

Available online at www.sciencedirect.com**ScienceDirect**

Procedia - Social and Behavioral Sciences 95 (2013) 372 – 381

Procedia
 Social and Behavioral Sciences

5th International Conference on Corpus Linguistics (CILC2013)

Quantifiers in a Spanish and German Comparable Corpus: A Contrastive Study of Economic Texts in On-line Media

Ana Medina Reguera*, Alice Stender

University Pablo de Olavide, Facultad de Humanidades, Dpto. de Filología y Traducción, Carretera de Utrera Km. 1, Seville 41013, Spain

Abstract

This paper explores the use of quantifiers in economic texts in a comparable German-Spanish corpus. First, previous quantification studies were reviewed in order to acquire a valid classification for quantifiers in both languages. Secondly, we compiled a comparable corpus of sixty specialized on-line newspaper articles (*CrisCorp*). This study also falls within the studies with ‘concurrent corpora’, as the assembled texts were written on the same date and are dealing with the same topic, the international financial crisis. Finally, we compared our tagged quantifiers and found quantitative and qualitative differences in our data and concerning partitives, comparisons, abbreviations, composition, vagueness and gradation.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](#).
 Selection and peer-review under responsibility of CILC2013.

Keywords: quantifiers; comparable corpus; contrastive study; economic language; Spanish; German

1. Introduction

Numerals are often associated with economic texts, but languages have many more ways to express quantification. As Lavric (2001: 226) puts it, “[...] en ninguna de las demás especialidades, los nombres y verbos de aumento y disminución desempeñan un papel tan fundamental como en el lenguaje económico” [our translation: ‘In no other specialized area do nouns and verbs of increase and decrease play such a fundamental role as in economic language’]. Quantitative expressions enrich the economic discourse, such as quantitative adverbs, adjectives, substantives, determiners or quantifiers. In the following we will see several definitions of quantifiers offered by German and Spanish authors. Later, we will show examples from our corpus, CrisCorp, a comparable and concurrent corpus. It is a prototypical bilingual comparable corpus because it brings together pairs of the same

* Corresponding author. Tel. +34 954349836; Fax: +34 954349818
 E-mail address: ammedreg@upo.es

economic news in specialized newspapers with the financial world crisis as their central topic. The term ‘concurrent’ is used by some corpus linguists (Maia 2003, Kenning 2010) for collections of texts that deal with the same subject and are sampled from different newspapers, and whose publication date is usually important. Examples of newspaper corpora are corpora of war reports, football during the World Cup, political texts during election campaigns or corpora of individual journalists to compare journalism styles (Maia 2003: 4). We concentrate on producing a small corpus in a specific domain of very similar texts at the same level of specialization (see section 4 in this paper). For further information about other possibilities offered by CrisCorp in terms of contrastive analysis (for instance economic metaphors or sentence length) and terminology extraction, see Medina Reguera and Stender (2012).

2. Quantifiers and quantitative expressions

It is difficult to establish exactly what a quantifier is (cuantificador in Spanish and Quantor or Quantifikator in German), because they may be ascribed to a wide range of grammatical categories. Linguists have not yet reached a consensus as to which kind of words quantifiers are, and there is no general agreement in their classification. Indeed, words such as demasiado, menos, mucho or tanto belong to several word classes and are not easily categorized in one single classification. Leonetti (2007: 11) states that “[...] las palabras que hoy se denominan cuantificadores son, para los gramáticos clásicos, adjetivos, pronombres o adverbios” [our translation: ‘The words we call quantifiers today, were, for the classical grammarians adjectives, pronouns or adverbs’]. Labrador de la Cruz (2003) distinguishes between precise, imprecise and comparative quantifiers. Kirchner (2000) summarizes several Spanish grammars and concludes that quantifiers comprise adjectives, pronouns, definite articles, numerals and other lexical items that may, in some way, express quantity (e.g., indefinite plurality [millones/ Millionen/ ‘millions’] or definite plurals [dos millones de euros/ zwei Millionen Euro/ ‘two million Euros’]). Sánchez (1999) refers to proper quantifiers, explicitly denoting quantity, and to those that implicitly quantify but do not point to a specific amount, although they actually give information about quantifiable elements.

Quantifiers are not only word classes, but also semantic interpretations. Expressions that, strictly speaking, are not quantifiers may work as such in economic texts. For example, a la baja in recalificación a la baja (‘downgrading of the reclassification’) is not an exact quantifier, but it expresses the magnitude of the noun it modifies. In this case a la baja nuances the concept of recalificación (furthermore, in Spanish, the prefix *re-* in itself indicates a gradation, as Wagner states in 1989). Meilán (1998: 64) describes nouns that work as adverbial complements of quantity by indicating a degree of maximum quantity, such as *mogollón* (‘loads’), *horrores* (‘enormous amount’) or *la tira de* (‘loads of’). These examples do not usually show in formal written language, but they may be used in journalistic texts to attract the readers’ attention with striking headlines.

