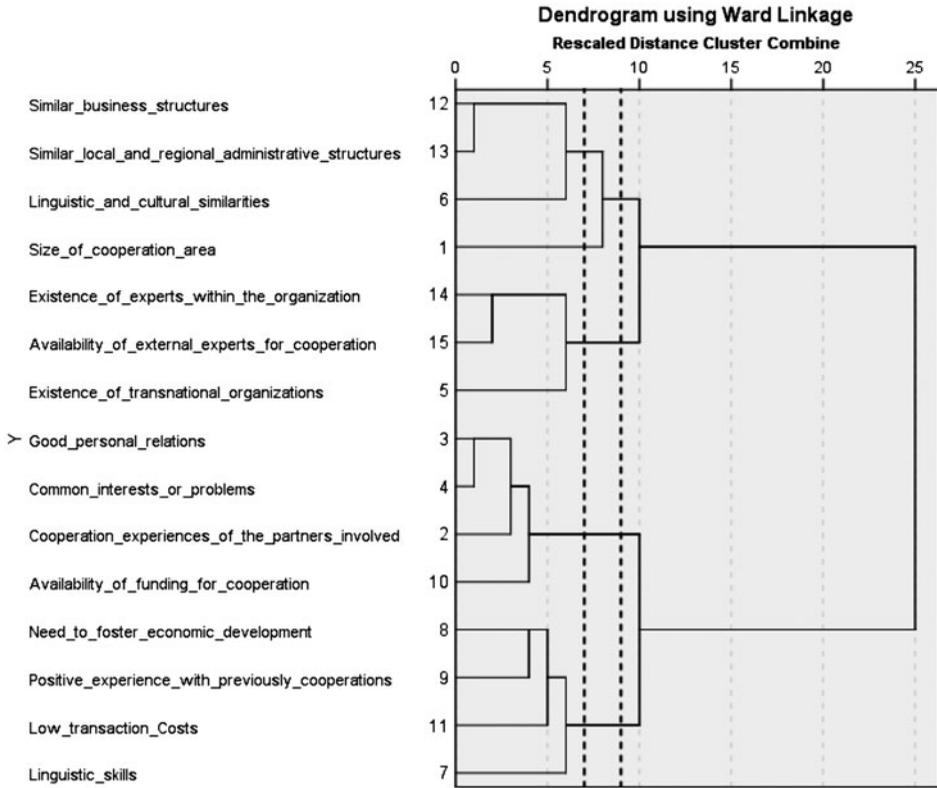


Figure 1. Dendrogram showing four and five clusters solution. Source: Table 6.

perceived barriers to cooperation outlined by the respondents are the specific areas which need to be improved in order to facilitate and help foster future cross-border activities in the region.

A total of 25 barriers were listed, which were scored by respondents on a 5-point scale (Table 7). The barriers to cross-border cooperation were divided into four content-based sets: administrative/legislative barriers, historical/political barriers, level of assistance as a barrier, economic/geographic barriers.

For first set of barriers (administrative/legislative), respondents from all three regions scored the complex funding system as the biggest barrier and the administrative system as the smallest. Administrative/legislative barriers seemed the biggest to respondents in Slovenia, and smallest to businesses in Carinthia. Statistically significant differences only occurred for the barrier entitled frequent changes in the rules of business. This barrier was by far the most troublesome to Slovenian businesses.

The biggest historical/political barriers to cross-border cooperation were corruption and the political situation. Respondents gave different cultures as the smallest barrier. The total score for historical/political barriers was highest (least obstructive) in Carinthia, scoring considerably lower in both other regions. Historical events were most frequently cited as a barrier to cross-border cooperation in Slovenia (statistically significant differences), while different culture seemed the most common barrier to cooperation for respondents in FVG, and least to Slovenian respondents.

