



school of economics and business administration facultad de ciencias económicas y empresariales ekonomia eta enpresa zientzien fakultatea

School of Economics and Business Administration

UNDERGRADUATE DISSERTATION INTERNATIONAL BUSINESS ADMINISTRATION

DO THE SAME TEAMS ALWAYS WIN? GENDER DIFFERENCES IN THE CASE OF EUROPEAN HANDBALL

Amaia Ayúcar Sánchez

Pamplona-Iruña 11 de mayo de 2023

Módulo: Economía Fernando Lera López

ABSTRACT

Competitive balance is one of the most critical issues in team sports competitions; in this case, the major problem of European handball is that the same teams repeatedly win. Here, the sport has traditionally been dominated by a few powerhouse nations, including Denmark, France, Spain, and Germany, while other countries have struggled to compete at the highest levels. There exist some reasons behind this fact. Therefore, this study aims to analyze this rationale using quantitative methods, taking into consideration the different teams from these countries, in order to study this inequality. The period to be analyzed is 2007-2008 to 2021-2022 (n=15 seasons). Gender differences are taken into consideration. A severe lack of uncertainty of outcome has crucial effects on rivalry and follower rates. In other words, the increased competitive imbalance should particularly interest those who manage national leagues.

Keywords: competitive balance, European handball, inequality, gender

RESUMEN (Español)

El balance competitivo es una de las cuestiones más importantes en la competición de deportes de equipo; en este caso, el principal problema del balonmano europeo es que repetidamente ganan los mismos equipos. Tradicionalmente, este deporte ha estado dominado por unas pocas potencias, como Dinamarca, Francia, España y Alemania, mientras que otros países han tenido dificultades para competir al más alto nivel. Existen algunas razones detrás de este hecho. Por lo tanto, el objetivo de este estudio es analizar esta razón utilizando métodos cuantitativos teniendo en cuenta a los diferentes equipos de estos países, para estudiar la desigualdad. El periodo de tiempo a analizar es 2007-2008 to 2021-2022 (n=15). Se consideran las diferencias de género. Una grave falta de incertidumbre en los resultados tiene efectos cruciales en los índices de rivalidad y de seguidores. En otras palabras, el aumento del desequilibrio competitivo debería ser de especial interés a quienes gestionan las ligas nacionales.

Palabras clave: balance competitivo, balonmano europeo, desigualdad, género

<u>INDEX</u>

ABSTRACT	2
1. INTRODUCTION	6
2. LITERATURE REVIEW	7
2.1. What is the competitive balance?	7
2.2. Implications in different sports	8
2.3. About handball	9
3. OBJECTIVES	12
4. DATA AND METHODOLOGY	13
5. RESULTS	20
5.1. Results per index	20
5.2. Changes over time	24
6. CONCLUSIONS AND DISCUSSION	26
6.1. Differences per gender	26
6.2. General conclusions	28
6.3. Limitations	29
6.4. Further research	30
BIBLIOGRAPHY	31
ANNEXES	34

1. INTRODUCTION

During the last decades, the competitive balance has suffered a worrying tendency: the problem of the same teams repeatedly winning in multiple leagues. Sports commentators, fans, and economists are carriers of this fact (Sanderson & Siegfried, 2003). In the case of European handball, this tendency has been evident over the last decades, whether in women's or men's competitions.

In order to give rise to the reasoning behind this fact, this research paper will focus on finding the best answer to the following question: *do the same teams always win?* The grade, improvement, or worsening over the time analyzed will be the subject of analysis. In fact, all other things being equal, increased demand should result from a stronger competitive balance (Humphreys, 2002).

As further explained, I will focus on comparing women's and men's national leagues across countries (Denmark, France, Germany, and Spain) in a specific time interval (n=15 seasons) to obtain quantitative indicators to secure a trustworthy database to analyze. The process of selecting these specific countries will be further explained in section 3, which gives rise to all the facts regarding antecedents and objectives.

Overall, this research paper aims to provide a valuable contribution to the ongoing discussions about the state of European handball and the measures that can be taken to improve its competitiveness. In addition, it can help the number of publications of empirical evidence about handball grow, given the fact that it is not very extensive (especially in the case of women). True as it is, "*appropriate measurement of competitive balance is central to the economic analysis of professional sports leagues*" (Owen & King, 2014: p.1).

Conclusions and their respective discussion will be provided at the end of the document, followed by the limitations and the possible further research of the topic or potentially related ones.

2. LITERATURE REVIEW

2.1. What is the competitive balance?

Competitive balance stands for "the situation in which no one business of a group of competing businesses has an unfair advantage over the others" (Cambridge Dictionary, 2023). Thus, in sports economics, competitive balance refers to the equality of forces, chances, and probabilities that rival teams in a league or championship have to prevail over the rest. This is, the competitive balance would exist if, at the start of a season, every team would have equal possibilities to win a league or to classify into a specific championship, instead of always being some specific teams who happen to dominate. "Competitive balance, how evenly teams are matched, is a central feature of the economic analysis of professional sports leagues; consequently, its measurement has received considerable attention in the sports economics literature" (Owen & King, 2014: p.1).

The majority of the scientific literature on competitive balance emphasizes the structure of the competition and how it works, which has focused on determining the possible factors that can affect competitive balance in different leagues. Some multiple factors or determinants set one league apart from another and may affect the balance of the competition (García-Unanue et al., 2014). The establishment of open or closed leagues, playoffs, and a greater number of national and international competitions are all examples of these elements.

Competitive balance is not easy to define or measure, but it is studied because it has major important implications for sport and its success and achievement. In fact, "appropriate measurement of competitive balance is central to the economic analysis of professional sports leagues" (Owen & King, 2014: p.1). As Owen and King state, "simulation methods are used to evaluate the effects of changes in season length on the distributions of competitive balance measures for different distributions of the strengths of teams in a league" since it "provides an ideal approach to evaluate the effects of such changes on the distributions of competitive balance measures for the ended to evaluate the effects of such changes on the distributions of the strengths (abilities) of the teams".

The **main issue** with competitive balance in handball is the following: there exists a major lack of uncertainty regarding which team will win different leagues.

As mentioned in the article "Does Competitive Balance Drive Interest In Sports?" (Badenhausen, 2015) "uncertainty of outcomes in competition is what drives fans, media, sponsors and dollars to the sports industry. If a single or a small collection of teams could sign all the best players then what excitement would these games provide?". Clear as it is, knowing in advance what the result will be can bore anyone in any sport or aspect of life. In other words, we need suspense to have interest and allure for something. Intrigue is key for captivation. Nonetheless, Badenhausen (2015) supports the idea that the possible cause for sports leagues being so successful nowadays may be due to few teams dominating most leagues, which calls the previous point into question.

If the competitive balance in a league is low, it is clear that fan interest in the weaker teams will fall and, eventually, fan interest in the stronger teams will also fall. Therefore, a higher competitive balance should lead to higher demand, all other things being equal (Humphreys, 2002).

Being this the case, there exists a crucial question to this matter: what are the **possibilities for the improvement** of competitive balance?

The potential stands predominantly in salary caps (maximum limit on total team salary expenditure), and revenue sharing (Kesenne, 2019). By penalizing teams that do not meet the specified requirements, they attempt to prevent the accumulation of the best players on a few teams and achieve a more balanced squad. Since these options have been the subject of numerous authors' publications, it is reasonable to assume that they are the most widely used. Howbeit, Kesenne (2019) does not recommend the aspiration of a transfer system aimed at limiting player mobility unless it pursues a real eradication, since it may not be enough. Nonetheless, other authors have different opinions about the effectiveness of these methods, thus this is not an undisputed truth.

2.2. Implications in different sports

Competitive balance is indeed addressed in different ways by the rules and norms of each sport. As a result, this section of the paper is devoted to providing readers with a brief overview of some leagues of the most popular sports. Considering that competitive balance is expected to be measured in team sports, some of the overriding pieces of information about basketball and football will be given.

Taking glances at **basketball**, some findings indicate that the NBA (National Basketball Association) as a whole has a better balance of competition than the European leagues, but these differences disappear when the conferences are looked at separately (García-Unanue et al., 2014). It is true that the NBA places restrictions on the opposition that continue to favor the chance of making it more appealing to viewers. More specifically, the salary cap system is in place. Additionally, the NBA draft enables lower-ranked teams to acquire new players and thus compete for the top spots in subsequent seasons.

Regarding **football** in the case of "La Liga" in Spain, we can see that "*The supremacy of a few teams over the other participants is a common factor in the major European football leagues. The Spanish First Division league is not an exception*" (Montes et al., 2012, p.1). Given the possibility of having ties and the repartition of points in this sport, the competitive balance should be measured in terms of accumulated points at the end of the season instead of the percentage of wins. In this case, the most balanced tournament will be the one in which the points difference between the competitors is the smallest possible, as this reflects a better chance of winning the title or qualifying for continental tournaments for all clubs during a season (Gasparetto & Barajas, 2016). In Spain's Liga BBVA, two teams frequently compete for a spot in the UEFA Champions League (FCB and Real Madrid), as well as three teams that are significantly stronger than the others in terms of results.

2.3. About handball

Gazing at the **history** of this sport, it was first played outdoors by 11 players in Scandinavia in the early 19th century (Saavedra, 2018) and slowly evolved to a 7-people-per-team indoor game that is played by around 19 million people worldwide (International Handball Federation, 2014). In 2021, 92,539 people were federated in this sport in Spain, only surpassed by football, hunting, golf, mountain and climbing, basketball, and paddle tennis (Statista Research Department, 2022). It is played in two 30-minute halves, in which two teams fight to score more goals than the opponent.

Nowadays, handball is one of the most popular indoor sports played worldwide, having

a special weight in Europe. This is why European Handball is among the main hubs of its competitive scene, as seen in the latest results of World Cups. It has been included as a sport to compete at the Olympic Games since 1972 (men) and since 1976 (women).

This sport is said to be considerably profound since it includes some "specific characteristics... frequent intensity changes, team-handball techniques, hard body confrontations, mental skills, and social factors specify the determinants of coordination, endurance, strength and cognition" (Wagner et al., 2014: p.1). In fact, "team handball is a complex sports game that is determined by the individual performance of each player as well as tactical components and interaction of the team", meaning that it is the talent of uniting individual strengths that makes a team outstanding. The previously mentioned research paper separates team-handball performance (cognition, strength, endurance, constitution-disposition, and nutrition) and team performance (cognition, social factors, and tactics), taking into consideration that external influences such as material and environmental conditions are crucial.

As stated by various research papers in the last decades, there is not enough **research** about this sport. "*Although there are comprehensive studies examining individual performance in team-handball players of different experience level, sex, or age are published, there is a lack of training studies, particularly for team-handball specific techniques and endurance, as well as cognition and social factors*" (Wagner et al., 2014: p.1) and "*Despite the sport's popularity, scientific publications on handball have been scarce*" (Saavedra et al., 2018: p.6) are some of the multiple examples that uncover this fact. Presently, if we take the case of the bibliographic database Scopus, we can see that there are just 1,898 documents that include the word "handball" in the article's title and 1,086 in the keywords, whereas for the case of "football" 17,153 and 22,356 documents can be found, respectively. If we search "competitive balance" and "handball", we will only face 8 results. This fact has had an impact on this paper since it has been forced to be further completed with opinion articles from official and well-known web pages because academic articles are more scarce than in other sports such as football, tennis, or basketball.

The previously mentioned problem of competitive balance in handball happens all across Europe; but if we focus on the case of **masculine handball in Spain**, it is known

that during the last few years, there is no doubt that FC Barcelona will win every ASOBAL league, year after year, repeatedly. Even if they have had some competitive opponents in previous years, they have been undefeated since 2009-2010, when CD Ciudad Real won the league (ASOBAL, 2023). Caja España Ademar (León) and Portland San Antonio (Navarre) are the other teams that have been able to surpass FCB in this century.

On the other hand, regarding **female handball in Spain**, there exists a little bit more uncertainty, since there have been different teams winning the league in the last century, even if there are still a few teams in real competition. Since the 2008-2009 sports year, S. D. Itxako (Navarre) has achieved the prize 4 consecutive times and Balonmano BeraBera (Basque country) 8 times, while Club Balonmano Atlético Guardés (Galicia) and Rocasa Gran Canaria are unusual winners (Almenzar, 2022). The presently named Liga Iberdrola has been called División de Honor Femenina (1982-2005), Liga Costa Blanca ABF (2005-2007), Liga ABF (2007-2011), División Honor Femenina (2011-2015) Liga Loterías de Balonmano Femenino (2015-2017) and finally Liga Guerreras Iberdrola (2017-present).