Lamíquiz (1991: 20) does not base the notion of concept on something concrete, but on an agreed and normalized objectivity that is both common and habitual for the speakers of a language. In his approach, a concept (a lexematic unit) cannot be quantified, as it has parameters of quality (according to Lamíquiz, quality exists or does not exist; it is there or not) and not quantity. Nonetheless, a concept can undergo a linguistic formalization or, to put it in other words, be gradually modified and, therefore, be quantified. Linguistics usually focuses on quality, while in the hard sciences quantities need to be categorical. Even when quality can be verified, it is based mainly on the knowledge and the perception of speakers and thus it is not reliable, since speakers may have different opinions. What Lamíquiz (1991), Sánchez (2006) and Leonetti (2007) agree upon is that defining and classifying quantifiers is a very complex endeavor. Table 1 offers examples from our corpus CrisCorp following Sánchez’s (1999) distinction between proper quantifiers and table 2 shows presuppositional quantifiers.

Table 1. Proper quantifiers from CrisCorp classified according to Sánchez (1999: 1036ff).

Proper Quantifiers		Sánchez	CrisCorp	
			Spanish	German
Numeral	Cardinal	uno, dos, mil, ...	menos de <i>tres</i> horas	von <i>vier</i> Prozent
	Ordinal	primero, décimo, ...	el <i>primero</i> en pedir ayudas	das <i>erste</i> Mal, am <i>zweiten</i> Tag in Folge
	Partitive	mitad, tercio, ...	Un <i>cuarto</i> de punto	Die <i>Hälfte</i> ihres

Proper Quantifiers		Sánchez	CrisCorp	
			Spanish	German
Indefinite	Multiplicative	doble, triple,...	la <i>triple A</i>	Marktwerts, Zweckgesellschaften sind gleich <i>doppelt</i> [...] betroffen, mit ihren <i>jeweiligen</i> internationalen Partnerbehörden
	Distributive	Sendos	No hay ejemplos de <i>sendos</i> en CrisCorp	mit ihren <i>jeweiligen</i> internationalen Partnerbehörden
	Universal	todo, cada, cada uno, ambos, cualquiera	para <i>todo</i> el mundo, cinco de <i>cada</i> lado, un 2,15% <i>cada</i> <i>uno</i> , <i>ambas</i> cámaras, <i>cualquier</i> barrera,	<i>alle</i> ihm zur Verfügung stehenden Mittel, <i>beide</i> Kammern,
	Non universal	algo, alguien, uno, alguno	como <i>algo</i> puntual, alguien (no hay), <i>uno</i> de los peores, <i>algunos</i> inversores	legten vorbörslich <i>etwas</i> zu, <i>jeder</i> wartet <i>irgendwie</i> darauf,
	Affirmative	varios, pocos, mucho, bastante, demasiado, nada	<i>varios</i> analistas, <i>pocos</i> (no hay), <i>bastante</i> negativos, han alentado <i>demasiado</i> el ánimo, han sido <i>nada</i> positivas	Notenbanken <i>mehrerer</i> Länder, <i>wenig</i> Vertrauen, so <i>viel</i> Vermögen, <i>zu viel</i> Regulierung, <i>keine</i> Jobs mehr
	Negative	nadie, ninguno, alguno	<i>nadie</i> quiere volver al comunismo, <i>ninguno</i> (no hay), <i>alguno</i> (no hay)	Thain werde <i>niemand</i> mehr glauben, so recht weiß am frühen Morgen noch <i>keiner</i> auf <i>mehr als</i> 400 Mrd. Dollar, <i>weniger als</i> zehn Mill. Euro, <i>ebenso</i> wie die Deutsche Bank
Graded	Comparative	más, menos, tanto	<i>más</i> de lo que tenía previsto, quedan <i>menos</i> de tres, <i>tanto</i> común como preferente	<i>mehr als</i> 400 Mrd. Dollar, <i>weniger als</i> zehn Mill. Euro, <i>ebenso</i> wie die Deutsche Bank
	Proportional	algo, (un) poco, mucho, bastante, demasiado, todo, nada	<i>algo</i> puntual, por <i>poco</i> más de, <i>mucho</i> recelo, <i>bastante</i> negativos, han pesado <i>demasiado</i> en el parqué, a <i>todo</i> tipo de bancos, ha resultado <i>nada</i> positivo	eine gewisse Beruhigung am Markt, <i>ausreichend</i> Kapital, schlimm <i>genug</i> , <i>zu</i> viel Regulierung, sie werde <i>alles</i> tun, daran habe sich <i>nichts</i> geändert,

Table 2: Presuppositional quantifiers from CrisCorp classified according to Sánchez (1999: 1036ff).

