



The internationalisation of SME in Cantabria

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October 2017

This study was commissioned by the Cámara de Comercio de Cantabria as part of the 'SME Internationalisation Exchange' Project (SIE) which is part-financed by the European Regional Development Fund through the Interreg Europe Programme www.interregeurope.eu/SIE

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Executive summary

The internationalisation of the economy of Cantabria is strongly influenced by the productive and business characteristics of the region. Cantabria is one of the smallest regions in Spain, and its GDP per capita is slightly below the country average. The number of enterprises per 1,000 inhabitants in Cantabria (64.45) is below the Spanish average (69.66). However, there are significant differences in the composition of enterprises in Cantabria, compared to the Spanish average, from the perspective of enterprise size. The number of Micro enterprises (those between 1 and 9 employees) in Cantabria is close to the average. As regards the relative number of Large enterprises (those over 249 employees), Cantabria occupies an intermediate position among the Spanish regions. The most important difference that characterises Cantabria is the lack of Small (those between 10 and 49 employees) and, especially, of Medium-sized (between 50 and 249) enterprises, when compared to the national average

Hence, the structural characteristics of Cantabrian enterprises, in terms of their size, are rather different than the Spanish average. For this reason, this report considers two groups of Spanish regions as additional references, for a proper comparison: close regions in terms of physical distance (CR), and similar regions in terms of number of enterprises by size (SR).

In terms of productive specialisation, the weight of the industrial sector in Cantabria is basically limited to a few branches of industrial activities. The lack of other manufacturing activities, as well as the lack of certain branches of services activities (such as wholesale trade) explains the relatively low number of SMEs in Cantabria.

Turning our analysis to the two key dimensions of the European strategy of economic specialisation for international competitiveness (education and innovation), it is found that Cantabria has a moderate specialisation in human capital (higher than most of the Spanish regions, but lower than the EU average), and a low specialisation in innovation. This is reflected in the specialisation of industrial activities, as well as among those of the services sector.

Exports in Cantabria represented 18.7% of the GDP of the region in 2016, whilst imports represented 14.5%. The weight of exports has experienced a smooth upward trend since 2003. Imports collapsed as a result of the crisis, and have not recovered their previous level.

The weight of both exports and imports in the GDP in Cantabria is significantly lower than that in the group of CR, the group of SR and the Spanish average, and even lower than in the EU average. In addition, these differences have increased clearly from 2002. Cantabria is largely behind all the groups of reference in terms of trade openness, and shows a process of divergence in this regard over the last fifteen years.

Cantabrian exports and imports are concentrated in a small number of sectors associated with manufacturing activities. The sum of the manufacturing of motor vehicles, basic metals, chemical products, food products, fabricated metals, rubber and plastic, machinery and equipment and electrical equipment accounts for 80% of exports and 66% of imports in the region. A key pattern of international trade is intra-industrial trade in these sectors.

Exports in Cantabria are very concentrated in a small number of enterprises: the 5 top exporter enterprises represented 36.2% of total exports during the last few years, while the top 10 accounted

for 53.2% of total exports. Only 3.1% of the enterprises in the region are exporters. The weight of the exporter enterprises in the total number of enterprises is significantly lower than in the Spanish average (4.6%). The difference between Cantabria and Spain as regards this issue has increased during the last years.

International trade in Cantabria is significantly oriented towards the rest of the EU: more than two thirds of exports go to, and around two thirds of imports come from, EU countries. The most important European trade partners of Cantabria are the four largest EU countries (Germany, France, United Kingdom and Italy), followed by Portugal, Finland, Belgium and the Netherlands. America and Asia (in this case, particularly as origin of imports) are also relevant in the international trade of Cantabria. Among non-EU countries, United States, China, Turkey, Mexico, Japan and Morocco are the most important trade partners of Cantabria.

Road transport is the most commonly used mode of transport in international trade in Cantabria, accounting for around two thirds of exports and imports. Maritime transport accounts for less than one third of the international trade, whilst the rest of modes of transport are residual.

Inward flows of Foreign Direct Investment (IFDI) are very low in Cantabria, in comparison with the groups of CR, SR and the Spanish average. Outwards flows of FDI (OFDI) are discontinuous, and concentrate very high peaks in certain years. This is due to the dominance of large projects of OFDI by a single multinational enterprise based in the region (the Banco Santander). The most important destinations of OFDI and origins of IFDI are European and American countries.

Academics, policy-makers and international organisations have paid substantial and increasing attention to the analysis of barriers to SME internationalisation. According to the literature, the most important of these barriers are related to internal factors such as firm organisation, lack of management and innovative capabilities and lack of financial resources, as well as to external barriers such as foreign government regulation. Both are particularly important in the case of high-growth countries.

In this report, we analyse the results of a survey on the barriers to internationalisation faced by enterprises in Cantabria, conducted by the Chamber of Commerce of the region. Among the internal barriers related to the capacity and capabilities of the enterprises, the most important factors are the lack of funding (67%), insufficient language skills (53.6%) and the small staff structure or size (50%), followed by the lack of qualified personnel (43.1%). Lack of productive capacity is only considered a barrier to internationalisation by a small percentage of the enterprises.

As regards the external barriers to internationalisation related to the information and uncertainty in international markets, the most important factors are the lack of awareness of international trade regulations (65.8%) and operations (65.5%) and the export procedures (62.6%). Other significant barriers are the problems to identify customers in international markets (45%), the lack of knowledge of the techniques to identify markets to internationalise (51.8%) and the lack of appropriate information on foreign markets (49.1%). The higher risk of default perceived in international markets is considered a barrier by 34.5% of the enterprises. Finally, 68.1% consider new barriers will be created in the near future derived from environmental or social regulations, and 25.7% think the same as regards barriers derived from the implementation of new technologies.

Given the importance of SME internationalisation for global, national and regional economic development, and the significant barriers to the internationalisation of these enterprises, the promotion of SME internationalisation has become a topic of heightened interest among policy-makers in developed countries. The existent policies in support of SME internationalisation in OECD countries are classified in those firstly addressing external barriers and secondly those addressing internal barriers. The second group includes actions focused on the collection and supply of information about business opportunities and market conditions, the reduction of human resource barriers and the provision of financial support.

This report analyses the results of a survey on the mechanisms in support of SMEs internationalisation in Cantabria, conducted by the Chamber of Commerce of the region. These mechanisms are, in Cantabria, mainly provided by three main organisms: the Spanish Institute for Foreign Trade (ICEX), dependent of the central administration; the Corporation for the Regional Development of Cantabria (SODERCAN), dependent of the regional administration; and the Chamber of Commerce of Cantabria, an official organisation which represents the private enterprises. Also, there are programmes developed in collaboration by two or all of these organisations.

The results of the survey show that average awareness of the existing programmes is 47.8%. As noted by the literature, fragmentation may be detrimental to awareness. On the contrary, awareness is higher among those programmes implemented in collaboration by various of the existent organisms. In 9 out of 14 programmes evaluated, awareness is over 50%.

Awareness of a programme is strongly related to its use. Even, it is related to its use among those enterprises who are aware of the programme. This reflects the importance of awareness of the programmes, and the spill-over effects which can affect positively their use: the more a programme is known, the more it is used, and the more it is used even among those who know it.

The rating of the programmes among those who have used them is, on average, quite high: it is clearly over 2 (in a scale between 0 and 3) for 11 of the 14 programmes under evaluation. However, the survey faces a significant limitation: only a portion of the SME in the region answered it (those are particularly active and interested in the internationalisation process), and thus the results are only representative of the minority of SMEs which have those characteristics. In the future, further efforts are needed to evaluate the barriers of SMEs in Cantabria as regards internationalisation, as well as the effects of the existent policies and mechanisms to support internationalisation on them. This should include a broader view of these issues which is more representative of the whole population of SMEs in the region.

Resumen ejecutivo

La internacionalización de la economía de Cantabria tiene una estrecha relación con las características productivas de la región y de sus empresas. Se trata de una de las CCAA más pequeñas de España, y cuenta con un PIB per cápita ligeramente inferior a la media nacional. El número de empresas por cada 1.000 habitantes en Cantabria (64,45) es ligeramente inferior al promedio estatal (69,66), si bien hay notables diferencias dependiendo del tamaño de las empresas: el número de Micro empresas (aquéllas con entre 1 y 9 empleados) en Cantabria es similar a la media; en relación a las Grandes empresas (más de 249 empleados), la región ocupa una posición intermedia entre las CCAA españolas; el elemento más relevante para Cantabria es la escasez de Pequeñas (entre 10 y 49 empleados) y, especialmente Medianas (entre 50 y 249 empleados) empresas.

Las características estructurales de las empresas de Cantabria, en cuanto a su tamaño, son sustancialmente diferentes de la media española. Por ello, este informe considera dos grupos de CCAA españolas como referencias adicionales, para una comparación adecuada: regiones cercanas en términos de distancia física (Close Regions, CR) y regiones similares en términos del número de empresas por tamaño (Similar Regions, SR).

En cuanto a su especialización productiva, el peso del sector industrial en Cantabria se limita fundamentalmente a unas pocas ramas de actividad. La falta de otras actividades industriales, así como la escasez de ciertas actividades de servicios (tales como el comercio al por mayor) explica el relativamente bajo número de Pequeñas y Medianas Empresas en Cantabria.

Al focalizar el análisis en las dos dimensiones clave de la estrategia europea de especialización económica para la competitividad internacional (educación e innovación), se obtiene que Cantabria muestra una moderada especialización en capital humano (superior a la mayor parte de CCAA españolas, aunque inferior al promedio europeo), y una baja especialización en innovación. Esto se refleja tanto en el tipo de especialización de las actividades industriales como en las del sector servicios.

Las exportaciones de Cantabria suponen el 18,7% del PIB regional, con datos de 2016, mientras que las importaciones representan el 14,5%. El peso de las exportaciones ha experimentado una suave tendencia ascendente desde 2003. Las importaciones cayeron fuertemente como resultado de la crisis, y continúan sin recuperar los niveles previos a la misma.

El peso tanto de exportaciones como de importaciones en el PIB de Cantabria es notablemente más bajo que en el grupo de CR, el grupo de SR y la media española y, aún en mayor medida, que la media de la UE. Además, estas diferencias se han incrementado sensiblemente desde 2002. Cantabria se encuentra muy por debajo de todos estos grupos de referencia en términos de apertura comercial, y muestra un proceso de divergencia al respecto durante los últimos quince años.

Las exportaciones e importaciones de Cantabria se concentran en unos pocos sectores de la industria manufacturera. La suma de vehículos de motor, metales básicos, productos químicos, alimentos, fabricación de metales, plásticos, maquinaria y equipo y material eléctrico supone alrededor del 80% de las exportaciones y el 66% de las importaciones de la región. Un elemento clave del comercio en la región es el comercio intra-industrial en estos sectores.

Las exportaciones de Cantabria están muy concentradas en un número reducido de empresas: las 5 principales empresas exportadoras han supuesto el 36,2% del total de exportaciones en los últimos años, mientras que las 10 mayores han supuesto un total del 53,2%. Únicamente el 3,1% de las empresas de la región son exportadoras, un número muy por debajo de la media española (4,6%). Además, la diferencia entre Cantabria y España a este respecto se ha incrementado durante los últimos años.

El comercio internacional de Cantabria está claramente orientado hacia el resto de la UE: más de dos tercios de las exportaciones y alrededor de dos tercios de las importaciones se destinan y proceden, respectivamente, de países de la UE. Los principales socios comerciales europeos de Cantabria son los cuatro países más grandes de la UE (Alemania, Francia, Reino Unido e Italia), seguidos por Portugal, Finlandia, Bélgica y los Países Bajos. América y Asia (en este último caso, fundamentalmente como origen de importaciones) muestran también relevancia en el comercio internacional de Cantabria. Entre los países de fuera de la UE, EEUU, China, Turquía, México, Japón y Marruecos se sitúan entre los principales socios comerciales de Cantabria.

El transporte por carretera es el medio más utilizado para el comercio internacional en Cantabria, suponiendo alrededor de dos tercios de las exportaciones y las importaciones. El transporte marítimo engloba algo menos de un tercio del comercio internacional, mientras que el resto de medios de transporte tienen un peso residual.

Los flujos de entrada de inversión extranjera directa (IED) en Cantabria son muy reducidos, en comparación con los de los grupos de CR, SR y la media estatal, en relación al PIB respectivo. Los flujos de salida de IED son discontinuos, con elevados picos concentrados en determinados años, lo cual se debe a la magnitud de grandes proyectos de IED realizados por una empresa con base en la región (el Banco Santander). Los más importantes países de origen y destino de la IED de Cantabria se sitúan en Europa y en América.

Académicos, responsables del diseño de políticas y organizaciones internacionales están prestando una atención sustancial (y creciente) al análisis de las barreras a la internacionalización de las Pequeñas y Medianas Empresas (PYMES). De acuerdo con la literatura, las más importantes de estas barreras se relacionan con factores internos, tales como la organización de la empresa, la falta de capacidades de gestión o innovación y la carencia de recursos financieros, así como con factores externos tales como la regulación de gobiernos extranjeros. Ambos tipos de factores son especialmente importantes en el caso de los países emergentes.

En este informe, analizamos los resultados de una encuesta sobre las barreras a la internacionalización que afrontan las empresas de Cantabria, realizada por la Cámara de Comercio. Entre las barreras internas, ligadas a la capacidad de las empresas, los principales elementos detectados son la falta de financiación (67%), el insuficiente conocimiento de idiomas (53,6%) y el reducido tamaño o estructura de la plantilla (50%), seguidos por la falta de personal cualificado (43,1%). La falta de capacidad productiva solo es considerada como una barrera a la internacionalización por un pequeño porcentaje de las empresas.

Respecto a las barreras externas a la internacionalización, relacionadas con la información y la incertidumbre en los mercados internacionales, los principales factores son la falta de conocimiento de las regulaciones (65,8%) y las operaciones comerciales internacionales (65,5%) y de los procedimientos para exportar (62,6%). Otras barreras destacadas son los problemas para identificar

consumidores potenciales en los mercados internacionales (45%), el desconocimiento de técnicas para identificar mercados en los que internacionalizarse (51,8%) y la falta de información adecuada sobre mercados internacionales (49,1%). Los mayores riesgos de impago percibidos en mercados internacionales son considerados una barrera por el 34,5% de las empresas. Por último, el 68,1% considera que, en el futuro inmediato, se crearán nuevas barreras ligadas a factores medioambientales o sociales, y el 25,7% cree que lo harán como consecuencia de la implementación de nuevas tecnologías.

Dada la importancia de la internacionalización de las PYMES para el desarrollo económico global, nacional y estatal, y de las destacadas barreras a la internacionalización de estas empresas, su promoción se ha convertido en un tema de gran interés para las políticas de los países desarrollados. Las políticas existentes en los países de la OCDE se clasifican en las que abordan barreras externas y barreras internas, englobando las acciones orientadas a la provisión de información sobre oportunidades de negocio y condiciones de mercado, la reducción de las barreras ligadas a los recursos humanos y la provisión de apoyo financiero.

Este informe analiza los resultados de una encuesta sobre los mecanismos de apoyo a la internacionalización de las PYMES en Cantabria, realizada por la Cámara de Comercio. En la región, estos mecanismos están fundamentalmente a cargo de tres organismos: el Instituto de Comercio Exterior (ICEX), dependiente del gobierno central; la Sociedad para el Desarrollo de Cantabria (SODERCAN), dependiente del gobierno regional; y la Cámara de Comercio de Cantabria, una organización oficial que representa a las empresas privadas. Asimismo, hay algunos programas desarrollados en colaboración entre dos o más de estos organismos.

Los resultados de la encuesta muestran que el conocimiento medio de los programas existentes es del 47,8%. Como señala la literatura, la fragmentación de los programas puede ser negativa para su conocimiento. En cambio, el conocimiento de aquellos programas implementados mediante la colaboración de varios organismos es, en general, más elevado. 9 de los 14 programas evaluados son conocidos por más del 50% de los encuestados.

El conocimiento de un programa está intensamente relacionado con su uso. Incluso, también con el porcentaje de uso considerando solo aquellas empresas que conocen el programa. Esto refleja la importancia de que los programas sean conocidos por las empresas, y los efectos inducidos que esto tiene sobre el uso de los mismos: cuanto más conocido es un programa, mayor es su uso, y también mayor es su uso entre los que lo conocen.

La valoración de los programas existentes entre las empresas que los han utilizado es, en promedio, muy elevada: se encuentra claramente por encima de 2 (sobre 3) para 11 de los 14 programas evaluados. Sin embargo, la encuesta se enfrenta a una limitación importante: únicamente una pequeña parte de las PYMES de la región respondieron a la misma, entre las cuales hay un peso muy elevado de las empresas más activas e interesadas en el proceso de internacionalización, de manera que los resultados son únicamente representativos de las empresas con estas características. En el futuro, se requiere continuar los esfuerzos para evaluar las barreras a la internacionalización de las PYMES de Cantabria y de los efectos de las políticas y mecanismos existentes para impulsar la internacionalización entre estas empresas. Ello habría de incluir una mayor profundización en estos aspectos, con una perspectiva que permita obtener resultados más representativos para el conjunto de las PYMES de la región.

1. Introduction

This report on the “Internationalisation of Small and Medium Enterprises (SMEs) in Cantabria” is part of the series of other studies on this topic in the regions participating in the SME Internationalisation Exchange (SIE) EU-funded Interreg Europe Programme. According to the objectives of this Programme, the aim of this report is to develop a general diagnostic of the situation of the region of Cantabria (Spain) in terms of SME internationalisation. This is part of a broader project, oriented at carrying out analytical and comparative research work, with the aim of obtaining recommendations about how to improve the existing policies and boost SME internationalisation in the regions participating in the SIE-Interreg Programme.

In particular, the objectives of this report are, first, to analyse the internationalisation of the enterprises in Cantabria, comparatively with other regions which have obtained successful results in this regard. Second, it aims to analyse the barriers slowing down or preventing SME internationalisation in Cantabria, as well as the existent policies and mechanisms to overcome such barriers. As a result of this analysis, this report serves as a diagnostic of the internationalisation of Cantabria, as well as a base for a further and deeper evaluation of the mechanisms for promoting SME internationalisation in the region.

The report is structured as follows. Following this introduction, the second section describes the productive and business structure of Cantabria. This section focuses, in particular, on the comparative analysis of the size of the enterprises, and their productive specialisation according to that factor. The third section describes the recent trends and current figures on the internationalisation of the economy of the region. It focuses on the comparative analysis of the size, productive and geographical distribution of both trade and foreign direct investment. The fourth section analyses the barriers to SME internationalisation in Cantabria, considering the general facts on these barriers described by the literature, and then the specific evidence available in Cantabria. The fifth section focuses on the analysis of the existent mechanisms for promoting SME internationalisation in the region. It considers both the general literature on this issue and the specific evidence on the awareness, use and rating of these mechanisms about the Cantabrian SMEs. The sixth section concludes, summarizing the most remarkable evidence obtained, and extracting some recommendations and prospects for continuing the analysis.

2. The productive and business structure of Cantabria

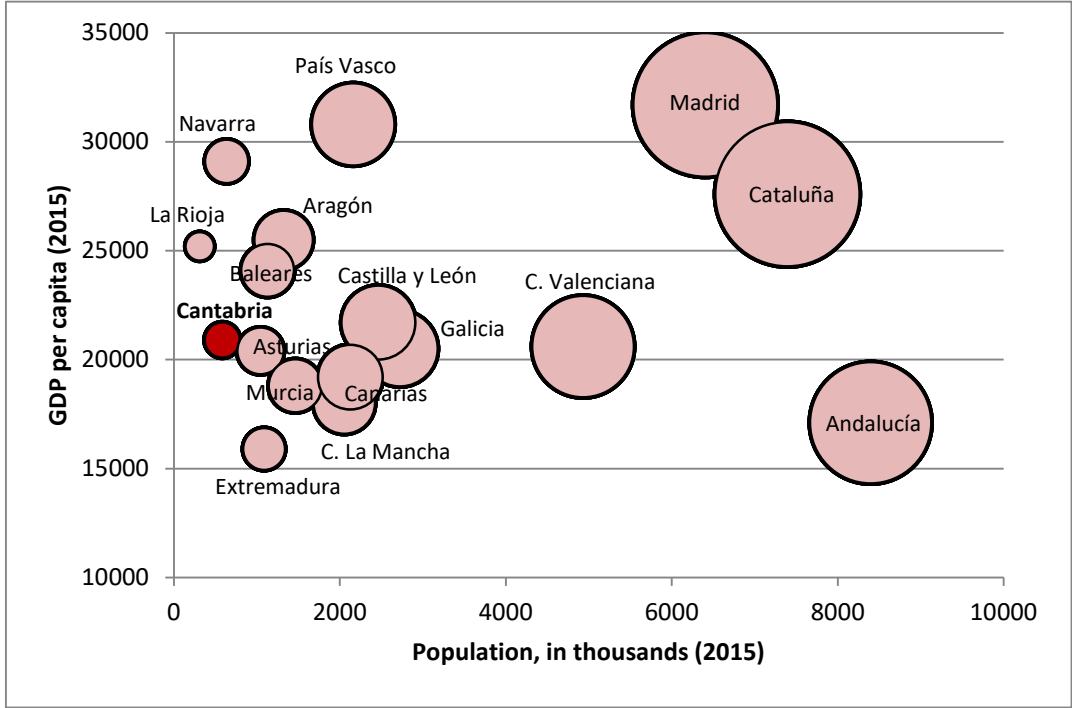
2.1. A first approach to the economy of Cantabria

Cantabria is a small region situated in the Northern coast of Spain. It occupies a geographical position in the southwest of the European continent, open to the Atlantic Ocean. Graph 2.1 summarizes the economic position of Cantabria in the Spanish context. The GDP per capita of the region (20,900 € per inhabitant on average, according to the latest data available in EUROSTAT) is around 10% below the Spanish average (23,200), and around 28% below the EU-28 average (28,900). In terms of this indicator, Cantabria occupies an average position among the Spanish regions: it holds the 9st highest GDP per capita among the 17 Spanish Autonomous Communities.

In terms of population, as can also be observed in the graph, Cantabria (584,000 inhabitants in 2015) is one of the smallest regions in Spain. It is the 16st Autonomous Community in population, only over La Rioja and slightly below Navarra. The Cantabrian population represent 1.26% of the Spanish population, and 0.11% of the EU-28 population: that is, 1 out of every 79 Spaniards and 1 out of every 873 Europeans live in the region.

As a result of its small size in terms of population, and also of its lower than average GDP per capita, the Cantabrian economy is, in terms of GDP, one of the smallest among the Spanish Autonomous communities. Its GDP was around 12 thousand million euros in 2015 (according to last data available in EUROSTAT). Cantabria accounts for just the 1.14% of the Spanish GDP, and 0.08% of the EU-28 GDP.

Graph 2.1. Cantabria in Spain: population (horizontal axis), GDP per capita (vertical axis) and GDP (size of the bubbles) of Spanish autonomous communities

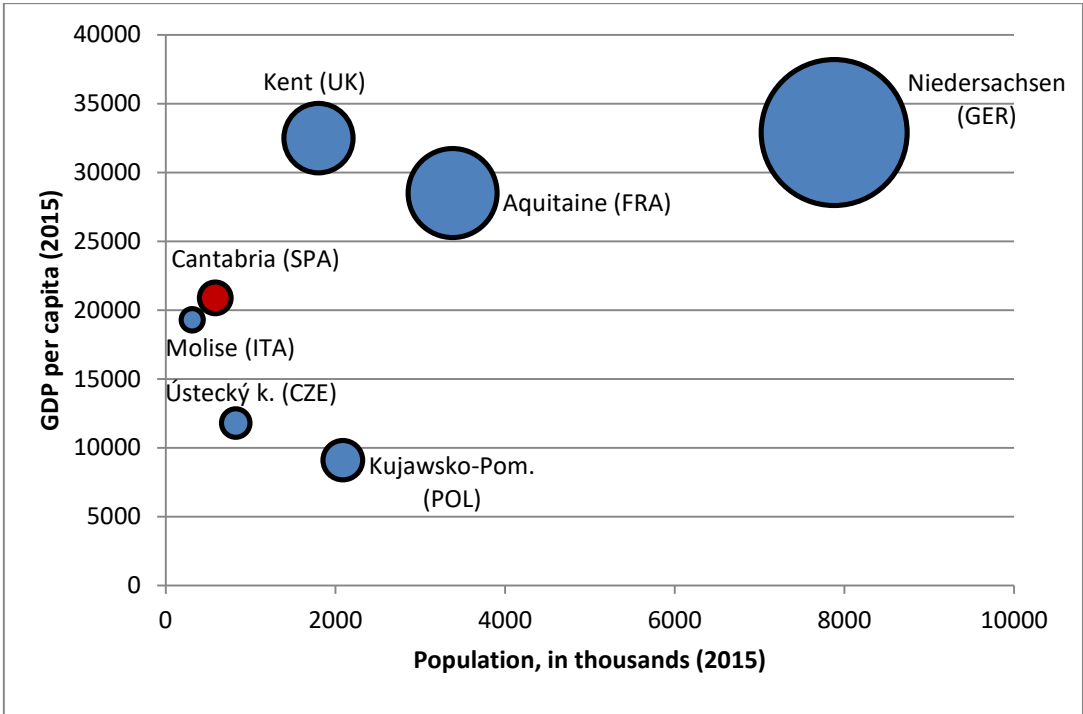


Source: Author’s elaboration, using data obtained from EUROSTAT (2017)

Graph 2.2 reproduces the information described in graph 2.1, but in this case it compares data for Cantabria with that for the other European regions involved at the SME Internationalisation Exchange (SIE) project. As observed, Cantabria (20,900) holds an intermediate position among the 7 regions involved in the project in terms of GDP per capita. It is significantly below Niedersachsen, in Germany (32,900 € per inhabitant), Kent, in the UK (32,500), and Aquitaine, in France (28,500); it is slightly higher than that of Molise (Italy) (19,300); and it is significantly over the value of Ústecký kraj, in the Czech Republic (11,800¹), and Kujawsko-Pomorskie, in Poland (9,100). In terms of population, Cantabria is one of the smallest regions in the group: it is only larger than Molise, whilst it is slightly below Ústecký kraj and significantly below the rest. As a result of the combination of both dimensions, the GDP of Cantabria is significantly larger than that of Molise, slightly over Ústecký kraj, slightly below Kujawsko-Pomorskie and significantly below Niedersachsen, Aquitaine and Kent.

The seven regions participating in the project have in common the fact that their level of economic activity, as measured by the GDP per capita, is below the average of the State of which each of them is part. As observed in graph 2.3 (vertical axis), Cantabria is the region where the difference between the national and the regional GDP per capita is the smallest among the seven regions involved in the project. On the other hand, the horizontal axis shows that Cantabria is, only over Molise, one of the regions with a lower participation in the total GDP of each State, illustrating the relatively small size of the region.

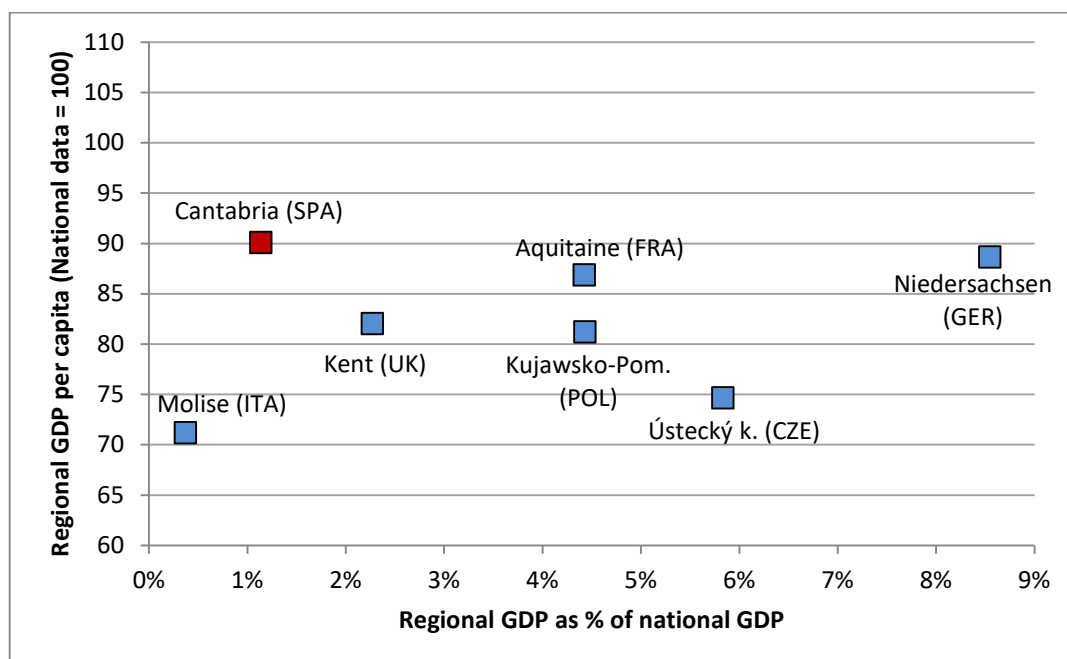
Graph 2.2. Population (horizontal axis), GDP per capita (vertical axis) and GDP (size of the bubbles) of European regions participating in SIE-Interreg project



Source: Author’s elaboration, using data obtained from EUROSTAT

¹ Data of GDP per capita, and the calculation of GDP derived from it, correspond to Severozápad, the most disaggregated level to which this information is available (NUTS 2).