In addition, gender is present in this research, thus it is important to mention that gender inequality affects (almost) every detail of handball competition, and competitive balance is not an exception. One of the more relevant and obvious reasons may be budgeting. Comparing the examples previously used, FC Barcelona has won 20 ASOBAL leagues in the last century, being the referent team. In Iberdrola, Balonmano Bera Bera is in the same situation, having won 8 leagues in the same period. Iconic players have been part of both teams, but there happens to be a difference; FCB's annual budget stands at almost 9 million euros in 2021 (Izquierdo, 2021), whereas Bera Bera was 805.000€ in 2022-2023 (Soler Olcina, 2023). This results in the budget of the men's team with the most league wins in recent years being approximately 11 times that of the women's team. In other words, 1 annual budget of FCB is similar to 11 annual budgets of Bera Bera. The outcome is clear; it is not by chance that female players tend to search for better opportunities outside of our territory as soon as they acquire a reputation, as is the case of Nerea Pena, Lysa Tchaptchet, or Paula Arcos. "Budgets have increased in recent years, but the overall 6 million for elite handball in Spain is a far cry from the +25 million in Romania and the +30 million in France" states Soler Olcina (2023).

3. OBJECTIVES

After deciding what the theoretical framework would be, the decision was to study women's and men's handball national leagues across some European countries in a 15-year time interval.

The reasoning behind having chosen European leagues was that it is the territory where more competition and high level there is regarding this specific sport. In fact, as an interesting point, winning a World Cup is considered to be easier than winning a European tournament, since being confronted by non-European teams is to some extent deemed to be an advantage compared to other possible opponents. Therefore, analyzing some of the most relevant countries forming this sportive apex was undoubtedly the best option. Even if analyzing national teams was an option, the decision was to do further research about teams in these countries.

Related to the previous fact, choosing the most appropriate samples was a tough task. To select relevant countries for both masculine and feminine leagues, national teams played an important role. Being among those who more often have won European (Diario AS, 2023) and World Tournaments (Diario AS, 2021) was a must taking into consideration that both genders should be contemplated.

The following table (Table 1) brings together which countries in general and what leagues specifically will be the sample to be analyzed across this research paper.

COUNTRIES	MEN'S LEAGUES	WOMEN'S LEAGUES
Denmark	Danish League Association	Bambusa Kvindeligaen
France	Ligue Nationale de Handball	Ligue Butagaz Énergie
Germany	Toyota Handball-Bundesliga	Bundesliga
Spain	Asobal	Iberdrola

Table 1: Danish, French, German, and Spanish male and female handball leagues

Source: own elaboration

In a nutshell, the importance of this research stands in the evolution over time and the differences in gender concerning the competitive balance of European handball, putting special emphasis on the teams within each country instead of national teams.

4. DATA AND METHODOLOGY

With the aim of solving the question of "*do the same teams always win*?" and its evolution over time, a database has been created, putting together information from results in European handball (regarding Germany, Denmark, France, and Spain for both genders). The classifications of all the seasons per country and gender have been retrieved from flash score (flashscore.es).

Here, there exists one page for each country and gender; this is, one for German men, one for German women, etc. The 15 seasons considered (2007-2008 to 2021-2022) have been organized in the horizontal axis of each table, following a chronological order. Teams from each of the national leagues stand on the vertical axis. Of course, the number of teams participating in a national league may vary across countries and over time, since regulations have been different.

Each of the different categories has an independent page, which is organized the following way: Spanish women (Table 2), Spanish men (Table 3), Danish women (Table 4), Danish men (Table 5), French women (Table 6) French men (Table 7), German women (Table 8), and German men (Table 9).

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS									
1	Bera Bera	49	1	Bera Bera	26	1	Bera Bera	30	1	Rocasa	45	1	Bera Bera	46
2	Málaga	41	2	Granollers	23	2	Elche	26	2	Bera Bera	41	2	Guardes	46
3	Rocasa	36	3	Rocasa	23	3	Guardes	23	3	Guardes	35	3	Rocasa	39
4	La Calzada	35	4	Guardes	22	4	La Calzada	22	4	Granollers	34	4	La Calzada	35
5	Guardes	35	5	Elche	20	5	Málaga	16	5	La Calzada	33	5	Aula Valladolid	35
6	Elche	32	6	Malaga	20	6	Granollers	16	6	Málaga	33	6	Málaga	34
7	Granollers	32	7	Aula Valladolid	18	7	Aula Valladolid	15	7	Elche	31	7	Zuazo	29
8	Aula Valladolid	28	8	La Calzada	16	8	Rocasa	14	8	Aula Valladolid	28	8	Granollers	26
9	Zuazo	24	9	Zuazo	13	9	Tenerife	10	9	Zuazo	23	9	Porriño	21
10	Porriño	22	10	Tenerife	11	10	Zuazo	10	10	Porriño	18	10	Puig d'en Valls	18
11	Morvedre	15	11	Porriño	9	11	Porriño	7	11	Alcobendas	17	11	Elche	16
12	Sant Quirze	7	12	San Jose	9	12	Alcobendas	3	12	Morvedre	12	12	Valencia	11
12	Tenerife	5	12	Morvedre	6	12	Acobericas	3	13	Valencia	9	13	Castellón	8
13		3	13	Atlantico Pereda	4				13	Castellón	5	13	Villavede	0
14	Lanzarote	3							14	Castelion	5	14	Villavede	0
			15	Cordoba	4									
			16	Puerto del Carmer	0									
	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	2016-2017 TEAM	POINTS	POSITION	2015-2016 TEAM	POINTS	POSITION	2014-2015 TEAM	POINTS	POSITION	2013-2014 TEAM	POINTS	POSITION	2012-2013 TEAM	POINTS
1	Guardes	48	POSITION	Bera Bera	48	POSITION	Bera Bera	48	POSITION	Bera Bera	46	POSITION	Bera Bera	47
2	Bera Bera	48	2		48	1	Rocasa	48	2		46	1	Elche	47
-		40	3	Rocasa	48	3		45	-	Rocasa	44 39	3		45
3	Rocasa	34	4	Guardes	38		Guardes	42	3	Alcobendas	39	4	Rocasa	42
	Málaga			Alcobendas		4	Alcobendas		4	Guardes			Alcobendas	
5	Zuazo	34	5	Porriño	30	5	Elche	34	5	Porriño	28	5	Guardes	35
6	Aula Valladolid	30	6	Zuazo	28	6	Aula Valladolid	31	6	Elche	27	6	Porriño	27
7	Porriño	25	7	Aula Valladolid	28	7	Porriño	22	7	Aula Valladolid	24	7	Cleba	22
8	Valencia	19	8	Valencia	21	8	Zuazo	21	8	Zuazo	22	8	Zuazo	20
9	Elche	19	9	Málaga	21	9	Valencia	21	9	Valencia	21	9	Alicante	19
10	Granollers	18	10	Cleba	19	10	Málaga	20	10	Cleba	20	10	Valencia	19
11	La Calzada	18	11	Elche	18	11	Cleba	15	11	Alicante	19	11	Itxako	17
12	Villavede	14	12	Granollers	18	12	Granollers	15	12	Castelldefels	17	12	Kukullaga	16
13	Alcobendas	13	13	Oviedo	9	13	Castelldefels	7	13	Cordoba	13	13	Castelldefels	15
14	Cleba	6	14	Zarautz	6	14	Córdoba	6	14	Kukullaga	12	14	Castro Urdiales	2
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS									
1	Itxako	50	1	Itxako	50	1	Itxako	46	1	Itxako	50	1	Valencia	47
2	Bera Bera	45	2	Elda	39	2	Elda	43	2	Parc Sagunt	43	2	Elda	45
3	Parc Sagunt	35	3	Parc Sagunt	37	3	Parc Sagunt	39	3	Elda	42	3	Itxako	43
4	Alcobendas	32	4	Alicante	34	4	Alicante	36	4	Bera Bera	40	4	Bidebieta	39
5	Alicante	32	5	Bera Bera	30	5	Cleba	31	5	Alicante	36	5	Sagunto	35
6	Elche	30	6	Elche	28	6	Bera Bera	29	6	Elche	28	6	Alcobendas	33
7	Rocasa	25	7	Cleba	23	7	Elche	24	7	Goya Koppert	27	7	Granollers	31
8	Cleba	22	8	Castro Urdiales	23	8	Goya Koppert	24	8	Cleba	23	8	Castro Urdiales	27
9	Elda	22	9	Alcobendas	21	9	Castro Urdiales	23	9	La Calzada	22	9	Porriño	26
10	Murcia	20	10	Murcia	21	10	Alcobendas	23	10	Alcobendas	14	10	La Calzada	23
11	Porriño	20	11	Gran Monovar	18	11	Rocasa	19	11	Rocasa	13	11	Parc Sagunt	20
12	Castro Urdiales	16	12	Goya Koppert	17	12	Marina Park	15	12	Ribarroja	12	12	Roquetas	19
13	Kukullaga	11	13	Rocasa	15	13	La Calzada	12	13	Zuazo	8	13	Gijón	13
14	La Calzada	4	14	Marina Park	8	14	Ribarroia	0	14	Gran Monovar	6	13		13
14	ca Caizada	4	14	wanna Park	0	14	robarroja	v	14	Gran Monovar	b	14	Chapela	8