Presuppositional Quantifiers		CrisCorp	
	Sánchez	Spanish	German
Inclusive	también, incluso, hasta, tampoco, ni siquiera	se extiende <i>también</i> a la temporada, <i>incluso</i> de mañana, <i>desde</i> el BCE hasta la FED, <i>tampoco</i> ha resultado nada positivo, ni siquiera (no hay)	auch die Börsen in Europa, erhöhte seine Verlusterwartung <i>sogar</i> um 51 Prozent, auch sei ein Überschwappen nach Europa nicht auszuschließen, es sei derzeit noch gar nicht abzusehen
Exclusive	sólo, al menos, apenas	sólo siete suspendieron, <i>al</i> <i>menos</i> las últimas cuentas, en <i>apenas</i> dos días	nur 4 200 Jobs gestrichen, wie seit mindestens einem Jahr nicht mehr, Staatsanleihen kaum verändert

The classification of Spanish quantifiers is at the very least confusing, and German grammars and linguistics are not substantially different in this point. The classification of German quantifiers is also problematic due to the divergence in ascribing them to word classes. Büßmann (2002: 547) defines quantifiers as terms that describe determiners that may quantify, and considers certain adjectives, pronouns and the numerals to be quantifiers. Vater (1984) states that quantifiers are linguistic expressions that denote a quantity and Gottschall (2008: 52), similarly, writes that quantifiers are “[...] Ausdrücke, die sich nicht auf ein bestimmtes Individuum beziehen, sondern die eine Aussage darüber erlauben, auf wie viele Individuen ein Prädikat zutrifft“ [our translation: ‘Expressions that do not refer to a certain entity, but rather allow statements to clarify how many entities are referred to by the predicate’].

3. The numerals

As we said before, numerals are only one side of linguistic quantification. Numerals tend to have undisputed meanings, but they are also difficult to allocate into word classes: “*Die problematische Wortartzugehörigkeit [...] (semantisch-konzeptuelle und phonologisch-lexikalische Zusammengehörigkeit versus morphosyntaktische Heterogenität kann nun als Ergebnis einer als Zahlen fungierenden Sequenz [...] gedeutet werden* (Wiese, 2001: 12)“ [our translation: ‘The problematic categorization into word classes [...] (they belong together from semantic-conceptual and phonologic-lexical perspectives but they are heterogeneous from a morphosyntactic point of view) can now be interpreted as result of a sequence that functions as a number’]. In both German and Spanish grammars, numbers are classified as cardinal (*uno, veintinueve, mil / eins, neunundzwanzig, tausend*), ordinal (*primero, centésimo, último, final / erster, hundertster, letzter*), partitive (*mitad or medio, cuarto, quinceavo / Hälfte, Viertel, viertel, hundertstel*), iterative (*dos veces / zweimal*) and multiplicative (*triple / dreifach*). Iterations in German end in *-mal/ig* and multiplications end in *-fach*.

An important difference between German and Spanish cardinal numbers concerns certain amounts of millions, for instance, *mil millones* for German *Milliarde*, or *mil billones* for German *Billiarde* (for a more detailed contrastive analysis see Castell, 1997: 365).

Spanish and German partitive numbers generally correlate. They both derive from ordinal numbers (*tercio, quinto, veinteavo / drittel, fünftel, zwanzigstel*), except for the Spanish partitives *decena* (‘set of ten’) and *quincena* (‘set of fifteen’, usually fortnight). When translating from Spanish into German, translators may opt for a proper cardinal number, the partitive *Dutzend* (‘dozen’) or the colloquial *zig* (‘lots’), as in *Hubo decenas de despidos > Es gab zig/viele/dutzende/eine große Anzahl Entlassungen* and *Tiene una quincena de vacaciones en agosto > Er hat im August zwei Wochen/ vierzehn Tage Urlaub*. Also, and unlike Spanish, German does not use prepositions when referring to concrete amounts, as patent in the following examples from our corpus: *recibirá una inyección de 5.000 millones de dólares* (‘will receive a 5 billion dollar injection’) vs. *musste Morgan 7,8 Mrd. Dollar abschreiben* (‘Morgan had to write off 7.8 billion dollars’). As with the cardinal numbers, using Spanish partitives without the preposition *de* is not grammatically correct.

The ordinal numbers (*primero, centésimo / erst-, hundertst-*) are distinguished by punctuation. In German, a full stop must follow ordinal numbers (3. = *dritt- / tercer*, ‘third’). ¹ Another difference between the two languages found in CrisCorp is that in the German texts, unlike the Spanish ones, and according to the European Standard DIN 5008, the thousands are not separated by full stops (only in case of amounts of money): *im Handelsverlauf bewegt sich der Index zwischen 11 499 und 11 715 Punkten; verlor 2,04 Prozent auf 1 377 Punkte; hatte der deutsche Aktienindex (Dax) 1,4 Prozent auf 6 623,99 Zähler eingebüßt*. ² Although the Spanish orthography of Spanish Real Academia Española (RAE), states that the international norm is to separate sets of thousands without a full stop but instead with a space, our Spanish corpus shows that such traditional usage is still customary.