Graph 2.3. GDP and GDP per capita of European regions participating in SIE-Interreg project, in comparison to the average of each Member State



Source: Author's calculation, using data obtained from EUROSTAT

2.2. The business structure of Cantabria

This sub-section describes the structural characteristics of the enterprises of Cantabria, in terms of their size. This is an element of crucial importance given the objective of this report. In fact, the size of the enterprises is one of the two dimensions selected for the identification of the regions of reference for the rest of the analysis, which is done in the next sub-section.

Table 2.1 shows the number and distribution of the enterprises existent in each Spanish Autonomous Community disaggregated according to their size. Following the European Union common definition, Micro enterprises are defined as those between 1 and 9 employees; Small enterprises, as those between 10 and 49 employees; Medium-sized enterprises, as those between 50 and 249 employees; and Large enterprises, as those with more than 249 employees.

As observed, of the 37,638 enterprises existing in Cantabria in 2016, 53.33% are enterprises with no employees, whilst an additional 42.68% are Micro enterprises. The rest of them are distributed in the following way: 1,273 Small enterprises (3.38% of all the enterprises in the region), 191 Medium-sized enterprises (0.51%) and 37 Large enterprises (0.1%).

The distribution of the enterprises in Cantabria according to their size is not dramatically different than that of the whole Spanish economy (also included in the table). The most remarkable fact is that the proportion of Micro enterprises is higher in Cantabria than in Spain (42.68% versus 40.32%), whilst the opposite is observed in the rest of categories: enterprises with no employees (53.33% versus 55.38%), Small enterprises (3.38% versus 3.58%), Medium-sized enterprises (0.51% versus 0.60%) and Large enterprises (0.1% versus 0.12%).

Table 2.1. Number of enterprises and % of total in the Spanish Autonomous Communities, by size of the enterprise (2016)

	Number of enterprises						% of total				
	No employees	Micro 1-9 employees	Small 10-49 employees	Medium 50-249 employees	Large >249 employees	Total	No employees	Micro 1-9 employees	Small 10-49 employees	Medium 50-249 employees	Large >249 employees
CANTABRIA	20,073	16,064	1,273	191	37	37,638	53.33	42.68	3.38	0.51	0.10
Galicia	106,611	83,595	6,047	948	146	197,347	54.02	42.36	3.06	0.48	0.07
Asturias	37,092	28,085	2,044	317	50	67,588	54.88	41.55	3.02	0.47	0.07
País Vasco	74,841	67,193	6,932	1,248	220	150,434	49.75	44.67	4.61	0.83	0.15
Navarra	24,593	16,901	1,862	385	71	43,812	56.13	38.58	4.25	0.88	0.16
La Rioja	12,346	9,519	989	136	13	23,003	53.67	41.38	4.30	0.59	0.06
Aragón	45,583	37,484	3,486	545	88	87,186	52.28	42.99	4.00	0.63	0.10
Madrid	304,821	186,381	19,173	4,130	1,342	515,847	59.09	36.13	3.72	0.80	0.26
Castilla y León	87,824	67,532	5,082	676	117	161,231	54.47	41.89	3.15	0.42	0.07
C.-La Mancha	67,591	54,104	4,079	467	55	126,296	53.52	42.84	3.23	0.37	0.04
Extremadura	35,912	27,286	1,899	259	23	65,379	54.93	41.74	2.90	0.40	0.04
Cataluña	341,123	226,745	22,746	4,260	844	595,718	57.26	38.06	3.82	0.72	0.14
C. Valenciana	186,048	143,584	12,431	1,949	323	344,335	54.03	41.70	3.61	0.57	0.09
I. Baleares	48,910	36,684	3,111	468	75	89,248	54.80	41.10	3.49	0.52	0.08
Andalucía	264,369	206,433	15,784	2,033	332	488,951	54.07	42.22	3.23	0.42	0.07
Murcia	49,526	38,199	3,556	519	87	91,887	53.90	41.57	3.87	0.56	0.09
Canarias	75,473	54,383	4,881	848	132	135,717	55.61	40.07	3.60	0.62	0.10
SPAIN	1,790,247	1,303,449	115,641	19,410	3,959	3,232,706	55.38	40.32	3.58	0.60	0.12

Source: Author's calculation, using data obtained from the Ministry of Economy, Industry and Competitiveness-DG Industry and Small and Medium Enterprise, derived from the Spanish Central Directory of Enterprises (DIRCE)

Table 2.2 shows the number of enterprises that exist in each Autonomous Community and at the national level, disaggregated by their size, per each 1,000 inhabitants. As observed, in Cantabria there are 64.45 enterprises per 1,000 inhabitants. This figure is slightly lower than the Spanish average (69.66). The highest figures of this indicator are found in the two most important economic areas (Cataluña, 80.56; and Madrid, 80.54), as well as in the Balears Islands (79.05). In other five regions, this indicator is around or over 70 (La Rioja, Galicia, C. Valenciana, País Vasco and Navarra). In other six regions, including Asturias, Aragón, Castilla y León, Murcia and Canarias (in addition to Cantabria), the number is around 65. Finally, the lowest values are found in the poorest regions: Castilla La Mancha (61.49), Extremadura (60.09) and Andalucía (58.23).

Nevertheless, the number of enterprises per 1,000 inhabitants shows different results depending on the typology of enterprises considered. To easily illustrate this, table 2.3 describes the ranking of Spanish Autonomous Communities, according to this indicator, for each category of size of enterprises. Graphs 2.4 to 2.8 show the number of enterprises per 1,000 inhabitants for each category: those with no employees (graph 2.4), Micro enterprises (graph 2.5), Small enterprises (graph 2.6), Medium-sized enterprises (graph 2.7) and Large enterprises (graph 2.8).

As observed, the category where Cantabria shows a relatively higher presence of enterprises is the Micro enterprises. The region is the 9th Autonomous Community with more enterprises of this size (those with between 1 and 9 employees) per 1,000 inhabitants (27.5 Micro enterprises per 1,000 inhabitants), only slightly below the Spanish average (28.1).

In the case of the largest enterprises (those over 249 employees), Cantabria is far below the Spanish average (0.06 versus 0.09 Large enterprises per 1,000 inhabitants). Nevertheless, for this category, a few regions (Madrid and, to a minor extent, Cataluña, Navarra and País Vasco) concentrate most of the existent enterprises. Thus, the position of Cantabria in the ranking of Autonomous Community as regards the Large enterprises is intermediate: 8th of 17.

The worst relative position of Cantabria is observed for the categories of Small (between 10 and 49 employees) and Medium-sized (between 50 and 249 employees) enterprises. Both for Small and for Medium-sized enterprises, Cantabria holds the 12th position among the Spanish Autonomous Communities in terms of the number of these enterprises per 1,000 inhabitants. Only in the poorest regions (Extremadura, Andalucía and Castilla La Mancha), as well as in Asturias and Castilla y León, the presence of both Small and Medium enterprises is lower than in Cantabria. In the case of the Small enterprises, its number per 1,000 inhabitants in Cantabria is around 12.5% lower than the Spanish average (2.18 versus 2.49). The Medium-sized enterprises are particularly concentrated among the few richest regions: Madrid, Navarra, País Vasco and Cataluña. For this kind of enterprises, the distance between Cantabria (0.33) and the Spanish average is even larger: nearly 22%, in relative terms.

Table 2.2. Number of enterprises per 1,000 inhabitants, by size of the enterprise (2016)

	No employees	Micro 1-9 emp.	Small 10-49 emp.	Medium 50-249 emp.	Large >249 emp.	Total
CANTABRIA	34.37	27.51	2.18	0.33	0.06	64.45
Galicia	39.12	30.68	2.22	0.35	0.05	72.42
Asturias	35.53	26.90	1.96	0.30	0.05	64.74
País Vasco	34.62	31.08	3.21	0.58	0.10	69.58
Navarra	38.67	26.57	2.93	0.61	0.11	68.89
La Rioja	39.44	30.41	3.16	0.43	0.04	73.49
Aragón	34.48	28.35	2.64	0.41	0.07	65.95
Madrid	47.59	29.10	2.99	0.64	0.21	80.54
Castilla y León	35.64	27.41	2.06	0.27	0.05	65.43
C.-La Mancha	32.91	26.34	1.99	0.23	0.03	61.49
Extremadura	33.01	25.08	1.75	0.24	0.02	60.09
Cataluña	46.13	30.66	3.08	0.58	0.11	80.56
C. Valenciana	37.73	29.12	2.52	0.40	0.07	69.83
I. Baleares	43.32	32.49	2.76	0.41	0.07	79.05
Andalucía	31.48	24.58	1.88	0.24	0.04	58.23
Murcia	33.85	26.11	2.43	0.35	0.06	62.81
Canarias	35.48	25.57	2.29	0.40	0.06	63.81
SPAIN	38.58	28.09	2.49	0.42	0.09	69.66
Variation coeff. (Pearson)	0.125	0.084	0.194	0.333	0.631	0.102

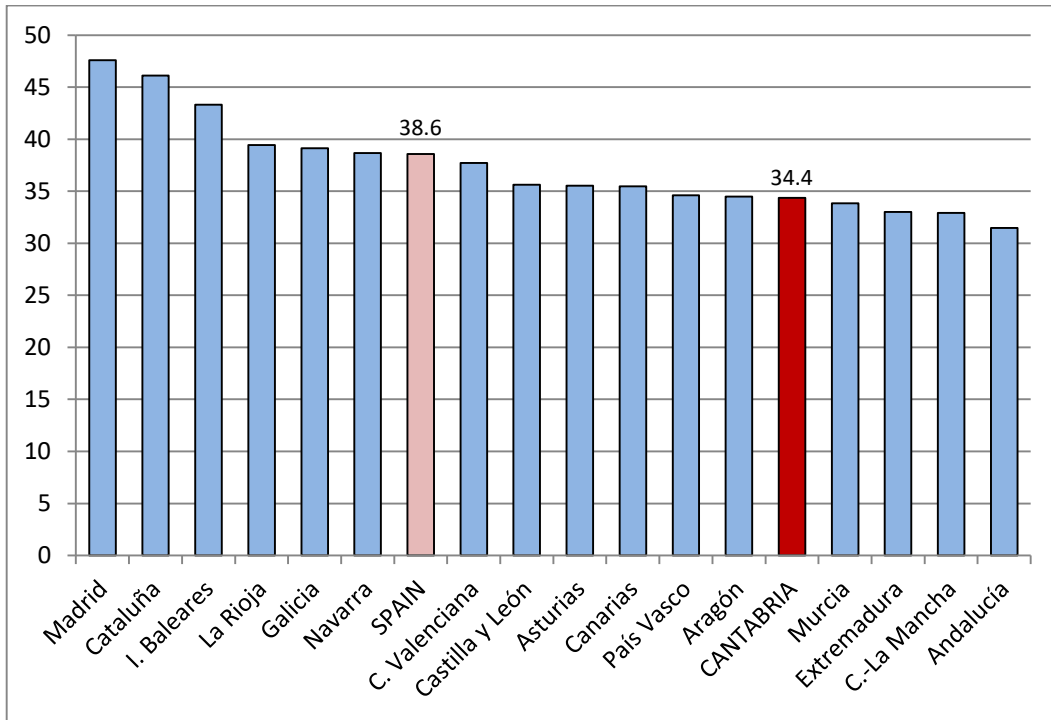
Source: Author's calculation, using data obtained from the DG Industry and Small and Medium Enterprise (DG Industry & SME), derived from the Spanish Central Directory of Enterprises (DIRCE), and EUROSTAT

Table 2.3. Ranking of Spanish Autonomous Communities by number of enterprises per 1,000 inhabitants, by size of the enterprise (2016)

No employees	Micro 1-9 emp.	Small 10-49 emp.	Medium 50-249 emp.	Large >249 emp.
Madrid	I. Baleares	País Vasco	Madrid	Madrid
Cataluña	País Vasco	La Rioja	Navarra	Cataluña
I. Baleares	Galicia	Cataluña	País Vasco	Navarra
La Rioja	Cataluña	Madrid	Cataluña	País Vasco
Galicia	La Rioja	Navarra	La Rioja	SPAIN
Navarra	C. Valenciana	I. Baleares	SPAIN	Aragón
SPAIN	Madrid	Aragón	I. Baleares	I. Baleares
C. Valenciana	Aragón	C. Valenciana	Aragón	C. Valenciana
Castilla y León	SPAIN	SPAIN	Canarias	CANTABRIA
Asturias	CANTABRIA	Murcia	C. Valenciana	Canarias
Canarias	Castilla y León	Canarias	Murcia	Murcia
País Vasco	Asturias	Galicia	Galicia	Galicia
Aragón	Navarra	CANTABRIA	CANTABRIA	Asturias
CANTABRIA	C.-La Mancha	Castilla y León	Asturias	Castilla y León
Murcia	Murcia	C.-La Mancha	Castilla y León	La Rioja
Extremadura	Canarias	Asturias	Andalucía	Andalucía
C.-La Mancha	Extremadura	Andalucía	Extremadura	C.-La Mancha
Andalucía	Andalucía	Extremadura	C.-La Mancha	Extremadura

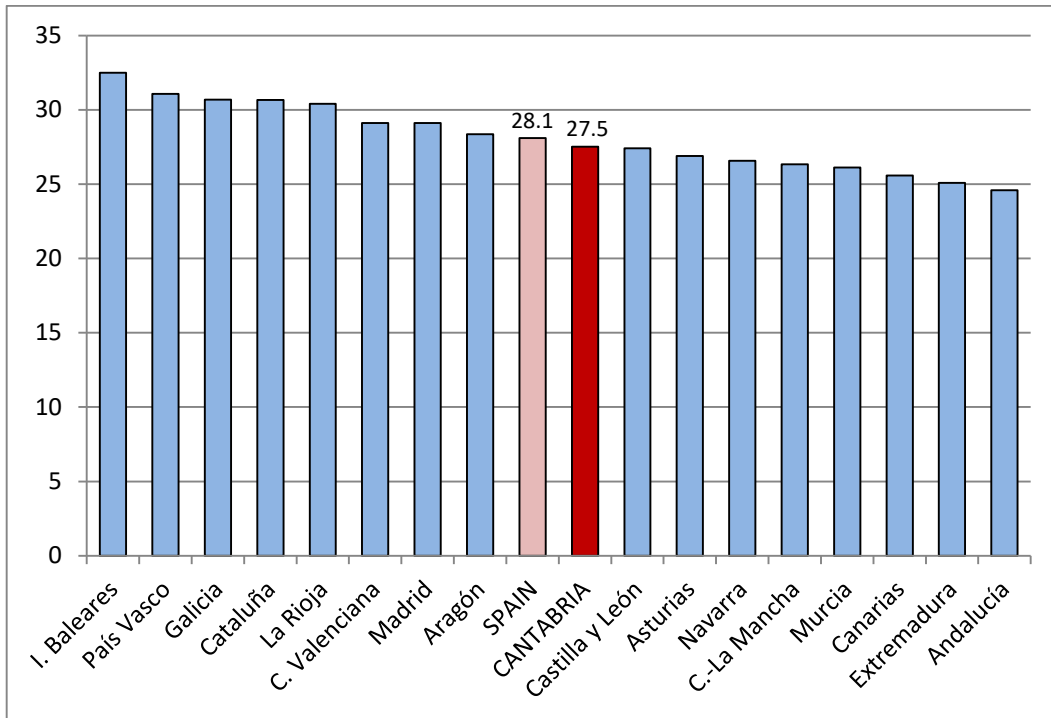
Source: Author's elaboration, using data obtained from the DG Industry & SME and EUROSTAT

Graph 2.4. Number of enterprises with no employees per 1,000 inhabitants, by Autonomous Community (2016)



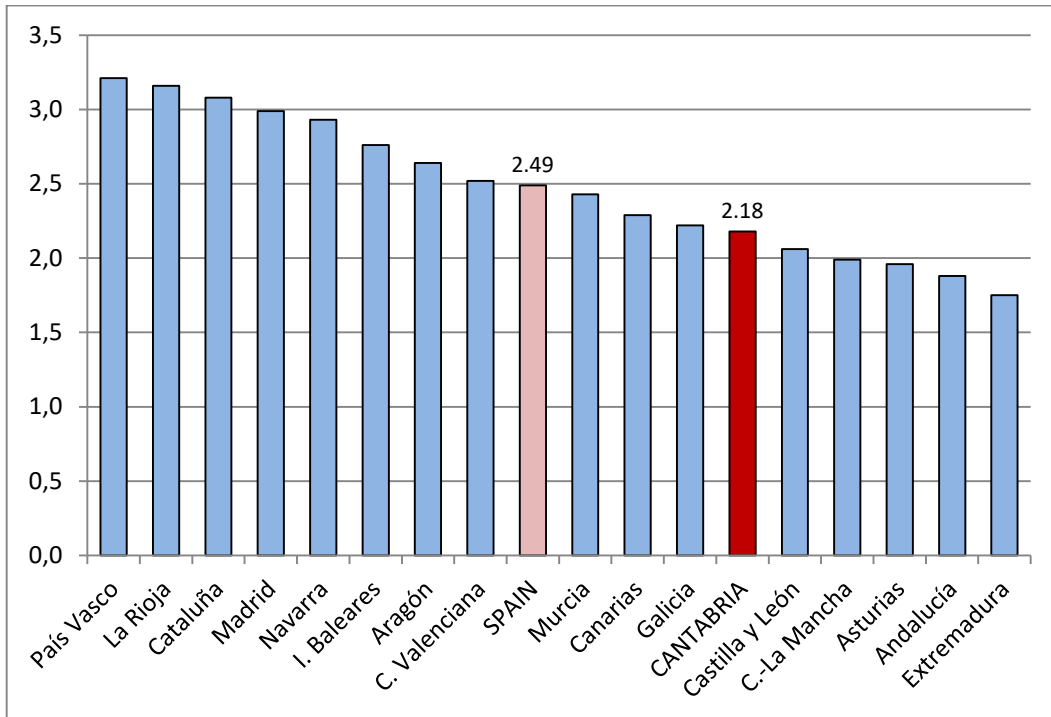
Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

Graph 2.5. Number of Micro enterprises per 1,000 inhabitants, by Autonomous Community (2016)



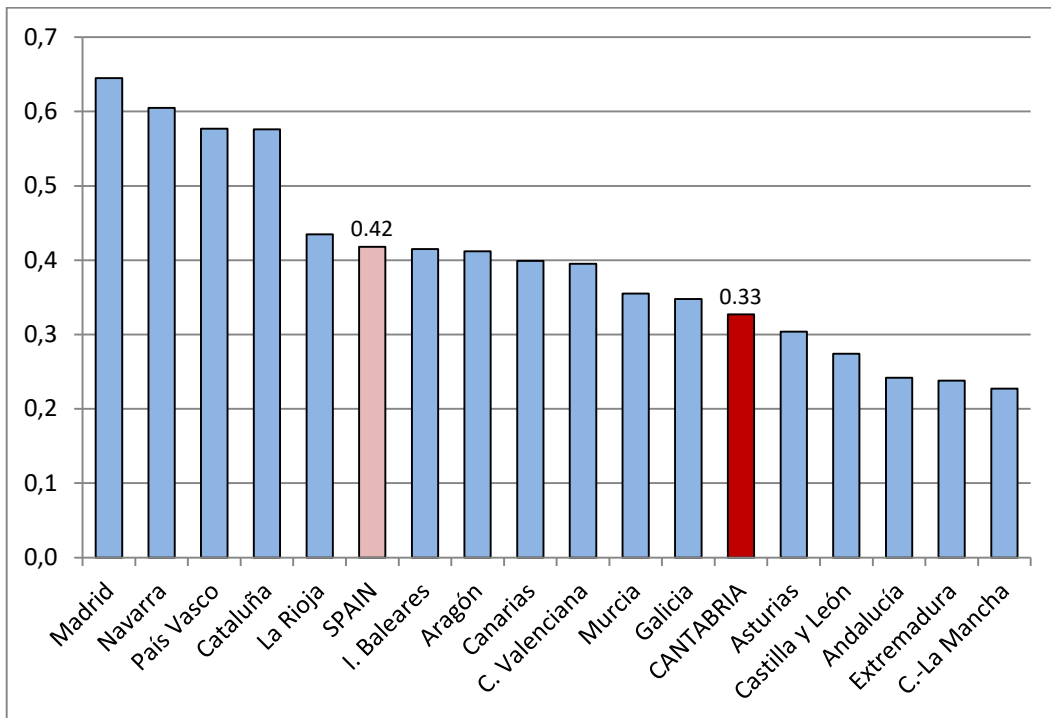
Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

Graph 2.6. Number of Small enterprises per 1,000 inhabitants, by Autonomous Community (2016)



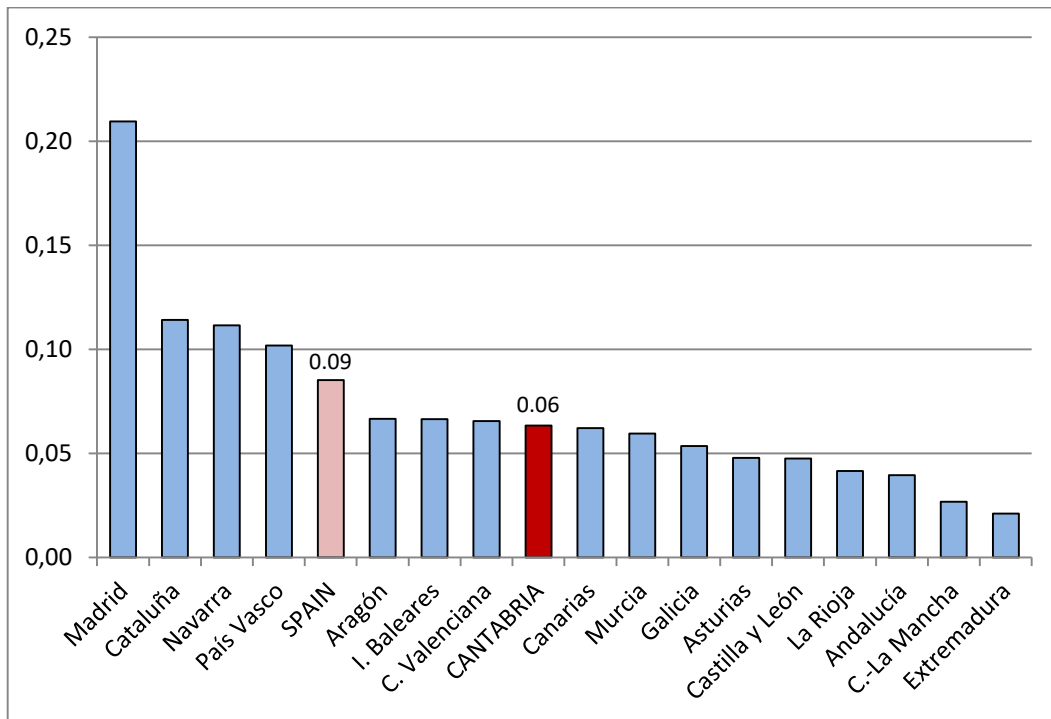
Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

Graph 2.7. Number of Medium enterprises per 1,000 inhabitants, by Autonomous Community (2016)



Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

Graph 2.8. Number of Large enterprises per 1,000 inhabitants, by Autonomous Community (2016)



Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

2.3. Comparing Cantabria with other regions: a framework for benchmarking

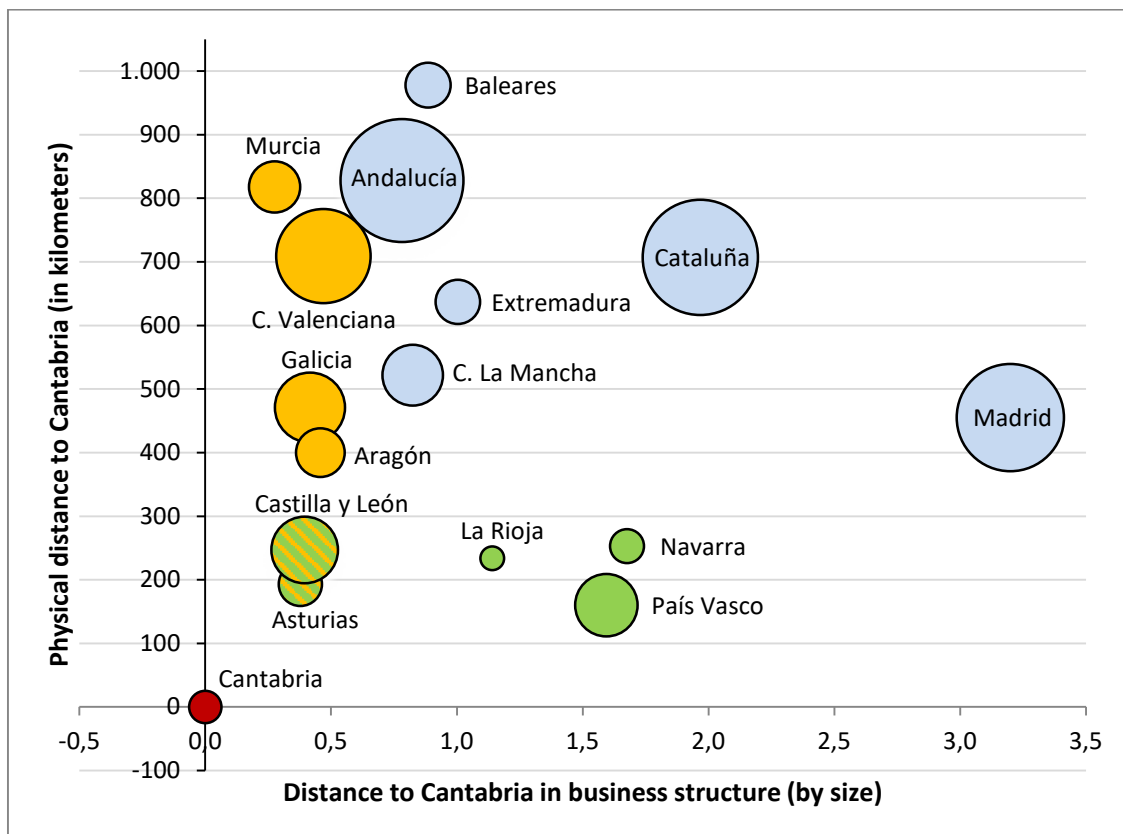
In order to provide an outlook of the internationalisation of the economy of Cantabria, which constitutes the main objective of this report, it is necessary to compare. To do so, it is necessary to find appropriate references. Given that Spain is a large and quite heterogeneous country, the comparison with the Spanish average is insufficient. Around 40% of the Spanish GDP is generated in just two regions, Madrid and Cataluña, whose structural and business characteristics are, as previously described, rather different than those of other regions (as Cantabria). Also, the geographic characteristics and productive specialisation of Spanish regions differ significantly, leading to additional structural differences. For these reasons, in this report, in addition to the Spanish average (and, where information is available, the European average and data from the other regions participating in the project), we take as reference for the analysis the Spanish Autonomous Communities which are most similar to Cantabria. In the selection of these regions of reference, we consider two different dimensions: on the one hand, geographical or physical distance, and on the other hand, distance in terms of business structure.

The physical distance is measured considering the kilometres between the capital cities of Cantabria and each region, following the fastest route (according to Google Maps). This dimension is represented in the vertical axis of graph 2.9. The five regions closest to Cantabria, represented in green colour, are the group considered as a reference for the analysis (from here, group of "Close Regions", or CR): País Vasco, Asturias, La Rioja, Castilla y León and Navarra.

Distance between Cantabria and these five regions is, in all cases, between 150 and 250 kilometres, whilst distance to the next closest region (Aragón) is over 400 kilometres.

As second dimension, we consider the existing number of enterprises per 1,000 inhabitants, for each category of enterprises' size, as the indicator of distance in terms of business structure. To capture this distance or difference between Cantabria and each of the other regions, we calculate an index, following several steps: first, for each category, we measure the absolute value of the difference between the number of enterprises (relative to its population) in Cantabria and in the other region in question, divided by the Spanish average; then, we aggregate, for each region, the values obtained for each category. We obtain a final single index for each region, represented in the horizontal axis of graph 2.9. The index has a lower value in those regions which are more similar to Cantabria in terms of the number of enterprises in each category, and vice-versa. There are six regions close to Cantabria according to this dimension: Asturias and Castilla y León (which were close in terms of physical distance), Aragón, Galicia, C. Valenciana and Murcia. In these regions, the value of the index is between 0.25 and 0.5; in the rest, it is over 0.75. These six regions constitute the second group of reference for the analysis (from here, group of "Similar regions", or SR)².

Graph 2.9. Dimensions used for selecting the regions of reference: physical distance (in green) and business structure (in orange)



² Canarias is not considered as a possible reference, despite showing a business structure quite similar to Cantabria, because of the very large physical distance between both regions, and the very particular characteristics of Canarias (insularity and ultra-peripherality).

Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT (business structure) and Google Maps (physical distance)

Table 2.4 describes the main macroeconomic indicators of Cantabria, in comparison to the groups selected as reference for the analysis: the closest Autonomous Communities (group of close regions, CR), those more similar in terms of business size (group of similar regions, SR), the Spanish average and the EU average. As can be observed, the average GDP per capita of the CR group is remarkably over that of Cantabria, as this group combines regions with a value of the indicator similar to Cantabria (Asturias and Castilla y León) and others with clearly higher values (País Vasco, Navarra and, to a minor extent, La Rioja). Meanwhile, the average GDP per capita of the SR group is very similar to that of Cantabria. The Spanish average of the indicator and, especially, the EU-28 average are significantly higher. In summary, the SR group constitute a reference similar to Cantabria in terms of level of economic activity, whilst the other references have a higher level of economic activity (in terms of its population size).