Table 2: Spanish women's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POIN
1	Barcelona	57	1	Barcelona	68	1	Barcelona	38	1	Barcelona	59	1	Barcelona	57
2	GranoTers	44	2	Bidasoa Irun	53	2	Ademar León	33	2	Bidasoa Irun	45	2	Ademar León	43
3	Bidasoa Irun	42	3	Logrofio La Rioia	47	3	Logrofio La Rioia	30	3	Logrofio La Rioia	40	3	Granollers	42
4	Benidorm	35	4	Granollers	47	4	Bidasoa Irun	27	4	Ademar León	37	4	Logroño La Rioja	41
4		35	5		47	5		27	5		37			37
6	Cuenca	34	6	Huesca	47	6	Cuenca Granollers	23	6	Granollers Huesca	37	5	Cuenca	36
	Logroño La Rioja		-		43	-			-			-		
7	Ademar León	30	7	Ademar León		7	Guadalajara	16	7	Atlético Valladolid	33	7	Huesca	33
8	Anaitasuna	29	8	Puente Genil	36	8	Puente Genil	15	8	Cuenca	33	8	Guadalajara	29
9	Huesca	28	9	Atlético Valladolid	35	9	Nava	14	9	Benidorm	30	9	Atlético Valladolid	28
10	Puente Genil	26	10	Anaitasuna	33	10	Atlético Valladolid	14	10	Anaitasuna	25	10	Bidasoa Irun	27
11	Torrelavega	26	11	Benidorm	31	11	Puerto Sagunto	14	11	Sinfin	24	11	Benidorm	25
12	Morrazo	26	12	Nava	24	12	Benidorm	14	12	Guadalajara	23	12	Puente Genil	19
13	Atlético Valladolid	22	13	Sinfin	24	13	Anaitasuna	13	13	Puente Genil	19	13	Morrazo	19
14	Sinfin	21	14	Morrazo	22	14	Sinfin	13	14	Morrazo	18	14	Albarei Teucro	18
15	Nava	20	15	Guadalajara	22	15	Huesca	11	15	Albarei Teucro	13	15	Puerto Sagunto	13
16	Antequera	6	16	Puerto Sagunto	18	16	Cangas	8	16	Alcobendas	9	16	Zamora	13
			17	Cisne	12									
			18	Villa de Aranda	11									
	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINT
1	Barcelona	60	1	Barcelona	56	1	Barcelona	60	1	Barcelona	60	1	Barcelona	58
2	Ademar León	51	2	Logroño La Rioja	43	2	Logroño La Rioja	48	2	Logroño La Rioja	47	2	Atlético Madrid	49
3	Logroño La Rioja	42	3	Ademar León	38	3	Granollers	43	3	Granollers	42	3	Logroño La Rioja	42
4	Granollers	37	4	Granollers	37	4	Anaitasuna	36	4	Huesca	40	4	Ademar	38
5	Anaitasuna	32	5	Morrazo	28	5	Cangas	32	5	Ademar León	36	5	Aragón	38
6	Cuenca	31	6	Villa de Aranda	27	6	Benidorm	32	6	Cuenca	29	6	Granollers	33
7	Huesca	30	7	Anaitasuna	26	7	Ademar	31	7	Anaitasuna	28	7	Anaitasuna	30
8	Atlético Valladolid	28	8	Benidorm	24	8	Villa de Aranda	28	8	Guadalajara	27	8	Huesca	28
9	Puente Genil	25	9	Puerto Sagunto	22	9	Huesca	27	9	Aragón	25	9	Puerto Sagunto	25
10	Guadalajara	24	10	Huesca	22	10	Puente Genil	24	10	Morrazo	25	10	Cuenca	25
11	Bidasoa Irun	23	11	Cuenca	22	11	Guadalaiara	24	11	Puente Genil	23	11	Villa de Aranda	22
12	Puerto Sagunto	23	12	Guadalajara	21	12	Puerto Sagunto	24	12	Juanfersa	23	12	Atlético Valladolid	22
12	Benidorm	23	13	Sinfin	19	13	Aragón	23	13	Puerto Sagunto	23	13	Guadalajara	20
14	Morrazo	20	14	Puente Genil	19	14	Cuenca	23	14		22	14		19
										Villa de Aranda			Cangas	
15 16	Villa de Aranda Sinfin	20	15	Albarei Teucro	16	15	Zamora Juanfersa	19 8	15	Atlético Valladolid Bidasoa Irun	22 9	15	Octavio Palma del Río	19 12
16	Sintin	13	16	Aragón	U	16	Juantersa	8	16	Bidasoa Irun	9	16	Palma del Rio	12
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINT
1	Barcelona	58	1	Barcelona	58	1	Atlético Madrid	60	1	Atlético Madrid	56	1	Atlético Madrid	57
2	Atlético Madrid	57	2	Atlético Madrid	54	2	Barcelona	55	2	Barcelona	52	2	San Antonio	53
3	Ademar León	44	3	Ademar León	43	3	Valladolid	46	3	Atlético Valladolid	46	3	Ademar León	49
4	Atlético Valladolid	43	4	Granollers	43	4	Ademar	40	4	San Antonio	44	4	Barcelona	46
5	Aragón	32	5	Atlético Valladolid	41	5	Siudad de Logroño	34	5	Ademar León	42	5	Atlético Valladolid	39
6	Cuenca	31	6	Aragón	40	6	San Antonio	34	6	Granollers	34	6	Aragón	34
7	Logroño La Rioja	29	7	San Antonio	32	7	Aragón	31	7	Logroño	30	7	Granollers	25
8	Granollers	29	8	Cuenca	28	8	Granollers	27	8	Aragón	27	8	Arrate	23
8			9						9	-				
-	Torrevieja	26		Logroño La Rioja	26	9	Alcobendas	25		Octavio	26	9	Torrevieja	22
10	San Antonio	24	10	Antequera	24	10	Diudad encantada	24	10	Los Dólmenes	26	10	Algeciras	21
11	Huesca	22	11	Torrevieja	22	11	Los dólmenes	24	11	Arrate	21	11	Almeria	20
12	Anaitasuna	22	12	Puerto Sagunto	21	12	Torrevieja	21	12	Torrevieja	21	12	Los Dólmenes	20
13	Octavio	20	13	Guadalajara	18	13	Arrate	19	13	Cuenca	20	13	Altea	20
14	Guadalajara	18	14	Anaitasuna	14	14	Toledo	18	14	Alcobendas	15	14	Lograño	18
14					11	15	Octavio	15	15	Teucro	15	15	Cantabria	17
14	Antequera	17	15	Toledo		10	Octavio	10	10			15	Cantaona	

Table 3: Spanish men's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Odense	50	1	Esbierg	46	1	Esbierg	40	1	Odense	47	1	Copenhagen	35
2	Esberi	45	2	Odense	46	2	Odense	36	2	Esbjerg	44	2	Odense	33
3	Herning	39	3	Viborg	44	3	Viborg	35	3	Herning	40	3	Herning	30
4	Viborg	39	4	Herning	35	4	Copenhagen	35	4	Copenhagen	40	4	Nyk	29
5	Nvk	29	5	Copenhagen	32	5	Silkeborg	30	5	Nvk	37	5	Esbierg	28
6	Silkeborg	27	6	Nyk	32	6	Herning	30	6	Aarhus	31	6	Viborg	27
7	Horsens	26	7	Aarhus	24	7	Aarhus	26	7	Viborg	26	7	Silkeborg	24
8	Copenhagen	24	8	Silkeborg	22	8	Randers	23	8	Holstebro	21	8	Randers	20
9	Aarhus	22	9	Holstebro	21	9	Nyk	22	9	Silkeborg	21	9	Holstebro	18
10	Aiax	16	10	Aiax	19	10	Aiax	13	10	Skanderborg	16	10	Aarhus	12
11	Skanderborg	15	11	Randers	19	11	Holsebro	12	11	Ajax	14	11	Ringkøbing	5
12	Randers	14	12	Horsens	15	12	Horsens	8	12	Randers	14	12	Aiax	3
13	Ringkøbing	12	13	Skanderborg	6	13	Skanderborg	7	13	Aalborg	7		, daw	
14	Holstebro	6	14	Vensyssel	3	14	Aalborg	7	14	Ringkøbing	6			
14	noistebro		14	vensyssel	3	14	haidoig		14	Ningkøbing	0			
	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Herning	39	1	Esbjerg	34	1	Esbjerg	37	1	Viborg	39	1	Herning	36
2	Nyk	30	2	Herning	32	2	Herning	36	2	Herning	36	2	Holstebro	32
3	Vibora	29	3	Viborg	28	3	Holstebro	31	3	Randers	33	3	Viborg	31
4	Copenhagen	28	4	Hoistebro	27	4	Viborg	27	4	Esbjerg	32	4	Randers	27
5	Silkeborg	27	5	Randers	27	5	Silkeborg	25	5	Holstebro	29	5	Veien	21
6	Odense	26	6	Nyk	24	6	Randers	23	6	Odense	22	6	Esbjerg	20
7	Esbjerg	24	7	Copenhagen	21	7	Odense	21	7	Vejen	20	7	FIF	15
8	Randers	20	8	Silkeborg	21	8	Aarhus	18	8	Skive	19	8	Skive	14
9	Aarhus	17	9	Odense	20	9	Copenhagen	15	9	Copenhagen	13	9	Sønderjyske	8
10	Holstebro	10	10	Aarhus	16	10	Ringkøbing	13	10	Ringkøbing	10	10	Aalborg	7
11	Ringkøbing	9	11	Ringkøbing	14	11	Skive	12	11	Nyk	6	11	Odense	7
12	Skanderborg	5	12	Sønderivske	0	12	Nyk	6	12	Sønderivske	5	12	Slagelse	0
	chanderberg			opriocifyone						Condengione			olugeloc	
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Viborg	38	1	Randers	40	1	FIF	38	1	Viborg	44	1	Viborg	39
2	Holstebro	37	2	Viborg	36	2	Viborg	36	2	FIF	36	2	Herning	35
3	Randers	34	3	Herning	30	3	Herning	31	3	Aarhus	31	3	FIF	30
4	Herning	34	4	Vejen	29	4	Randers	31	4	Herning	28	4	Slagelse	29
5	Esbjerg	24	5	Esbjerg	25	5	Vejen	30	5	Aalborg	25	5	Vejen	29
6	FIF	19	6	Holstebro	23	6	Esbjerg	25	6	Vejen	22	6	Randers	19
7	Aarhus	16	7	Aarhus	19	7	Aalborg	23	7	Esbjerg	21	7	Aarhus	18
8	Aalborg	15	8	FIF	18	8	Holstebro	16	8	Randers	19	8	Gudme	18
9	Vejen	14	9	Odense	17	9	Odense	15	9	Horsens	18	9	Esbjerg	14
10	Odense	14	10	Aalborg	16	10	Aarhus	13	10	Gudme	12	10	Aalborg	12
11	Slagelse	10	11	Roskilde	9	11	Sønderjyske	3	11	Sønderjyske	6	11	Horense	11
12	Silkeborg	9	12	Sønderjyske	2	12	Horsens	3	12	Slagelse	2	12	Team Nord	10

Table 4: Danish Women's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS												
1	GOG	52	1	GOG	42	1	Aalborg	42	1	Aalborg	41	1	Skjern	43
2	Aalborg	47	2	Aalborg	41	2	GOG	34	2	GOG	40	2	GOG	42
3	Skjern	37	3	Holstebro	38	3	Holstebro	33	3	Bjerringbro/Silket	37	3	Bjerringbro/Silket	40
4	Skanderborg	36	4	Bjerringbro/Silket	35	4	Bjerringbro/Silkel	29	4	Holstebro	35	4	Aalborg	32
5	erringbro/Silkebor	33	5	Sønderjyske	29	5	Skjern	28	5	Skjern	34	5	Holstebro	31
6	Fredericia	29	6	Skjern	29	6	Skanderborg	27	6	Skanderborg	32	6	Kolding	25
7	Mors	26	7	Skanderborg	27	7	Ribe-Esbjerg	24	7	Aarhus	29	7	Nordsjælland	24
8	Ribe-Esbjerg	24	8	Kolding	24	8	Mors	24	8	Sønderjyske	23	8	Aarhus	23
9	Lemvig	22	9	Ribe-Esbjerg	20	9	Sønderjyske	22	9	Ribe-Esbjerg	23	9	Mors	23
10	Nordsjælland	21	10	Fredericia	20	10	Aarhus	22	10	Mors	17	10	Ribe-Esbjerg	22
11	Sønderjyske	21	11	Mors	19	11	Fredericia	16	11	Nordsjælland	17	11	Sønderjyske	17
12	Kolding	19	12	Aarhus	18	12	Kolding	13	12	Lemvig	13	12	Skanderborg	17
13	Holstebro	19	13	Lemvig	11	13	Lemvig	13	13	Kolding	12	13	Midtjylland	13
14	Ringsted	19	14	Ringsted	11	14	Nordsjælland	9	14	Ringsted	11	14	Tønder	12
15	Skive	15												
	2016-2017			2015-2016			2014-2015		_	2013-2014			2012-2013	
POSITION	TEAM	POINTS												
1	Aalborg	41	1	Holstebro	39	1	Kolding	45	1	Kolding	43	1	Kolding	47
2	erringbro/Silkebo	38	2	Kolding	35	2	Aalborg	38	2	Skjern	42	2	Skjern	42
3	Holstebro	37	3	Aarhus	35	3	erringbro/Silkebo	35	3	Holstebro	39	3	erringbro/Silkebor	41
4	Skjern	34	4	Skjern	33	4	Holstebro	34	4	Aalborg	38	4	Aalborg	37
5	GOG	32	5	erringbro/Silkebor	33	5	Skjern	32	5	Sønderjyske	32	5	Holstebro	35
6	Mors	27	6	GOG	30	6	Midtylland	28	6	GOG	31	6	Aarhus	26
7	Ribe-Esbjerg	27	7	Aalborg	28	7	GOG	27	7	Aarhus	31	7	Mors	24
8	Kolding	26	8	Sønderivske	25	8	Aarhus	27	8	erringbro/Silkebor	29	8	Sønderivske	23
9	Aarhus	23	9	Skanderborg	23	9	Ribe-Esbjerg	25	9	Skanderborg	27	9	Ribe-Esbjerg	20
10	Sønderjyske	21	10	Mors	19	10	Mors	24	10	Mors	16	10	Viborg	19
11	Midtilland	20	11	Ribe-Esbjerg	19	11	Sønderjyske	24	11	Nordsjælland	10	11	Skanderborg	17
12	Skanderborg	16	12	Midtjylland	19	12	Lemvig	11	12	Ribe-Esbierg	11	12	Ringsted	13
13	Tønder	13	13	Nordsjælland	16	13	Skanderborg	10	13	Skive	9	13	Skive	10
14	Randers	9	14	Skive	10	14	Odder	4	14	Ringsted	5	14	Nordsjælland	10
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS												
1	AG	47	1	AG	50	1	erringbro/Silkebor	46	1	Aalborg	41	1	FCK	44
2	Kolding	35	2	Skjern	36	2	FCK	39	2	FCK	40	2	Aarhus	36
3	erringbro/Silkebor	34	3	Nordsjælland	35	3	Aalborg	36	3	erringbro/Silkebor	39	3	GOG	36
4	Holstebro	31	4	Aarhus	35	4	Kolding	34	4	Kolding	38	4	erringbro/Silkebor	35
5	Aalborg	29	5	Aalborg	34	5	Nordsjælland	32	5	Skjern	33	5	Kolding	35
6	Skjern	29	6	erringbro/Silkebor	33	6	Skjern	27	6	Viborg	30	6	Skjern	34
7	Aarhus	24	7	Kolding	31	7	Viborg	22	7	Holstebro	29	7	Aalborg	30
8	Viborg	24	8	Holstebro	31	8	Holstebro	21	8	GOG	25	8	Holstebro	26
9	Skanderborg	21	9	Fredericia	19	9	Mors	19	9	Aarhus	22	9	Fredericia	24
10	Mors	21	10	Lemvig	18	10	Aarhus	13	10	Nordsjælland	21	10	Viborg	21
11	Nordsjælland	19	11	Viborg	14	11	Fredericia	9	11	Mors	15	11	Nordsjælland	21
12	Sønderjyske	17	12	Mors	13	12	Lemvig	8	12	Fredericia	15	12	Mors	13
13	Skive	17	13	Midtylland	10	13	Ringsted	6	13	Ringsted	11	13	Ringsted	7
			14	FCK	5	14	GOG	0	14	Ajax	5	14	Skanderborg	2