4. The corpus: CrisCorp

The present study is corpus-based, as the research goal existed prior to the text collection. CrisCorp is a comparable, specialized, bilingual German and Spanish corpus. It is also synchronous, because it contains texts from the same timespan, that is, from the beginning of the mortgage crisis in the USA (14 March 2007) until June 2010. In our corpus compilation, the nature of similarity both in structure and function was a crucial issue. Our aim is to compare our texts in real language use, as “the possibilities of a comparable corpus are to compare different languages or varieties in similar circumstances of communication, but avoiding the inevitable distortion introduced by the translations of a parallel corpus” (Maia 2003: 27). Comparable corpora have the advantage of containing only naturally occurring, un-mediated language (Kenning 2010:493). As usual for comparable corpora (Baker, 1993,

¹ Here numbers are followed by a dash and have no proper ending, since they are declined like adjectives and they are only offered as examples.

² Available at: <http://din-5008-richtlinien.de>

1996) it contains original texts and the parallelism lies in the chronology (timespan), the type of publication (text type and text size) and the topic. Therefore, for a macroeconomic article in Spanish we searched for an analogous text in a similar newspaper in German with an analogous degree of specialization on the same topic and approximately the same date. In this paper we only offer preliminary conclusions obtained up to a certain date, but it is an open corpus with on-going compilation.

CrisCorp contains 16284 tokens in Spanish and 15312 in German that add to a total of 31596 tokens from 60 newspaper articles (30 in Spanish and 30 in German) from specialized economic newspapers available on-line. For several reasons, we decided to use a small-scale corpus. On one hand, we wanted to address specific questions about quantifiers that occur very frequently in economic texts, and our corpus was representative enough to find the whole quantifier spectrum. Furthermore, Kennedy (1998: 66) states that a larger corpus will not necessarily be more useful than a smaller one, because it depends on the corpora's purpose. On the other hand, since quantifiers are not related to only one part-of-speech, we had to extract part of the data manually, and the manual selection of our texts also made it recommendable to use a smaller corpus, for they "offer the possibility of more controlled comparative and contrastive research" (Maia 2003:4).

The corpus stems from the magazine Handelsblatt and the on-line versions of Expansión and CincoDías.³ All of them are journalistic (for this genre see Casado, 1990), but specialized media. The genre is relevant for this study, for there are huge differences between text genres such as investment reports and macroeconomic news. In a stock market report we are quite sure to find graphs and figures, while the genre in our corpus does not usually have these kinds of information (in the corpus we have also removed all photographs and other visual elements that are characteristic of on-line texts). The CrisCorp texts belong to a very frequent and important genre that mediates between institutions and the public, both skilled and semiskilled: "die Textsorten der Wirtschaftspresse sind die frequentesten und wichtigsten Vertreter im Bereich institutioneller Vermittlung" (Hundt 2000: 655).

5. Data extraction

We extracted the quantifiers in the CrisCorp texts manually as well as semi automatically, with WordSmith Tools. We tagged the quantifiers following the scheme laid out table 1, and analyzed them quantitatively with the application Wordlist. Due to space limitations, we will restrict the discussion of results to 1. Partitives; 2. Comparisons; 3. Abbreviations; 4. Composition of numerals; 5. Vague quantifiers; and 6. Gradation.

Martínez (2007) describes partition in Spanish as the quantification of one part extracted from a whole that maintains a relationship of subordination with the help of the preposition *de* between the partitive and the noun. German does not need any nexus. The data in table 3 suggests that Spanish uses 55.5 % more partitive constructions than German.

Table 3: Examples of partitive quantification in CrisCorp⁴

Spanish	German
más de la mitad de su valor/ la mitad	mehr als die Hälfte/ hat sich der Aktienkurs halbiert
un tercio de su valor en bolsa	mehr als ein Drittel davon
participación del 9% del capital	ein Großteil davon
la gran mayoría de nuestras posiciones	in den meisten Fondsprospekt
dos de las mayores aseguradoras de bonos / una de las mayores sociedades/bancarrotas	die Hälfte ihres Marktwertes
gran parte de la culpa/ la mayor parte del tiempo	4 von 200 Jobs
Subida de un cuarto de punto	etwa zwei Dritteln

³ Available at: <http://www.handelsblatt.com/>, <http://www.expansion.com/>, <http://www.cincodias.com/>

⁴ Please note that this table offers examples from CrisCorp. Thus, examples may be partly coincidental but they are not translations, nor are they intended to be understood as semantically equivalent.

la tercera mayor quiebra

ein Fünftel ihres Nominalwerts

The plural *Euros* does exist in German, but it does not appear in our corpus. The singular *Euro* appears 44 times. In Spanish, the plural with the ending *-s* appears 46 times. The symbol for the Euro, €, is not present at all in CrisCorp. The mathematical symbol for percentage % appears in almost all Spanish texts, but it is not present in the German ones, where the use of the written word *Prozent* is compulsory in the stylesheet of the newspaper *Handelsblatt* (the norm DIN 5008 also recommends it).