Table 2.4. GDP per capita and total GDP in Cantabria and the groups of reference for the analysis (2015)

	GDP per capita	GDP (million €)
Cantabria	20,900	12,226
Close regions (CR)	25,343.9	167,770
Similar regions (SR)	21,035.4	293,249
Spain	23,200	1,075,639
EU-28	28,900	14,714,029

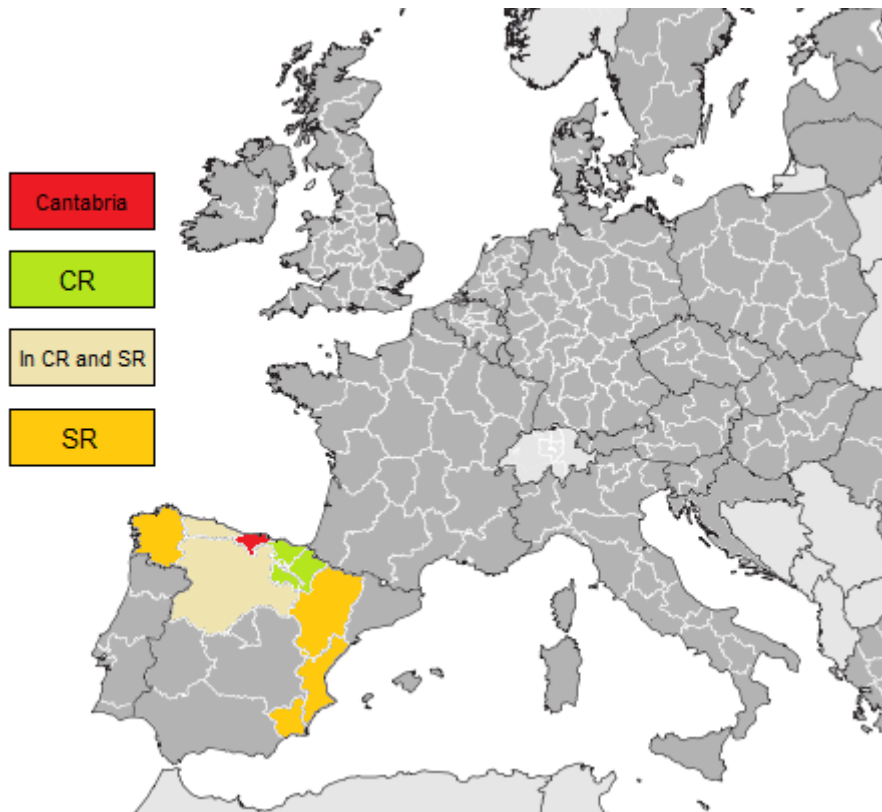
Source: Author's calculation, using data obtained from EUROSTAT

Map 2.1 shows the geographical position of Cantabria (in red colour), the regions included in the CR group (in green colour) and those included in the SR group (in orange colour); the regions which are included in both the CR and the SR group are represented in beige colour.

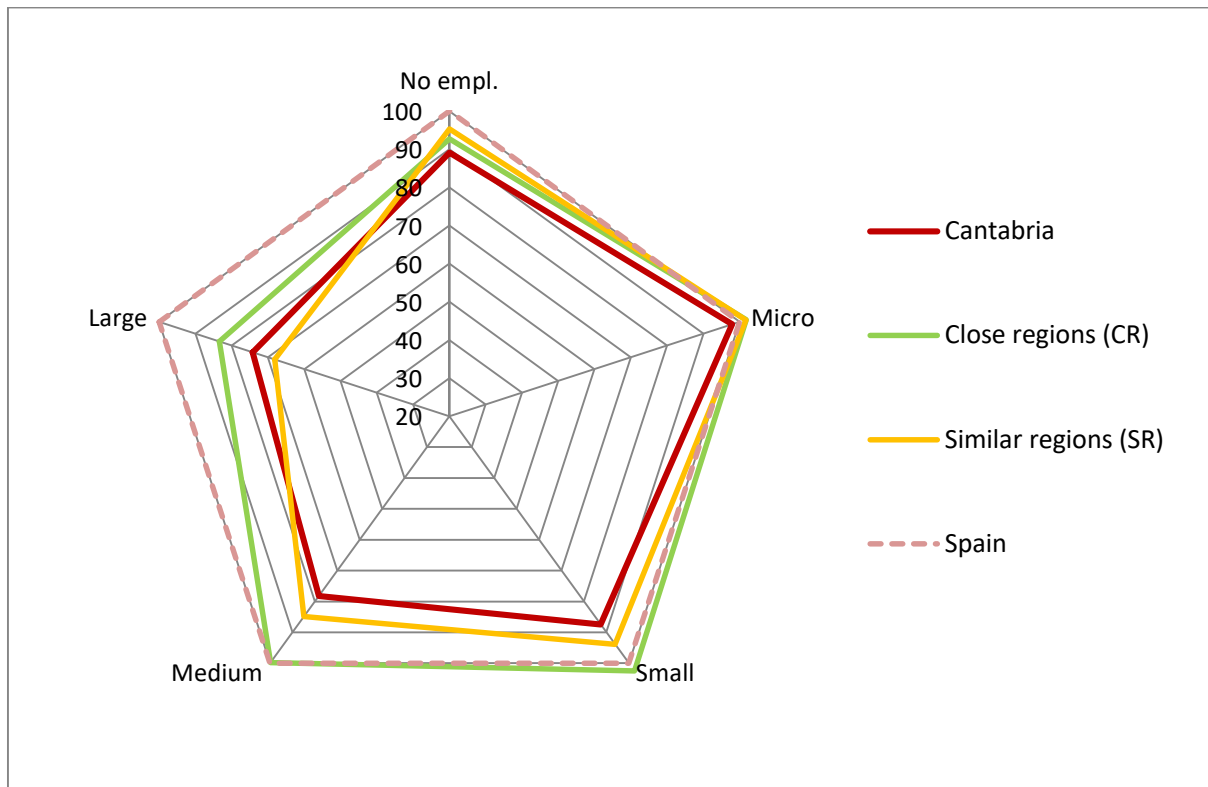
Next, graph 2.10 describes the number of enterprises per 1,000 inhabitants in Cantabria, in the CR group, in the SR group and in the Spanish average (taken as reference, equal to 100). As observed, the most significant differences appear as regards the Small enterprises and, especially, the Medium-sized enterprises: in Cantabria, the number of Small enterprises and, even more, that of Medium-sized enterprises is significantly lower than in the CR group and in the Spanish average (always, in terms of their respective population). In the SR group, the relative number of both categories of enterprises is slightly higher than in Cantabria, even when it is lower than the Spanish average and that of the CR group. As regards the Large enterprises, their number in Cantabria is significantly lower than that in the Spanish average, although more similar to those in the CR group and in the SR group. Finally, the relative number of Micro enterprises is rather similar in all the four cases.

In summary, the CR group shows a higher relative number of Small, Large and, especially, Medium-sized enterprises than Cantabria. Meanwhile, the differences between Cantabria and the SR group are lower. Nevertheless, the SR group shows a slightly higher presence of Small and of Medium-sized enterprises than Cantabria, whilst that of Large enterprises is lower.

Map 2.1. Geographical situation of Cantabria and the Autonomous Communities selected as reference for the analysis



Graph 2.10. Number of enterprises per 1,000 inhabitants, by size of the enterprise (2016) (Spanish average = 100)



Source: Author's calculation, using data obtained from the DG Industry & SME and EUROSTAT

2.4. The productive specialisation of Cantabria and its businesses

This sub-section describes, first, the productive specialisation of Cantabria, in comparison to that of the Spanish and European regions of reference. Second, it analyses the specialization of Cantabria and the regions of reference according to the two key elements of the European economic strategy for global competitiveness: innovation and education. Finally, the sub-section describes the productive specialisation of the enterprises in Cantabria, also with respect to the regions of reference, differentiating by each category of size.

Table 2.5 describes the contribution of each branch of activity to the GDP in Cantabria and in the Spanish Autonomous Communities selected as reference. Graph 2.11 summarizes this information, focusing in the comparison between Cantabria, the group of Close Regions (CR), the group of Similar Regions (SR) and the Spanish average.

As observed, the industrial sector makes a remarkable contribution to the economy of Cantabria (22.49% of GDP). This contribution is higher than in the Spanish average (18.05%), although it is quite close to that of the SR group (21.21%), and lower than in the CR group (26.93%). The industry is a key sector in terms of the internationalisation of the economy. Thus, given its contribution to the economy of Cantabria, it has a central role in the internationalisation of the region.

On contrary, the primary sector has lost most of its past potential in Cantabria. At present, it accounts for 1.46% of the regional GDP. This figure is significantly lower than in the Spanish average and lower than in the CR group, even when, in both cases, this sector only represents around 2.5% of GDP. In the SR group, the contribution of this sector is higher, nearly 4%.

The construction sector represents 6.88% of the GDP in Cantabria. Its contribution is slightly higher than in the SR and, especially, higher than in the CR and the Spanish average.

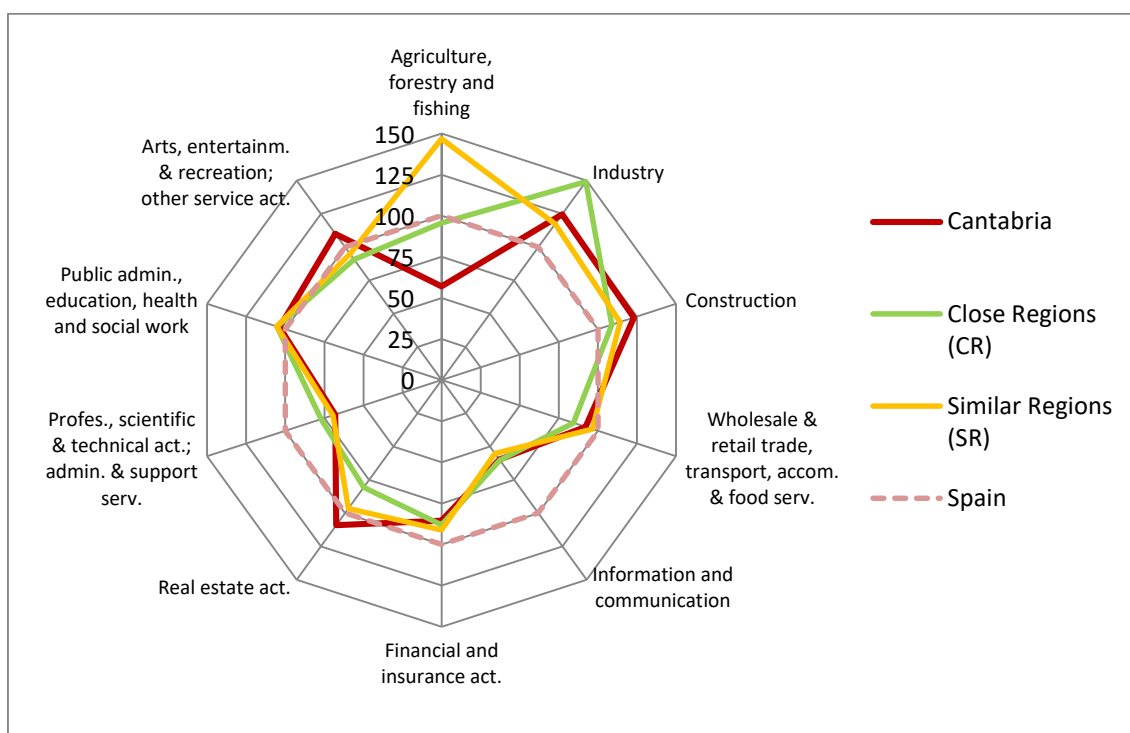
The activity branches in the services sector account, in total, for around 69% of the economy of Cantabria. During the last few decades, the role of these activities in the internationalisation of the economy has grown rapidly, both in terms of trade and of FDI. As a result, and given the predominant contribution of this sector to the economy, it has also an increasing role in the internationalisation of the region, which may be even greater in the future. In Cantabria, the activities of wholesale and retail trade, transport and accommodation and food services represent the 21.38% of the GDP, slightly over the CR group, but slightly below the SR group and the Spanish average. Real estate activities contribute to 12.21% of the GDP of Cantabria, which is more than in the CR group, the SR group and the national average. On the contrary, the contribution of the sum of professional, scientific and technical activities and administrative and support services to the economy of Cantabria is 5.73%, below that in the CR group, the SR group and the Spanish average. The importance of public administration and public services (19.55% of the GDP in Cantabria) is rather similar to that of the CR group, the SR group and the national average. The branches of information and communication and of financial and insurance activities, represent only 2.48% and 3.35% of GDP in Cantabria, respectively, which are similar figures to that in the CR group and the SR group, but lower than in the national average. Finally, the branches of arts, entertainment and recreation and other service activities contribute to the 4.47% of GDP in Cantabria, over the data in the CR group, the SR group and the Spanish average.

Table 2.5. Contribution of each branch of activity to the GDP (2015) in Cantabria and the regions of reference for the analysis

Agriculture forestry and fishing	Industry	Construction	Wholesale & retail trade, transport, accom. & food serv.	Information and commun.	Financial and insurance act.	Real estate act.	Prof, scientific & technical act.; adm. & support serv.	Public admin., education, health and social work	Arts, entertain. & recreation; other service act.	Agriculture forestry and fishing
Cantabria	1.46	22.49	6.88	21.38	2.48	3.35	12.21	5.73	19.55	4.47
Asturias	1.42	22.59	6.65	21.73	2.81	3.43	10.78	6.60	20.11	3.87
País Vasco	0.76	29.27	6.08	19.31	3.10	3.31	8.77	7.79	17.88	3.72
Navarra	3.32	33.94	5.21	18.06	2.02	2.96	7.18	5.74	17.98	3.60
La Rioja	6.07	30.34	5.97	18.44	1.79	3.52	8.69	4.72	17.32	3.14
Castilla y León	4.12	22.82	6.19	19.76	1.89	3.79	9.29	5.29	23.16	3.68
Close Regions (CR)	2.45	26.93	6.09	19.58	2.50	3.45	9.02	6.47	19.83	3.69
Galicia	5.26	20.32	7.03	22.81	2.42	3.44	9.08	6.14	19.77	3.73
Asturias	1.42	22.59	6.65	21.73	2.81	3.43	10.78	6.60	20.11	3.87
Aragón	5.40	25.05	5.72	20.14	2.58	3.61	9.86	5.13	19.25	3.26
Castilla y León	4.12	22.82	6.19	19.76	1.89	3.79	9.29	5.29	23.16	3.68
C. Valenciana	2.40	19.83	6.38	24.07	2.33	3.62	12.87	6.17	18.06	4.28
Murcia	4.85	19.15	6.03	23.79	1.92	3.32	10.85	5.37	21.17	3.56
Similar Regions (SR)	3.76	21.21	6.38	22.39	2.29	3.57	10.81	5.84	19.89	3.85
Spain	2.56	18.05	5.59	23.22	4.15	3.92	11.19	8.41	18.84	4.06

Source: Author's calculation, using data obtained from EUROSTAT

Graph 2.11. Contribution of each branch of activity to the GDP (2015) in Cantabria and the regions of reference for the analysis (Spanish average = 100)



Source: Author's calculation, using data obtained from EUROSTAT (2017)

Table 2.6 describes the contribution of different groups of activities to the GDP in Cantabria, here in comparison with the other European regions participating in the SIE-Interreg project, using the last data available in EUROSTAT (in this case, 2014).

As observed, the contribution of the industry to the GDP in Cantabria is largely higher than in Aquitaine (France), Molise (Italy) and Kent (UK), although it is lower than in Niedersachsen (Germany), Kujawsko-Pomorskie (Poland) and, especially, Ústecký kraj. (Czech Republic). The importance of the primary sector in Cantabria is in line with the regions where that value is lower (Niedersachsen and Kent), whilst in the others it is notably higher. With respect to construction, its contribution in Cantabria is similar to that in Ústecký kraj., Aquitaine and Molise, higher than in Niedersachsen and lower than in Kent and Kujawsko-Pomorskie.

As regards service activities, the contribution of the sum of wholesale and retail trade, transport, accommodation and food services and information and communications to the GDP of Cantabria is only lower to that in Kujawsko-Pomorskie, similar to that in Kent and lower to the figures in all the other regions. On the contrary, the contribution of the sum of financial and insurance, real estate, professional, scientific and technical and administrative and support services in Cantabria is only higher than in Ústecký kraj. and Kujawsko-Pomorskie, but clearly lower than in the rest of the regions, and especially than in Kent. Finally, the contribution of the branches of public administration, public services and other services is similar to that in Niedersachsen and Kent, higher to that in Ústecký kraj. and Kujawsko-Pomorskie and lower to that in Aquitaine and Molise.

Table 2.6. Contribution of each branch of activity to the GDP (2014)
in the European regions participating in SIE-Interreg project

	Agriculture, forestry and fishing	Industry	Construction	Wholesale & retail trade; transport; accom. & food serv.; information & comm.	Financial & insurance; real estate; prof., scientific & technical act.; adm. & support serv.	Public adm.; education; health & social work; arts, entert & recreation and other services
Cantabria (ESP)	1.51	22.57	6.87	23.59	21.61	23.86
Ústecký kraj (CZE)	2.25	42.66	6.27	17.58	13.35	17.90
Niedersachsen (GER)	1.36	26.42	5.21	18.69	24.26	24.07
Aquitaine (FRA)	3.75	12.99	6.74	20.39	27.22	28.92
Molise (ITA)	5.52	12.02	6.41	19.23	25.23	31.60
Kujawsko-Pom. (POL)	4.46	28.58	7.88	26.73	13.32	19.03
Kent (UK)	1.15	11.48	9.60	23.82	30.99	22.96

Source: Author's calculation, using data obtained from EUROSTAT

Table 2.7 shows the data for Cantabria, the group of Close Regions (CR), the group of Similar Regions (SR), the Spanish average and the EU-28 average on two key dimensions for the European strategy of economic specialisation: education and innovation. As regards education or human capital, data are referred to the percentage of the employed population who holds at least upper secondary studies, taking the last year available (2016). As regards innovation, it shows the total expenditure in research and development (R&D) as a percentage of the GDP, considering the average of the last four years where information is available (2011-2014).

As observed, with respect to the first dimension, the percentage of the employees who have at least upper secondary education in Cantabria is higher than the Spanish average and that the SR group, and similar to the value in the CR group. However, the value of this indicator in Cantabria is significantly lower than the EU-28 average. As regards the second dimension, the total expenditure in R&D in Cantabria is similar to that in the SR group, but lower than that for the CR group and the Spanish average, and even lower than the EU-28 average. In summary, Cantabria shows a moderate specialisation in human capital (higher than most of the Spanish regions, but lower than the EU average), and a low specialisation in innovation.

Graph 2.12 and graph 2.13 illustrate this position of Cantabria. Graph 2.12 compares the situation of Cantabria in these dimensions in comparison to the regions that constitute the CR and SR groups. Graph 2.13 compares Cantabria with the other regions participating in the SIE-Interreg project.

As observed, the specialisation of Cantabria in human capital is higher than in most of the Spanish regions of reference, with the exception of the close regions of País Vasco, Navarra and Asturias. However, in comparison to the regions in the SIE-Interreg project, the value of this indicator in Cantabria is only over that of Molise, but it is clearly below that of all the other regions.

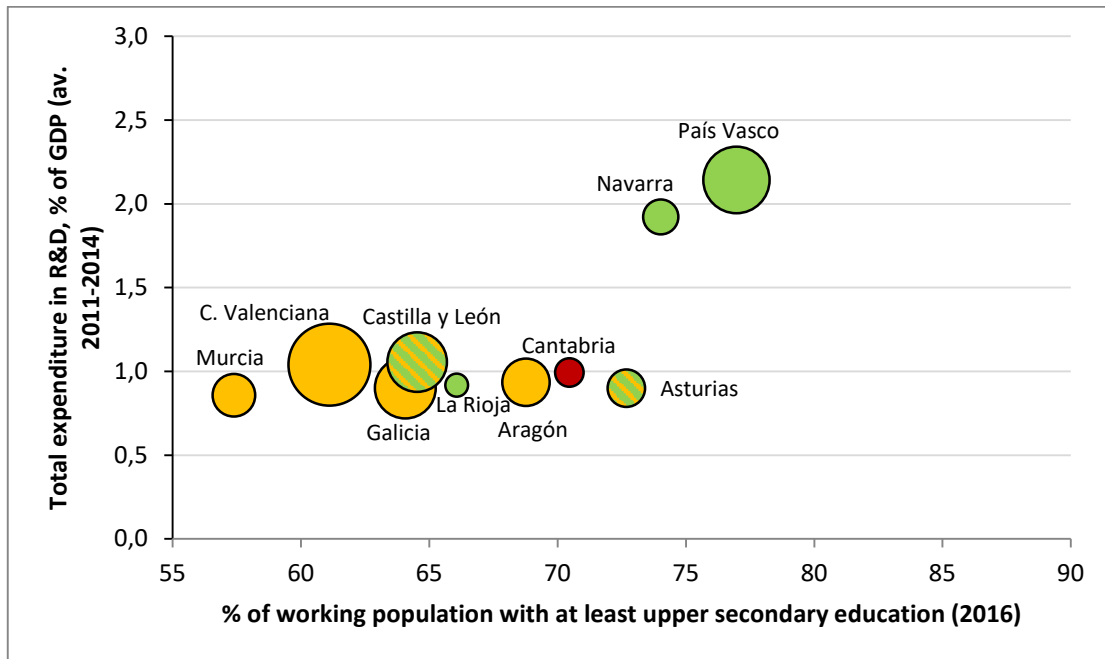
Regarding innovation, Cantabria, together with most of the Spanish regions of reference, shows a low effort in R&D, which indicates a low specialisation in innovation. The exceptions among the Spanish regions are País Vasco and Navarra, where the values are remarkably higher. When comparing with the regions in the SIE-Interreg project, Kent, Aquitaine, and especially, Niedersachsen show a much higher specialisation in innovation than Cantabria, whilst the value of the indicator in Molise, Ústecký kraj. and Kujawsko-Pomorskie are even lower than that of Cantabria.

Table 2.7. Selected indicators of specialisation on education and innovation in Cantabria, the regions of reference, Spain and the EU

	EDUCATION % of the employed population with at least upper secondary education (2016)	INNOVATION Total expenditure in R&D, as % of the GDP (average 2011-2014)
Cantabria	70.5	0.99
Close Regions (CR)	70.9	1.46
Similar Regions (SR)	63.5	0.98
Spain	66.0	1.28
EU-28	81.8	2.01

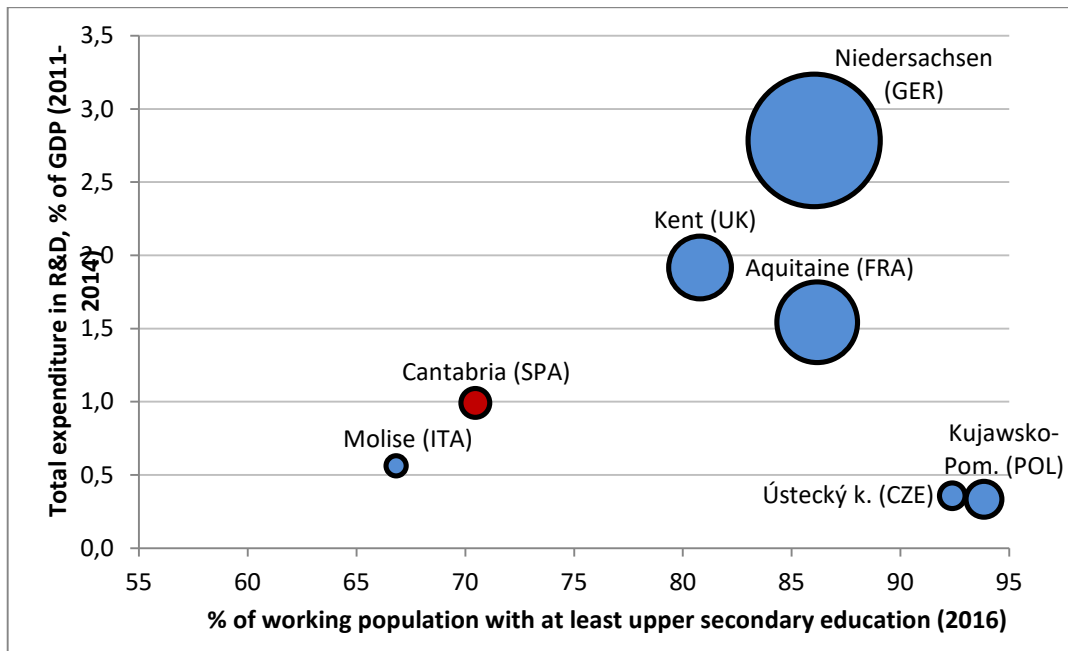
Source: Author's calculation, using data obtained from EUROSTAT

Graph 2.12. Situation of Cantabria, with respect to the Spanish regions of reference, in terms of selected indicators of specialisation in education (horizontal axis) and innovation (vertical axis)



Source: Author's calculation, using data obtained from EUROSTAT

Graph 2.13. Situation of Cantabria, with respect to the regions participating in SIE-Interreg, in terms of selected indicators of specialisation in education and innovation



Source: Author's calculation, using data obtained from EUROSTAT. Data for Ústecký kraj. correspond to the closest level of regional disaggregation available (Severozápad, NUTS2). Data on expenditure in R&D correspond to the average of 2011 and 2013 in Niedersachsen, and to the average in the period 2011-2013 in Aquitaine

To complete this section, we proceed to describe the distribution of the existent enterprises in Cantabria by branch of activity, in each category of size, in comparison to the regions of reference. The distribution of enterprises by branch of activity is shown in graph 2.14 for the Micro enterprises, in graph 2.15 for the Small enterprises, in graph 2.16 for the Medium-sized enterprises and in graph 2.17 for the Large enterprises³. Table 2.8 summarizes, in order of importance, which branches of activities (for each size of enterprises) are more relevant: a) both in Cantabria and in the regions of reference; b) in Cantabria, to a further extent than in the regions of reference and c) in the regions of reference to a further extent than in Cantabria.

As regards the Microenterprises (graph 2.14), in Cantabria these are particularly concentrated in Retail trade (to a similar extent than in the regions of reference) and in Food and beverage services (with a higher weight than in the regions of reference). Other significant activities with a strong weight among this kind of enterprises both in Cantabria and in the regions of reference are Construction of buildings, Specialised construction activities and Land transport. Meanwhile, in Wholesale trade and in Other manufacture activities, the presence of Micro enterprises is lower in Cantabria than in the regions of reference.

Graph 2.15 shows the same information for the case of Small enterprises. It should be considered that, as described in the previous sub-section, the total number of Small enterprises per inhabitant in Cantabria is significantly lower than in the regions of reference (what was not observed in the case of the Micro enterprises). The activities with a high contribution to the number of Small enterprises both in Cantabria and in the regions of reference are, especially, Manufacture of metal products, Specialized construction activities, Retail trade and Education. Cantabria has a relatively higher presence of Small enterprises in the branches of Food and beverage services, Land transport, Manufacture of food products, Construction of buildings and Trade of vehicles, above all. On the contrary, the lack of Small enterprises in Cantabria is explained basically as a result of the low presence of this kind of businesses in other manufacture activities and Wholesale trade.

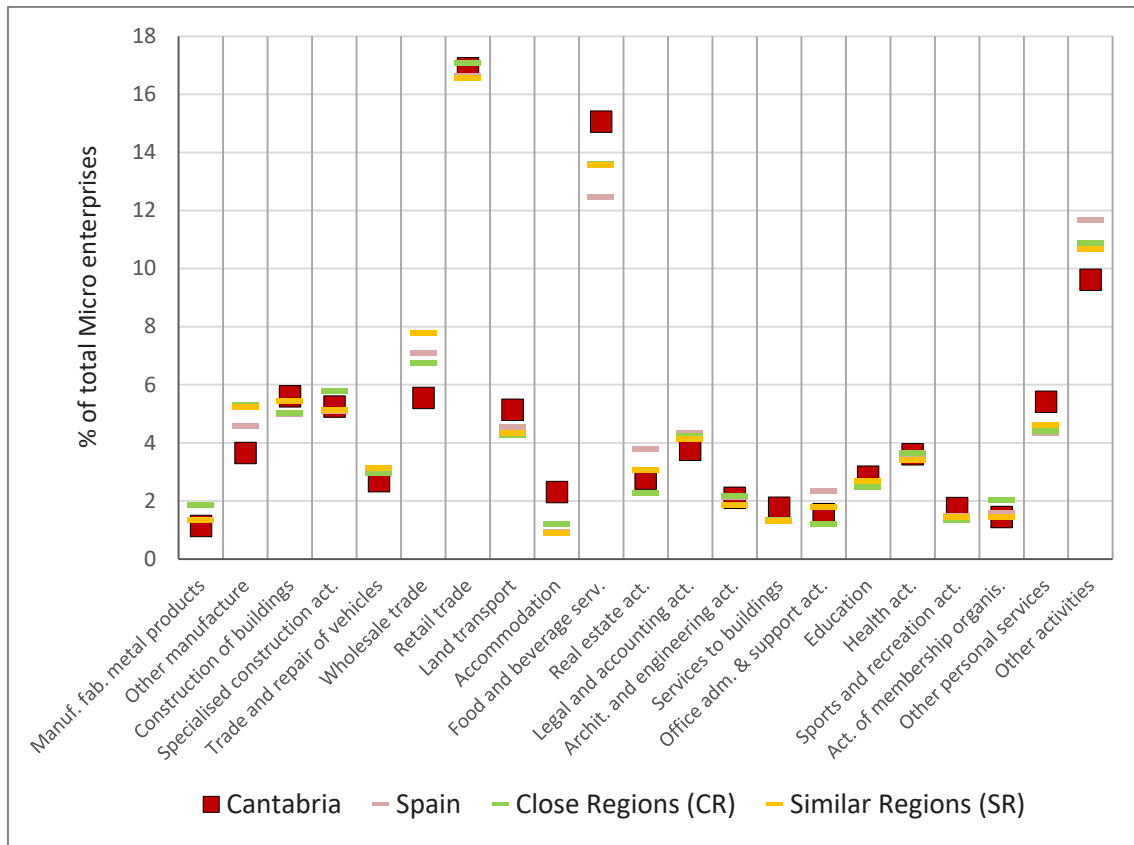
In the case of Medium-sized enterprises (graph 2.16), its number in Cantabria with respect to the number of inhabitants is (as described in the previous sub-section) significantly lower than in the regions of reference. In fact, the difference is even higher than that for the Small enterprises. Thus, in comparison to the regions of reference, this category of Medium-sized enterprises constitutes the main shortage of the productive system in Cantabria. As can be observed, the main branches who make a relevant contribution to this category of enterprises both in Cantabria and in the regions of reference are Education and Services to buildings. There are three branches with a particular relevance in Cantabria among this category of enterprises, to a further extent than in the regions of reference: Manufacture of metal products, Manufacture of food products and Residential care activities. On the contrary, the shortage of Medium-sized enterprises in Cantabria can be explained primarily due to the lack of presence of those dedicated to Wholesale trade and to other manufacture activities.