Table 5: Danish men's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Metz	78	1	Brest	37	1	Brest	51	1	Metz	63	1	Metz	65
2	Brest	68	2	Metz	37	2	Metz	51	2	Brest	59	2	Brest	55
3	Paris	63	3	Nantes	31	3	Fleury Loiret	43	3	Niza	55	3	Paris	53
4	Besancon	61	4	Paris	30	4	Nantes	43	4	Besancon	49	4	Niza	53
5	Nantes	58	5	Niza	29	5	Paris	42	5	Nantes	48	5	Nantes	50
6	Chambray	53	6	Besancon	29	6	Niza	39	6	Fleury Loiret	44	6	Besancon	42
7	Niza	51	7	Chambray	28	7	Besancon	38	7	Chambray	40	7	Fleury Loiret	40
8	Dijon	47	8	Bourg de Peage	26	8	Dijon	36	8	Toulon	39	8	Chambray	37
9	Bourg de Peage	43	9	Fleury Loiret	21	9	Bourg de Peage	33	9	Paris	38	9	Toulon	37
10	Merignac	42	10	Toulon	21	10	Toulon	32	10	Dijon	34	10	Bourg de Peage	36
11	Toulon	42	11	Saint Amand	20	11	Chambray	29	11	Bourg de Peage	32	11	Havre	30
12	Plan de Cuques	38	12	Dijon	20	12	Merignac	19	12	Saint Amand	27	12	Dijon	25
13	Celles	34	13	Merignac	18								,	
14	Fleury Loiret	32	14	Plan de Cuques	17									
15	Saint Amand	0												
	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Metz	57	1	Metz	38	1	Fleury Loiret	48	1	Metz	51	1	Metz	51
2	Paris	50	2	Fleury Loiret	34	2	Paris	45	2	Fleury Loiret	51	2	Fleury Loiret	45
3	Brest	46	3	Paris	29	3	Metz	44	3	Paris	45	3	Nimes	42
4	Besancon	42	4	Niza	28	4	Nimes	39	4	Toulon	36	4	Havre	37
5	Nantes	40	5	Besancon	28	5	Nantes	34	5	Havre	34	5	Paris	36
6	Chambray	40	6	Nantes	27	6	Niza	34	6	Mios Biganos	32	6	Mios Biganos	34
7	Toulon	38	7	Toulon	22	7	Toulon	32	7	Niza	29	7	Toulon	31
8	Dijon	37	8	Dijon	18	8	Havre	31	8	Nantes	28	8	Besancon	29
9	Fleury Loiret	32	9	Nimes	0	9	Dijon	28	9	Besancon	28	9	Niza	28
10	Niza	32	10	Mios Biganos	0	10	Mios Biganos	25	10	Nimes	26	10	Dijon	27
11	Celles	26												
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Metz	46	1	Metz	55	1	Metz	51	1	Metz	35	1	Metz	61
2	Paris	46	2	Harvor	53	2	Havre	45	2	Havre	31	2	Havre	55
3	Arvor	45	3	Toulon	48	3	Mios Biganos	40	3	Nimes	28	3	Paris	53
4	Havre	43	4	Nimes	48	4	Nimes	40	4	Paris	26	4	Dijon	48
5	Toulon	37	5	Mios Biganos	41	5	Toulon	34	5	Mios Biganos	24	5	Nimes	47
6	Mios Biganos	36	6	Havre	40	6	Dijon	33	6	Besancon	22	6	Besancon	44
7	Nimes	30	7	Fleury Loiret	36	7	Fleury Loiret	29	7	Dijon	20	7	Mios Biganos	42
8	Fleury Loiret	30	8	Paris	34	8	Toulouse	27	8	Fleury Loiret	13	8	Mérignac	39
9	Dijon	24	9	Dijon	31	9	Arvor	26	9	ngouleme Charen	9	9	gouleme Charen	38
10	Besancon	23	10	Besancon	28	10	igouleme Charen	22	10	Toulon	6	10	Fleury Loiret	38
			11	Cergy-Pontoise	26				11	Arvor	6	11	Bègles	37
											-	12	Vesoul	26

Table 6: French women's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021		1	2019-2020			2018-2019			2017-2018	_
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POIN
1	PSG	60	1	PSG	55	1	29	35	1	PSG	49	1	PSG	45
2	Nantes	49	2	Montpellier	50	2	Nantes	29	2	Montpellier	43	2	Montpellier	45
3	Aix	44	3	Nantes	47	3	Nimes	26	3	Chambery	41	3	Nantes	37
4	Montpellier	41	4	Aix	40	4	Montpellier	22	4	Nantes	39	4	St Raphael	34
5	Chambery	39	5	Nimes	38	5	Toulouse	20	5	Nimes	36	5	Aix	33
6	Nimes	36	6	Toulouse	32	6	Aix	18	6	Aix	28	6	Dunkerque	32
7	Toulouse	32	7	Chambery	31	7	Dunkergue	15	7	St Raphael	25	7	Nimes	27
8	St Raphael	31	8	St Raphael	28	8	St Raphael	15	8	Toulouse	23	8	Toulouse	27
9	Cesson	27	9	Limoges	20	9	Chambery	14	9	Tremblay	23	9	Chambery	23
10	Chartres	22	10	Dunkerque	24	10	Chartres	14	10	Dunkerque	19	10	lvry	16
11	Creteil	22	11	Chartres	24	10	Istres	13	11	Istres	19	11	Tremblay	14
12		20	12		22	12		13	12		10	12		13
	Dunkerque		12	Creteil		12	lvry		12	lvry	10	12	Cesson	
13	Limoges	18		Istres	20		Tremblay	9		Cesson			Saran	12
14	Istres	17	14	Cesson	18	14	Creteil	9	14	Pontault	6	14	Massy Essone	6
15	Saran	12	15	lvry	16									
16	Nancy	11	16	Tremblay	8	1								
	2016-2017			2015-2016			2014-2015			2013-2014		1	2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINT
1	PSG	48	1	PSG	46	1	PSG	45	1	Dunkergue	43	1	PSG	49
2	Nantes	45	2	St Raphael	36	2	Montpellier	44	2	PSG	40	2	Dunkerque	39
3	Montpellier	40	3	Nantes	34	3	St Raphael	34	3	Montpellier	38	3	Montpellier	38
4	St Raphael	35	4	Montpellier	32	4	Chambery	33	4	Nantes	35	4	Chambery	34
5	Chambery	26	5	Chambery	31	5	Dunkerque	32	5	Toulouse	33	5	Nantes	34
6	Dunkerque	26	6	Creteil	28	6	Nantes	31	6	St Raphael	29	6	St Raphael	27
7	Toulouse	25	7	Dunkerque	26	7	Cesson	24	7	Cesson	27	7	Cesson	26
8	Aix	20	8	Cesson	25	8	Nimes	23	8	Chambery	27	8	Selestat	21
9	lvry	22	9	Toulouse	24	9	Creteil	21	9	Aix	19	9	Aix	21
10	Nimes	22	10	Nimes	22	10	Toulouse	20	10	Nimes	19	10	lvrv	21
11	Cesson	16	11	lvry	19	11	Tremblay	20	11	Selestat	13	11	Toulouse	20
12	Saran	16	12	Aix	17	12	Aix	19	12	Tremblay	15	12	Tremblay	18
12	Creteil	16	13		12	13	Selestat	19	13		15	13	Creteil	16
13	Selestat	16	14	Chartres Tremblay	12	13	Istres	10	13	lvry Diion	9	13	Billere	16
14	Selestat	5	14	Tremplay	11	14	Istres	8	14	Dijon	я	14	Billere	0
	2011-2012			2010-2011			2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINT
1	Montpellier	47	1	Montpellier	50	1	Montpellier	50	1	Montpellier	48	1	Montpellier	49
2	Chambery	39	2	Chambery	44	2	Chambery	43	2	Chambery	41	2	Chambery	45
3	St Raphael	36	3	Dunkerque	37	3	Tremblay	33	3	Tremblay	27	3	lvry	36
4	Nantes	31	4	Nantes	30	4	St Raphael	32	4	Dunkerque	31	4	Dunkerque	31
5	Dunkerque	31	5	St Raphael	27	5	lvry	29	5	Ivry	30	5	Nimes	29
6	Toulouse	24	6	Istres	26	6	Dunkerque	29	6	St Raphael	25	6	Tremblay	26
7	Selestat	22	7	Tremblay	26	7	Istres	26	7	Creteil	24	7	St Raphael	26
8	Creteil	21	8	Touraine	20	8	Nimes	20	8	Istres	23	8	PSG	25
9	lvry	20	9	Nimes	18	9	Nantes	20	9	Nimes	21	9	Creteil	25
10	Cesson	20	10	Toulouse	18	10	Dijon	19	10	Aurillac	21	10	Toulouse	24
11	Tremblay	20	11	PSG	17	11	Cesson	18	11	Toulouse	20	11	Selestat	18
12	PSG	18	12	Cesson	16	12	Toulouse	16	12	Nantes	19	12	Istres	17
													Pontault	7
														6
13 14	Istres Nimes	18 17	13 14	lvry Dijon	16 15	13 14	Aurillac Creteil	16 13	13 14	PSG Selestat	17 7	13 14	Ponta Villefren	