Comparisons are often expressed by means of quantifiers such as *más/ mehr* ('more') and *menos/ weniger* ('less') to indicate differences, and *tanto/so viel wie/ genauso/ ebenso* ('as...as/ the same as') to indicate even states. Absolute superlatives and relative superlatives, which can be compared, belong in this category. In Spanish, absolute superlatives end with *-ísimo*, while the superlative in German has to be built with adjectives with maximum degree, such as *äußerst* ('extremely') and *unheimlich* ('incredibly'). Table 4 provides additional examples. The comparison *mehr als* ('more than') appears 30 times in German while in Spanish *más de* is present 10 times and *más que*, 8. This shows that Spanish, as mentioned, uses a wider range of partitive constructions.

Table 4: Comparison and superlatives⁵ in CrisCorp

Spanish	Examples	German	Examples
mayor/ peor/ mejor	registraron las mayores caídas/ una de las mayores caídas/ la mayor caída/ los mayores bancos/ sus mayores cuotas en 20 años/ la mayor del mundo/ dos de las mayores aseguradoras de bonos/ la mayor caída de la historia/ el mayor banco/ la mayor reforma/tercera mayor quiebra/ una de las mayores sociedades/ mayores subidas/ un tamaño tres veces mayor/ mayor interés ha mostrado/ la mayor parte del tiempo/ mayores entidades financieras/ la mayor monoline/ mayor número/ una de las mayores de Estados Unidos La mejor empresa/ la peor empresa/ la peor crisis	groß/ Superlativ	der zweitgrößte Verlust/ den prozentual größten Kursverlust/ die weltgrößte Bank/ Deutschlands größte Fondsgesellschaft/ Europas zweitgrößter Versicherer/ die größte US-Bank/ die größten europäischen Banken/ zweitgrößte Investmentbank/ der größte Netto-Verlust/ größte Finanzaufsichtsreform seit 80 Jahren/ zweitgrößten Bankenkollaps/ größten halbstaatlichen US-Hypothekenfinanzierer/ drittgrößtes US-Institut/ die größten, nicht abgesicherten Gläubiger/ der größte Gläubiger/ die sieben größten Industriestaaten/ die weltgrößte Bank/ größter Anteilseigner/ der weltgrößte Anleihenversicherer/ der größte Verlust seit dem Höhepunkt/
más	más de lo que tenía previsto/ más de la mitad de su valor/ mucho más dinero/ más inyecciones/Hace falta más que eso/ más liquidez/ más que suficiente/ más caro que al cierre/ volumen más alto desde 1988/ el segundo valor que más subió/ se desplomó más de un 4%/ más alto/ más bajo/ al nivel más bajo/ más riesgo	mehr als/ über	mehr als 3 Prozent/ stürzten mehr als 65 Prozent/ ein Minus von mehr als drei Prozent/ weit über den Erwartungen/ höher als vorhergesagt/ deutlich höheren Verlust/ viel mehr Kapital/ mehr als die Hälfte/ die Hälfte ihres Marktwerts/ mehr als ein Drittel/ mehr als die Aktie aktuell wert ist/ weit mehr als 2000
menos/ inferior/ superior/ por encima/ por debajo	menos de tres horas/ no es menos/ menos garantías/ inferior a los 59.900 millones/ resultados trimestrales superiores a lo estimado/ superior a/ incluso superior que/ muy por encima de lo esperado/ por debajo de esta cuota	weniger/ geringer/ schlechter/ kleiner/ tiefer	weniger stark als das Hauptbeben/ weniger als 10 Mill. Euro/ geringere Mittelabzüge als die französischen Adressen/ weniger Interesse als ursprünglich angenommen/ fielen schlechter aus als erwartet/ günstigere Verzinsung/ so wenig Vertrauen wie nie zuvor/ tiefer war das Barometer noch nie gefallen
mínimo/ máximo	máximo directivo/ máximo responsable/ mínimo histórico/ mínimo del año/ alerta máxima	andere Superlativ	bis dato höchster Quartalsverlust/ umfassendste Reform/ Oberste Wächterin/ eines der am stärksten betroffenen Institute/ den tiefsten Stand seit Oktober 2006/ die höchsten Steigerungsraten/ tiefste Wirtschaftskrise seit Jahrzehnten/ ins tiefste Finanzloch/ profitabelste Bank der Welt/ der stärkste Einbruch seit Beginn der Datenerhebung

⁵ Here we do not distinguish between comparisons and pseudo comparisons (cf. Leonetti, 1998).