Finally, as regards Large enterprises, its number is rather limited both in Cantabria and in the regions of reference. As shown in graph 2.17, in both cases there is a particular contribution to this category of enterprises by the branches of Manufacture of food products and, to a minor

³ Here, given the categories provided by DIRCE, the information of the Medium-sized enterprises corresponds to those with 50 to 199 employees, whilst that for the Large enterprises corresponds to those with 200 employees or more.

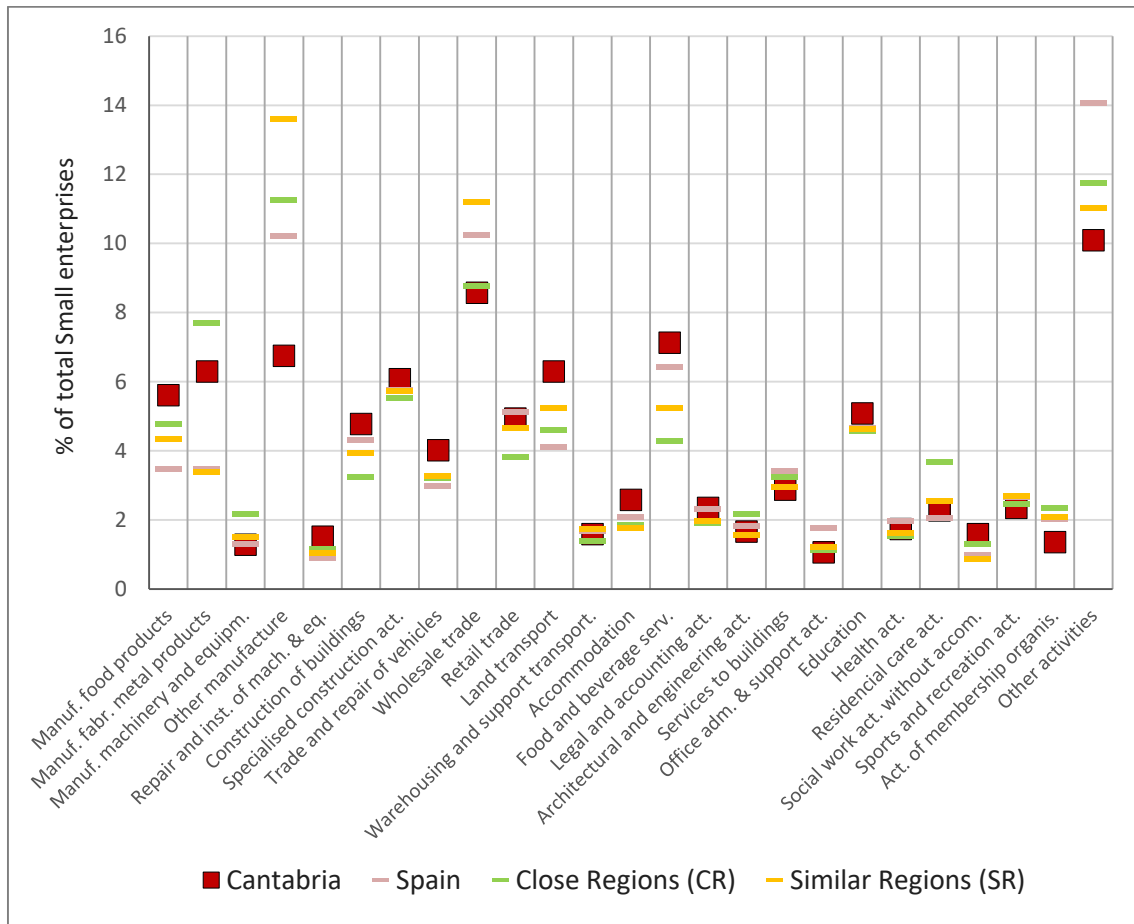
extent, by Education, among others. In Cantabria, it is particularly relevant, to a further extent than in the regions of reference, the weight of the branches of Retail trade, Health activities, Manufacture of basic metals and, to a minor extent, Land transport and Manufacture of motor vehicles. On the contrary, in the regions of reference the contribution to the total number of Large enterprises by the branches of Wholesale trade, above all, and other branches of activities in manufactures and the services sectors, is higher than in Cantabria.

Graph 2.14. Distribution of Micro enterprises (1 to 9 employees) by branch of activity in Cantabria and the regions of reference



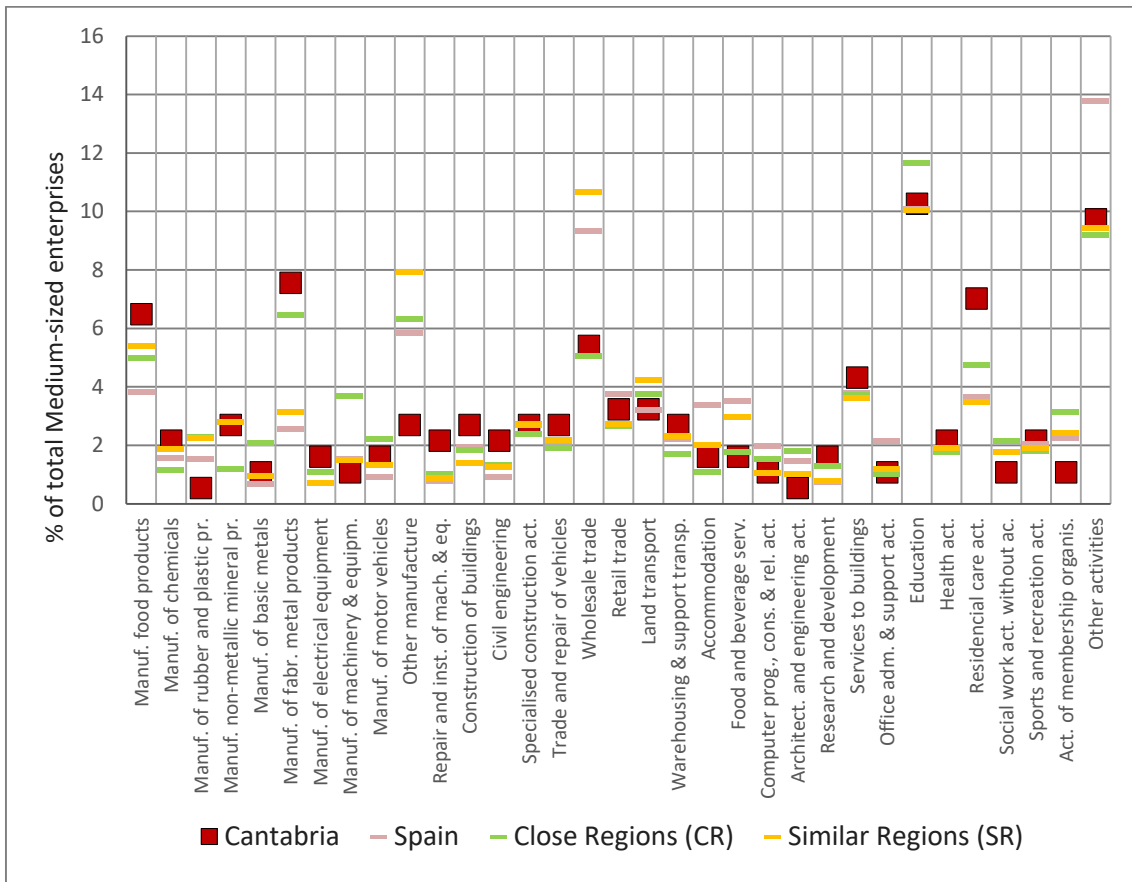
Author's elaboration, using data obtained from the Spanish Central Directory of Enterprises (DIRCE)

Graph 2.15. Distribution of Small enterprises (10 to 49 employees) by branch of activity in Cantabria and the regions of reference



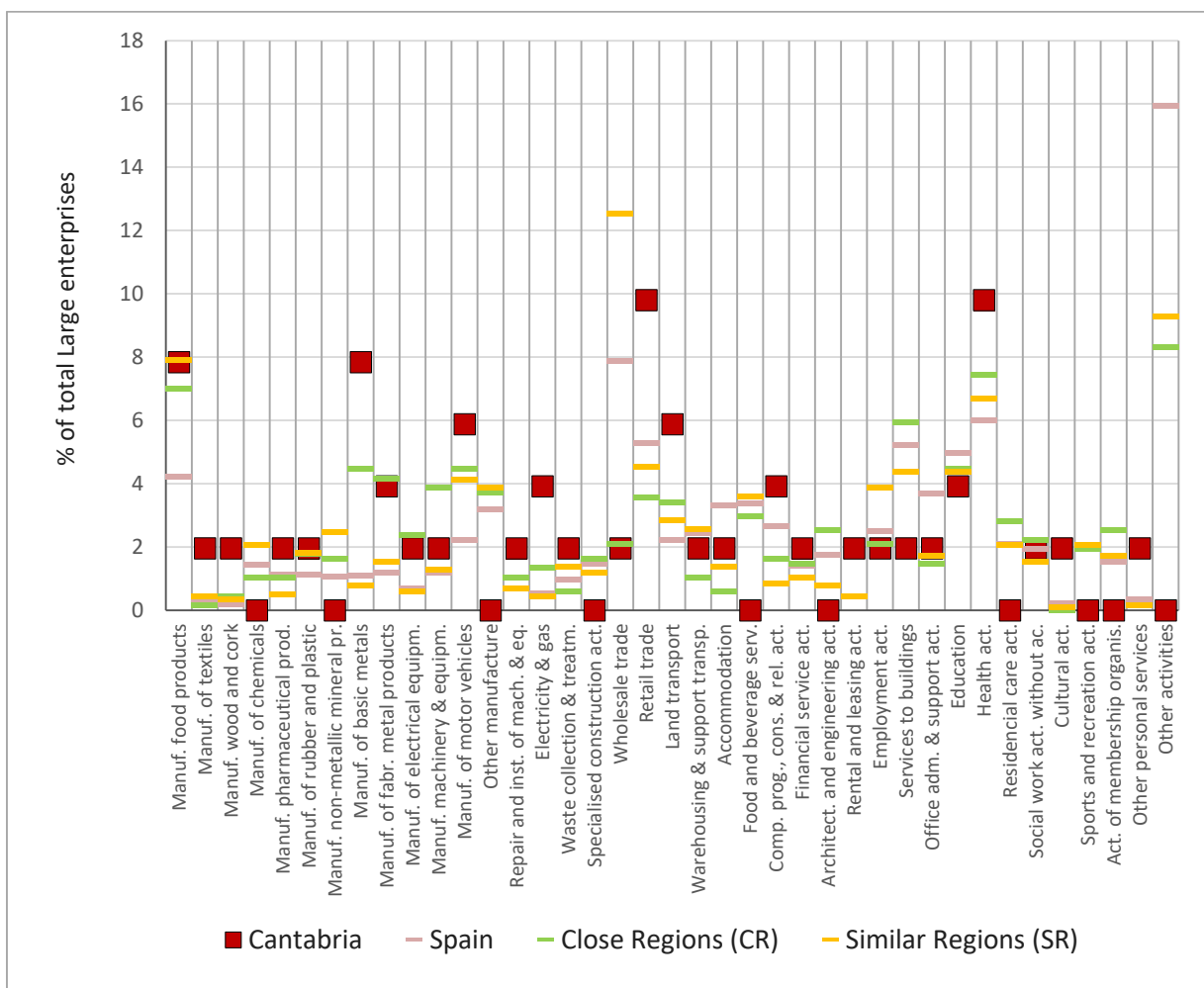
Author's elaboration, using data obtained from the Spanish Central Directory of Enterprises (DIRCE)

Graph 2.16. Distribution of Medium-sized enterprises (50 to 199 employees) by branch of activity in Cantabria and the regions of reference



Author's elaboration, using data obtained from the Spanish Central Directory of Enterprises (DIRCE)

Graph 2.17. Distribution of Large enterprises (200 employees or more) by branch of activity in Cantabria and the regions of reference



Author's elaboration, using data obtained from the Spanish Central Directory of Enterprises (DIRCE)

Table 2.8. Branches of activities with more importance in Cantabria and the regions of reference, according to the number of enterprises by each category of size

	High in Cantabria, and in the regions of reference	High in Cantabria, and lower in the regions of reference	High in the regions of reference, lower in Cantabria
Micro enterprises (1-9 employees)	Retail trade, Construction of buildings, Specialised construction act., Land transport, Legal and accounting act., Trade of vehicles, Real estate act., Health act., Education	Food and beverage serv., Other personal services, Accommodation	Wholesale trade, Manufacture (miscellaneous), Other activities
Small enterprises (10-49 empl.)	Manuf. metal products, Spec. construction act., Retail trade, Education	Food and beverage serv., Land transport, Manuf. food products, Construction of buildings, Trade of vehicles,	Other manufacture, Wholesale trade, Other activities
Medium-sized enterprises (50-199 empl)	Education, Services to buildings, Retail trade, Land transp., Manuf. of mineral prod., Spec. construction act., Health act., Sports and recreation act.	Manuf. of metal products, Manuf. of food products, Residential care act., Trade of vehicles, Construction of buildings, Manuf. of chemicals, Warehousing act.,	Wholesale trade, Other manufacture
Large enterprises (> 199 empl.)	Manuf. of food products, Education, Manuf. of plastic, Manuf. machinery and eq., Wholesale trade, Warehousing act., Employment act., Admin. and support act., Social work	Retail trade, Health act., Manuf. of basic metals, Land transport, Manuf. of motor vehicles, Electricity and gas, Manuf. of metal prod., Accommodation, Computer prog. and cons., Financial service act., Rental and leasing act., Cultural act., Other personal serv.	Wholesale trade, Manuf. of mineral prod., Manuf. of chemicals, Other manufacture, Food and beverage serv., Architect and engin. act., Residential care act., Sports and recreation act., Act. of members. organ., Other activities

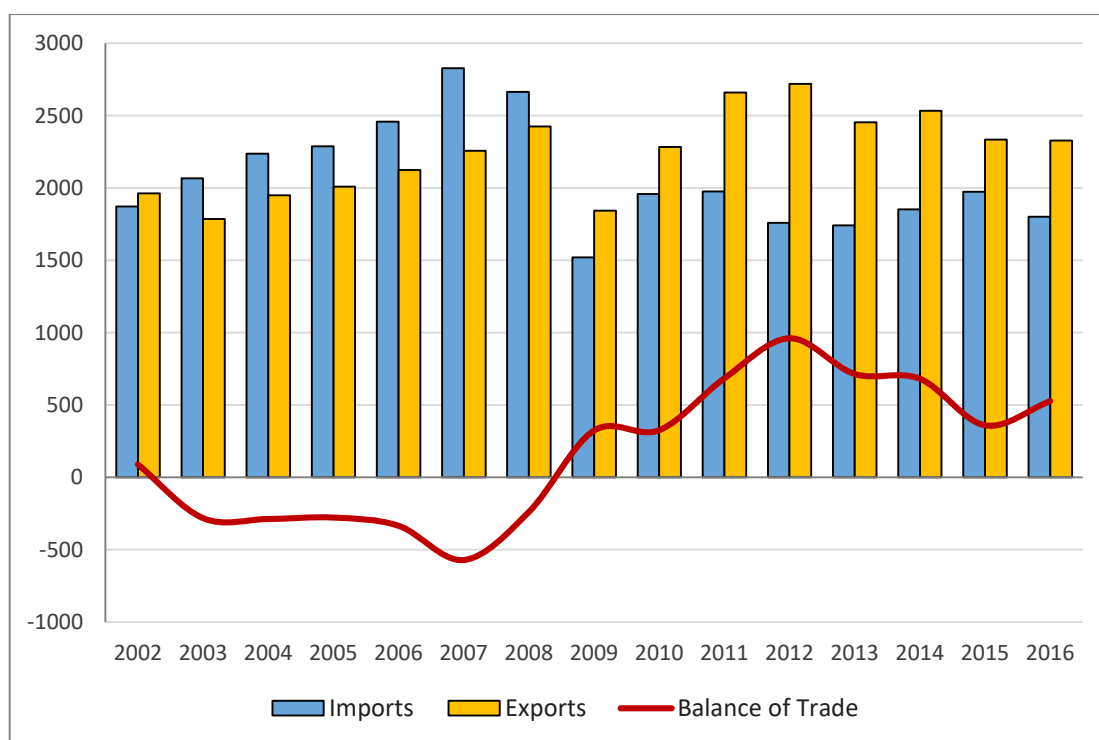
Author's elaboration, using data obtained from the Spanish Central Directory of Enterprises (DIRCE)

3. The internationalisation of business in Cantabria

3.1. International trade in Cantabria

Graph 3.1 shows the evolution of imports, exports and the balance of trade in Cantabria, from 2002 to the present. The economic crisis had a very significant effect on these variables. Since 2009, exports exceeded imports, generating a significant surplus in international trade. Between 2002 and 2008, imports increased by 51% and exports by 15%. The notable trade deficit disappeared after the onset of the financial and economic crisis. In 2009, the reduction of imports of more than 1 billion euros led to an international trade surplus in Cantabria, despite the fact that exports were reduced by almost 600 million euros. The effect of the crisis has been long-lasting. In 2016, imports were still at the level of 2002, representing a reduction of over 600 million euros lower than the pre-crisis level; meanwhile, the level of exports has been about 100 million euros lower than the pre-crisis levels.

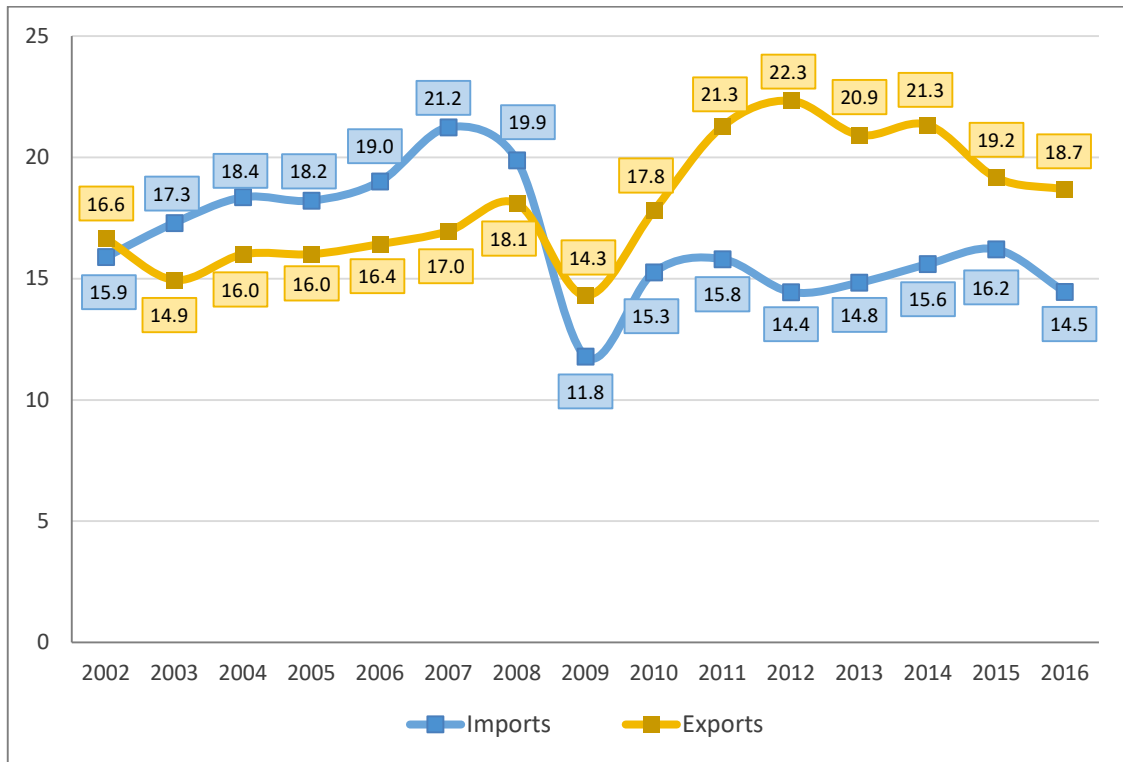
Graph 3.1. Exports, imports and balance of trade in Cantabria, in million euros of 2010 (constant prices), 2002-2016



Source: Author's elaboration, using data obtained from ICANE (2017)

Graph 3.2 shows the evolution of the weight of exports and imports on the GDP of Cantabria. Between 2003 and 2008, imports clearly exceeded exports, creating a trade deficit that exceeded 4% of GDP in 2007. However, since 2009, exports outpaced imports, generating a trade surplus currently around 4% of GDP. In the whole of the period 2002-2016, exports have increased their weight as a percentage of GDP of Cantabria from 16.6 to 18.7%. Meanwhile, in the same period, imports reduced their share of GDP of Cantabria from 15.9 to 14.5%.

Graph 3.2. Exports and imports in Cantabria (% of GDP), 2002-2016



Source: Author's elaboration, using data obtained from ICANE (2017)

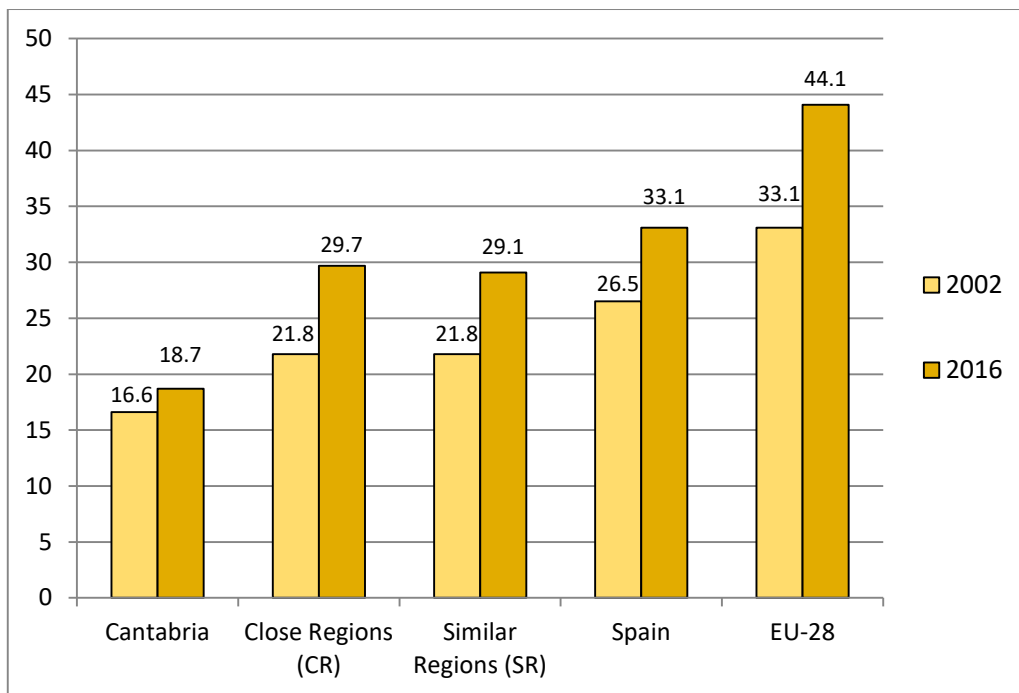
Table 3.1 compares the evolution of the weight of exports and imports as regards the GDP of Cantabria with that of the reference groups used in the analysis. Graphs 3.3 and 3.4 show this evolution for exports and imports, respectively. The most notable element is that in Cantabria, the weight of both exports and imports as regards GDP is significantly lower than in all groups of reference. Specifically, in Cantabria, exports currently account for 18.7% of GDP, while in the Close Regions (CR) this is 29.7%, in the Similar Regions (SR), 29.1%, in Spain, 33.1% and in the EU 44.1%. A similar pattern is found in imports.

Table 3.1. Exports and imports in Cantabria and the groups of reference for the analysis (% of GDP), 2002-2016

	Cantabria	Close Regions (CR)	Similar Regions (SR)	Spain	EU-28
	Exports				
2002	16.6	21.8	21.8	26.5	33.1
2003	14.9	21.9	21.5	25.4	32.4
2004	16.0	22.3	20.8	25.2	33.7
2005	16.0	21.3	19.8	24.7	35.1
2006	16.4	22.3	20.1	24.9	37.3
2007	17.0	23.2	20.8	25.7	37.9
2008	18.1	23.2	19.5	25.3	38.9
2009	14.3	19.8	18.1	22.7	34.8
2010	17.8	23.7	20.3	25.5	38.6
2011	21.3	27.3	23.0	28.9	41.4
2012	22.3	27.6	24.9	30.7	42.6
2013	20.9	28.5	27.3	32.2	42.8
2014	21.3	30.2	28.0	32.7	43.1
2015	19.2	30.3	29.2	33.2	44.0
2016	18.7	29.7	29.1	33.1	44.1
	Imports				
2002	15.9	20.6	20.6	28.5	31.7
2003	17.3	19.9	20.5	27.7	31.3
2004	18.4	21.4	21.6	29.0	32.6
2005	18.2	21.6	22.9	29.7	34.4
2006	19.0	23.1	23.4	30.8	36.8
2007	21.2	23.2	23.8	31.7	37.4
2008	19.9	22.6	22.7	30.4	38.8
2009	11.8	16.2	17.6	23.8	33.8
2010	15.3	19.7	20.2	26.8	37.7
2011	15.8	22.7	23.0	29.2	40.4
2012	14.4	21.9	24.1	29.2	40.7
2013	14.8	21.9	24.4	29.0	40.3
2014	15.6	23.5	25.4	30.2	40.3
2015	16.2	22.8	25.1	30.7	40.4
2016	14.5	21.4	24.3	30.2	40.6

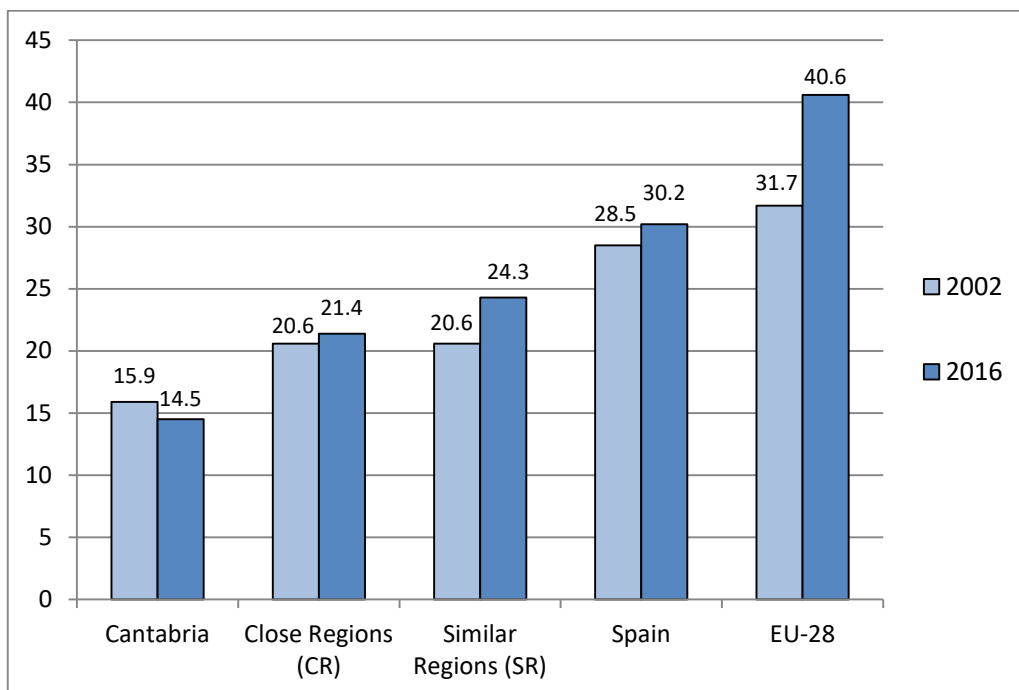
Source: Author's elaboration, using data obtained from ICANE (2017), INE (2017), Eurostat (2017) and DataComex (2017)

Graph 3.3. Exports in Cantabria and in the groups of reference for the analysis (% of GDP)



Source: Author's elaboration using data obtained from ICANE (2017), INE (2017), Eurostat (2017) and DataComex (2017)

Graph 3.4. Imports in Cantabria and in the groups of reference for the analysis (% of GDP)

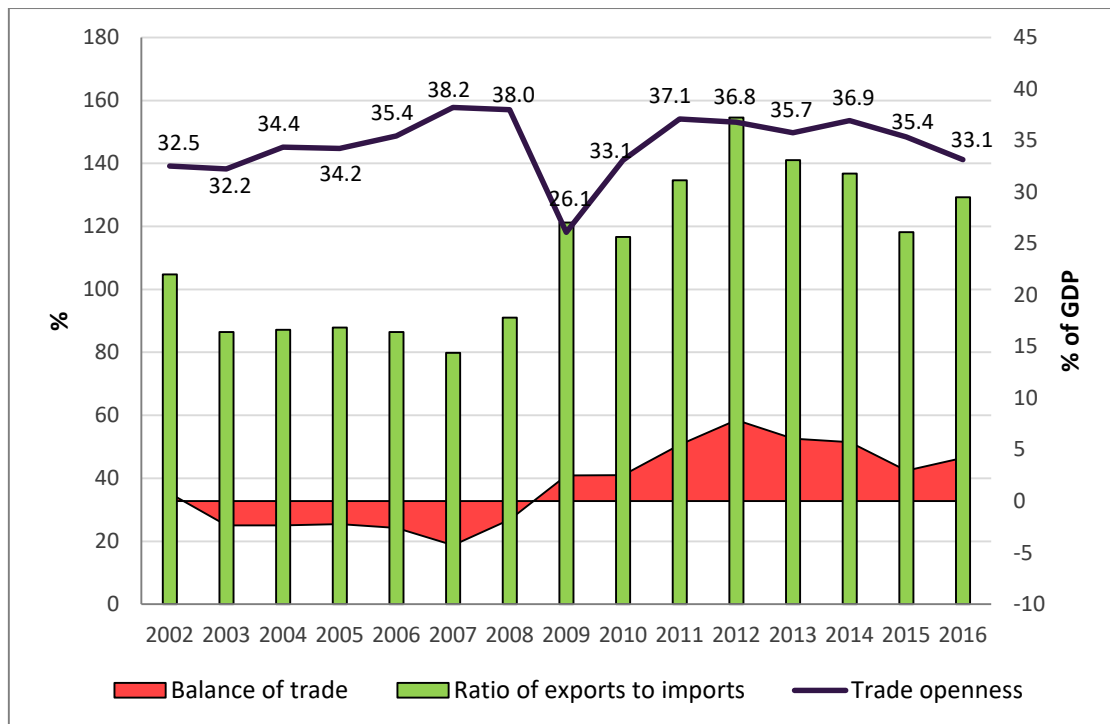


Source: Author's elaboration, using data obtained from ICANE (2017), INE (2017), Eurostat (2017) and DataComex (2017)

Graph 3.5 shows the level and evolution of international trade in Cantabria, based on three variables: the balance of trade, trade openness ratio and the ratio of exports to imports. Analysing the evolution of the balance of trade, Cantabria had a large trade deficit between 2002 and 2008. Since then it switched to a trade surplus. This same conclusion is obtained by analysing the ratio of exports to imports: less than 100 until 2008 and more than 100 since then. Finally, the graph shows how trade openness was increased in Cantabria between 2002 and 2008, from 32.5 to 38% of GDP. But with the crisis, this variable fell to 26.1%. In the following years, trade openness almost recovered the previous level reaching 37.1%. However, since 2011, this has declined again, falling to 33.1% in 2016.