Table 7: French men's handball league's latest classifications

Source: own elaboration

	2021-2022			2020-2021			2019-2020			2018-2019			2017-2018	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Bietigheim	52	1	BVB Dortmund	60	1	BVB Dortmund	34	1	Bietigheim	50	1	Thuringer	48
2	BVB Dortmund	44	2	Bietigheim	53	2	Bietigheim	33	2	Thuringer	50	2	Bietigheim	40
3	Buxtehuder SV	38	3	Metzingen	44	3	Metzingen	30	3	Metzingen	40	3	Buxtehuder	35
4	Thuringer	34	4	Thuringer	43	4	Blomberg-Lippe	26	4	Buxtehuder	33	4	BVB Dortmund	34
5	Metzingen	31	5	Blomberg-Lippe	43	5	Thuringer	24	5	Leverkusen	28	5	Metzingen	33
6	Blomberg-Lippe	28	6	Neckarsulmer	37	6	Leverkusen	23	6	Blomberg-Lippe	28	6	Leverkusen	33
7	Neckarsulmer	26	7	Oldenburg	30	7	Buxtehuder	18	7	BVB Dortmund	27	7	Göppingen	33
8	Halle-Neustadt	21	8	Leverkusen	29	8	ensheim-Auerbac	15	8	Göppingen	22	8	Blomberg-Lippe	32
9	Leverkusen	19	9	ensheim-Auerbac	29	9	Neckarsulmer	12	9	ensheim-Auerbac	20	9	Oldenburg	21
10	ensheim-Auerbac	17	10	Buxtehuder	28	10	Oldenburg	11	10	Oldenburg	20	10	Nellingen	16
11	Bad Wildungen	17	11	Bad Wildungen	22	11	Göppingen	10	11	Bad Wildungen	18	11	Bad Wildungen	16
12	Oldenburg	16	12	Halle-Neustadt	20	12	Bad Wildungen	7	12	Neckarsulmer	13	12	ensheim-Auerbac	12
13	Zwickau	11	13	Rosengartn	18	13	Mainz	4	13	Halle-Neustadt	8	13	Neckarsulmer	10
14	Rosengartn	10	14	Göppingen	16	14	rpfalz Baren Kets	3	14	Nellingen	7	14	Rodertal	1
15	rofalz Baren Kets	4						-						
16	Mainz	4												
19	THE REAL PROPERTY OF	-												
	2016-2017			2015-2016		1	2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Bietaheim	52	1	Thuringer	43	1	Thuringer	47	1	Thuringer	43	1	Thuringer	37
2	Thuringer	44	2	Metzingen	41	2	Buxtehuder	46	2	Leipzig	37	2	Leipzig	36
3	Metzingen	38	3	Leipzig	41	3	Metzingen	41	3	Leverkusen	30	3	Buxtehuder	35
4	Buxtehuder	33	4	Bietgheim	41	4	Oldenburg	34	4	Buxtehuder	29	4	Oldenburg	31
5	Oldenburg	32	5	Oldenburg	34	5	Leipzig	34	5	Oldenburg	27	5	Leverkusen	28
6	Dortmund	28	6	Dortmund	26	6	Leverkusen	33	6	Metzingen	26	6	Göppingen	26
7	Leipzig	26	7	Buxtehuder	26	7	Blomberg-Lippe	31	7	Bietgheim	18	7	Frankfurt	21
8	Leverkusen	22	8	Leverkusen	26	8	Fuchse Berlin	21	8	Göppingen	16	8	Blomberg-Lippe	15
9	Blomberg	20	9	Blomberg-Lippe	22	9	Bietgheim	17	9	Blomberg-Lippe	16	9	Koblenz/Weibern	12
10	Göppingen	20	10	Fuchse Berlin	21	10	Bad Wildungen	17	10	Koblenz/Weibern	12	10	Metzingen	11
11	Bad Wildungen	15	11	Bad Wildungen	20	11	Göppingen	12	11	Trier	6	11	Trier	7
12	Neckarsulmer	13	12	Göppingen	16	12	SVG Celle	12	12	Bensheim	4	12	Bad Wildungen	5
13	Nellingen	10	13	SVG Celle	15	13	Trier	10		Denone			boo moongen	
14	SVG Celle	7	14	Rosengarten	8	14	Koblenz/Weibern	9						
	OVO COMO		14	ressengenen		- 14	Robienz Weibern	5						
	2011-2012			2010-2011		1	2009-2010			2008-2009			2007-2008	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Thuringer	32	1	Thuringer	39	1	Leipzig	39	1	Leverkusen	33	1	Lepizia	46
2	Buxtehuder	32	2	Leipzig	35	2	Leverkusen	35	2	Leipzig	28	2	Leverkusen	43
3	Leipzig	30	3	Buxtehuder	34	3	Oldenburg	32	3	Buxtehuder	26	3	Buxtehuder	41
4	Oldenburg	29	4	Leverkusen	34	4	Blomberg-Lippe	28	4	Frankfurt	25	4	Frankfurt	41
5	Leverkusen	23	5	Oldenburg	28	5	Buxtehuder	20	5	Oldenburg	23	5	Bayer	36
6	Frankfurt	21	6	Frankfurt	20	6	Göppingen	23	6	Numberg	24	6	Oldenburg	30
7	Göppingen	17	7	Sindelfingen	20	7	Frankfurter	20	7	Blomberg-Lippe	19	7	Trier	23
8	Blomberg-Lippe	17	8	Blomberg-Lippe	20				8	Göppingen	19			
8		16	8		19	8	Thuringer	18	9	Coppingen thein-Main Biener	19	8	Dortmund	22
-	Bad Wildungen		-	Göppingen		9	Trier		-			9	Halle-Neustadt	
10	Trier	5	10	Trier	10	10	Sindelfingen	14	10	Trier	18	10	Blomberg-Lippe	18
11	SVG Celle	2	11	Rosengarten	9	11	Dortmund	11	11	Thuringer	16	11	Bietigheim	18
			12	Bietigheim	3	12	SVG Celle	11	12	Dortmund	11	12	Aaitz-Bretzenheim	17

Table 8: German women's handball league's latest classifications

Source: own elaboration

	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Magdeburgo	64	1	Kiel	68	1	Kiel	44	1	Flensburg	64	1	Flensburg	56
2	Kiel	58	2	Flensburg	68	2	Flensburg	42	2	Kiel	62	2	Rhein-Neckar	55
3	Fuchse Beril	53	3	Magdeburgo	53	3	Magdeburgo	39	3	Magdeburgo	54	3	Fuchse Berlin	53
4	Flensburg	50	4	Fuchse Berlin	52	4	lannover-Burgdor	36	4	Rhein-Neckar	50	4	Magdeburgo	50
5	Göppingen	38	5	Rhein-Neckar	50	5	Rhein-Neckar	34	5	Melsungen	42	5	Kiel	49
6	Lengo	37	6	Göppingen	42	6	Fuchse Berlin	35	6	Fuchse Berlin	38	6	lannover-Burgdor	47
7	Wetzlar	35	7	Leipzig	42	7	Melsungen	32	7	Bergischer	38	7	Melsungen	41
8	Melsungen	33	8	Melsungen	41	8	Leipzig	27	8	Göppingen	36	8	Leipzig	37
9	Leipzig	33		Lemgo	41	9	Wetzlar	27	9	Erlangen	30	9	Lemgo	34
10	Rhein-Neckar	30	10	Wetzlar	41	10	Lengo	27	10	Wetzlar	29	10	Göppingen	31
11	Bergischer	29	11	lannover-Burgdor	36	11	Göppingen	23	10	Leipzig	23	11	Wetzlar	30
12	lannover-Burgdor	29	12	Bergischer	35	12	Stuttgart	23	12	Lengo	26	12	Minden	26
12		27	13		30	12		20	12		20	12	Erlangen	25
	Erlangen			Erlangen			Bergischer			lannover-Burgdor	E .0			
14	Hamburgo	26	14	Stuttgart	32	14	Erlangen	20	14	Minden	25	14	Stuttgart	20
15	Stuttgart	24	15	Balingen	29	15	Minden	18	15	Stuttgart	23	15	Gummersbach	16
16	Minden	18	16	Minden	28	16	Balingen	16	16	Ludwigshafen	14	16	Ludwigshafen	15
17	Balingen	16	17	Ludwigshafen	25	17	Ludwigshafen	15	17	Gummersbach	14	17	Lubbecke	14
18	N-Lubbecke	14	18	Nordhorn-Lingen	17	18	Nordhorn-Lingen	4	18	Bietigheim	14	18	Huttenberg	13
			19	Essen	15									
			20	Coburg	11									
	2016-2017			2015-2016			2014-2015			2013-2014			2012-2013	
POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS	POSITION	TEAM	POINTS
1	Rhein-Neckar	61	1	Rhein-Neckar	56	1	Kiel	65	1	Kiel	59	1	Kiel	61
2	Flensburg	58	2	Flensburg	55	2	Rhein-Neckar	63	2	Rhein-Neckar	59	2	Flensburg	54
3	Kiel	53	3	Kiel	50	3	Flensburg	54	3	Flensburg	54	3	Rhein-Neckar	54
4	Fuchse Berlin	51	4	Melsungen	47	4	Magdeburgo	48	4	Hamburgo	53	4	Fuchse Berlin	51
5	Magdeburgo	51	5	Fuchse Berlin	43	5	Göppingen	42	5	Fuchse Berlin	46	5	Hamburgo	49
6	Wetzlar	41	6	Göppingen	39	6	Melsungen	40	6	Magdeburgo	40	6	lannover-Burgdor	46
7		41	7	lannover-Burgdor	39	7	Fuchse Berlin	40	7		40	7	Wetzlar	40
	Melsungen		8						8	Melsungen				
8	Leipzig	35		Magdeburgo	35	8	Wetzlar	34		lannover-Burgdor	32	8	Magdeburgo	36
9	Erlangen	28	9	Gummersbach	35	9	Hamburgo	34	9	Lemgo	31	9	Lemgo	34
10	Göppingen	27	10	Wetzlar	34	10	Gummersbach	34	10	Lubbecke	30	10	Melsungen	33
11	lannover-Burgdor	24	11	Leipzig	30	11	Balingen	31	11	Wetzlar	29	11	Göppingen	32
12	Minden	24	12	Bergischer	19	12	Lubbecke	29	12	Göppingen	26	12	Lubbecke	28
13	Lengo	23	13	Lemgo	18	13	lannover-Burgdor	29	13	Gummersbach	26	13	Balingen	25
14	Stuttgart	23	14	Balingen	15	14	Bergischer	28	14	Minden	24	14	Minden	18
15	Gummersbach	22	15	Stuttgart	14	15	Lemgo	27	15	Bergischer	22	15	Gummersbach	16
16	Bergischer	22	16	Eisenach	10	16	Minden	25	16	Balingen	19	16	Großwallstadt	15
17	Balingen	17	17	Lubbecke	8	17	Ludwigshafen	25	17	Eisenach	13	17	Neuhausen	15
18	Coburg	14	18	Hamburgo	0	18	Erlangen	23	18	Emsdetten	10	18	Essen	8
						19	Bietigheim	13						
	0044 0040			0040 0044			0000 0040			0000 0000			0007.0000	
POSITION	2011-2012 TEAM	POINTS	POSITION	2010-2011 TEAM	POINTS	POSITION	2009-2010 TEAM	POINTS	POSITION	2008-2009 TEAM	POINTS	POSITION	2007-2008 TEAM	POINTS
1	Kiel	68	1	Hamburgo	62	1	Kiel	62	1	Kiel	65	1	Kiel	61
2	Flensburg	57	2	Kiel	55	2	Hamburgo	61	2	Hamburgo	52	2	Flensburg	54
3	Fuchse Berlin	53	3	Fuchse Berlin	55	3	Flensburg	54	3	Rhein-Neckar	50	3	Hamburgo	54
4	Hamburgo	50	4	Rhein-Neckar	53	4	Rhein-Neckar	49	4	Lemgo	47	4	Rhein-Neckar	52
5	Rhein-Neckar	48	5	Göppingen	45	5	Gummersbach	47	5	Flensburg	44	5	Nordhorn-Lingen	50
6	Magdeburgo	39	6	Flensburg	44	6	Göppingen	46	6	Göppingen	42	6	Gummershach	41
7	Lengo	39	7	Magdeburgo	44	7	Lemgo	40	7	Magdeburgo	42	7	Lemgo	39
8	Göppingen	38	8	Gummersbach	42	8	Großwallstadt	42	8	Nordhorn-Lingen	42	8	Magdeburgo	39
			-			_			-			_		
9	Lubbecke	30	9	Lemgo	36	9	Fuchse Berlin	40 26	9	Gummersbach	40	9	Göppingen	31
	Melsungen	30		Großwallstadt	30	10	Lubbecke		10	Fuchse Berlin	30	10	Melsungen	29
11	Gummersbach	29	11	Wetzlar	27	11	Magdeburgo	25	11	Melsungen	30	11	Großwallstadt	26
12	Großwallstadt	27	12	Lubbecke	24	12	Melsungen	23	12	Großwallstadt	26	12	Fuchse Berlin	25
13	lannover-Burgdor	24	13	Melsungen	22	13	Wetzlar	23	13	Minden	25	13	Balingen	24
14	Balingen	24	14	lannover-Burgdor	20	14	lannover-Burgdor	20	14	Wetzlar	23	14	Wetzlar	21
15	Wetzlar	23	15	Balingen	19	15	Balingen	18	15	Balingen	23	15	Minden	18
		18	16	Rheinland	16	16	Rheinland	14	16	Rheinland	19	16	Essen	18
16	Bergischer													
16 17	Hittenberg	17	17	Hamm-Westfalen	15	17	Düsseldorf	12	17	Stralsunder	6	17	Lubbecke	18

Table 9: German men's handball league's latest classifications

Source: own elaboration

Once the database has been set up, the procedure is all about obtaining different indicators in order to evaluate competitive balance and draw conclusions.