tanto como	so viel wie	so viel Geld wie seit mindestens einem Jahr nicht mehr/ so viel Vermögen wie nie zuvor/ so viele wie seit langem nicht mehr
------------	-------------	---

Abbreviations would demand a separate study, and here we can only aim to show remarkable differences present in our corpus. Much in line with other specialized German languages, and opposite to Spanish, the German journalistic language shows a clear trend for the usage of abbreviations. In our German corpus, abbreviated forms appear more than twice as often as the forms written in full (127 abbreviations vs. 51 extended forms). For example, the word *Milliarde* appears 38 times in full and the abbreviation *Mrd.* shows 98 times. *Millionen* appears 9 times and its abbreviations *Mill.* and *Mio.* appear 18 times and 9 times respectively. In Spanish there are no abbreviations at all and because. Since Spanish has no equivalent for *Milliarde*, *millones* appears a total of 136 times as compared to only 3 times for *billones*. According to the style sheets of some great Spanish newspapers, abbreviations are only permitted in case of tables, graphs or figures.⁶

Table 5: Substantives with numeral meaning and their composition in CrisCorp

German	Frequency	Spanish	Frequency
Mill.	18	Billón	1
Mio.	9	Billones	3
Millionen	9	Millones	136
Milliardär	1	Multimillonario	1
Milliarde	1		
Milliarden	38		
Mrd.	98		
Milliardenbeträge	1		
Milliardengewinn	1		
Milliardenhöhe	2		
Milliardenlasten	1		
Milliardenloch/löcher	1/ 1		
Milliardenschweren/s	1/ 1		
Billion	1		
Bill.	2		
Billionen	2		
TOTAL	188	TOTAL	141

Table 5 also shows that there are many more compound forms in our German corpus than in the Spanish one, and, in clear contrast to the wide array of compound words with the word *Milliarde*, in Spanish lexical classification we only found the term *multimillonario*. The most interesting result here is the way our corpus shows how German flexible word-compounding also applies to numerals. For example, *zweitgrößte* (the second biggest), appears 5 times in all its forms (*der zweitgrößte Verlust in diesem Jahr*, *Europas zweitgrößtem Versicherer*, *zweitgrößten Banken-Kollaps*), whereas Spanish does not count with this word-building mechanism in quantifiers. A concordance list in Spanish yields information about what are the most frequent forms of expressing these comparative and

⁶ For more information see: Style sheet for El País: <http://blogs.elpais.com/files/manual-de-estilo-de-el-pa%C3%ADs.pdf>; Style sheet for El Mundo: http://www.masmenos.es/wp-content/uploads/2002/01/librodeestilo_elmundo.pdf

superlative forms, which can be built with the Latin comparative preceding the noun (*segunda mayor pérdida*) or the periphrastic alternative following the noun (*segunda pérdida más grande*).

Precision in data presentation is also noteworthy. In CrisCorp, some quantifiers nuance statements through detracting precision or adding reliability, such as *apenas* and *exacto* (Table 6). By comparing their use in Spanish and German, these *vague* quantifiers (Bradburn and Miles, 1979) may lead to insights about language use and the particular discursive characteristics of these types of texts.

Table 6. Comparison of vague quantifiers in CrisCorp

Spanish	Frequency	German	Frequency
exacto	1	genau	-
exactamente	-	genauen	1
más o menos	-	mehr oder weniger	-
aproximado	-	rund	22
aproximadamente (aprox.)	-	zirka, ca.	-
escaso/s	-	knapp	14 (+1 with different signification)
cerca de	5	fast	11
estima	2	Einschätzung	1
estimación	1	Schätzungen	1
estimado	1	geschätzte	1
bastante	2	ziemlich	1
bastantes	1	etwa	5 (+5 with different signification)
casi	5 (+1 with different signification)	etwas	3 (+2 with different signification)
algo	1 (+5 with different signification)	ein wenig/ ein bisschen	1+1
apenas	3	kaum	7
unos	14		
unas	7		

Adjectives expressing magnitude are called *elatives*. Sánchez (2006: 25) states that elatives are equivalent to the absolute superlative. They do not allow further gradation, as they express one extreme of a scale. Some examples of elatives in CrisCorp are *alerta máxima*, *mínimo histórico*, *equipos punteros*, *desplome / Rekordsumme*, *Pleite*, *Ramsch-Status*, *Absturz*. Leonetti (2007: 67) also recommends placing adjectives and adverbs in a different category, called *words of gradation*.

For Leonetti (2007), grading is always relative because it leads to evaluating such a grade with respect to a contextually defined reference level. Levels refer to the two extremes of a scale and are semantically marked. It is possible to grade verbs (*aumentar*, *disminuir/ vergrößern*, *verkleinern* = ‘increase, decrease’), adverbs (*significativamente/ besonders* = ‘significantly’) or adjectives, as shown in corpus examples in Table 7. Bierwisch (1984: 79) states that when gradable adjectives are “interpreted as nominative they only identify a certain dimension or a scale on a dimension, and interpreted as contrastive they pinpoint an extreme value on this scale”.