Table 3.2 shows the evolution of the balance of trade, the trade openness ratio and the ratio of exports to imports in Cantabria, in comparison with the groups of reference for the analysis. The current trade surplus in Cantabria (4.2% of GDP) is much lower than that of the Close Regions (8.3%) and slightly lower than that of Similar Regions (4.8%), although it is higher than that of Spain (2.9%) and the EU (3.5%). In relation to the trade openness ratio, Cantabria is very far from any of the reference groups. In 2016, Cantabria shows a trade openness ratio of 33.1%, while this variable represents 51.1% of GDP in the Close Regions, 53.4% in the Similar Regions, 63.2% in Spain and 84.7% in the EU. In summary, Cantabria is lagging behind the groups of reference in terms of international trade. In addition, Cantabria undergoes a process of divergence in this dimension in relation to all reference groups

Graph 3.5. Balance of trade (% of GDP, right axis), trade openness ratio (% of GDP, right axis) and ratio of exports to imports (% , left axis) in Cantabria, 2002-2016



Source: Author's elaboration, using data obtained from ICANE (2017)

Table 3.2. Balance of trade (% of GDP), trade openness ratio (% of GDP) and ratio of exports to imports (%) in Cantabria and the groups of reference for the analysis, 2002-2016

	Cantabria	Close Regions (CR)	Similar Regions (SR)	Spain	EU-28
	Balance of trade				
2002	0.8	1.3	1.2	-2.0	1.4
2003	-2.4	2.0	1.0	-2.2	1.1
2004	-2.4	1.0	-0.7	-3.9	1.2
2005	-2.2	-0.4	-3.1	-5.0	0.8
2006	-2.6	-0.8	-3.3	-5.9	0.5
2007	-4.3	0.0	-3.0	-6.0	0.6
2008	-1.8	0.6	-3.2	-5.1	0.1
2009	2.5	3.6	0.5	-1.2	1.0
2010	2.5	3.9	0.1	-1.3	0.9
2011	5.5	4.6	0.0	-0.2	1.1
2012	7.9	5.7	0.8	1.5	1.9
2013	6.1	6.6	2.9	3.3	2.5
2014	5.7	6.7	2.6	2.4	2.8
2015	3.0	7.4	4.1	2.4	3.5
2016	4.2	8.3	4.8	2.9	3.5
	Trade openness ratio				
2002	32.5	42.4	42.3	55.0	64.8
2003	32.2	41.8	42.0	53.1	63.8
2004	34.4	43.7	42.4	54.2	66.3
2005	34.2	42.9	42.7	54.3	69.5
2006	35.4	45.4	43.5	55.7	74.1
2007	38.2	46.3	44.5	57.4	75.3
2008	38.0	45.8	42.1	55.8	77.7
2009	26.1	36.0	35.7	46.5	68.6
2010	33.1	43.4	40.4	52.3	76.3
2011	37.1	50.0	46.0	58.1	81.8
2012	36.8	49.5	49.0	59.9	83.3
2013	35.7	50.5	51.8	61.2	83.1
2014	36.9	53.7	53.4	62.9	83.4
2015	35.4	53.1	54.4	63.9	84.4
2016	33.1	51.1	53.4	63.2	84.7
	Ratio of exports to imports				
2002	104.8	106.2	105.8	92.9	104.5
2003	86.4	109.9	105.0	92.0	103.6
2004	87.2	104.4	96.5	86.7	103.7
2005	87.9	98.3	86.5	83.1	102.2
2006	86.4	96.3	85.9	80.8	101.2
2007	79.8	100.0	87.5	81.1	101.5
2008	91.0	102.5	85.8	83.2	100.4
2009	121.3	122.3	103.1	95.2	102.9
2010	116.6	119.9	100.5	95.1	102.3
2011	134.6	120.2	100.1	99.2	102.6
2012	154.6	126.0	103.4	105.0	104.7
2013	141.0	130.0	111.9	111.2	106.3
2014	136.8	128.5	110.2	108.0	106.8
2015	118.2	132.5	116.3	108.0	108.8
2016	129.2	138.6	120.0	109.6	108.7

Source: Author's elaboration, using data obtained from ICANE (2017), INE (2017), Eurostat (2017) and DataComex (2017)

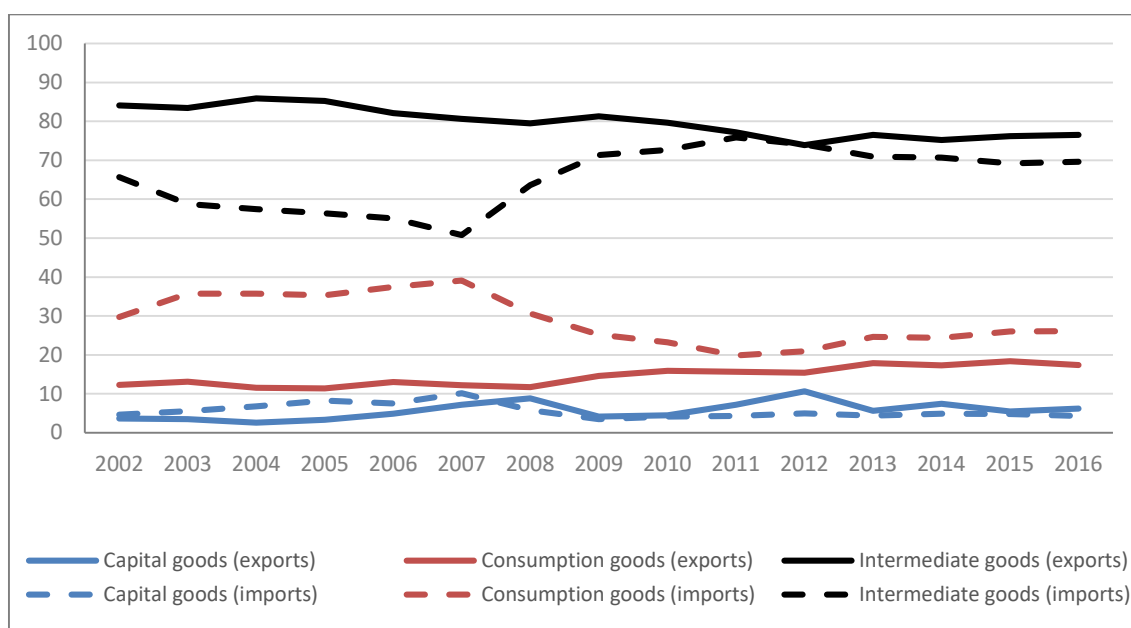
With regard to the type of traded goods, table 3.3 and graph 3.6 show the structure and evolution of international trade in Cantabria according to classification by broad economic categories (BEC classification). The patterns of international trade in Cantabria are dominated by intermediate goods, both in exports and imports. This type of goods makes up for around 77% of exports and 70% of imports. Consumption goods have a smaller weight in international trade in Cantabria, 17% of exports and 26% of imports. Finally, capital goods represent 6% of exports and 4% of imports.

Table 3.3. Exports and imports in Cantabria, by BEC classification, in million euros of 2010 (constant prices), 2002-2016

	Capital goods	Consumption goods	Intermediate goods	Total
	Exports			
2002	71.5	240.4	1,650.5	1,962.4
2003	62.2	234.2	1,490.4	1,786.8
2004	49.8	225.6	1,674.4	1,949.8
2005	67.1	228.8	1,714.5	2,010.5
2006	103.8	275.8	1,744.2	2,123.8
2007	162.4	274.7	1,821.0	2,258.1
2008	214.7	283.5	1,928.2	2,426.3
2009	76.3	268.2	1,499.4	1,843.9
2010	101.3	364.0	1,818.4	2,283.6
2011	190.7	416.4	2,053.2	2,660.3
2012	290.3	420.1	2,010.4	2,720.8
2013	138.1	438.3	1,878.4	2,454.7
2014	189.0	439.0	1,905.8	2,533.8
2015	127.1	428.5	1,778.8	2,334.4
2016	143.4	404.1	1,781.1	2,328.6
	Imports			
2002	87.0	556.3	1,229.6	1,872.9
2003	114.1	738.1	1,215.6	2,067.8
2004	152.1	799.5	1,285.2	2,236.8
2005	189.5	808.4	1,289.6	2,287.5
2006	185.1	919.8	1,352.7	2,457.6
2007	286.1	1106.4	1,435.8	2,828.3
2008	154.0	816.3	1,694.8	2,665.0
2009	52.7	383.4	1,084.4	1,520.5
2010	80.9	454.0	1,423.0	1,957.8
2011	84.6	392.4	1,499.5	1,976.5
2012	87.7	368.5	1,304.2	1,760.4
2013	77.0	428.8	1,235.0	1,740.8
2014	90.8	452.1	1,309.6	1,852.4
2015	93.9	513.8	1,366.9	1,974.6
2016	78.1	469.7	1,254.1	1,802.0

Source: Author's elaboration, using data obtained from ICANE (2017)

Graph 3.6. International trade in Cantabria, by BEC classification
 (% of total exports, solid line; % of total imports, dashed line), 2002-2016



Source: Authors calculation, using data obtained from ICANE (2017)

Focusing in greater detail on the analysis of the sectoral composition of international trade in Cantabria, according to the NACE classification, table 3.4 shows the 8 most relevant sectors for the economy of Cantabria in terms of their volume of exports and imports: manufactures of motor vehicles, basic metals, chemical products, food products, fabricated metals, rubber and plastic, machinery and equipment and electrical equipment. The data in the table show the high concentration of both exports and imports in a few sectors of manufacturing activities. In 2016, these 8 sectors together accounted for 80% of exports and 66% of imports in Cantabria. The manufacture of motor vehicles occupies the first place in the ranking of both exports and imports. Other sectors with a significant weight in international trade in Cantabria are the manufacture of chemical products, food products and basic metals. There is a coincidence in the most important sectors in exports and imports. This indicates that the dominant pattern of international trade in Cantabria is intra-industrial trade. This is a pattern similar to that observed in developed countries, although Cantabria shows a trade specialisation in manufacturing activities of lower technological intensity.

Table 3.5 shows the concentration of international trade in a small number of enterprises. The weight of exporter enterprises in relation to the total amount of enterprises is lower in Cantabria than in Spain. In 2016, Cantabria, had 1,168 exporter enterprises, which represents 3.1% of all enterprises in the region. Meanwhile, Spain had 148,794 exporter enterprises (4.6% of all enterprises in the country). The difference between Cantabria and the Spanish average as regards this indicator has increased during the last years.

The concentration of international trade in Cantabria in a few enterprises is more clearly seen in table 3.6. In recent years, only about 10-12 enterprises exported more than 50 million euros per year. In 2016, the 5 most exporting enterprises in Cantabria represented 36.2% of total exports, while the top 10 exporting enterprises accounted for 53.2% of total exports.

Table 3.4. Exports and imports in Cantabria, by NACE codes (top-8 internationalised activities, % of total exports and % of total imports), 2002-2016

	Manufacture of food products (C10)	Manufacture of chemical products (C20)	Manufacture of rubber and plastic products (C22)	Manufacture of basic metals (C24)	Manufacture of fabricated metal products, except machinery and equipment (C25)	Manufacture of electrical equipment (C27)	Manufacture of machinery and equipment (C28)	Manufacture of motor vehicles, trailers and semi-trailers (C29)
	Exports							
2002	5.3	4.9	6.8	7.8	11.7	9.6	4.9	26.7
2003	5.7	4.9	8.0	9.7	9.2	7.3	5.7	25.2
2004	5.5	4.6	7.4	14.1	9.5	7.3	6.2	24.2
2005	6.0	2.8	5.2	17.8	9.0	7.4	6.8	23.0
2006	6.3	11.7	3.2	16.5	10.1	8.9	6.3	23.2
2007	6.6	11.2	3.2	20.6	11.3	7.7	7.4	18.1
2008	6.3	11.0	2.9	20.2	12.3	7.0	8.7	18.6
2009	8.4	11.0	3.5	16.6	11.3	6.5	8.1	19.8
2010	8.3	11.4	3.1	16.9	10.3	7.7	7.2	18.7
2011	7.5	10.6	3.4	19.8	8.9	8.8	7.0	18.6
2012	7.4	11.8	3.9	18.4	13.1	7.4	6.5	16.8
2013	8.1	16.8	3.6	18.5	9.3	7.6	5.1	19.1
2014	8.5	13.4	4.3	18.6	9.4	6.1	5.0	18.5
2015	10.6	14.6	5.3	14.1	6.8	5.2	5.3	15.6
2016	10.5	14.7	5.5	14.7	9.8	3.0	4.9	16.9

	Imports							
2002	6.8	8.2	2.6	8.1	2.8	7.8	4.1	29.5
2003	6.4	7.5	2.5	10.3	3.0	5.2	5.7	33.3
2004	6.8	6.2	2.3	8.7	2.8	6.0	7.3	31.3
2005	7.4	5.4	2.0	8.9	3.1	6.0	8.0	31.2
2006	7.4	6.9	1.5	9.5	2.7	6.0	6.4	32.0
2007	6.0	6.5	1.4	10.0	2.7	6.6	8.1	35.2
2008	6.2	10.6	1.2	11.9	2.8	7.0	7.1	24.6
2009	10.0	10.4	3.3	9.2	6.0	8.1	6.8	12.5
2010	8.2	9.7	3.1	10.2	5.5	7.0	6.9	13.3
2011	9.8	11.9	3.1	9.0	6.7	7.9	7.0	9.7
2012	11.7	12.1	2.5	8.5	4.3	6.3	5.9	10.8
2013	11.5	13.8	2.6	8.0	4.9	5.2	5.9	12.2
2014	12.6	12.2	3.1	8.1	5.6	6.0	7.4	12.9
2015	11.4	11.0	3.2	8.0	4.6	4.6	6.0	15.4
2016	11.0	10.8	4.1	7.9	5.5	3.1	6.3	17.6

Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.5. Number of enterprises and exporter enterprises in Cantabria and Spain, 2008 and 2016

	Cantabria			Spain		
	Enterprises	Exporter enterprises	%	Enterprises	Exporter enterprises	%
2008	40,393	839	2.1	3,422,239	101,395	3.0
2016	37,696	1,168	3.1	3,236,582	148,794	4.6

Source: Author's calculation, using data obtained from ICANE (2017), INE (2017) and ICEX (2017)

Table 3.6. Number of enterprises in Cantabria (by value of exports in euros), 2012-2016

	< 50,000	50.000 – 0.5 Mill.	0.5 Mill. – 2.5 Mill.	2.5 Mill. - 10 Mill.	10 Mill. - 50 Mill.	> 50 Mill.
2012	702	192	95	60	29	12
2013	846	198	100	55	32	11
2014	747	204	91	50	29	14
2015	728	167	78	62	35	10
2016	835	149	82	60	31	11

Source: Author's calculation, using data obtained from ICEX (2017)

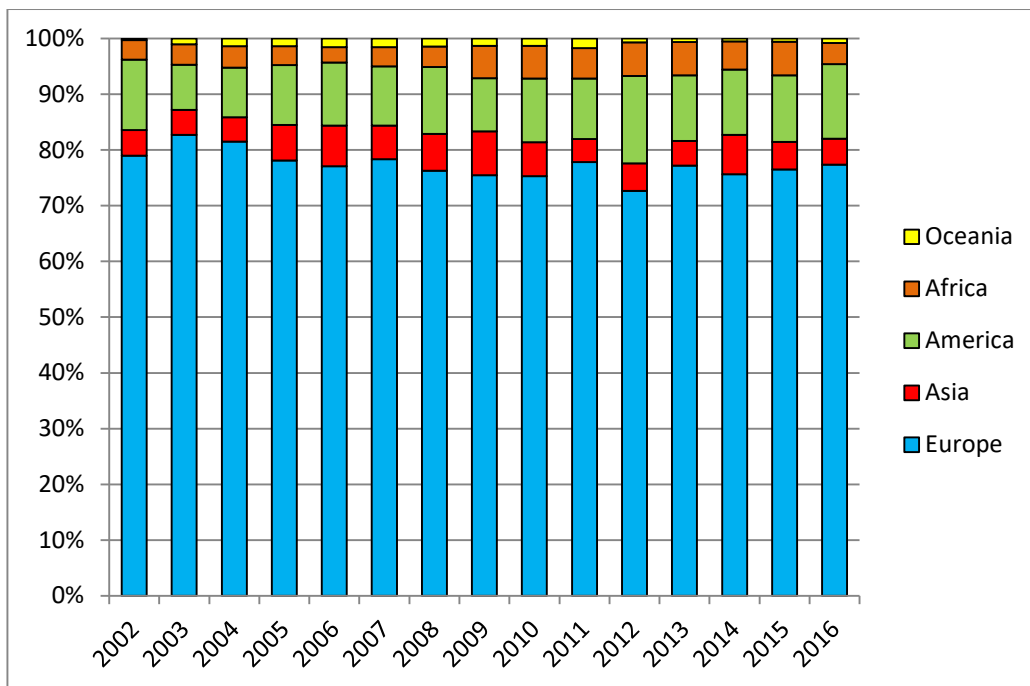
Table 3.7, and graphs 3.7 and 3.8 show the evolutions of exports and imports in Cantabria by destination and origin. International trade in Cantabria is clearly oriented towards Europe, in particular towards the EU, both in terms of exports and imports. Table 3.8 shows the evolution of trade with the EU. In 2016, 71.8% of total exports went to EU countries. Similarly, 65.4% of total imports arrived from EU countries. At a great distance from Europe are America and Asia in terms of destination of exports and origin of imports. In contrast, Africa and Oceania are the least relevant continents in the international trade in Cantabria. Table 3.9 shows that the trade flows are particularly intense with the largest European countries: Germany, France, United Kingdom and Italy. Other European countries such as Portugal, Finland, Belgium and Netherlands also occupy relevant positions in the ranking of trade partners, table 3.10. Ranking in which are also non-European countries like United States, Turkey, China, Mexico, Japan and Morocco.

Table 3.7. Exports and imports in Cantabria, by destination of exports and origin of imports, in million euros of 2010 (constant prices), 2002-2016

	Africa	America	Asia	Europe	Oceania	Total
	Exports					
2002	68,7	248,8	89,1	1549,3	4,8	1962,4
2003	66,3	144,0	80,1	1477,3	17,9	1786,8
2004	74,9	174,0	85,5	1588,3	26,1	1949,8
2005	69,1	215,1	128,1	1569,1	26,8	2010,5
2006	58,4	240,4	154,6	1635,0	32,8	2123,8
2007	77,7	238,3	135,9	1760,1	34,5	2258,1
2008	89,7	290,7	159,8	1848,2	33,7	2426,3
2009	106,5	175,0	145,2	1384,8	23,5	1843,9
2010	133,1	261,1	139,0	1716,9	30,1	2283,6
2011	146,1	288,8	110,0	2067,5	44,6	2660,3
2012	163,6	425,8	135,6	1974,0	18,3	2720,8
2013	147,4	288,7	107,3	1893,0	14,7	2454,7
2014	128,6	296,5	178,0	1913,8	12,1	2533,8
2015	139,5	279,1	115,0	1783,8	13,4	2334,4
2016	88,3	310,6	108,5	1800,8	18,6	2328,6
	Imports					
2002	26,0	111,6	419,5	1297,9	17,9	1872,9
2003	46,4	131,1	587,1	1286,7	16,4	2067,8
2004	50,2	110,2	619,6	1443,5	13,3	2236,8
2005	36,6	166,8	647,2	1425,9	11,1	2287,5
2006	46,4	185,1	609,9	1605,3	10,9	2457,6
2007	66,8	201,9	651,7	1902,2	5,7	2828,3
2008	118,8	257,2	369,1	1917,0	2,9	2665,0
2009	68,3	144,9	191,5	1106,8	8,8	1520,5
2010	141,6	183,5	215,6	1397,8	13,1	1957,8
2011	76,5	166,2	223,5	1488,6	21,6	1976,5
2012	65,1	154,0	164,8	1355,7	20,8	1760,4
2013	90,3	124,7	216,9	1293,4	15,5	1740,8
2014	72,7	164,1	254,0	1348,9	12,7	1852,4
2015	64,6	258,1	279,8	1360,0	12,1	1974,6
2016	80,2	200,4	233,0	1274,3	13,0	1802,0

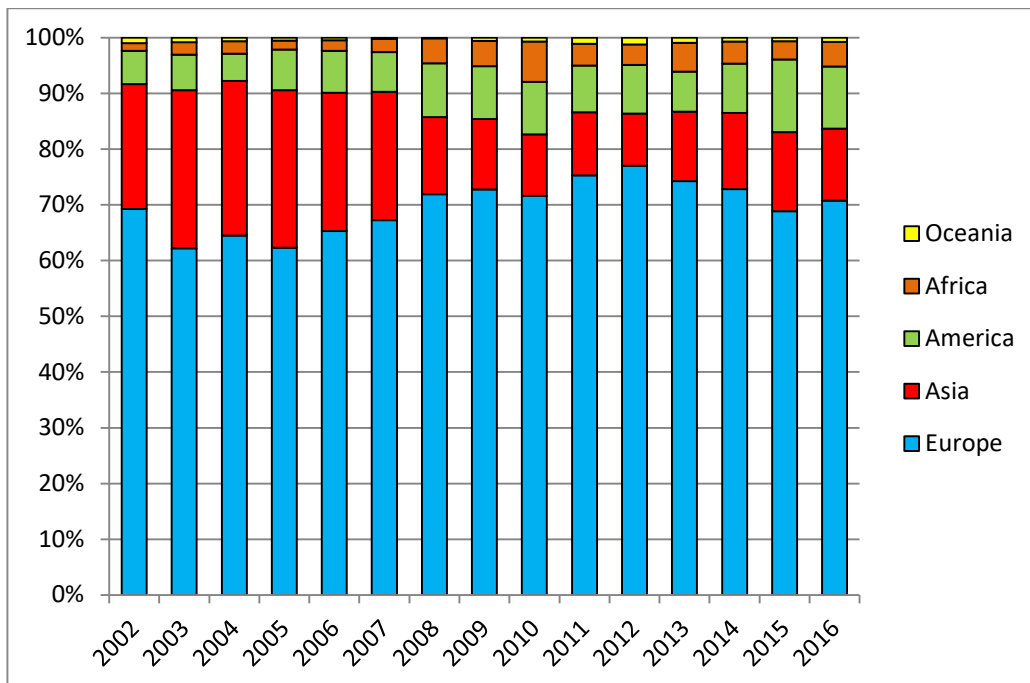
Source: Author's calculation, using data obtained from ICANE (2017)

Graph 3.7. Exports of Cantabria, by destination (as % of total exports), 2002-2016



Source: Author's calculation, using data obtained from ICANE (2017)

Graph 3.8. Imports of Cantabria, by origin (as % of total imports), 2002-2016



Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.8. Exports and imports with the EU in Cantabria (in million euros of 2010 and % of total exports and imports), 2002-2016

	Exports	% Total exports	Imports	% Total imports
2002	1,492.1	76.0	1,234.8	65.9
2003	1,420.2	79.5	1,208.2	58.4
2004	1,508.2	77.4	1,312.2	58.7
2005	1,479.3	73.6	1,321.5	57.8
2006	1,533.0	72.2	1,488.5	60.6
2007	1,632.9	72.3	1,789.0	63.3
2008	1,701.4	70.1	1,768.8	66.4
2009	1,295.5	70.3	1,033.1	67.9
2010	1,597.9	70.0	1,283.3	65.5
2011	1,929.5	72.5	1,366.5	69.1
2012	1,803.4	66.3	1,233.6	70.1
2013	1,738.9	70.8	1,190.2	68.4
2014	1,790.0	70.6	1,223.5	66.0
2015	1,641.8	70.3	1,257.2	63.7
2016	1,671.1	71.8	1,179.1	65.4

Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.9. Exports and imports with the EU-28 countries in Cantabria (in million euros of 2010 and % of total exports and imports), 2016

	Exports	% Total exports	Imports	% Total imports
Austria	15.6	0.7	18.8	1.0
Belgium	58.4	2.5	71.3	4.0
Bulgaria	2.8	0.1	9.7	0.5
Croatia	0.9	0.0	1.7	0.1
Cyprus	3.5	0.2	0.0	0.0
Czech Rep.	18.1	0.8	8.4	0.5
Denmark	11.6	0.5	8.1	0.4
Estonia	0.8	0.0	0.3	0.0
Finland	16.5	0.7	109.4	6.1
France	439.3	18.9	169.4	9.4
Germany	339.1	14.6	245.8	13.6
Greece	10.6	0.5	3.6	0.2
Hungary	33.2	1.4	17.4	1.0
Ireland	9.2	0.4	23.1	1.3
Italy	186.0	8.0	85.5	4.7
Latvia	0.3	0.0	1.0	0.1
Lithuania	2.3	0.1	9.9	0.5
Luxembourg	1.1	0.0	1.6	0.1
Malta	1.1	0.0	0.0	0.0
Netherlands	59.2	2.5	55.3	3.1
Poland	45.8	2.0	34.2	1.9
Portugal	198.8	8.5	48.9	2.7
Romania	7.0	0.3	2.2	0.1
Slovakia	3.8	0.2	2.0	0.1
Slovenia	2.5	0.1	3.5	0.2
Sweden	28.9	1.2	21.0	1.2
United Kingdom	171.8	7.4	225.5	12.5
EU-28	1671.1	71.8	1179.1	65.4

Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.10. Top-10 partner countries by export and imports (in million euros of 2010), 2016

Rank	Country	Exports	Country	Imports
1	France	439.3	Germany	245.8
2	Germany	339.1	United Kingdom	225.5
3	Portugal	198.8	France	169.4
4	Italy	186.0	Finland	109.4
5	United States	174.0	China	106.4
6	United Kingdom	171.8	Italy	85.5
7	Turkey	80.9	Belgium	71.3
8	Netherlands	59.2	Mexico	58.1
9	Belgium	58.4	Netherlands	55.3
10	Morocco	50.6	Japan	53.8

Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.11 shows the value of exports and imports in Cantabria by mode of transport. Meanwhile, table 3.12 shows their weight on total exports and imports. Road transport is the most commonly used mode of transport in international trade in Cantabria: 69.4% of exports and 64.1% of imports in 2016. At a great distance is maritime transport, accounting for 28.6% of exports and 31.5% of imports. The whole rest of the modes of transport represent barely 2% of exports and 4.5% of imports in Cantabria.