Measuring competitive balance is trivial, as it "*constitutes a key aspect of empirical research*" (Humphreys, 2019: p.1), which concords with previously mentioned data. According to Humphreys, these measurements can be classified into two main groups, which are static and dynamic. For the first group, some main instruments are the win ratio per team, those based on the standard deviation, the Record test, and the Herfindahl-Hirschman index (HHI). On the other hand, Competitive Balance Ratio (CBR) and Markov transition probabilities could be examples of dynamic assessments.

Some of the previously mentioned measurements will be used in this paper. However, it may make more sense to categorize the instruments differently, so that it is more consistent and easier. Elseway, our **indices** would appear the following way.

Two categories will be taken into consideration: dispersion and concentration. For the first classification, the Gini index (Gini) will be our innovative instrument in comparison to what Humphreys proposed. Nevertheless, we will use the standard deviation to obtain Pearson's variation coefficient (CV). On the other hand, for the concentration group, we will keep the Herfindahl-Hirschman Index (HHI) and we will use the win ratio per team in relation to the concentration ratio (Cn). It can be noticed that none of Humphreys' dynamic measurements will be considered, nor the static Record test.

With the aim of gaining a sense of understanding of the functioning and analysis of this work, the formulas of each of them will be stated in this section.

All of the previous instruments are briefly summed up in the following table (Table 10) to have a more visual and outstanding view of the data.

10. Categories of instrument	is to measure competitive of
DISPERSION	CONCENTRATION
Pearson's variation coefficient (CV)	Herfindahl-Hirschman Index (HHI)
Gini index (Gi)	Concentration ratio (Cn)

Table 10: Categories of instruments to measure competitive balance

Source: own elaboration

As previously stated, the instruments' respective formulas will be discussed in this part of the section.

Firstly, regarding dispersion measurements, **Pearson's variation coefficient** (CV) is explained in the following way (formula 1):

Formula 1: Pearson's variation coefficient (CV) $CV = \frac{\sigma}{\bar{x}}$ *Source: own elaboration*

Where σ stands for the standard deviation and \bar{x} for the arithmetic mean. The result of the CV will always be between 0 and 1 unless it is put in percentage points by multiplying it by 100. This is, it is expressed as the ratio of the standard deviation to the mean of the dataset.

Secondly and in the same category, the Gini index looks as follows (formula 2):

Formula 2: Gini index (Gi)

$$Gini = 1 + (\frac{1}{n}) - (\frac{2}{n^2 \bar{x}}) * (x_1 + x_2 * 2 + x_3 * 3 + x_4 * 4...)$$

Source: own elaboration

Where n is the number of teams, \bar{x} is the mean points obtained by the teams, and xi is the points obtained by team i. Again, this index will result in values between 0 and 1 where 0 would stand for perfect equality and 1 for perfect inequality.

Hereafter, concerning concentration instruments, **Herfindahl-Hirschman Index** (HHI) is stated in the subsequent expression (formula 3):

Formula 3: Herfindahl-Hirschman Index (HHI)

$$HHI = \sum_{i=1}^{n} s_i^2 \qquad i = 1, 2, 3, ..., n$$

Source: own elaboration

Where Si stands for the market share of each team, i.e. the points obtained in relation to the total points of the league. The higher the value of the HHI, the higher the concentration and the less competitive the market.

Finally, the **Concentration ratio** (Cn) is expressed below (formula 4):

Formula 4: Concentration ratio (Cn)

$$Cn = \sum_{i=1}^{r} s_i$$
 $i = 1, 2, 3, 4, 5$ $S_i = \frac{q_i}{Q}$
Source: own elaboration

Where n is the number of teams to be analyzed and Si is the market share of each team (points obtained in relation to the total points of the league). The computations for this index have been calculated considering just 5 teams per season, thus n=5 and C(5), no matter the total number of participants in a league.

After gathering information about the classifications of male and female handball leagues of Spain, Denmark, France, and Germany in the years 2007-2008 to 2021-2022 (Tables 2 to 9), the next step was to compute the calculations to obtain the results of the previously mentioned indices for each of the seasons selected: Pearson's variation coefficient (CV), Gini index (Gini), Herfindahl-Hirschman Index (HHI) and Concentration Ratio (Cn).

5. RESULTS

In the first instance, the tables with all the results for each of the categories and genders will be given, in the same order as for the data from the previous point. This is, Spanish women (annex 1), Spanish men (annex 2), Danish women (annex 3), Danish men (annex 4), French women (annex 5) French men (annex 6), German women (annex 7), and German men (annex 8), as can be seen hereunder.

Here, as has been previously mentioned, multiple numbers and calculations appear. First, there exists a copy of the simple tables (2 to 9) where just the yearly classifications of each league appear. Then, some of the intermediate calculations are present, followed by the final indices (CV, Gini, HHi, and Cn).

5.1. Results per index

As it will be later seen, in order to simplify interpretations and to give a more general view, mean computations of each of the indices have been calculated and put together. These will be given and interpreted hereafter. Nevertheless, some insights are given about the particular calculations of these indices, per country, gender, and season.

The results will be analyzed in the following order: regarding dispersion indicators: first, the Pearson's Variation Coefficient (CV) and next the Gini index; and concerning concentration indicators, Herfindahl-Hirschman (HHI) will be explained before the Concentration Ratio (Cn). As an introduction to the values, Table 11 gives an insight into the mean values of each of the indices.

	CV	Gini	HHI	C(5)
SPAIN WOMEN	0,4949	0,2689	880,2381	54,3602
SPAIN MEN	0,4436	0,2373	735,6390	47,3579
DENMARK WOMEN	0,5044	0,2731	991,7981	59,7480
DENMARK MEN	0,4366	0,2364	837,3232	51,5690
FRANCE WOMEN	0,2911	0,1550	975,8180	56,6007
FRANCE MEN	0,4383	0,2337	828,8555	51,7057
GERMANY WOMEN	0,4820	0,2626	939,1134	57,3015
GERMANY MEN	0,4514	0,2464	656,7815	43,6754

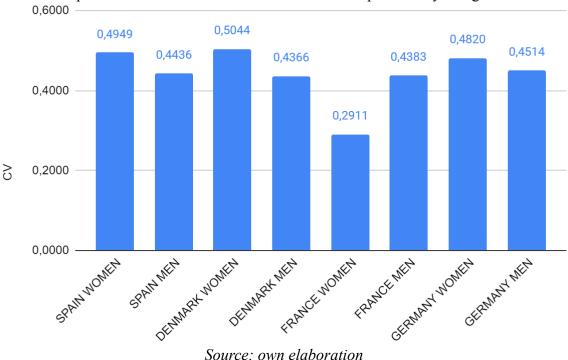
Table 11: mean values of each indicator for every country and gender

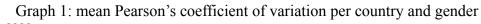
Source: own elaboration

Therefore, **Pearson's Variation Coefficient (CV)** is the first of all indices to be analyzed. As previously mentioned, this statistical measure is used to express the degree of variation between a set of data points and their mean value. Taking a worth somewhere in the range of 0 and 1, the higher the value of the coefficient, the more heterogeneous the upsides of the variable will be, as well as conversely.

In the case of the Spanish women's league, the mean of this value stands at 0.4949. This is, it has high variability. This case is similar to the Spanish men's league, where the mean stands at 0.4436. If we take a look at The female league in Denmark, the mean of this measure is 0.5044, whereas for men it is 0.4366. Regarding French women, 0.2911 is 0.4383. Finally, regarding Germany, the female league has a mean CV of 0.4820 whereas the male one is 0.4514. Put together, the following graph (Graph 1) reflects this information. It reveals that the French nation is the only one from this selection where male leagues rank higher than female leagues in terms of punctuation usage.

Additionally, taking a look at the particular CVs per country, gender, and season, it can be observed that some of the highest punctuations are present in Spanish women and Danish women whereas some of the lowest can be spotted in French women.

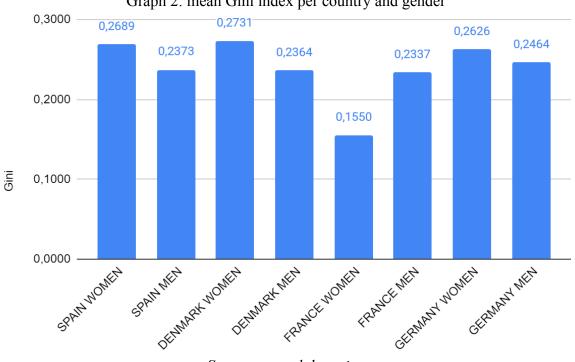




As can be seen in Graph 2 about the different Gini indicators for the considered

countries for both genders, there seem to be considerable differences, even if all of them stand between 0.15 and 0.28. In general, France has the lowest points; especially for women (0.155). In addition, this country is also the exception regarding the tendency of female leagues to have higher punctuations, as it is the only one where the male league is higher.

Regarding the particular Gini index results per country, gender, and season, Danish men have had large changes over the years (decrease), whereas French women have in general some of the lowest indices, contrary to German men.

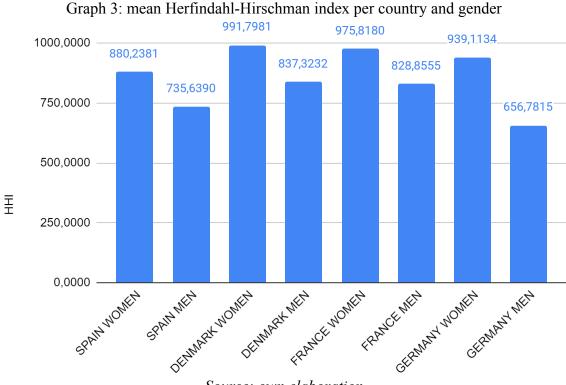


Graph 2: mean Gini index per country and gender

Source: own elaboration

Graph number 3 reflects the mean **Herfindahl-Hirschman index** results per country and gender. As it is known, the HHI score is a number between 0 and 10,000. The market is more concentrated the higher the score. Therefore, having a look at the following graph, it can be stated that as a general rule, male leagues are less concentrated than female ones, leading to the German league for men being the least concentrated in this market (656.7815) followed by the Spanish league for men (735.639).

Concerning the individual HHIs per country, gender, and season, it can be stated that the Spanish women's league is the owner of some of the lowest results together with

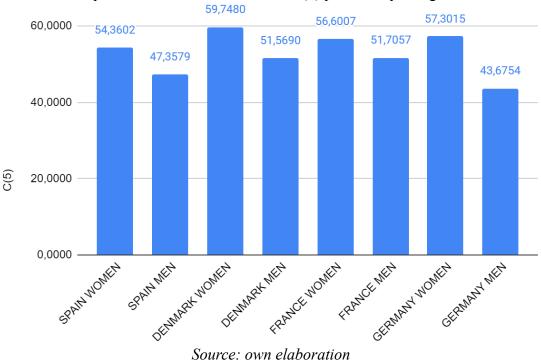


German men's one, whilst Danish and French women own the highest, in general.

Source: own elaboration

Finally, Graph 4 shows the results for the mean **Concentration Ratio** of each country and gender, considering the top 5 teams of each league. It is important to remember that Concentration Ratios are market focus proportions that show the market share held by the top n teams in a given league, in this case. As is shown in percentage points, a concentration ratio of 100% would indicate that the top 5 teams in the league hold a monopoly, compared to a concentration ratio of 0% which would indicate perfect competition, with each team having an equal market share. In general, women's leagues show higher concentration. Nevertheless, this may be biased because in general, these leagues have a lower number of participant teams, thus the top 5 takes a higher proportion of total teams for women than it does for men.

Concerning the specific C(5)s per country, gender, and season, the Danish female league is one of the leagues with the highest punctuations together with German women, very contrary to the German male league.