Table 7: Gradable adjectives from CrisCorp

GERMAN	SPANISH
drastischer Einbruch	fuertes caídas
deutlich höherer Verlust	abultados números
großzügige Geldspritzen	profundas caídas
kleinere Erholungen	ingresos récord
massiver Stellenabbau	caída considerable

GERMAN	SPANISH
enormer Kapitalbedarf	peores pérdidas
enorme Schwierigkeiten	sangría colosal
globale Finanzkrise	completa eliminación
gewaltiger Abschlag	cuantiosas pérdidas
herbe Verluste	severa falta de efectivo
minimale Verbesserung	fuerte alza
gigantisches Konjunkturpaket	modesta recuperación
deutliche Mehrheit	profunda recesión
enorme Wertberichtigung	porcentaje sustancial
schwacher Dollar	anémico crecimiento
beträchtliche Abschreibungen	robusta tasa de crecimiento

CrisCorp shows high incidence (14 times) of the gradable Spanish adjective *alto* in conjunction with *riesgo* ('high risk'). This is not surprising, as we are dealing with the beginnings of the financial crisis and therefore many of the texts that compose our corpus deal with the same issue, the subprime mortgages. Given the extensive use of anglicisms in German, *Handelsblatt* uses 'Subprime' instead of a German term on 11 occasions and is no longer a quantifier in a direct comparison. Nonetheless, German makes a frequent use of adjectives such as *hoch* ('high'), *niedrig* ('low') in all its forms, while Spanish, with a broader lexical variety, employs more synonyms.

Table 6 presents only some of the 140 examples of gradable adjectives found in CrisCorp, of which 72 are German and 68, Spanish. Again, in this case it is not possible to classify these adjectives into only one part-of-speech, as some of them (as seen in Table 6) are also elatives, which are set on both ends of a scale.

6. Conclusions

Contrastive studies about quantification based on corpora—especially on comparable corpora—are difficult to find. Nonetheless, contrastive linguistics provides an appropriate framework for the study of quantifiers, and such study may become useful for later applications in Translation Studies or Critical Discourse Analysis. In a parallel corpus with original texts and their translations, the strategies employed to translate quantifiers in both directions can be contrasted. Our corpus, however, enables us to simultaneously observe the quantifiers separately and comparatively in naturally occurring language in comparable original texts. A comparable corpus with original text production is helpful to discover language use without the interference of translations, as there seems to be a growing consensus that translations tend to offer more explicitations or simplifications, often described in the literature in terms of 'distortion'. Methodologically, we first studied the way quantification is used in German written media and then in Spanish written media in order to establish a comparison. We gained useful insights into the categories compared (form and types of quantifiers) and into the larger systems of which these categories are a part (the way quantification is expressed in economic language in our text type).

As seen in section 2, after reviewing the literature about quantification, we can appreciate the clear difficulty of categorizing diverse quantifiers in only one word class, since many of them serve different semantic functions and can be placed *between* two or more parts of speech. Hence, it is not always possible to classify them categorically and the classification rather needs to respond to 'practical effects' (Labrador, 2004). Therefore, although we can distinguish between quantifiers themselves or quantifying expressions that work as such, we have extract data from both groups, since they serve the same purpose within the economic discourse.

We have not offered specific advice for translators in this paper, but we believe that specific usage rules may be drawn from the direct observation of how quantifiers are used in economic discourse. For example, in the case of vague quantifiers, the corpus shows the need for German language users to put nouns in a particular position, in contrast to the Spanish imprecision. For instance, while in German *rund 2 Millionen* or *knapp 2 Millionen* seems to be a must when meaning 'around/approximately/nearly', Spanish directly uses *2 millones* (22 occurrences for *rund*,

as opposed to only 5 for *cerca de*. The numerous occurrences for *knapp* in comparison to none for *escaso/a/os/as* and 3 *apenas*, as shown in Table 5, also support this interpretation.

The analysis of CrisCorp has shown that there are broad lexical similarities in quantification between German and Spanish, but it has also confirmed that there is less synonymous variety in German quantifiers than in Spanish ones. Nevertheless, German texts in our corpus employ more vague quantifiers (*knapp*, *circa*, *rund*), which are also possible in Spanish but do not show in our texts (*rund 2 Mio.* vs. *Ø 2 millones*). Thanks to CrisCorp, it was possible to detect contrasts between the languages concerning abbreviations and symbols, such as the use of the term *Euros*. This may be interpreted as a hint that, even if there are prescriptive norms, their use is widely accepted and bound to stylistic reasons. Concerning partitive constructions, Spanish use is massive compared to German texts in our corpus.