Table 3.11. Exports and imports in Cantabria, by mode of transport (in million euros of 2010), 2014-2016

	Maritime transport	Road transport	Rail transport	Other	Total
	Exports				
2014	736.8	1,741.9	4.4	50.7	2,533.8
2015	649.0	1,618.1	0.7	66.6	2,334.4
2016	665.9	1,616.5	0.0	46.2	2,328.6
	Imports				
2014	791.4	974.1	4.1	82.8	1,852.4
2015	745.5	1,137.0	6.0	86.3	1,974.6
2016	566.8	1,154.4	2.8	78.0	1,802.0

Source: Author's calculation, using data obtained from ICANE (2017)

Table 3.12. Exports and imports in Cantabria, by mode of transport (% of total exports and imports), 2014-2016

	Maritime transport	Road transport	Rail transport	Other
	Exports			
2014	29.1	68.7	0.2	2.0
2015	27.8	69.3	0.0	2.9
2016	28.6	69.4	0.0	2.0
	Imports			
2014	42.7	52.6	0.2	4.5
2015	37.8	57.6	0.3	4.4
2016	31.5	64.1	0.2	4.3

Source: Author's calculation, using data obtained from ICANE (2017)

3.2. International investment

Table 3.13 and graph 3.9 show the flows of Inward Foreign Direct Investment (IFDI) and Outward Foreign Direct Investment (OFDI) in Cantabria, from 2002 to 2016. The data show an evolution with large discontinuities. Two features of Cantabria related to international investment are revealed, both due to the regional business structure. First, OFDI is not only discontinuous, but also reaches high peaks. The reason for this phenomenon is the location in Cantabria of the headquarters of a large multinational enterprise: Banco Santander. FDI made by Banco Santander, purchasing Abbey in 2004 and ABN AMRO in 2007, explains the highest peaks of OFDI. On the other hand, the dominance of micro and small enterprises in the business structure means that vast majority of enterprises in Cantabria do not have the capacity to undertake investment abroad. In summary, the evolution of OFDI in Cantabria depends very much on a few large operations effected by a single multinational financial enterprise. This is shown in table 3.13, which includes figures of FDI excluding financial and related services.

In relation to the IFDI in Cantabria, a characteristic element is highlighted. According to table 3.13 and graph 3.9, Cantabria receives very little investment from abroad. In fact, IFDI represents only 0.2% of the GDP of Cantabria.

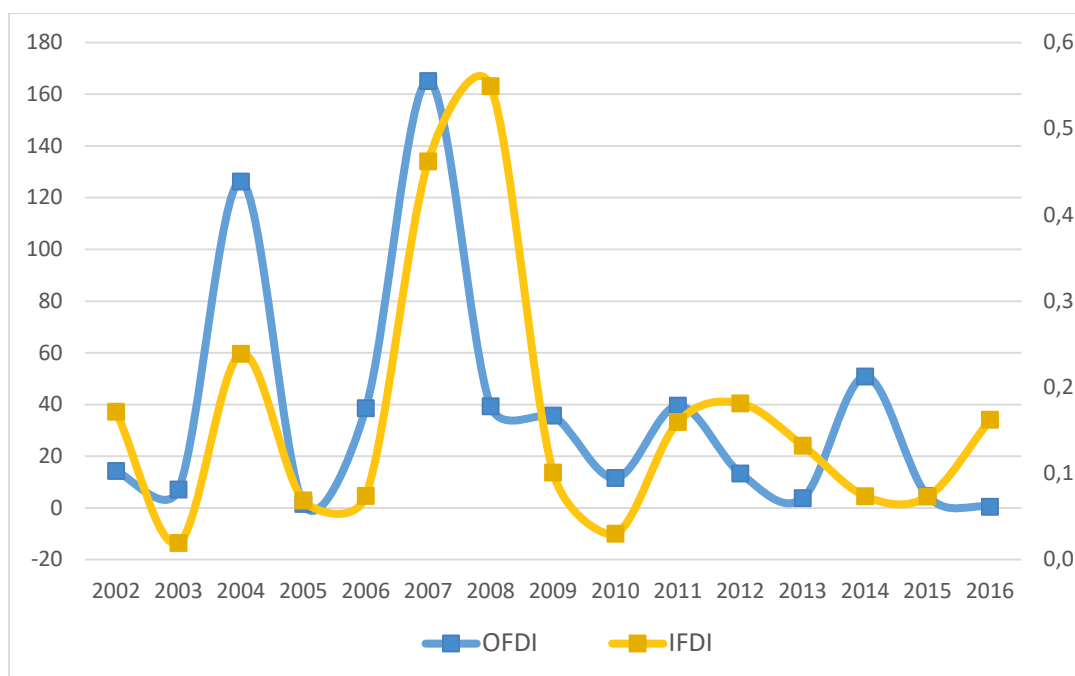
In comparative terms, table 3.14 shows the weight of the OFDI and IFDI in the GDP of Cantabria and the groups of reference for the analysis. In Cantabria the OFDI is concentrated in certain years, reaching a weight much higher than those observed in Close Regions (CR), Similar Regions (SR) and Spain. In relation to IFDI, its weight in Cantabria is lower than in the groups of reference.

Table 3.13. Flows of Inward Foreign Direct Investment (IFDI) and Outward Foreign Direct Investment (OFDI) in Cantabria (in million euros of 2010, constant prices), 2002-2016

	OFDI (total)	OFDI (without financial and related services)	IFDI (total)	IFDI (without financial and related services)
2002	1,686.9	206.5	20.2	2.5
2003	849.3	185.1	2.3	2.1
2004	15,389.6	85.1	29.1	29.1
2005	191.9	76.1	8.6	8.6
2006	4,984.0	104.7	9.6	9.6
2007	21,988.5	89.5	61.5	60.6
2008	5,273.7	87.3	73.6	19.7
2009	4,601.8	12.4	13.0	13.0
2010	1,486.6	31.1	3.9	3.9
2011	4,946.5	45.2	20.0	20.0
2012	1,630.4	952.7	22.1	22.1
2013	448.7	14.3	15.5	3.5
2014	6,039.7	103.3	8.7	3.6
2015	565.5	12.0	8.9	8.9
2016	56.6	2.5	20.2	20.2

Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

Graph 3.9. IFDI (right axis) and OFDI (left axis) in Cantabria (% of GDP), 2002-2016



Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

Table 3.14. IFDI and OFDI (% of GDP) in Cantabria and the groups of reference for the analysis, 2002-2016

	Cantabria	Close Regions (CR)	Similar Regions (SR)	Spain
OFDI				
2002	14.3	3.6	1.9	1.0
2003	7.1	0.7	0.5	0.3
2004	126.3	2.8	0.3	2.0
2005	1.5	1.2	0.8	0.4
2006	38.5	2.0	0.7	1.0
2007	165.2	16.9	1.4	5.0
2008	39.3	3.4	1.4	1.3
2009	35.7	1.4	1.0	0.9
2010	11.6	1.4	1.0	0.6
2011	39.6	3.4	0.6	1.1
2012	13.4	0.5	0.4	0.3
2013	3.8	0.9	0.4	0.3
2014	50.9	0.7	0.4	0.8
2015	4.6	0.7	0.7	0.3
2016	0.5	1.1	0.9	0.3
IFDI				
2002	0.2	1.8	1.7	4.3
2003	0.0	0.3	2.8	2.3
2004	0.2	2.1	1.6	2.2
2005	0.1	0.2	0.3	1.9
2006	0.1	1.0	0.3	1.4
2007	0.5	1.6	1.1	3.5
2008	0.5	0.4	0.7	3.5
2009	0.1	0.6	0.5	1.6
2010	0.0	0.3	0.1	2.3
2011	0.2	0.8	0.7	3.3
2012	0.2	0.6	0.3	1.9
2013	0.1	1.4	0.7	2.3
2014	0.1	1.3	0.6	2.0
2015	0.1	1.5	0.9	2.4
2016	0.2	3.9	0.2	3.0

Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

The analysis of the flows of OFDI and IFDI by sectoral composition reveals that the dynamic of these flows and their discontinuities are driven by few sectors. Most economic activities of the economy of Cantabria do not receive or make significant foreign investment. Table 3.15 shows a clear dominance in FDI of economic activities related to financial services.

Table 3.15. IFDI and OFDI in Cantabria, by NACE codes (top-8 internationalised activities, in million euros of 2010), 2002-2016

	Manufacture of chemical products (C20)	Manufacture of electrical equipment (C27)	Retail trade (G47)	Computer programming and consultancy (J62)	Financial service activities (K64)	Insurance, reinsurance and pension funding (K65)	Act. auxiliary to financial services and insurance act. (K66)	Real state activities (L68)	Total
	OFDI								
2002	0.0	7.0	6.1	0.0	1,480.4	0.0	0.0	0.0	1,686.9
2003	131.9	6.2	6.1	21.9	497.2	0.0	166.9	0.0	849.3
2004	0.0	12.8	9.3	44.5	15,303.8	0.0	0.7	0.0	15,389.6
2005	0.0	8.3	9.9	32.0	110.6	4.2	1.0	14.6	191.9
2006	45.8	8.3	15.6	2.6	4,808.0	12.8	58.6	27.9	4,984.0
2007	0.6	28.0	10.3	4.5	21,877.9	0.0	21.1	37.1	21,988.5
2008	14.7	5.9	6.4	0.0	5,160.9	0.0	25.5	60.1	5,273.7
2009	0.0	5.1	7.3	0.0	4,581.5	0.0	7.9	0.0	4,601.8
2010	0.0	5.5	0.5	0.0	1,384.7	70.8	0.0	0.0	1,486.6
2011	0.0	15.4	17.9	6.2	4,733.2	0.0	173.1	4.3	4,951.4
2012	1.0	0.0	3.5	920.2	676.4	0.0	1.3	0.0	1,630.4
2013	3.0	0.1	0.0	8.2	130.8	0.0	303.6	2.0	448.7
2014	0.0	0.1	0.0	0.0	5,792.2	0.0	144.2	85.2	6,039.7
2015	0.0	2.9	0.0	0.0	521.7	0.0	31.8	0.0	565.5
2016	0.0	0.0	2.5	0.0	54.1	0.0	0.0	0.0	56.6

	IFI								
2002	0.0	0.0	0.0	0.0	17.7	0.0	0.0	0.0	20.2
2003	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	2.3
2004	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	29.1
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	8.6
2006	0.0	4.3	0.1	0.0	0.0	0.0	0.0	0.3	9.6
2007	0.0	51.1	0.0	0.0	0.0	0.9	0.0	0.0	61.5
2008	17.9	0.0	0.0	0.0	26.6	27.4	0.0	0.3	73.6
2009	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	13.0
2010	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	3.9
2011	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.1	20.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.1
2013	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	15.5
2014	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	8.7
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	8.9
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2

Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

Finally, table 3.16 shows the evolution of the geographical distribution of OFDI and IFDI. Meanwhile, table 3.17 shows the top-10 main partner countries in terms of OFDI and IFDI in the whole analysed period. In the case of the OFDI there is a clear dominance of European partners, as in the case of international trade. Also noteworthy is that the investment made from Cantabria to America. In the case of the IFDI the same geographical pattern is found: international investment received in Cantabria arrived from Europe and America, in that order of relevance. Pattern reflected in the rankings of partner countries by OFDI and IFDI. Rankings dominated by the presence of European and American countries such as Netherlands, United Kingdom, France, United States, Mexico, Poland, Costa Rica and Brazil.

Table 3.16. IFDI and OFDI in Cantabria, by destination and origin (MM euros of 2010), 2002-2016

	Africa	America	Europa	Asia	Oceania	Total
	OFDI					
2002	0.0	90.8	1,593.9	2.2	0.0	1,686.9
2003	0.0	566.5	280.3	2.6	0.0	849.3
2004	0.0	303.3	15,085.7	0.5	0.4	15,389.6
2005	0.0	117.3	71.2	3.5	0.5	191.9
2006	0.0	3,220.7	1,761.6	1.8	1.3	4,984.0
2007	0.0	762.6	21,222.0	3.8	0.0	21,988.5
2008	0.6	1,009.9	4,233.5	29.7	0.0	5,273.7
2009	0.0	3,143.8	1,457.3	0.7	0.0	4,601.8
2010	0.0	1,176.5	287.5	22.6	0.0	1,486.6
2011	0.0	760.9	4,190.4	0.1	0.0	4,951.4
2012	0.0	1,497.9	53.4	79.1	15.4	1,630.4
2013	0.0	131.3	317.4	0.0	0.0	448.7
2014	0.0	4,491.3	1,135.1	413.3	0.0	6,039.7
2015	0.0	355.1	101.7	108.6	0.0	565.5
2016	0.0	27.0	29.6	0.0	0.0	56.6
	IFDI					
2002	0.0	0.0	20.2	0.0	0.0	20.2
2003	0.0	1.9	0.4	0.0	0.0	2.3
2004	0.0	28.7	0.4	0.0	0.0	29.1
2005	0.0	8.1	0.6	0.0	0.0	8.6
2006	0.0	5.2	4.4	0.0	0.0	9.6
2007	0.0	0.0	61.5	0.0	0.0	61.5
2008	0.0	18.3	55.3	0.0	0.0	73.6
2009	0.0	4.9	8.1	0.0	0.0	13.0
2010	0.0	1.4	2.5	0.0	0.0	3.9
2011	0.0	3.6	16.3	0.0	0.0	20.0
2012	0.0	14.1	8.0	0.0	0.0	22.1
2013	0.0	1.5	14.0	0.0	0.0	15.5
2014	0.0	0.5	8.2	0.0	0.0	8.7
2015	0.0	3.0	6.0	0.0	0.0	8.9
2016	0.0	0.5	19.8	0.0	0.0	20.2

Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

Table 3.17. Top-10 partner countries in OFDI and IFDI (in million euros of 2010), aggregate 2002-2016

Rank	Country	OFDI	Country	IFDI
1	Netherlands	22,625.6	Netherlands	104.3
2	United Kingdom	19,292.4	France	82.3
3	United States	11,045.1	Mexico	25.6
4	Poland	4,929.5	Costa Rica	25.1
5	Brazil	2,711.8	United States	20.3
6	Chile	1,695.0	Luxembourg	19.7
7	Mexico	1,370.1	Panama	15.5
8	Germany	1,325.2	Germany	7.7
9	Belgium	1,183.5	Switzerland	5.9
10	China	655.0	United Kingdom	5.1

Source: Author's calculation, using data obtained from ICANE (2017) and DataInVex (2017)

4. Barriers to SME internationalisation

4.1. Barriers to SME internationalisation: General considerations

Identifying barriers to SME internationalisation is a key issue with a view to developing policies that successfully allow for overcoming these barriers. International organisations, governments and other public or private institutions have paid significant attention to this important issue. The OECD, in particular, has worked continually on barriers to SME internationalisation. Its report “Top barriers and drivers to SME internationalisation” (OECD, 2009) analyses in detail the main barriers identified by its prior study “Removing barriers to SME access to international markets” (OECD-APEC, 2007). The barriers to SME internationalisation identified in the 2009 study included: shortage of working capital to finance exports; identification of business opportunities overseas; limited information about locating or analysing markets; inability to contact potential overseas customers; obtaining reliable foreign representation; a lack of managerial resources and time to deal with internationalisation; inadequate quantity of skilled personnel for internationalisation; difficulty in matching competitor’s prices; lack of home government assistance; and transportation costs. OECD (2009) goes deeper into the analysis and includes some key findings related to the barriers to internationalisation. Specifically, the report finds that lack of funding, firm resources, international contacts, and required managerial knowledge about internationalisation are key barriers limiting SMEs internationalisation. Based on these barriers, the report makes recommendations with a view to intensifying the efforts to remove them. In particular, these recommendations are focused on removing the limitations identified in financial resources, international markets information and managerial knowledge.

Four years later, OECD (2013) published a new report on SME internationalisation. Although the report’s theme is broader in scope, the fourth chapter is completely focused on the barriers to SME internationalisation. The report is based on the “Survey of SME perceptions of barriers to access to high-growth markets”. Although the survey could be partially biased in geographical and sectoral terms, the information it provides is enormously useful. In order to limit these biases, the report takes into account information from other sources. As the main conclusion as regards the barriers to internationalisation, the report states that in order to foster SME internationalisation, governments should improve their understanding of the internal barriers. These barriers, specifically, are related to firm organisation and the lack of management capabilities and innovative capacities. These internal barriers and the financial barriers seem to be more critical in high-growth markets than in developed markets. On the other hand, also external barriers to SME internationalisation are more important in high-growth countries than in developed markets. In this sense, the barriers related to regulation controlled by foreign governments play a determining role.

The barriers to internationalisation have been also studied by prominent academics and researchers. Focusing on barriers to SME internationalisation, Fliess and Busquets (2006) identify the main barriers analysing recent studies and business surveys. The aim of their paper is to provide recommendations to support SME internationalisation. So, by identifying the

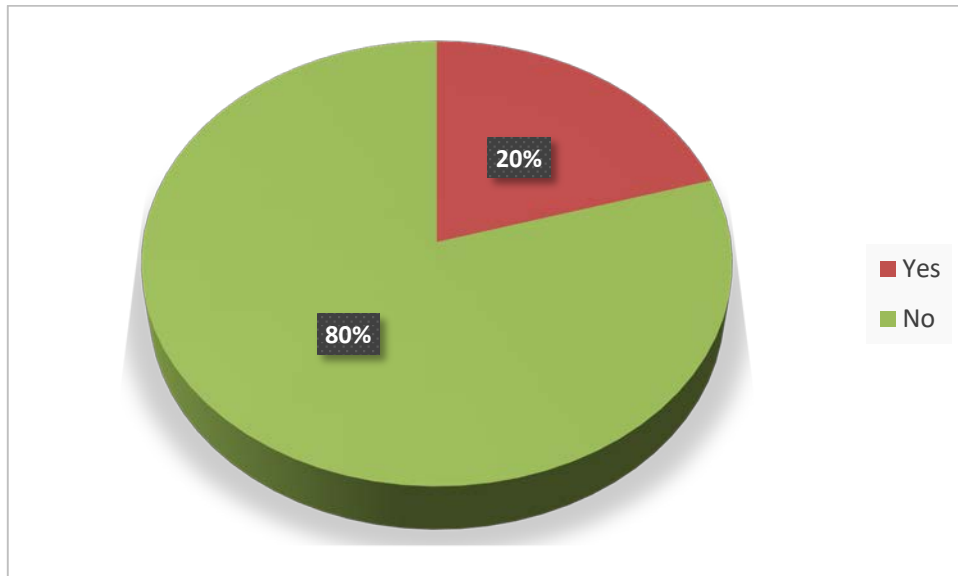
vulnerability of SMEs to tariff and non-tariff barriers, the authors suggest ways of enhancing SME internationalisation by involving governments and implementing public policies. Pinho and Martins (2010) analyse the barriers that can limit or restrain Portuguese SME internationalisation using parametric and semi-parametric techniques. They identify six significant barriers that might restrict internationalisation: lack of knowledge of potential international markets; lack of qualified personnel; lack of technical capacity; lack of financial assistance; control of the physical product flow; and the degree of competition. Hutchinson, Fleck and Lloyd-Reason (2009) study the initial barriers to internationalisation experienced by small retailers in the United Kingdom. Using a multiple case study methodology, the authors find several internal and external barriers including: lack of resources; opportunity cost and risk in the domestic market; lack of knowledge; lack of managerial vision; risk of losing control; regulations; currency risk; logistics, cultural differences and lack of government support. Toulova, Votoupalova and Kubickova (2015) analyse the internationalisation of the SMEs in the Czech Republic and the barriers perceived by them in four sectors: agriculture, food processing industry, wood processing industry and IT. They identify barriers to SMEs internationalisation in the lack of experience in foreign markets, language skills, costs of promotion abroad, lack of information about foreign markets and lack of government support. Among these barriers, the author finds that only a lack of previous experience in foreign markets and a lack of information about foreign markets are positively correlated with the success in the internationalisation process of Czech SMEs. Finally, Fayos, Calderón and Mollá (2015) study the Spanish retail internationalisation. Specifically, they focus on the case of SMEs, looking at the barriers in the internationalisation process. The main barriers identified by the authors are the lack of experience in international markets, opportunity cost in domestic market, lack of funding, enterprise size, and the lack of public support to internationalisation. In general terms, different authors and studies usually show similar barriers to internationalisation of SMEs. However, other barriers depend on the country or sector considered.

4.2. Barriers to SME internationalisation: The case of Cantabria

The Chamber of Commerce of Cantabria (2016a) conducted a survey on the barriers to internationalisation. The survey was answered by 113 enterprises. It is possible to classify the barriers perceived by the enterprises into two main categories. First, internal barriers related to the capacity and capabilities of the enterprises. Second, external barriers related to the information and uncertainty regarding international markets. Graphs 4.1 to 4.5 show the responses about the perceived barriers related to the capacities and capabilities of the enterprises. Graph 4.1 shows that most of the enterprises answering the survey do not consider having barriers to internationalisation due to a lack of productive capacity. Only one in five enterprises report having barriers due to a small productive capacity. However, graph 4.2 shows that half of the enterprises consider that a small staff structure or size constitutes a barrier to internationalisation. Graph 4.3 shows the response about the barriers to internationalisation due to the lack of skilled staff. Most of the enterprises declare that they have no barriers for this reason. However, a high percentage of them (43.1%) consider that the lack of qualified personnel hinders their internationalisation. Graph 4.4 shows that 53.6% of enterprises have problems to internationalise their activities due to language skills. Finally, graph 4.5 shows that

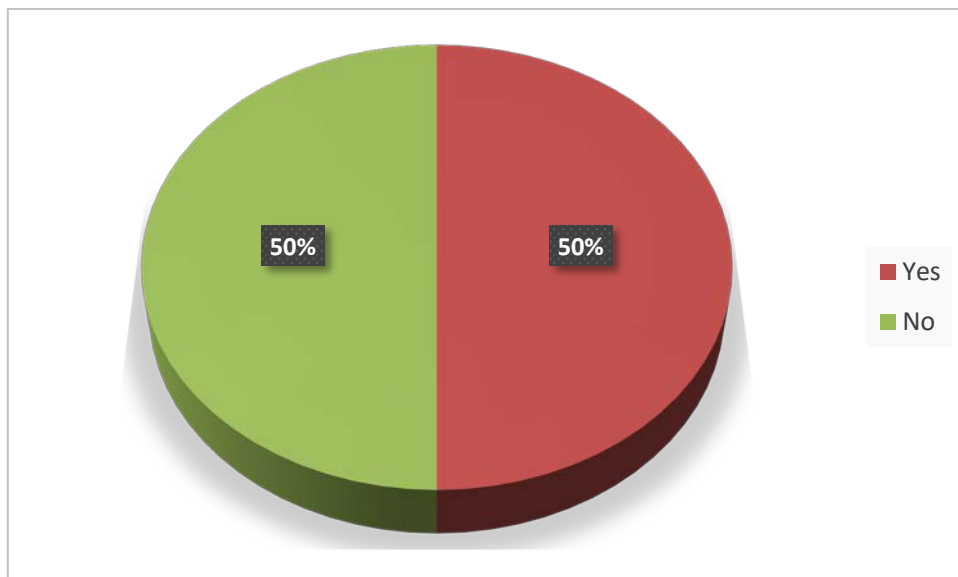
two thirds of the enterprises consider the lack of funding as a barrier to their internationalisation.

Graph 4.1. Barriers to internationalisation due to lack of productive capacity (%)



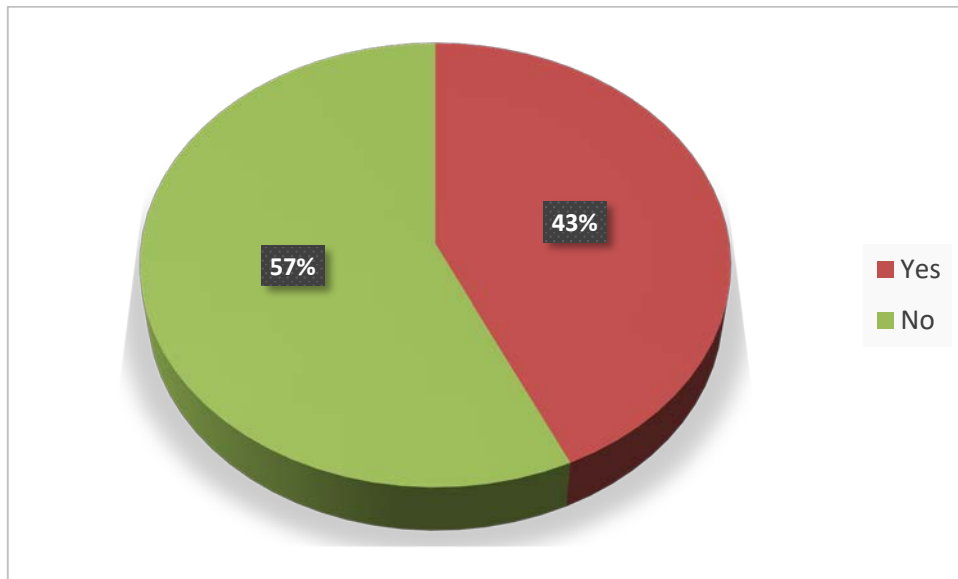
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.2. Barriers to internationalisation due to staff structure or size (%)



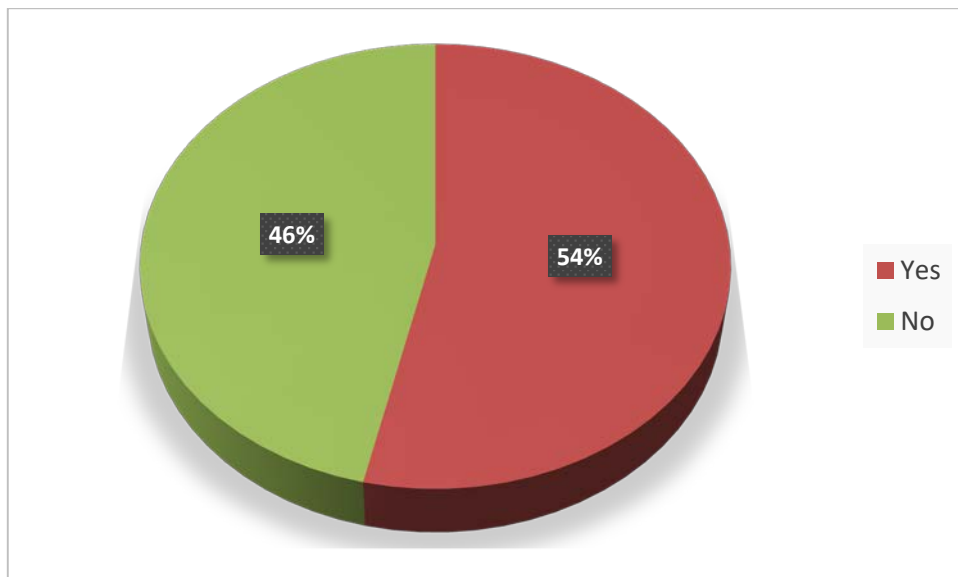
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.3. Barriers to internationalisation due to lack of skilled staff (%)



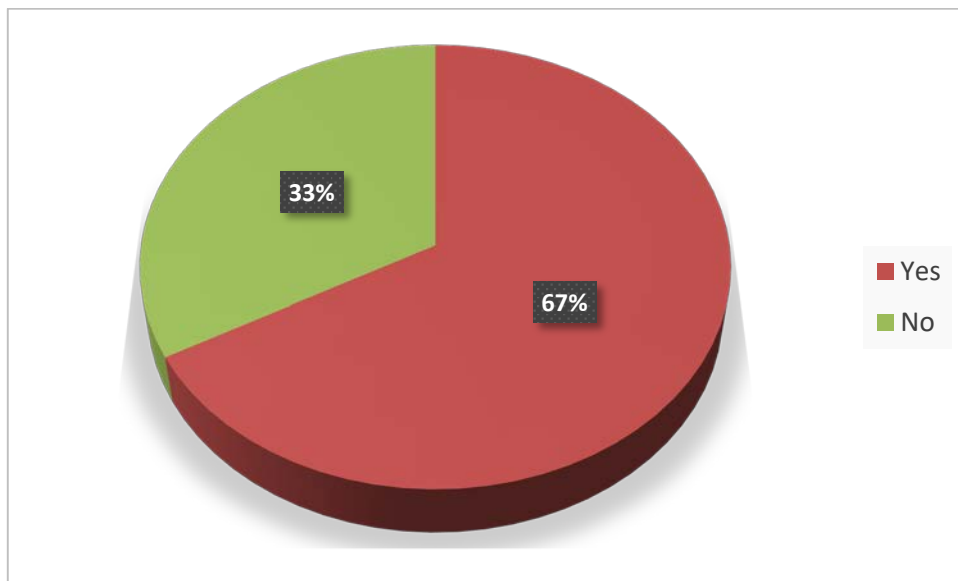
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.4. Barriers to internationalisation due to language skills (%)



Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.5. Barriers to internationalisation due to lack of funding (%)

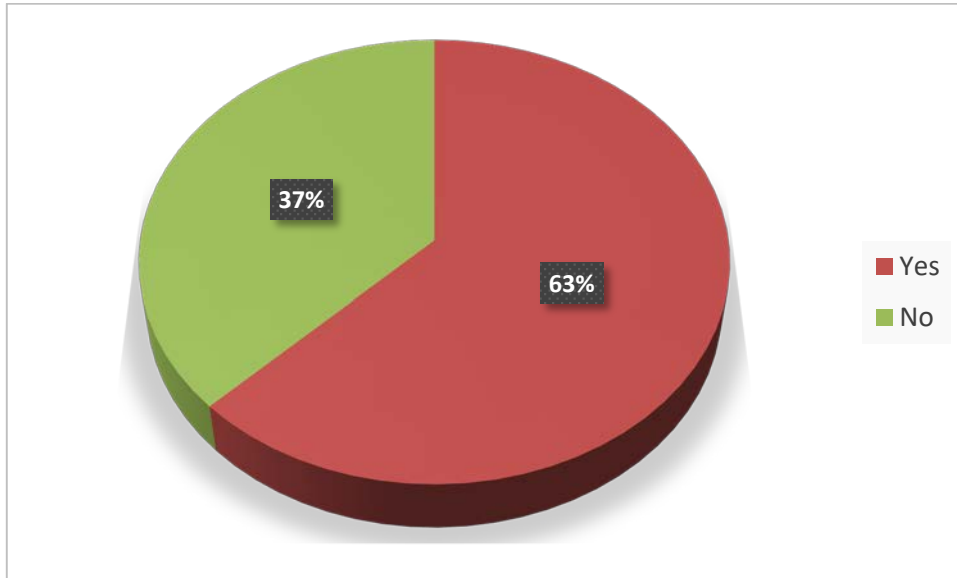


Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graphs 4.6 to 4.12 show the responses about the perceived barriers to the information and uncertainty regarding international markets. Graph 4.6 shows the perceived barriers derived from export procedures. Some 62.6% of the enterprises consider that these procedures constitute a problem for their internationalisation. Graphs 4.7 and 4.8 complement the previous graph. Some 65.8% of the enterprises consider that they do not have adequate knowledge about the regulations of foreign markets, graph 4.7. Some 65.5% of the show a lack of awareness of international trade operations, as seen in graph 4.8. Graph 4.9 and 4.10 show that almost half of the enterprises consider that they have problems related to knowledge of countries, international markets and the techniques to identify them. Specifically, 49.1% do not have appropriate information on foreign markets or countries and 51.8% do not know the techniques to identify markets to internationalise their activities. In addition, graph 4.11, 45% report having problems to identify customers in international markets. Graph 4.12 shows that most enterprises do not consider the existence of barriers to internationalisation due to higher risk of default perceived in international markets. However, 34.5% of enterprises perceived this risk as a barrier to their internationalisation.