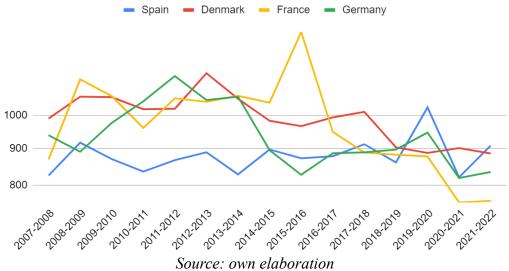


Graph 4: mean Concentration Ratio (5) per country and gender

5.2. Changes over time

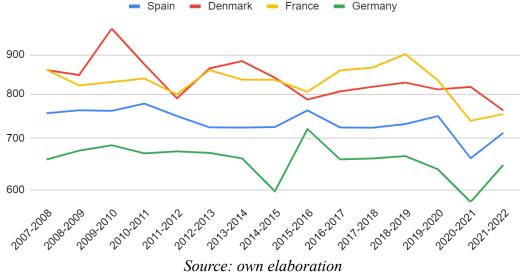
Even if the main focus of this research is not the changes over time that happen in the competitive balance of leagues from different countries, it is true that analyzing some of the indices and their progress is not undue. For this section, only the HHI results have been taken into consideration, since it is possibly the index that best captures the reality, as I will later explain. Thus, the question to be answered in this part of the research is the following: *for each of the leagues to be analyzed, has competitive balance suffered an improvement or a worsening over time*?

As can be seen in Graph 5, in the case of female leagues, their results are quite different and changing, especially for countries like France and Germany. Both of these countries have had a decadence of the HHI value, meaning that these leagues have had a more competitive league over the years due to their lower concentration. In the case of France, it is the country with the highest and the lowest values over time compared to the rest of the nations, with considerable differences. On the other hand, Spain seems to be the most constant one, even if it also has ups and downs. In this case, it seems that this country has a higher concentration than some years ago, leading to less competition.



Graph 5: HHI over time for female leagues in Spain, Denmark, France, and Germany

Looking at Graph 6 about men, the interpretation of the results is quite different from those of women. Even if each of the countries has its peaks, they are very different compared to each other. This is evident if we consider that only Denmark and France touch each other, whereas the rest of the nations have such different values that their tendencies in the graph do not touch each other. These two countries have decreased their concentration level, thus now have higher competition than 15 years ago. Additionally, it is to say that, in general, the values are quite constant.



Graph 6: HHI over time for male leagues in Spain, Denmark, France, and Germany — Spain — Denmark — France — Germany

6. CONCLUSIONS AND DISCUSSION

6.1. Differences per gender

In order to compare what the differences may be regarding gender in each of the leagues per country, the conclusions of this research paper can be separated into two main parts, in concord with the type of indices used to obtain the results of the different leagues per country and gender: dispersion and concentration.

Firstly, putting together both of the **dispersion** indicators used in this paper, some conclusions can be obtained jointly. For example, it can be stated that due to its low CV and Gini coefficient, France has the most equitable distribution of points among women's leagues. This same trend happens for Denmark among the men's leagues. Contrarily, Denmark has the highest CV and Gini index for women's teams, leading to the conclusion of an unequal distribution of punctuation acquired among groups. Nevertheless, the important point of this section is that in general women's leagues have a higher degree of dispersion than men's leagues.

As a first breakdown of the previous conclusion, comparing the results of Graph 1 about the mean **coefficients of variation (CV)** for women's and men's handball associations in Spain, Denmark, France, and Germany, it can be noted that the CV of the women's leagues in Spain, Denmark, and Germany is higher than that of the men's leagues. This suggests that the women's leagues in those three countries have a higher degree of inequality or dispersion than the men's leagues. In the case of France, the CV is higher in the men's league than in the women's league. This suggests that the men's league in that nation has greater inequality indications than the women's league. In general, we can conclude that the men's and women's leagues in the four nations are significantly different in terms of dispersion.

However, it is important to keep in mind that the CV is only one measure of inequality and does not take into account other significant aspects, thus it is advisable also to analyze other indices such as the **Gini index**. In this case, the mean Gini coefficients for the women's and men's handball leagues in Spain, Denmark, France, and Germany can be compared using Graph 2. When compared to men's leagues, we notice that the results are typically higher for women's leagues. This suggests that teams in women's leagues are more unequal. There are, however, a few exceptions. As it has been mentioned in the previous point, in the case of France, the men's league has a higher Gini coefficient than the women's league. This suggests that the men's league has more inequality than the women's league in that country. In general, the conclusion may be that men's and women's leagues in the four nations are significantly different in terms of dispersion.

Secondly, the main outcome of the **concentration** measures mentioned, (HHI and Cn) is that the German male handball league is the least concentrated one compared to France, Spain, and Denmark. The mean results obtained over the last 15 years bring up the conclusion that this league has a close to optimal competitive balance. Even if its dispersion measure punctuations are more similar to the rest, it can be seen that watching a male German handball match is more intriguing than for example a French one, as a general rule. Briefly, the main outcome of this is that female handball is more concentrated than male, thus the league's top teams get a larger share of the points they earn, as will further be explained hereunder.

Due to this last mentioned fact, I personally consider that HHI has been the more representative of reality compared to the rest of the indices, for the case of German male handball. Nevertheless, I do not consider women's handball as the results show. This is, I think that as a general rule, male handball has a larger issue with competitive balance than female handball does.

In order to find the conclusion mentioned, if we take a glance at each of the concentration measures used starting with the **Herfindahl-Hirschman** Index, the clearest outcomes are that in general women's leagues are more concentrated than men's, as can be seen in Graph 3. In other words, there exists a greater concentration of wins among a small number of teams. This is particularly evident in the Danish and French women's leagues compared to the German men's league. The Danish female league has the highest concentration, which means that the league's top teams get a larger share of the points they earn.

Finally, the last index to compare is the **Concentration Ratio**, which has been computed considering 5 teams per league and season. When we compare the results in Graph 4, we can see that Denmark has the highest concentration ratio in both gender leagues, followed by Spain and France. Germany has the most outstanding result for its male league since it is very low compared to the rest of the countries.

After analyzing these differences, it can be concluded that the gender differences in competitive balance are remarkable in relation to the results obtained in this study. In general, men have larger issues with competitive balance than women do. Both dispersion and concentration measures are a reflection of this fact. This will be mentioned below as one of the many general conclusions.

6.2. General conclusions

As the general conclusion of the paper, it is important to state that in general, the results show a relevant **lack of competitive balance**. The Spanish leagues are a perfect example of this, since Barcelona (men) and Bera Bera (women) are leaders in the last couple of years, due to multiple factors where budgeting takes an important role.

Nevertheless and as I previously mentioned, I think that in general, male handball has more problems with competitive balance than female handball does. In addition, HHI has been a good reflection of this fact.

Even so, there are exceptions, such as German handball, which is an example to follow for the rest of the European handball leagues analyzed in this study. This league is the most competitive one of the ones here analyzed. Therefore, this research supports the fact that nowadays those who are banal about the lack of competitive balance in Spanish handball leagues opt for following German leagues.

This fact is backed by the reference "The Strongest League in the World? German Handball Bundesliga at the Top of the EHF Ranking", which states that regarding the EHF Championship "the Bundesliga, meanwhile, has additionally scored reliably in the EHF European League in recent years away from the titles, in some cases with three participants in the Final4" (handball world, 2022). In addition, "France recently fell behind Spain to rank 3". Here, the French player Nikola Karabatic states that "this kind of Champions League is pretty cool for clubs like Barcelona, Kielce or Veszprem, because their national leagues are very weak" due to the problem analyzed throughout this paper: "this context also the problem of differently balanced national leagues with only one top team in Spain or two in Poland and Hungary".

In addition, it is relevant to mention that differences between genders are present all

along the results of this study and generally disfavor women more than men. Due to budgeting and other multiple factors, women are (once again) undermined and harmed in sports, compared to facts regarding men. This has overall analyzed objective data rather than subjective, thus it may not be by chance that this trend is repeatedly present in empirical research.

Now, the question is: *is there a way out of the problem of competitive balance?* The easy answer would be negative, with the reasoning behind explaining that this is simply what it is, and these large industries are hard to change. Nevertheless, even if it is true that this is not an easy nor a fast task, there may be some actions that can help this inequality be reduced. In order to look for solutions, we would have to analyze the causes. So, why do the same teams always win? Is it due to budgeting, competition format, or even fear? In any of the cases, changes in the causes lead to changes in the results. Therefore, some of the possible solutions could be the improvement of an equal budget repartition, salary caps, the regulation of the transfer market, and so on.

6.3. Limitations

There exists not enough empirical evidence regarding handball and competitive balance in handball, thus recent data was hard to find. This leads to a limited literature review and limited possible sources for the rest of the research.

In addition, the conclusions of this paper may be biased since only the classifications of each league and its respective punctuations have been taken into consideration. In other words, there may be many other factors that affect and lead to competitive balance in handball that have not been considered throughout this work. Examples of this may be player skills, team sponsorships, results of other sports for the same clubs, etc.

Also, especially for female handball, I consider that analyzing a general picture of the last 15 seasons has not been as effective. This sport has suffered multiple changes during this period of time, thus the given conclusions may not be as accurate as possible. For example, if we take the case of female Spanish handball, we can see that from 2008-2009 to 2011-2012 Itxako team was clearly the leader, but due to budgeting issues, this team rapidly disappeared, handing success over to Bera Bera. Of course, this

event is not reflected in the numbers and calculations inspected here.

As the season 2019-2020 was not completed in most countries due to the Covid-19 pandemic, the indicators are not as realistic as in the rest of the years, leading to possible biases in general for different indicators.

Related to the previous points, handball is a sport that is rapidly changing norms inside each country and across borders, which makes it difficult to compare across seasons. One example can be that the number of teams participating in each league and season varies year after year as well as across borders, leading to difficulties in obtaining comparable results in indices such as the Concentration Ratio.

6.4. Further research

The main point to include in this section of the research paper is to solve the limitations mentioned. In fact, the results may be limited and biased by the factors that have been previously mentioned. Even if a comprehensive picture of market concentration and inequality in the handball industry can be obtained by comparing the HHI, Cn, Gini index, and CV, if the objective is to arrive at meaningful conclusions, it is essential to take into account any other variables that might have an impact on these measures.

If this is solved, the results obtained and the judgments about them may be used to find areas for improvement in the sport's promotion of greater parity and competitiveness. Of course, the ways of putting solutions into practice and their effects should also be further analyzed, which could consequently be a potential concept for a future research paper.

Furthermore, extensive research could be carried out regarding solutions to the issue of competitive balance, whether it is for handball or not. As I previously mentioned, changes in the causes of this problem could improve the results.

In addition, I would like to include further research on gender inequality in handball, as I consider that this has a major impact on the results of competitive balance in handball across genders. Even if I have briefly mentioned this fact in these conclusions, it may be interesting to deepen this topic.

BIBLIOGRAPHY

Åkesson, K. (2020, February 28). How equal is handball? *idrottsforum.org*. from <u>https://idrottsforum.org/akesson200228-in-english/</u>

Almenzar, J. M. (2022). División de Honor Femenina . BRD - División honor femenina. from <u>http://bancoderesultados.jmalmenzar.com/_bmn/honor_fem.php</u>

ASOBAL. (2023). Palmarés. Liga Plenitude *ASOBAL*. from <u>https://asobal.es/liga/palmares/</u>

Badenhausen, K. (2015). Does competitive balance drive interest in sports? *Forbes*. from

https://www.forbes.com/sites/kurtbadenhausen/2015/08/25/does-competitive-balance-dr ive-interest-in-sports/?sh=3e7f3f2f4f25

Competitive balance. *Cambridge Dictionary*. (n.d.). from <u>https://dictionary.cambridge.org/dictionary/english/competitive-balance</u>

Diario AS. (2021). Palmarés - Mundial de Balonmano. *AS.com*. from <u>https://as.com/especiales/balonmano/mundial/comunes/palmares/</u>

Diario AS. (2023). Mundial de Balonmano 2023. *AS.com*. from <u>https://resultados.as.com/resultados/balonmano/mundial/</u>

Flashscore. (2023). Flashscore.es. *Flashscore.es*, resultados en directo, MisMarcadores. from <u>https://www.flashscore.es/</u>

Gasparetto, T., & Barajas, A. (2016). Reanalizando la competitividad en la industria del fútbol: Diferencia Acumulada de Puntos. *Revista De Administração De Empresas*, 56(3), 288–301. <u>https://doi.org/10.1590/s0034-759020160303</u>

Handball-World. (2022). *The Strongest League in the world? German handball Bundesliga at the top of the EHF ranking*. https://www.handball-world.news/en/news-2-1-20-144146.html

Humphreys, B. R. (2019). Una guía práctica para medir el balance competitivo. *Papeles de Economía Española*, *Deporte y economía*, (159), 43-60.