References

- Baker, M. (1993). Corpus Linguistics and Translation Studies. Implications and Applications. In Baker, M., Francis G. & Tognini-Bonelli, E. (Eds.), *Text and Technology. In Honour of John Sinclair* (pp. 233-250). Philadelphia/Amsterdam: John Benjamins Publishing Company.
- Bierwisch, M. (1989). The Semantics of Gradation. In Bierwisch, M. & Lang, E. (Eds.), *Dimensional Adjectives* (pp. 71-261). Berlin: Springer.
- Bradburn, N. & Miles, C. (1979). Vague quantifiers, *Public Opinion Quarterly*, Vol. 43, Issue 1, 92-101.
- Bußmann, H. (2002). *Lexikon der Sprachwirtschaft*. Kröner: Stuttgart.
- Casado Velarde, M. (1990). Notas sobre el léxico periodístico de hoy. In *El lenguaje en los medios de comunicación*. Zaragoza: Asociación de la Prensa [Press Association].
- Castell Vicente, A. (2002). *Gramática de la lengua alemana* (4th ed.). Ismaning: Hueber.
- Corpas Pastor, G. (2008). *Investigar con corpus en traducción: los retos de un nuevo paradigma*. Frankfurt : Peter Lang.
- Duden (1998). *Grammatik der deutschen Gegenwartssprache*. Eisenberg, P., Gelhaus, H., Henne H., Sitta, H. & Wellmann, H. (Eds.). Mannheim: Dudenverlag.
- Gottschall, C. (2008). *Prädikatenlogik der ersten Stufe mit Identität*. Skriptum zur Vorlesung Einführung in die Logik von Dr. Klaus Dethloff [skript to the lecture Introduction into Logic], retrieved from: <http://logik.phl.univie.ac.at/~chris/skriptum/skriptum.pdf>
- Hundt, M. (2000). Textsorten des Bereichs Wirtschaft und Handel. In Brinker, K. et al. (Eds.). *Text- und Gesprächslinguistik. Ein internationales Handbuch zeitgenössischer Forschung* (pp. 642-658). Berlin, New York: de Gruyter.
- Kennedy, G. (1998). *An Introduction to Corpus Linguistics*. Amsterdam: Rodopi.
- Kenning, M. (2010): What are parallel and comparable corpora and how can we use them? In O'Keeffe, A. & McCarthy, M. (Eds.), *The Routledge Handbook of Corpus Linguistics* (pp. 487-500). London: Routledge.
- Kirchner, A. (2000). *Eine kopfgesteuerte Phrasenstrukturgrammatik für spanische Nominalphasen*, thesis.
- Labrador de la Cruz, B. (2003). Typicality in the use of indefinite quantifiers. *Babel*, Issue 1, Vol. 49, 41-58.
- Lamíquiz Ibáñez, V. (1991). *La cuantificación lingüística y los cuantificadores*, Madrid: UNED.
- Lavric, E. (2001). Expresiones cuantitativas en el lenguaje económico y en otras lenguas de especialidad. *Las lenguas de especialidad y su didáctica*. Actas del Simposio Hispano-Austríaco, Tarragona, Universidad Rovira y Virgili, 221-234.
- Leonetti, M. (2007). *Los cuantificadores*, Madrid: Arco.
- Maia, B. (2003). What are comparable corpora? *Proceedings of Pre-conference Workshop Multilingual Corpora: Linguistic Requirements and Technical Perspectives*, at Corpus Linguistics 2003. Lancaster, 27-34. Available at: <http://web.letras.up.pt/bhsmaia/belinda/pubs/CL2003%20workshop.doc>
- Martínez García, H. (2007). *Estructura y cuantificación partitiva*. Available at: <http://dialnet.unirioja.es/servlet/articulo?codigo=2898344>
- Medina Reguera, A. & Stender, A. (2012). El lenguaje económico español y alemán a través de la prensa especializada. Parámetros para un estudio contrastivo de corpus. In Martíno Alba, P. & Lebsanft, C. (Eds.). *Telar de traducción especializada* (pp. 79-89). Madrid: Dykinson.
- Meilán García, A. (1998). *Construcciones locativas y cuantitativas*, Madrid: Arco.
- Sánchez López, C. (1999). Los cuantificadores. In Bosque, I. & Demonte, V. (Eds.), *Nueva Gramática Descriptiva de la Lengua Española*. Madrid: Espasa-Calpe.
- Sánchez López, C. (2006). *El grado de adjetivos y adverbios*. Madrid: Arco Libros.
- Vater, H. (1984). Determinanten und Quantoren im Deutschen. *Zeitschrift für Sprachwissenschaft*, 3, 19-42.
- Wagner, C. (1984). Los cuantificadores. *Documentos Lingüísticos y Literarios* 10. 55-63.
- Wiese H. (2001). *Was unterscheidet Zahlwörter von anderen Ausdrücken?* Available at: <http://publikationen.ub.uni-frankfurt.de/files/14108/HWZahlw>