Table 7. Barriers to cross-border cooperation in the business sector.*

	Region				F-test	sig
	Carinthia	FVG	Slovenia	Total		
Administrative system	3.03	2.97	2.90	2.96	0.12	0.89
Complex funding system	3.00	2.71	2.61	2.76	1.09	0.34
Legislation	3.09	2.89	2.58	2.84	1.89	0.16
Frequent changing of the rules of business	3.19	2.82	2.45	2.79	3.62	0.03
Barriers – administrative/legislative	3.07	2.85	2.63	2.83	2.22	0.11
Political situation	3.09	2.90	2.86	2.93	0.40	0.67
Historical events	3.54	3.03	2.77	3.08	4.71	0.01
Corruption	3.03	2.91	2.83	2.92	0.28	0.76
Security problems	3.50	3.29	3.26	3.34	0.47	0.63
Infrastructure	3.34	2.98	2.93	3.06	1.74	0.18
Quality of the banking system	3.36	2.93	3.15	3.11	1.51	0.23
Different culture	3.50	3.21	3.74	3.44	3.17	0.05
Different language	3.00	3.25	3.55	3.28	2.11	0.13
Barriers – historical/political differences	3.30	3.03	3.01	3.09	2.04	0.13
Lack of local government assistance	3.28	2.70	2.32	2.71	6.35	0.00
Lack of regional government assistance	3.00	2.90	2.24	2.72	4.91	0.01
Lack of national government assistance	3.17	2.48	1.97	2.49	9.03	0.00
Lack of European organisations assistance	3.14	2.90	2.65	2.88	1.48	0.23
Lack of business associations assistance	3.32	2.84	2.53	2.86	3.76	0.03
Lack of agency assistance	3.39	2.67	2.70	2.85	4.62	0.01
Barriers – level of assistance as barrier	3.29	2.76	2.37	2.75	8.84	0.00
Size of nearby markets on the other side of the border	3.68	3.08	3.41	3.33	3.24	0.04
Purchasing power of the nearby markets on the other side of the border	3.63	3.00	3.40	3.28	3.65	0.03
Quality and productivity of local firms	3.56	3.16	3.12	3.25	1.87	0.16
Product differentiation of local economy	3.48	3.03	3.00	3.13	2.80	0.06
Geographical conditions in border regions	3.88	3.42	3.26	3.48	3.52	0.03
Distance to larger cities on the other side of the border	3.88	3.30	3.35	3.45	3.38	0.04
Transportation infrastructure	3.47	3.03	2.93	3.10	2.17	0.12
Barriers – economic/geographical	3.69	3.16	3.18	3.29	4.45	0.01

Note: *1 – barrier that cannot be overcome; 5 – no barrier at all.

Source: Author's calculations.

Statistically significant differences appeared in nearly all areas in the set featuring level of assistance as a barrier to cross-border cooperation (except for assistance from European organisations). Businesses in Carinthia see the level of assistance as the least obstructive set of barriers, though within the set they cited the lack of regional government assistance as the biggest barrier. Respondents in FVG saw the lack of national government assistance as the biggest barrier to cross-border cooperation, with local government assistance in second place. Businesses in Slovenia see this category as the main set of barriers to cross-border cooperation – both compared to the other regions and compared to the other sets of barriers. The lack of national government assistance is also seen as the biggest barrier by Slovenian businesses.

Statistically significant differences were also found for most items in the set of economic/geographic barriers. The highest score (least obstructive) by region for the overall set of economic/geographical indicators was given by Carinthian businesses, while there was little difference between FVG and Slovenia. The biggest barriers to businesses are

Table 8. Barriers to cross-border cooperation in the business sector.

Barriers	Has your organisation ever had any cross-border cooperation (formal or informal) with partners in other countries?*					
	Yes, with partners in both countries	Yes, with partners in one country	No	Total	F-test	sig
Administrative/legislative	3.23	2.65	2.78	2.83	3.56	0.03
Historical/political differences	3.36	3.03	3.01	3.09	2.64	0.07
Level of assistance as barrier	2.98	2.68	2.72	2.75	0.83	0.44
Economic/geographical	3.45	3.60	3.08	3.29	5.14	0.01

Note: *1 – barrier that cannot be overcome; 5 – no barrier at all.

Source: Author's calculations.

connected to transport infrastructure and the product differentiation of the local economy. The small size and purchasing power of the markets on the other side of the border still seems an issue for businesses in FVG, while geographical conditions in border areas are an issue for Slovenian businesses.

The survey checked whether the perception of barriers influenced the level of cooperation in the surveyed businesses. The businesses were also divided into three groups according to previous cross-border cooperation (Table 8). All three groups considered the level of assistance to be a relatively major barrier to cooperation. The differences between the groups were also smallest for this set of barriers. The largest differences occurred within the set of economic/geographic barriers, which are seen as the biggest barrier by organisations that have not yet been involved in cross-border cooperation, while they were seen as significantly less of a barrier in the other two groups. Again in the administrative/legislative category, businesses that have cooperated with the two other cross-border regions perceived such barriers as less important than businesses cooperating with just one or no other region.

The perceived barriers mostly emphasise how important the basic framework conditions are in cross-border cooperation. The respondents, businesses which have already cooperated across borders and businesses which have not yet been involved in cross-border cooperation, offered suggestions on how to improve cross-border cooperation in the Alps-Adriatic region in order to remove the perceived barriers. It is evident that there are a number of areas and activities in which future research should be carried out to understand how to best meet the needs of future cross border cooperation in the region. The most common suggestions relate to the framework conditions for cross-border cooperation, such as simplifying and streamlining bureaucracy and administrative procedures, removing administrative barriers and amending legislation, simplifying the funding system and allowing for increased funding opportunities. One of the respondents' suggestions was also an establishment of a coordinated and jointly run information centre for cross-border cooperation in the Alps-Adriatic region which could improve and expand cross-border activities and increase future potential to cross-border cooperation in the region (Setnikar Cankar & Petkovšek, 2012a, 2012b).