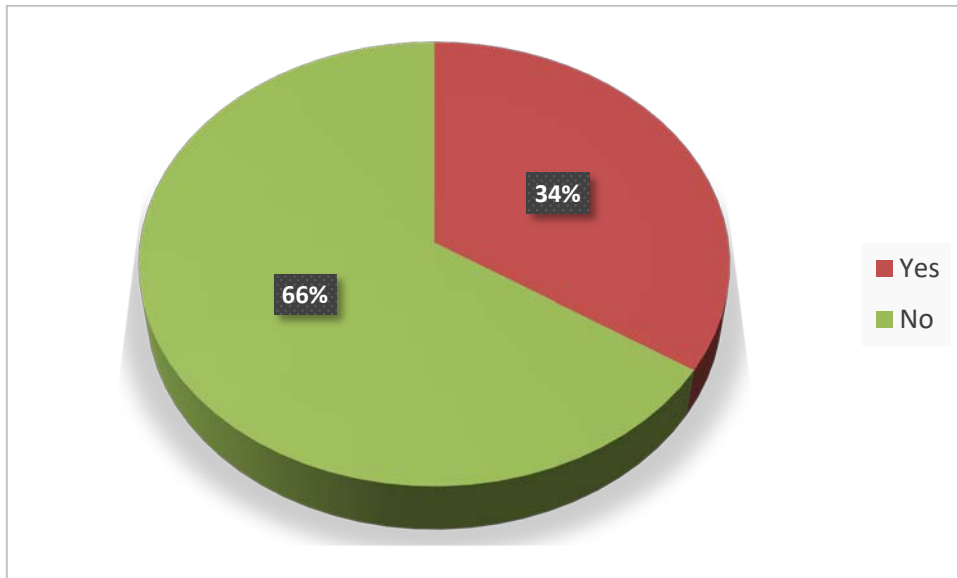
Finally, table 4.1 shows the forecast of new barriers in the near future. Some 68.1% of enterprises consider that new barriers will be created derived from environmental or social regulations. Meanwhile, 25.7% consider that new barriers derived from the implementation of new technologies will be created. Finally, 14.2% consider that new barriers will be created due to other reasons.

Graph 4.6. Barriers to internationalisation due to export procedures (%)



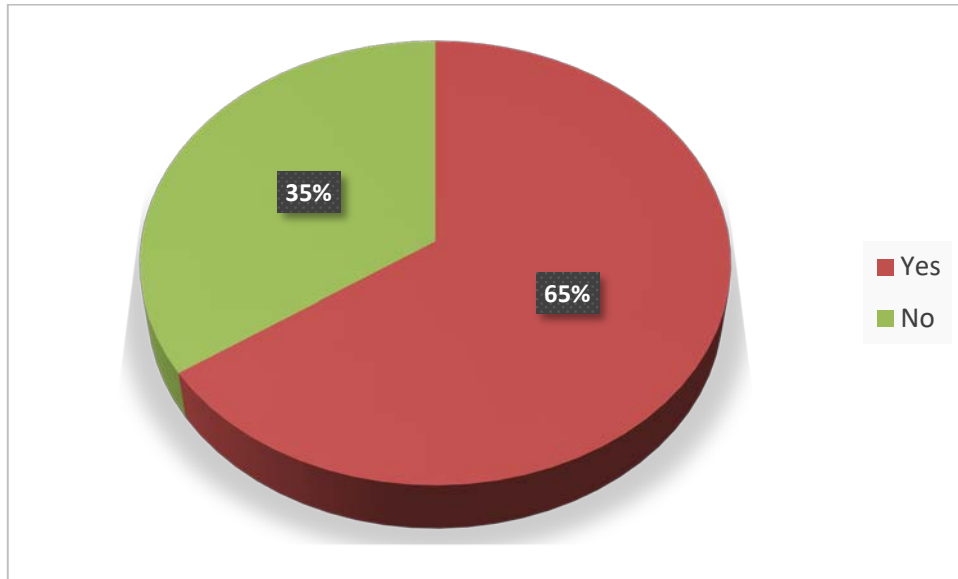
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.7. Knowledge of international markets regulations (%)



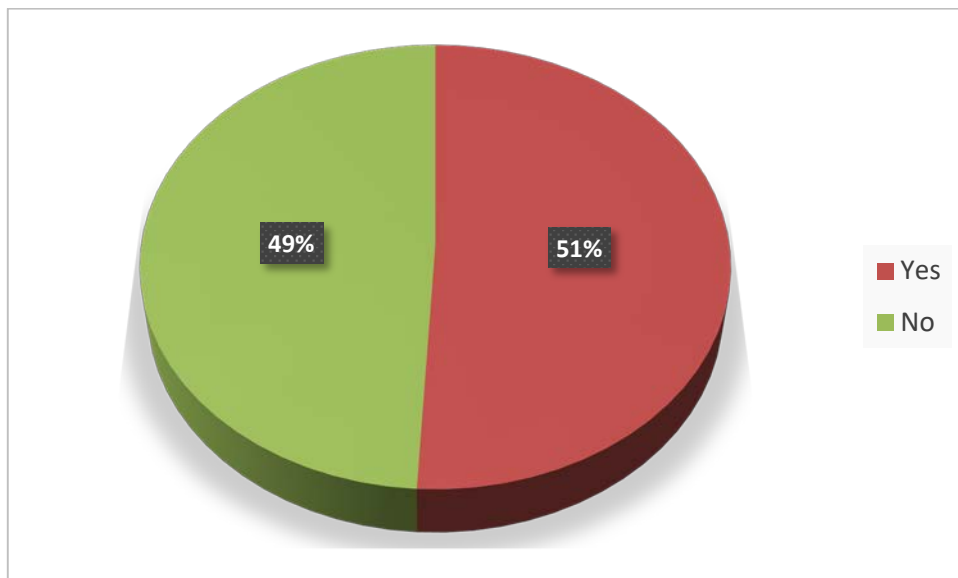
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.8. Lack of awareness of international trade operations (%)



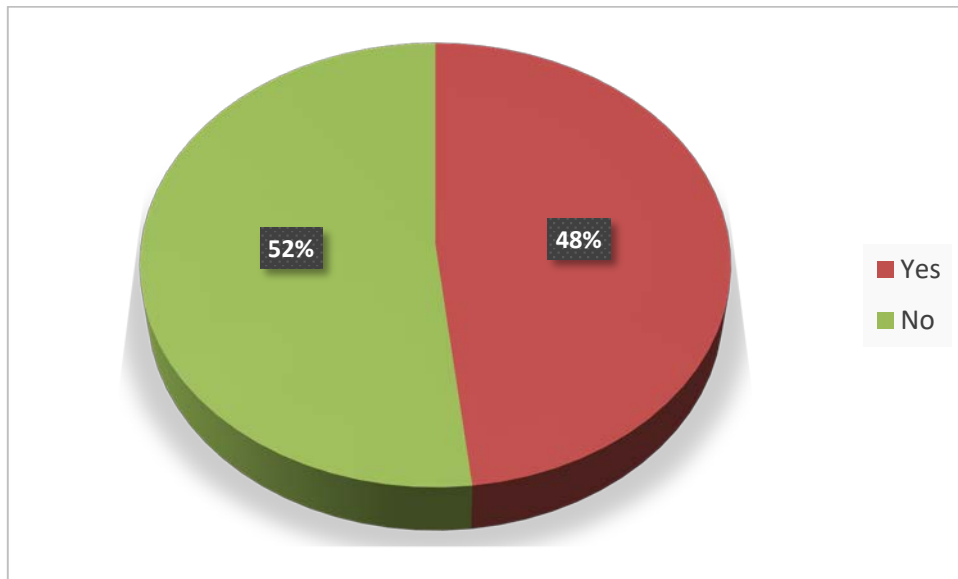
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.9. Knowledge of countries and international markets (%)



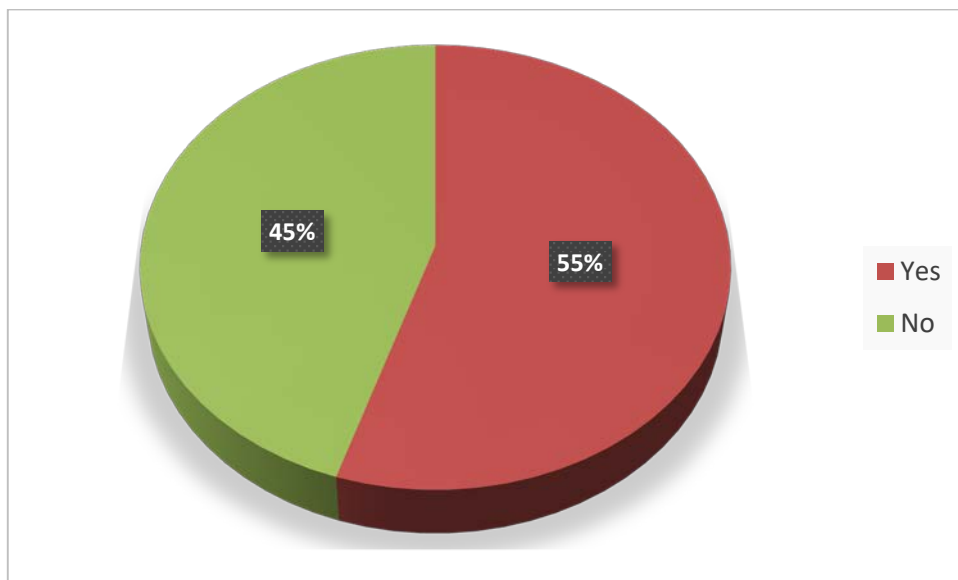
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.10. Knowledge of techniques to identify international markets (%)



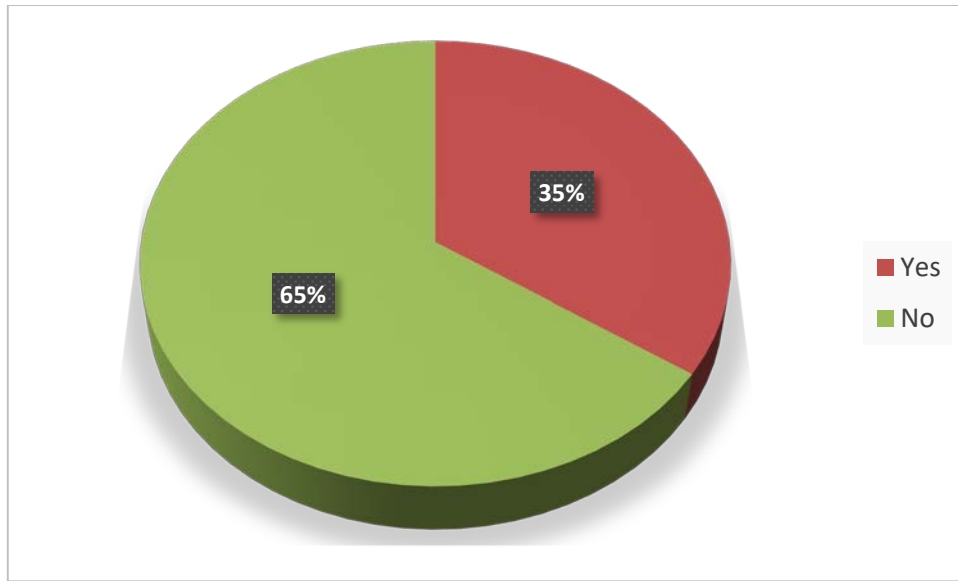
Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.11. Knowledge of techniques to find customers in international markets (%)



Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.12. Barriers to internationalisation due to higher risk of default perceived in international markets (%)



Source: Authors' elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Table 4.1. Forecast of new barriers in the near future (%)

Derived from the implementation of new technologies	25.7
Derived from environmental or social regulations	68.1
Other	14.2

Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

In summary, more than half of the enterprises surveyed stated they detected barriers to internationalisation due to or derived from:

- Predicted new environmental or social regulation in the near future (68.1%).
- Lack of funding (67%).
- Lack of knowledge about international markets regulations (65.8%).
- Lack of awareness about international trade operations (65.5%).
- Export procedures (62.6%).
- Language (53.6%).
- Lack of knowledge of the techniques to identify international markets (51.8%).
- Staff structure or size (50%).

Other barriers that affect a significant proportion of enterprises have also been identified. These barriers are due to or derived from:

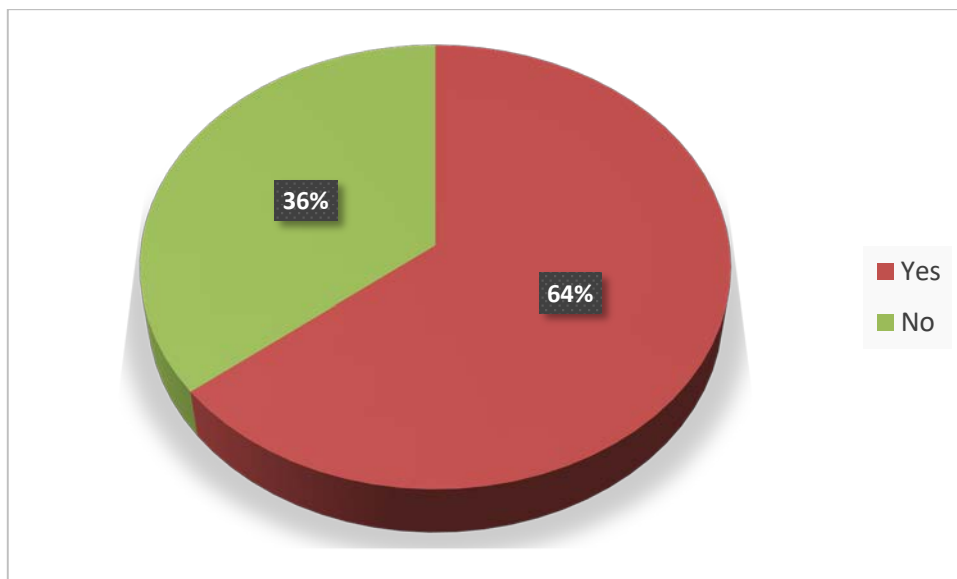
- Lack of knowledge of countries and international markets (49.1%).

- Lack of awareness of techniques to find customers in international markets (45%).
- Lack of skilled staff (43.1%).
- Higher risk of default perceived in international markets (34.5%).
- Predicted new regulation derived from the implementation of new technologies in the near future (25.7%).
- Lack of productive capacity (20.4%).

In general, these barriers coincide with those identified by the empirical literature. There are some common elements in the barriers to internationalisation perceived by SMEs, though there are differences in the intensity in which the barriers hamper SME internationalisation. However, these results should be interpreted with caution due to the small sample size and potential self-selection bias answering the survey. To improve our knowledge about the barriers to internationalisation and their effects, a comparative study with homogeneous methodology controlling for the potential biases is necessary.

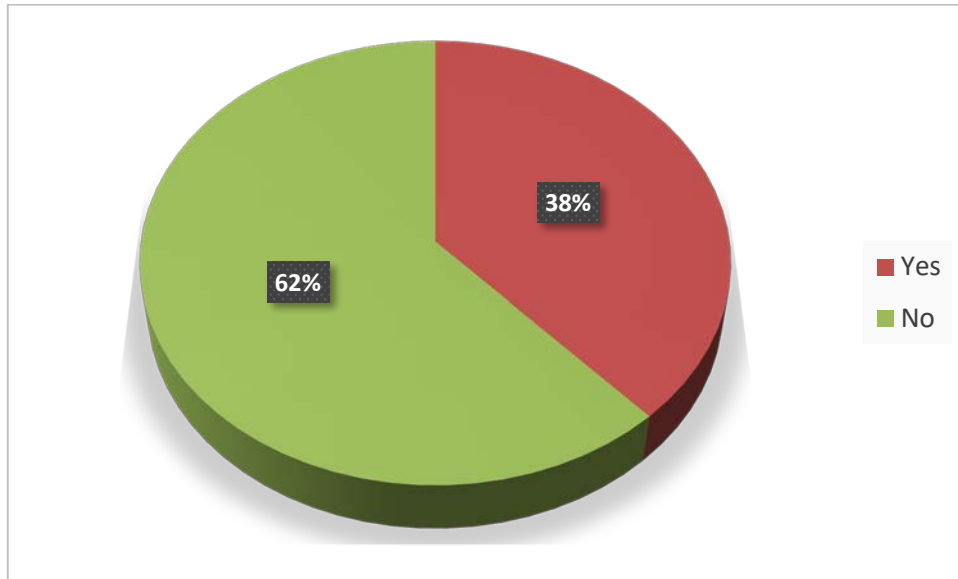
Finally, public support is one of the elements that helps overcoming the barriers to internationalisation, as has been demonstrated in the empirical literature. The survey on barriers to internationalisation conducted by the Chamber of Commerce of Cantabria (2016a) also included two questions on public support to internationalisation, graphs 4.13 and 4.14. According to their responses, the majority of SME (64.3%) receive information on internationalisation. However, at the same time, most of the enterprises (61.8%) also show their lack of knowledge of specialised public advice. This apparent contradiction could indicate either that the information that enterprises receives is not the information they need or the enterprises have problems to manage the information received. In any case, in the following section will be analysed in detail the mechanisms of support to internationalisation in Cantabria.

Graph 4.13. Receiving information on internationalisation support (%)



Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

Graph 4.14. Lack of knowledge of specialised public advice (%)



Source: Author's elaboration, using data obtained from Chamber of Commerce of Cantabria (2016a)

5. The mechanisms of support to enterprise internationalisation in Cantabria

5.1. Policies to support internationalisation in developed countries: motivation and characteristics

The promotion of internationalisation has become a topic of heightened relevance for policy-making in developed countries. This activity is broadly considered as crucial in an effort to drive economic development at global, national and regional levels. Supporting the internationalisation activities of SMEs is particularly important. As noted by a report elaborated by the OECD (2013), SMEs are much less involved in international activities than large firms, both in extensive terms (the relative number of internationalised firms) and in intensive terms (the extent to which an internationalised firm is active abroad, as well as the number of foreign markets in which firms are active). In Spain, the share of exported turnover (that is, the share of firms' turnover which is sold in foreign markets) is around 20-25% for small enterprises, around 30% for medium-sized enterprises and 40% for large enterprises. The average number of export destinations is over 20 among Spanish large enterprises, whilst it is around 10 for medium-sized enterprises and less than 10 for small enterprises. Differences as regards FDI are even larger: around 25% of Spanish large firms have foreign affiliates, but less than 10% of medium-sized enterprises and very few small enterprises do. These data, described by Navaretti *et al.* (2011), are similar to those in other EU countries.

Operating abroad requires incurring significant fixed costs to overcome the existing barriers to internationalisation, which were described in the previous sector. These fixed costs are more easily borne by large firms. By contrast, SMEs face more difficulties in overcoming these costs (such as limited resources and contacts, and lack of knowledge and information), and this hinders their participation in international activities (OECD, 2013). Nevertheless, the SMEs which are able to overcome these barriers and become internationalised are, on average, more productive, more innovative and more resilient than the rest (BIS, 2013). Studies have also proved that being internationally active is strongly related to higher turnover growth, higher employment growth and more innovation (EC, 2014).

With the aim of extending these positive results, most OECD countries have incorporated the support of internationalisation, particularly in the cases of SMEs, as an important policy priority (OECD, 2013). Policies to support SMEs internationalisation typically focus on the market failures which result in a sub-optimal level of international activity, such as information failures, knowledge spill-overs and agglomeration effects (BIS, 2013). These policies help SMEs to overcome entry barriers to foreign markets, and thus to enjoy the benefits of operating in those markets, which otherwise would be only enjoyed by a limited number of firms. Some of the policies to support internationalisation are targeted to specific groups of SMEs: sectors and regions which are considered particularly relevant or where specific needs are identified, or enterprises that are newly internationalising their activities (OECD, 2013). In most of the countries, these policies and mechanisms are developed through a well-established network of public agencies and organised private sector institutions (such as the Chambers of Commerce)

(OECD, 2009). In certain cases, the existent policies and mechanisms have been organized under the formulation of a national or regional strategy for SMEs internationalisation (OECD, 2013).

OECD (2013) classifies those policies which support SMEs internationalisation into two groups: those addressed at reducing external barriers (in particular, governmental barriers, such as tariff and non-tariff barriers) and those addressed at reducing internal barriers. In the second group, there is a wide range of policies and mechanisms. First, there are actions focused on the collection and supply of information about business opportunities and market conditions abroad: trade fairs, sector specific market analyses, offices in foreign markets, provision of contacts, etc. Second, there are actions to reduce human resource barriers (such as the lack of qualified personnel, or specific professional profiles), including assistance in training the personnel (for instance, in marketing or legal issues necessary for expansion abroad), matching services between young qualified people and businesses, and coaching programmes by a consultant or export adviser. Third, there are actions focused on providing financial support, such as the provision of export loans or export insurance.

Following an extensive study of the mechanisms existing in 16 European countries, OECD (2013) indicates that programmes to supply information about foreign markets and consultation by experts are very common: 100% and 75% of the countries under study, respectively, have implemented these kinds of programmes. Programmes of support of international activities based on trade fairs or exhibitions (100%) and, to a minor extent, foreign-market observation tours (62.5%), are also frequent. As regards human resource support, 62.5% of countries have implemented programmes focused on assistance and the training of employees. Finally, as regards actions to address financial constraints, the majority of countries have programmes of export credits (75%), whilst only a minority of them have mechanisms of direct financial support such as subsidies (18.8%) and tax incentives (18.8%). Additionally, an increasing tendency in policies to promote SMEs internationalisation in developed countries is the introduction of regional or sub-national approaches. These initiatives, particularly prevalent in certain EU countries (including Spain), consist of supporting actions tailored to the circumstances of different regions, or actions specifically focused on less developed regions.

In the European context, policies and mechanisms to increase the internationalisation of SMEs and helping them to access foreign markets are officially viewed as crucial for competitiveness, economic growth and innovation (EC, 2017). The European Commission (EC) remarks that, according to one study, the participation of SMEs in the supporting programmes that exist in the EU increased SMEs turnover in the target market by 27%, and total turnover of the firm by 11% (EC, 2014). Also, another study developed to evaluate the effectiveness of these programmes shows that 12% of participants would not have started international activities without this support; an additional 9% started international activities earlier because of the support; and an additional 36% have more international activities because of the support. These figures are even greater when considering only the so-called high-growth markets, which are subject to higher entry barriers (EC, 2011).

According to the EC (2014), the most successful mechanisms in the support of SMEs internationalisation are those focused on building capabilities inside the SME. This includes individual support and access to training and consultancy services, tailored to the specific

resources or capabilities of each, as well as the integration in networks: support networks, managed by the government or business associations, and/or cooperation networks between enterprises (clusters, business networks and exporting consortia).

Finally, the literature highlights the existence of two main obstacles which may block or slow down the success of SMEs internationalisation mechanisms (OECD, 2013): adequate screening and awareness. First, as only a limited number of firms can enter foreign markets, a screening process is required. This needs appropriate criteria to distinguish between SMEs with and without potential to succeed in foreign markets, in order to focus efforts on those with more potential. Second, and very importantly, for the effective of these programmes, it is essential that firms are aware of their existence. In each country, there are numerous support programmes, often managed by different agencies. The fragmentation may negatively affect awareness, particularly among SMEs. According to a study of the European Commission (EC, 2011) among international SMEs, in Spain, only 28% of these enterprises were aware of the public support programmes used to support enterprises' internationalisation, whilst only 7% were using them. And if this happens among international enterprises, studies show that awareness is even lower among those that are not internationally active (EC, 2014), creating a vicious circle which hinders their internationalisation. As a result of fragmentation and difficulties for awareness, some countries have created a portal to centralise the information on public support programmes to internationalisation (OECD, 2013). Also, involvement of the organised private sector, including the network of Chambers of Commerce, has proved to be useful for improving the take up rates and the success of the programmes (OECD, 2009).

5.2. Mechanisms of support to internationalisation in Cantabria: awareness, use and rating

This sub-section, first, briefly describes the main programmes and institutions which exist in Cantabria addressed at supporting internationalisation (table 5.1). Next, it describes the main results of a specific survey commissioned by the Chamber of Commerce of Cantabria, focused on the awareness, use and rating of these mechanisms according to the SMEs of the region.

In Spain, the main organisation addressed at promoting internationalisation is the Institute for Foreign Trade (in Spanish, *Instituto de Comercio Exterior* –ICEX-). ICEX is a public entity, at the national level, whose main mission is to promote internationalisation of Spanish enterprises. As observed in table 5.1, ICEX has several programmes which are of interest for the internationalisation of Cantabrian enterprises. First, ICEX *CONECTA con el Mercado*, which provides contact with the Foreign Trade Offices of Spain in other countries. Second, ICEX *CONSOLIDA*, focuses on supporting SMEs projects of internationalisation already started. Third, ICEX *FERIAS*, funds the participation of enterprises in international trade fairs. Fourth, ICEX *NEXT*, which provides technical support to enterprises which are either initiating or consolidating their international activities. Fifth, ICEX *SOURCING*, providing services of market prospection and analysis of business opportunities. Sixth, ICEX *TARGET USA*, which supports projects of internationalisation in the United States. And seventh, ICEX *CAPACITACIÓN EMPRESARIAL*, consisting of sessions of information and training about specific markets.

At the regional level, the key organism in the support of the internationalisation activities is the Corporation for the Regional Development of Cantabria (*Sociedad para el Desarrollo de Cantabria, SODERCAN*). SODERCAN is a public corporation, dependent of the regional government, whose mission is to contribute to strengthen the industrial and productive system of Cantabria. One of its objectives is, in particular, to promote and support the internationalisation of Cantabrian enterprises to foreign markets, supporting internationalisation strategies and actions. SODERCAN implements a programme of support of internationalisation plans of the enterprises of the region, which is denominated *GLOBALÍZATE*. SODERCAN also implements a specific action focused on providing support to the creation of new clusters of enterprises for internationalisation projects (*Proyecto de Cooperación Empresarial para la Internacionalización*). Additionally, SODERCAN develops a scholarship programme addressed at training young professionals in mechanisms to support business internationalisation (*Programa de becarios en el exterior*).

The third key organism in the support of internationalisation activities in Cantabria is the Chamber of Commerce of Cantabria (*Cámara de Comercio de Cantabria*). In Spain, the chambers of commerce are organisations regulated by public law, whose mission is to represent and promote the general interest of the business sector. They develop consultative functions as regards public administrations. The activities of the chambers of commerce focus particularly on the promotion of exports of the enterprises. In the case of the Chamber of Commerce of Cantabria, it develops two specific programmes. First, *Asesoramiento a PYMES*, which provides technical support to SMEs both with or without experience in exporting. And second, *Programa de Promoción de la Industria Subcontratista*, which coordinates the joint participation of subcontracting enterprises in European fairs, and disseminates demands for subcontracting.

Finally, there are other key programmes for supporting internationalisation activities in Cantabria which are developed in collaboration between two or more of the previously described organisations. In particular, the programme *Misiones comerciales*, implemented by ICEX, SODERCAN and the Chamber of Commerce, consists of the joint organisation of commercial missions in specific countries. ICEX, SODERCAN and the Chamber of Commerce develop together event and workshops on potential objective countries (*Jornadas informativas de internacionalización*). Additionally, SODERCAN and the Chamber of Commerce participate in the project European Enterprise Network, aimed at providing support to the participation in European projects, as well as information on European policies and market opportunities.

Table 5.1. Aims, responsible entities and participants in the main programmes for supporting internationalisation existing in Cantabria

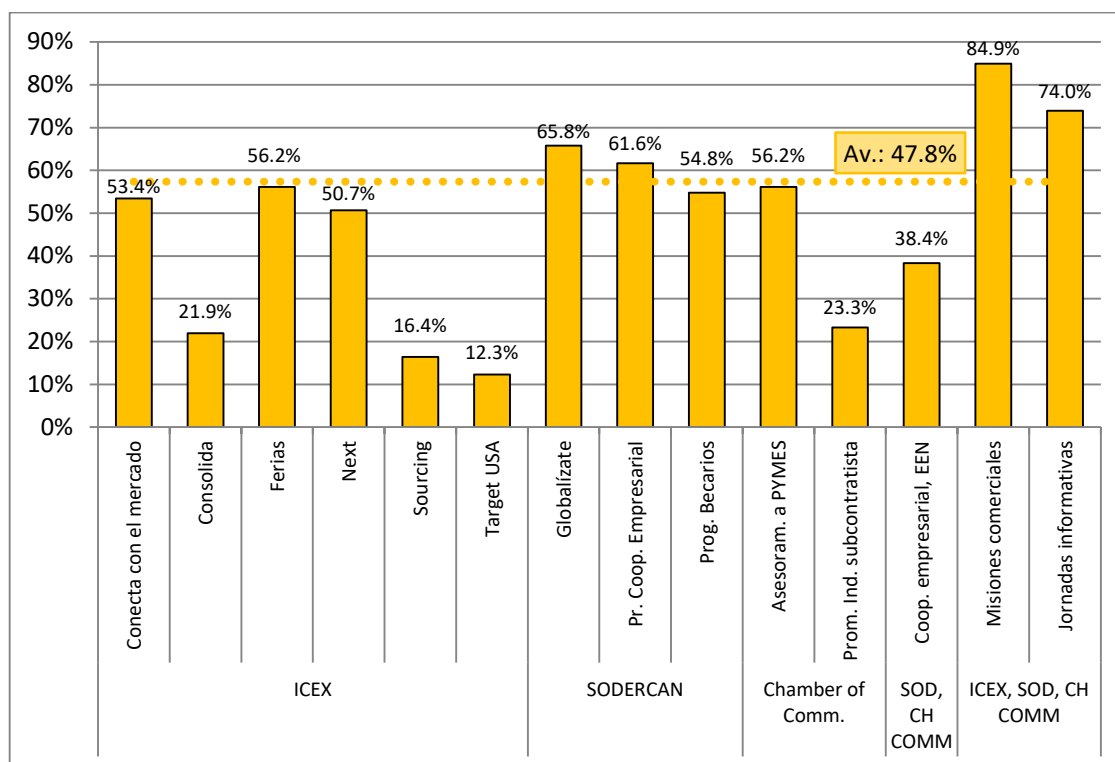
Name of the programme	Responsible entity	Aims of the programme
ICEX CONECTA con el mercado	ICEX (Spanish Institute for Foreign Trade)	- Contact with Spanish Foreign Trade Office in a specific country
ICEX CONSOLIDA	ICEX (Spanish Institute for Foreign Trade)	- Support to projects of internationalisation among SMEs (projects already started)
ICEX FERIAS	ICEX (Spanish Institute for Foreign Trade)	- Funding of participation of Spanish enterprises in international trade fairs
ICEX NEXT	ICEX (Spanish Institute for Foreign Trade)	- Technical support to enterprises for initiating international activities or for consolidating their international activities
ICEX SOURCING	ICEX (Spanish Institute for Foreign Trade)	- Market prospection and analysis of business opportunities in international markets
ICEX TARGET USA	ICEX (Spanish Institute for Foreign Trade)	- Support of SMEs in existing projects of internationalisation in the US, or to new projects in specific sectors
ICEX Capacitación Empresarial: Jornadas y seminarios	ICEX (Spanish Institute for Foreign Trade)	- Sessions on information and training about priority markets for the Spanish commercial policy
Programa de Ayudas GLOBALÍZATE	SODERCAN (Society for the Regional Development of Cantabria)	- Support to internationalisation plans
Proyecto de Cooperación Empresarial para la Internacionalización	SODERCAN (Society for the Regional Development of Cantabria)	- Support to the creation of new clusters of enterprises for internationalisation projects
Programa de becarios en el exterior	SODERCAN (Society for the Regional Development of Cantabria)	- Training /Scholarships for young professionals on the support of internationalisation

Asesoramiento a PYMES en Comercio Exterior	Chamber of Commerce of Cantabria	<ul style="list-style-type: none"> - Technical support to SMEs without experience in exporting - Technical support to SMEs with previous experience in exporting
Programa de Promoción de la Industria Subcontratista	Chamber of Commerce of Cantabria	<ul style="list-style-type: none"> - Joint participation of subcontracting enterprises in European fairs - Dissemination of demands for subcontracting
P. Cooperación Empresarial, European Enterprise Network	SODERCAN (Society for the Regional Development of Cantabria) and Chamber of Commerce of Cantabria	<ul style="list-style-type: none"> - Support to the participation in European projects - Information on European policies and market opportunities
Programa de Promoción Internacional – Misiones Comerciales	ICEX, SODERCAN and Chamber of Commerce of Cantabria	<ul style="list-style-type: none"> - Joint organisation of commercial missions in specific countries
Jornadas informativas de internacionalización	ICEX, SODERCAN and Chamber of Commerce of Cantabria	<ul style="list-style-type: none"> - Organisation of events and workshops on potential objective countries

After the previous description of the existent programmes for supporting SME internationalisation in Cantabria, the rest of this section focuses on analysing to what extent the SMEs of the region are aware of these mechanisms, use them and appreciate them. To this aim, we use the results of the Survey on the awareness and rating of the programmes to support internationalisation (Chamber of Commerce of Cantabria, 2016b). This survey was developed by the Chamber of Commerce of the region, with the specific objective of getting information about these issues among the SMEs. The sample of the survey is composed by SMEs of the region, derived from a list of enterprises who have relationships with the Chamber of Commerce. The rate of response was around 10%. This implies that the results are representative of just a part of the SMEs existing in the region, where those more active and positive in their participation in the existent programmes and mechanisms may be probably overrepresented.

In the first place, graph 5.1 shows the percentage of the SMEs in the sample who are aware of each of the programmes. As observed, average awareness of these mechanisms is not high (47.8%). This figure is higher than the average awareness of these programmes in Spain reported by the European Commission (EC, 2011). However, as previously noted, it should be taken into account that the design of the surveys and the sample is different, and this makes the comparison difficult. The programmes with the highest percentages of awareness are those developed jointly by ICEX, SODERCAN and the Chamber of Commerce: *Misiones comerciales* (84.9%) and *Jornadas informativas* (74%). This reflects the fact that the collaboration of different organisms may be useful when seeking to increase awareness of the programmes. Among other mechanisms, programmes developed by SODERCAN show, in general terms, rather high percentages of awareness: *“Globalízate”* (65.8%), *“Programa de Cooperación Empresarial”* (61.6%) and *“Programa de Becarios en el Exterior”* (54.8%). As regards the programmes of the Chamber of Commerce, *“Programa de Asesoramiento a PYMES”* also show a quite high percentage of awareness (56.2%). In the case of ICEX, the programmes with also quite high awareness among SMEs of the region are *“Ferias”* (56.2%), *“Conecta con el Mercado”* (53.4%) and *“NEXT”* (50.7%). In total, in 9 of the 14 programmes under evaluation, awareness is over 50%. In the other five programmes, awareness is rather low. These are programmes which are oriented to a very specific profile of enterprises (*“European Enterprise Network”*, 38.4%; *“Promoción de la Industria Subcontratista”*, 23.3%; *“TARGET USA”*, 12.3%), or certain programmes which are very new (*“CONSOLIDATE”*, 21.9%, and *“SOURCING”*, 16.4%, both starting in 2014).

Graph 5.1. Awareness of the mechanisms of support to internationalisation existing in Cantabria among the SMEs (%)



Source: Authors' calculation, using data obtained from Chamber of Commerce of Cantabria (2016b)

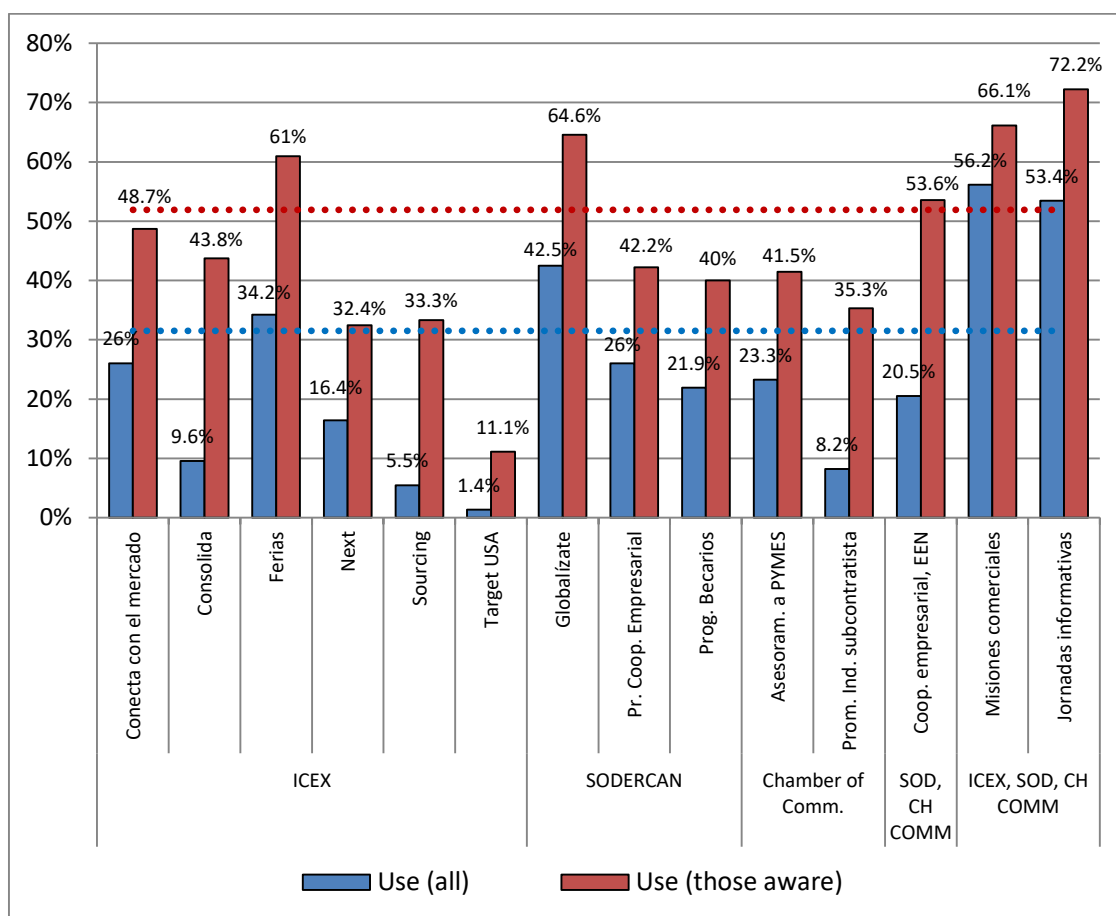
Next, graph 5.2 shows the percentages of use of the existing mechanisms, both among all the sample of SMEs (in blue colour) and among only those who are aware of each of them (in red colour).

As could be expected, the general use of the programmes is narrowly related to their awareness: the more a programme is known, the more it is expected to be used (and vice-versa). This close relationship can be observed in graph 5.3. The programmes used by more than 50% of the sample of SMEs are "Misiones comerciales" (56.2%) and "Jornadas informativas" (53.4%), developed jointly by ICEX, SODERCAN and the Chamber of Commerce, and whose percentages of awareness were the highest. The use of "GLOBALÍZATE", developed by SODERCAN, is also quite high (42.5%). The use of the programme "FERIAS", developed by ICEX, is over 30% (34.2%). Next, there are several programmes where awareness was around the average, and so are their percentages of use: "Conecta con el Mercado" (26%), "Cooperación empresarial" (26%), "Asesoramiento a PYMES" (23.3%) and "Programa de Becarios en el Exterior" (21.9%). The use of the programmes "Cooperación empresarial, European Enterprise Network" (20.5%) and "NEXT" (16.4%) is lower. Finally, the use of the four programmes where awareness was low is also very low: "CONSOLIDA" (9.6%), "Promoción de la Industria Subcontratista" (8.2%), "SOURCING" (5.5%) and "TARGET USA" (1.4%).

Awareness is not only related to the use of the programmes among all the SMEs. May be more strikingly, it is also quite strongly related to the use of the programmes once considering

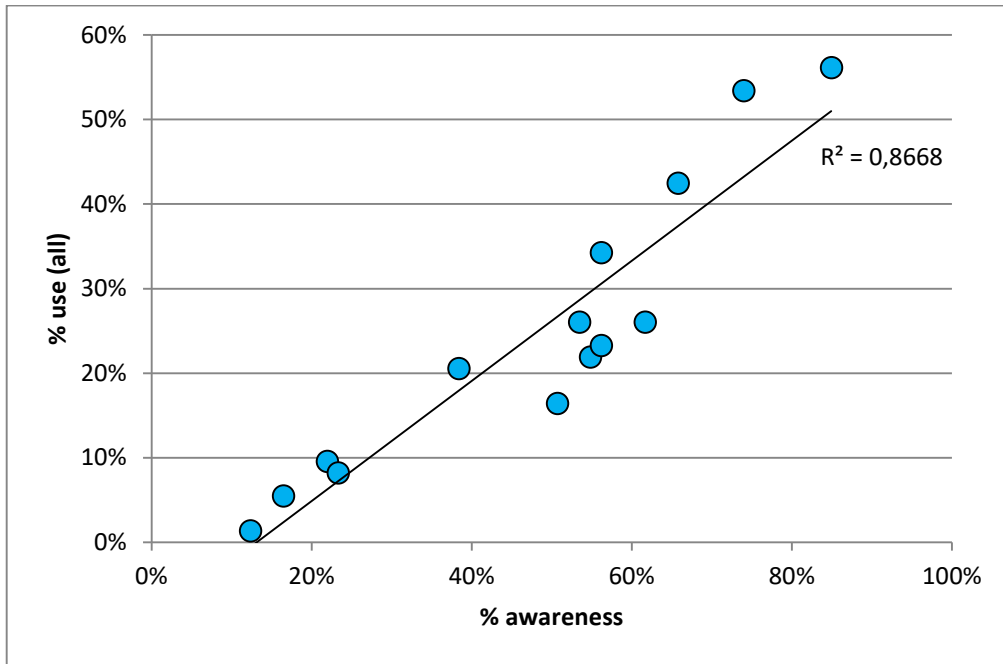
only the SMEs who are aware of each of them (graph 5.4). That is, the more a programme is known, the more it is used even among those who know it, and vice-versa. This indicates the existence of spill-over effects as regards the awareness and use of the programmes. Looking case by case, the programmes with highest percentages of use among those who are aware are, again, “*Jornadas informativas*” (72.2%) and “*Misiones comerciales*” (66.1%). Next, other programmes with a relatively high use among those aware are “*GLOBALÍZATE*” (64.6%) and “*FERIAS*” (61%), followed by “*Cooperación empresarial, European Enterprise Network*” (53.6%) and “*Conecta con el Mercado*” (48.7%). There are other four programmes whose percentage of use among those aware is below the average, albeit awareness was over the average: “*Cooperación empresarial*” (42.2%), “*Asesoramiento a PYMES*” (41.5%), “*Programa de Becarios en el Exterior*” (40%) and “*NEXT*” (32.4%). For other three programmes, awareness was low, although the use among those aware is closer to the average: “*CONSOLIDIDA*” (43.8%), “*Promoción de la industria subcontratista*” (35.3%) and “*SOURCING*” (33.3%). Finally, the use of “*TARGET USA*” (11.1%) is very low even among those aware of the programme.

Graph 5.2. Use of the mechanisms of support to internationalisation existing in Cantabria (%): all the SMEs and those aware of each mechanism



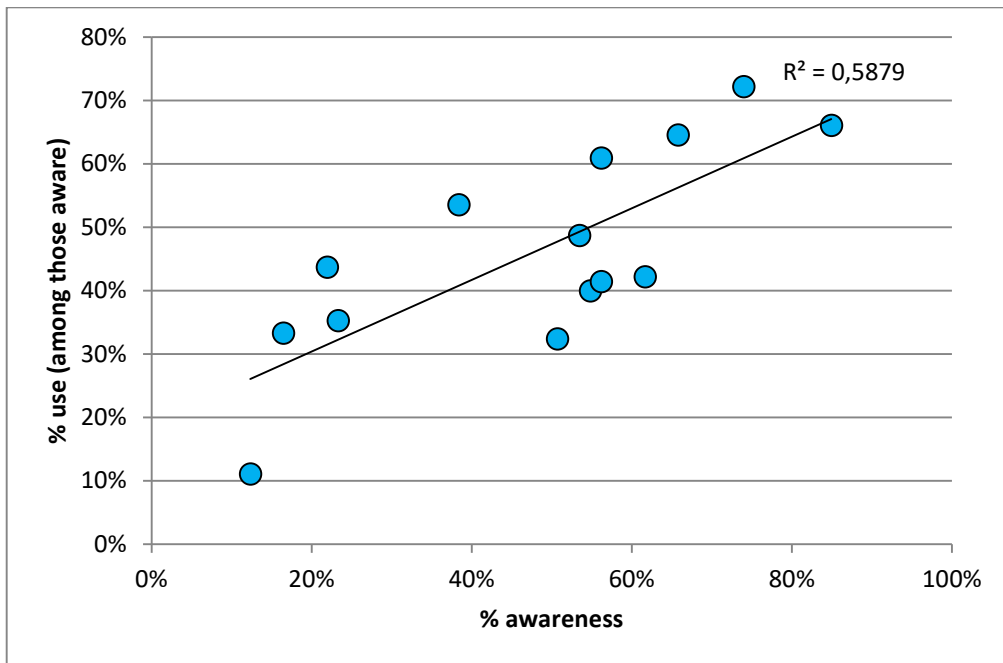
Source: Authors’ calculation, using data obtained from Chamber of Commerce of Cantabria (2016b)

Graph 5.3. Awareness (%) and use (%) among all the SMEs) of the mechanisms of support to internationalisation existing in Cantabria



Source: Author's calculation, using data obtained from Chamber of Commerce of Cantabria (2016b)

Graph 5.4. Awareness (%) and use (% among those aware) of the mechanisms of support to internationalisation existing in Cantabria

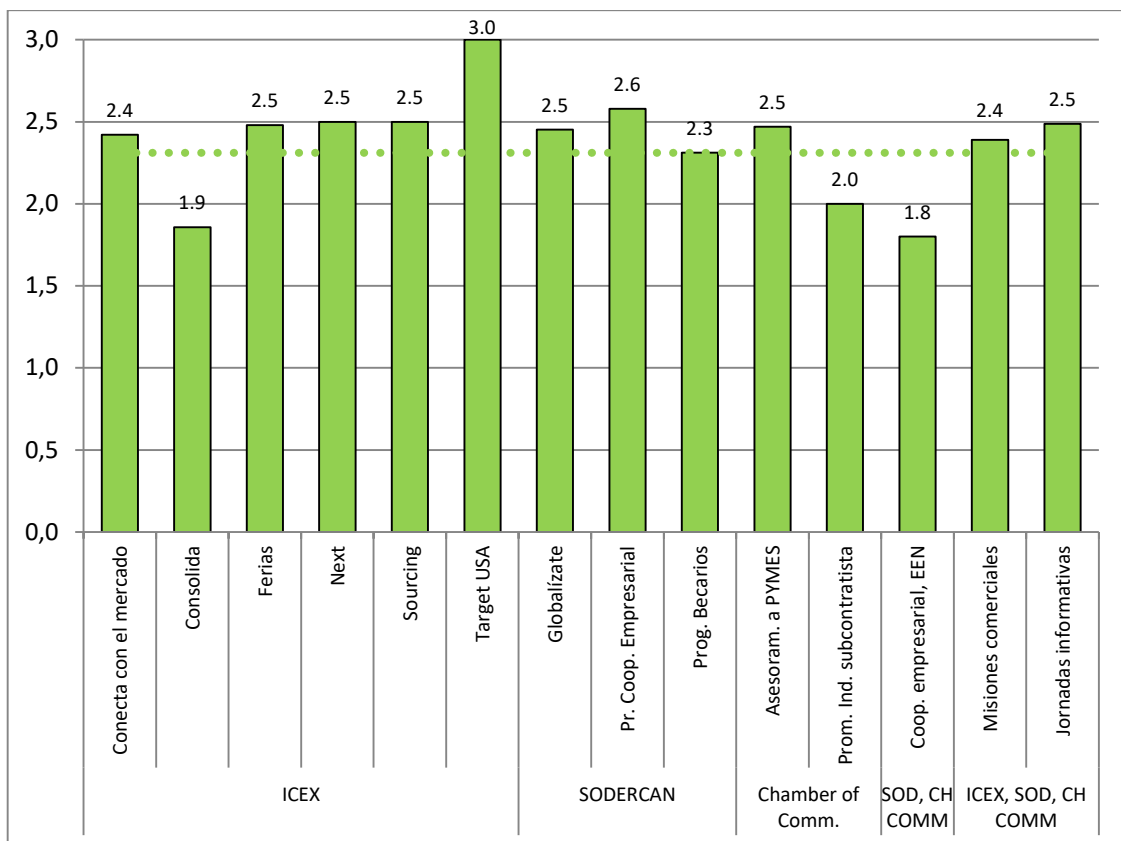


Source: Author's calculation, using data obtained from Chamber of Commerce of Cantabria (2016b)

To complete the section, graph 5.5 shows the average rating given to each program by those SMEs that have used it (the participants). The average rating of the programmes by the participants is quite high: 2.31 over 3. This indicates a general high level of satisfaction among the participants in the programmes who provided information to the survey. Nevertheless, this information does not allow obtaining conclusions about how the programmes are viewed by SMEs without such circumstances.

SMEs participating in the programmes show a very high rating of 11 of the 14 programmes under evaluation: “TARGET USA” (3), “Cooperación empresarial” (2.6), “FERIAS” (2.5), “NEXT” (2.5), “SOURCING” (2.5), “GLOBALÍZATE” (2.5), “Asesoramiento a PYMES” (2.5), “Jornadas informativas” (2.5), “Conecta con el mercado”, “Misiones comerciales” (2.4) and “Programa de Becarios en el Exterior” (2.3). By contrast, there are three programmes where ratings are not so satisfactory: “Cooperación empresarial, European Enterprise Network” (1.8), “CONSOLIDA” (1.9) and “Promoción de la Industria Subcontratista” (2). These results indicate that, on the one hand, efforts are needed to improve satisfaction of the participants in these three specific programs. On the other hand, and more generally and importantly, efforts should focus not just in increasing satisfaction of the SMEs who participate in the programmes, but especially on increasing the proportion of SMEs who participate in them and in the internationalisation activities around those programmes.

Graph 5.5. Rating (0-3) of the mechanisms of support to internationalisation existing in Cantabria among the SMEs (%)



Source: Authors' calculation, using data obtained from Chamber of Commerce of Cantabria (2016b)

6. Conclusions and Future directions

This report has provided a comparative analysis of the internationalisation of enterprises in Cantabria, with a particular focus on the SMEs, as well as an analysis of the existent barriers to SME internationalisation and the mechanisms to support their internationalisation.

The analysis has detected that the internationalisation of the enterprises of Cantabria is significantly affected by the productive and business characteristics of the region. Cantabria is a small region, which represents about 1% of the Spanish GDP, and about 0.1% of the EU GDP. Its GDP per capita is slightly lower than the Spanish and quite lower than the EU-28 average. The region has a moderate specialisation in human capital and low specialisation in innovation. The business structure is, in comparative terms, biased towards Micro enterprises, whilst it faces a lack of Small and Medium enterprises.

As regards the internationalisation of the economy, Cantabria is a much less open economy, in terms of international trade, than the groups of reference for the analysis. The trade openness ratio in Cantabria is 33.1%, while it represents 51.1% in the Close Regions, 53.4% in the Similar Regions, 63.2% in Spain and 84.7% in the EU. In addition, Cantabria has experienced a process of divergence with all the groups of reference in terms of the openness of its economy. This process has been conditioned by the economic crisis, although it has its roots before. Since 2009, the previously existent trade deficit has disappeared. In 2016, imports were, as a percentage of GDP, slightly below the level of 2002, whilst exports were slightly over it. In all the other groups of relevance for the analysis, the weight of imports in the GDP has increased during these years, whilst that of exports has boosted considerably.

The international trade in Cantabria is characterised by an intense concentration in a few sectors and a small number of enterprises. The 10 most exporting enterprises represent more than 50% of total exports in the region. Only 3.1% of all enterprises in Cantabria are exporter enterprises (in Spain, 4.6%). The difference between the region and the national average has become even bigger in the last years. Intermediate goods dominate the international trade in Cantabria. The most relevant sectors in terms of international trade are manufactures of motor vehicles, basic metals, chemical products, food products, fabricated metals, rubber and plastic, machinery and equipment and electrical equipment. These eight sectors represent 80% of exports and 66% of imports in the region. Cantabria shows a pattern of high presence of intra-industrial trade, particularly concentrated in sectors with lower technological intensity than what is the usual pattern in develop regions and countries.

In geographical terms, the international trade in Cantabria is oriented towards the EU-28: more than two thirds of the regional trade goes to or comes from the EU, whilst the four largest EU countries (Germany, France, United Kingdom and Italy) are the main four trade partners of the region. At a great distance, the trade with America and Asia is more relevant than that with Africa and Oceania. The most used mode of transport in the international trade in Cantabria is the road transport, followed, at a great distance, by the maritime transport.

In the other side of the internationalisation process, the international investment, Cantabria is characterized by very high peaks and discontinuities as regards outward flows. This is explained by the clear dominance of flows from a large multinational such as Banco Santander.

On the contrary, the business structure characterized by the high presence of micro enterprises harms the capacity to undertake investment abroad by most of the enterprises in Cantabria. In terms of inward flows, Cantabria receives very little investment from foreign enterprises, in comparison with the regions of reference.

Given the previous characteristics of the economy of Cantabria and the internationalisation of its enterprises, the analysis of the barriers to SME internationalisation is a key issue of interest. To identify these barriers, the Chamber of Commerce of Cantabria conducted a survey answered by 113 enterprises. More than half of the enterprises of the sample identified barriers to their internationalisation derived from predicted new environmental or social regulation in the near future, lack of funding, lack of knowledge about international markets regulations, lack of awareness about international trade operations, export procedures, language, lack of knowledge of the techniques to identify international markets, and staff structure or size. Other barriers were identified by between 20 and 50% of the enterprises: lack of knowledge of countries and international markets, lack of awareness of techniques to find customers in international markets, lack of skilled staff, higher risk of default perceived in international markets, predicted new regulation derived from the implementation of new technologies in the near future, and lack of productive capacity. The barriers to internationalisation identified in Cantabria coincide, in general terms, with those identified by the empirical literature in other countries and regions. However, there are differences in the intensity which these barriers hamper SME internationalisation in Cantabria.

The knowledge of the barriers to SME internationalisation allows the institutions and governments to improve their public policies to support the internationalisation. In particular, SMEs need specific support to address internationalisation process, due to their limited resources, knowledge and information about foreign markets. A survey by the Chamber of Commerce evaluates the views of the enterprises of the region on 14 programmes to support internationalisation implemented by the three main organisms on this issue: ICEX, SODERCAN and the Chamber of Commerce. Among the enterprises participating in the survey, awareness of the existent programmes is relatively high: for 9 of the 14 programmes, awareness is over 50%. In general, the use of the programmes is strongly related to their awareness. Finally, the participants of the programmes usually show a very high level of satisfaction with them.

Nevertheless, the results on the evaluation of the barriers to internationalisation and the mechanisms of support to overcome them should be interpreted with caution. It is remarkable that, on the one hand, data at the macro level show significant problems in the region as regards internationalisation: clearly insufficient, and quite stagnant levels of trade openness and foreign direct investment (in comparison with the regions of reference), a very low number of internationalised enterprises, and a concentration on activities and countries which are characterized by a relatively low growth potential. On the other hand, when evaluating the results at the micro level, the surveyed enterprises show rather positive results: clear knowledge of the barriers, and quite high levels of awareness, use and rating of the existent mechanisms of support to internationalisation. The explanation of this contradictory evidence is the strong self-selection derived from the characteristics of the sample obtained in the surveys available. These surveys are representative of a portion of the enterprises in Cantabria, which are active, and generally successful, in the process of internationalisation. However, the objectives should be,

first, to know more about these successful cases. But also, as an additional aim, to incorporate more SMEs into a successful circle of international activity, which is at present the main problem of the economy of Cantabria on this issue.

In order to contribute to both objectives, further knowledge is needed on the barriers to SME internationalisation in the economy of Cantabria and the impact of the programmes to support internationalisation. In particular, it is necessary:

- To conduct a cross regional survey, with homogeneous methodology, which allows performing comparative analysis of firm characteristics, internationalisation characteristics, barriers perceived and factors to facilitate internationalisation.
- To perform a comparative study, specifically focused on Cantabria, using the data derived from this survey.
- To adopt a systematic framework for evaluating the policies and programmes implemented in support of internationalisation, in order to identify best practices and improve the support for the internationalisation.
- To develop experimental schemes for the new supporting programmes, in order to improve the knowledge of their real impact before and during their implementation.

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