Irrespective of the perceived barriers, the respondents see great advantages in cross-border cooperation for their businesses. The main advantages for businesses (already involved in cross-border cooperation and not yet involved) are perceived to lie

in: development and better performance of the business, exchange of knowledge, experiences and good practices, better cooperation and connection, networking, better options for acquisition of financial funds, more possibilities for projects and last but not least also better knowledge of culture and languages. These advantages clearly indicate the potential of further cross-border exchange throughout the Alps–Adriatic region (Setnikar Cankar & Petkovšek, 2013).

5. Conclusion

Overall, businesses participating in the survey stated that the most important set of factors stimulating cross-border cooperation was the set of factors relating to personal contacts: good personal relations, language skills and shared interests. This category also scored highly by individual region; only in FVG did it come second to availability of funding. The least important factors according to respondents were the size of the area of cooperation, similar administrative structure and linguistic and cultural similarities. Respondents in Slovenia placed the involvement of transnational organisations last.

Statistically significant differences between the regions only occurred for three factors stimulating cooperation: experience of cooperation of the partners involved and shared interests were the most important factors for businesses in Slovenia, while similar local and regional administrative structure were most important to businesses in FVG. The small differences in factor scores given by respondents from businesses from all three regions indicate that these factors are effectively universal and that (since they are not linked to specific experience) they are not influenced by location. Therefore, hypothesis 1 is only partly confirmed.

The situation is different with barriers to cooperation, which confirms hypothesis 2. Despite the above, the businesses involved operate in different countries and face different operating conditions, which is reflected in the differing perceptions of barriers to cooperation. On average, businesses perceived the biggest barriers in the level of assistance and administrative/legislative barriers. These are two categories that each country can largely influence through their own policies. The lack of development assistance seems particularly problematic to businesses in Slovenia, while businesses in Carinthia perceive that as much less of a barrier. Particularly problematic are the perceived barriers relating to the lack of development assistance at the local, regional and national level in Slovenia. The other set of barriers perceived as relatively obstructive was the administrative/legislative barriers. This set was also considered the biggest barrier by Slovenian businesses. Frequent changes in the rules of business were seen as a particularly obstructive barrier, along with legislation and the complex funding system.

Businesses perceived economic/geographic barriers as offering the least obstruction to cooperation. There were, however, noticeable differences between the three regions for this set of barriers. Carinthian businesses perceived this set as the least obstructive barrier, while for businesses in FVG the most troublesome issue was the small size and purchasing power of the markets beyond the border, and for Slovenian businesses it was transport infrastructure and the product differentiation of the local economy. Historical and political barriers were also assessed as relatively small. The biggest problem according to respondents came from corruption and the political situation. Businesses in Slovenia were most likely to perceive historical events as barriers, while in Italy it was the quality of the banking system.

Different factors stimulating cooperation were grouped into sets that matched the characteristics of individual groups of businesses, so that a number of separate strategies

for promoting cross-border cooperation could be designed. That confirms hypothesis 3. These sets of factors can be used to create a base for future strategies and, subsequently, training for business managers. Such strategies have to be adapted to the factors deemed important by particular groups.

Creating appropriate strategies for businesses would require more detailed research into specific cross-border cooperation areas and activities and the related factors stimulating such cooperation, as well as further research into barriers to cross-border cooperation, considering where and how can barriers be eliminated. This would require the collation of information already available on cross-border cooperation, and a study of what further information would be needed by the actors involved; that information would then be gathered and made available at a single source. The aims of providing a single source of information and supporting the easiest possible access to all cross-border actors in the Alps-Adriatic region would be best served by establishing a cross-border cooperation information centre. The information centre would offer a broad spectrum of information and data collected at a single source and provide and facilitate the exchange of best practice among the actors involved. Information and data of this kind would make it easier and quicker for actors to carry out research into factors stimulating cross-border cooperation and the elimination of barriers to cooperation, and the application of best practice would contribute to eliminating barriers more quickly, again promoting cross-border cooperation.

More efficient and effective cross-border cooperation between businesses can also be promoted by various forms of training. Increased globalisation and cross-border cooperation between companies is making the transfer of knowledge increasingly important. Training, in the form of workshops and seminars, could be organised under the auspices of an information centre, where – in addition to the necessary information and data – participants could gain appropriate knowledge and experience on approaches to the challenges of a border region and on identifying, understanding and dealing with shared interests and problems in border regions. These forms of training would increase the potential for cross-border cooperation in future, since additional knowledge would provide people with quicker access to shared solutions for eliminating barriers and problems within cross-border cooperation.

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