International Handball Federation. (2014). Handball. History and stories.

Izquierdo, J. (2021, December 14). El Barça, en 'Modo Psg' para pasearse en asobal y luchar por la champions de Balonmano. *elconfidencial.com*.

https://www.elconfidencial.com/empresas/2021-12-14/el-barca-en-modo-psg-para-pasea rse-en-asobal-y-luchar-por-la-champions-de-balonmano_3340681/

Késenne, S. (2019). ¿Cómo puede mejorarse el balance competitivo?. *Papeles de Economía Española, Deporte y Economía*, (159), 32-42.

Montes, F., & Sala, R. (2012). Equilibrio competitivo en Liga española de futbol de Primera División: Un test de Montecarlo basado en datos funcionales. *Studies of Applied Economics*, 30(2), 513-526. <u>https://doi.org/10.25115/eea.v30i2.3538</u>

Owen, P. D., & King, N. (2015). Competitive balance measures in sports leagues: The effects of variation in season length. *Economic Inquiry*, 53(1), 731-744. <u>https://doi.org/10.1111/ecin.12102</u>

Pérez, B. D., Giménez, A. R., & Sotomayor, A. Á. (2023). Desigualdad de género en el deporte de competición: voces y reflexiones. *Retos: nuevas tendencias en educación física, deporte y recreación*, (47), 557-564. <u>https://doi.org/10.47197/retos.v47.93006</u>

Saavedra, J. M. (2018). Handball research: State of the art. *Journal of human kinetics*, 63, 5. <u>https://doi.org/10.2478/hukin-2018-0001</u>

Sanderson, A. R., & Siegfried, J. J. (2003). Thinking about competitive balance. *Journal of Sports Economics*, 4(4), 255-279. <u>https://doi.org/10.1177/1527002503257321</u>

Soler Olcina, V. (2023). Los 12 presupuestos DHF de la temporada 2022-2023. *Deporte Cien Por Cien*. from

https://deportecienporcien.com/los-presupuestos-en-division-de-honor/

Soler Olcina, V. (2020, April 6). Andrea de la Torre: "el agravio por razón de género es internacional". *Deporte Cien Por Cien*. from

https://deportecienporcien.com/andrea-de-la-torre-el-agravio-por-razon-de-genero-es-int ernacional/

Statista Research Department. (2022, October 14). Federaciones con más deportistas Federados en España. *Statista*. from https://es.statista.com/estadisticas/1051888/ranking-de-federaciones-con-mas-deportista s-federados-espana/

Unanue, J. G., Villarrubia, L., Guerrero, L. G., Godoy, A., & Sánchez, J. S. (2014). Balance competitivo en las ligas europeas de baloncesto y la NBA. *Cultura, ciencia y deporte*, 9(27), 235-242. <u>https://doi.org/10.12800/ccd.v9i27.465</u>

Wagner, H., Finkenzeller, T., & Würth, S. (2014). Individual and Team Performance in Team-Handball: A Review. *Journal of Sports Science & Medicine*, 13(4), 808-816.

ANNEXES

Non-control	LOGINON	TEAM	PONTS	SI*100 (SI*100)^2	-	2020-202 POSITION TEAM	AM PG	NNTS	SI*100 (S	(Si*100)^2	NOLLINO	TEAM	POINTS	SI'100	(SI*100)*2	POSITION	TEAM	POINTS	SI*100	(SI*100/^2	POSITION TEAM	TEAM	POINTS	SI'100
were i were were i were i were were <th< td=""><td>-</td><td>Bera Bera</td><td>Г</td><td>3.46153846154 181 2130</td><td>177515</td><td>1 Ben</td><td></td><td></td><td></td><td>7257653</td><td></td><td>Bera Bera</td><td>8</td><td>15.625</td><td>244.140625</td><td>-</td><td>Rocasa</td><td>45</td><td>12 36263736</td><td>52.8348026</td><td>-</td><td>Bera Bera</td><td>-</td><td>12 63736264</td></th<>	-	Bera Bera	Г	3.46153846154 181 2130	177515	1 Ben				7257653		Bera Bera	8	15.625	244.140625	-	Rocasa	45	12 36263736	52.8348026	-	Bera Bera	-	12 63736264
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N	Milling		7170,007 4 120,07 17	040130	N		t		14206003	N	Elche	ŕ	÷	183,3767361	N	Des Des	t	11,20373020	20,0717340	N	Guarden	T	2,03730204
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	m	Rocasa		0,89010989011 97,81427	736384	3				4288503	m	Guardes			143,500434	m	Guardes		9,615384615	92,4556213	m	Rocasa	-	10,71428571
· · · · · · · · · · · · · · · · · · ·	4	a Calzada		61538461538 92,45562	213018	4 Gu				16045918	4	La Calzada			131,2934028	4	Granolers		9,340659341	87,24791692	4	a Calzada		9,615384615
No. No. <td>w</td> <td>Guardes</td> <td></td> <td>61538461538 92,45562</td> <td>213018</td> <td>۵ ۵</td> <td></td> <td>-</td> <td></td> <td>71938776</td> <td>4D</td> <td>Malaga</td> <td></td> <td></td> <td>89,4444444</td> <td>s</td> <td>La Calzada</td> <td></td> <td>0,065934066</td> <td>2,19116049</td> <td>5 Au</td> <td>la Valladolid</td> <td></td> <td>9,615384615</td>	w	Guardes		61538461538 92,45562	213018	۵ ۵		-		71938776	4D	Malaga			89,4444444	s	La Calzada		0,065934066	2,19116049	5 Au	la Valladolid		9,615384615
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	Elche		79120879121 77,28535	520106	6 Ma		-		71938776	ø	Granolers			69,4444444	9	Málaga		9,065934066	2,19116049	9	Malaga		9,340659341
Model Model <th< td=""><td>-</td><td>Grandlers</td><td></td><td></td><td>520106</td><td>7 Aula V</td><td></td><td>ſ</td><td></td><td>57270406</td><td>A 7</td><td>via Valiadolid</td><td>ŧ</td><td></td><td>51.03515625</td><td>-</td><td>Elche</td><td>ſ</td><td>8.516483516</td><td>2.53049149</td><td>7</td><td>Zuazo</td><td>f</td><td>7.967032967</td></th<>	-	Grandlers			520106	7 Aula V		ſ		57270406	A 7	via Valiadolid	ŧ		51.03515625	-	Elche	ſ	8.516483516	2.53049149	7	Zuazo	f	7.967032967
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	da Valadold			176331	8	alzada	16 7.14		2040816	••	Broses	ſ		53 16940778		ula Valiadolid	ŕ	7.692307692	9.17159763		Granolers	t	7.142857143
No. No. <td></td> <td>Zuazo</td> <td></td> <td></td> <td>05060</td> <td>0</td> <td>020</td> <td>13 6.80</td> <td></td> <td>0144133</td> <td>σ</td> <td>Tanadta</td> <td></td> <td></td> <td>17 1 2073011</td> <td></td> <td>Zuazo</td> <td></td> <td>6.318681310</td> <td>0 02573361</td> <td>•</td> <td>Portio</td> <td>T</td> <td>6,769230769</td>		Zuazo			05060	0	020	13 6.80		0144133	σ	Tanadta			17 1 2073011		Zuazo		6.318681310	0 02573361	•	Portio	T	6,769230769
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ş	Dentilo		A TOTAL DE DOT NUTION	CARDAN C		artes	404		112112	Ş		T			ş	Bombo	T	DISTRICTION OF	A REPERTING		in dian Unite	T	A DARDEADAR
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2										2 ;		T		1001001.12	2		T					T	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				MIDE'DI 000718/0071'	107.144			r,		700/101		Homo			69001262,61	-	AUCOORTIGAS	t	*'01/02/00/	578.181.10 ¹ 1	-		T	000000000000000000000000000000000000000
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sant Quirze		,92307692308 3,69822	48521		Jose	9,4,01		14317602	12	Alcobendas	m		2,44140625	12	Morvedre	1		0,86825263		Valencia	1	3,021978022
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13	Tenerife			94143		vedre	6 2,67		74744898		TOTAL	192		1025,390625	13	Valencia			3,113392102		Castellón	8	2,197802198
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	Lanzarote	m		57892		o Pereda	4 1,78		8877551		MEAN			000968055566	2	Castelón	w	1,373626374	886849414		Villaverde	•	•
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td></td> <td>TOTAL</td> <td>364</td> <td></td> <td>90219</td> <td></td> <td>doba</td> <td>4 1.78</td> <td></td> <td>8877551</td> <td></td> <td></td> <td></td> <td>++2.2+13.3</td> <td>906</td> <td></td> <td>TOTAL</td> <td>364</td> <td></td> <td>60.5542809</td> <td></td> <td>TOTAL</td> <td>364</td> <td>Ħ</td>		TOTAL	364		90219		doba	4 1.78		8877551				++2.2+13.3	906		TOTAL	364		60.5542809		TOTAL	364	Ħ
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td></td> <td>MEAN</td> <td>T</td> <td>7//m*n*m*n*/</td> <td>864678</td> <td></td> <td>Carmer</td> <td></td> <td></td> <td></td> <td></td> <td>t</td> <td></td> <td></td> <td>0111110000</td> <td></td> <td>MEAN</td> <td>ľ</td> <td></td> <td>CONSTRAETS</td> <td></td> <td>MEAN</td> <td>1</td> <td>70111111111111111111111111111111111111</td>		MEAN	T	7//m*n*m*n*/	864678		Carmer					t			0111110000		MEAN	ľ		CONSTRAETS		MEAN	1	70111111111111111111111111111111111111
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		t					TAI		t	2410000		t	07140141000		2000C101177			1				t		
0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					R	=							6/56'09					-		201				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			5401495098		37,206	2				568035714								4636040808		515512992			5458078744	Gini 0,2996430141
Norm Norm <th< td=""><td></td><td></td><td>84615384615</td><td></td><td></td><td>5</td><td></td><td>-</td><td></td><td>1331</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ť</td><td>1,64835165</td><td></td><td></td><td></td><td>Ť</td><td>6,21978022</td><td></td></th<>			84615384615			5		-		1331							Ť	1,64835165				Ť	6,21978022	
No. No. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>97544643</td> <td></td>										97544643														
Name Name <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>ŝ</td><td>9285714</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>							ŝ	9285714																
Math Math <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																								
Image Image <th< td=""><td></td><td>2016-2017</td><td></td><td></td><td></td><td></td><td>2016</td><td></td><td></td><td></td><td></td><td>2014-2015</td><td></td><td></td><td></td><td></td><td>2013-2014</td><td></td><td></td><td></td><td></td><td>012-2013</td><td></td><td></td></th<>		2016-2017					2016					2014-2015					2013-2014					012-2013		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DSITION	TEAM	POINTS				AM PC	SINTS 8		r100/r2	NOILISO	TEAM	POINTS	Sr100	(SI*100)^2	POSITION	TEAM	POINTS	SI*100	(SI*100)^2	POSITION	TEAM	POINTS	SI'100
mutu mutu <th< td=""><td>-</td><td>Guardes</td><td>ų</td><td></td><td>2042</td><td>1 Ben</td><td></td><td></td><td></td><td>3,892042</td><td>-</td><td>Bera Bera</td><td></td><td>13,18681319</td><td>173,892042</td><td>-</td><td>Bera Bera</td><td></td><td>12,63736264</td><td>59,7029344</td><td>-</td><td>Bera Bera</td><td></td><td>12,91208791</td></th<>	-	Guardes	ų		2042	1 Ben				3,892042	-	Bera Bera		13,18681319	173,892042	-	Bera Bera		12,63736264	59,7029344	-	Bera Bera		12,91208791
(mode) (mod) (mod) (mod) <td>N</td> <td>Bera Bera</td> <td>94</td> <td></td> <td>29344</td> <td>2 Ro</td> <td></td> <td></td> <td></td> <td>1,892042</td> <td>5</td> <td>Rocasa</td> <td></td> <td></td> <td>152,8348026</td> <td>2</td> <td>Rocasa</td> <td>4</td> <td>12,08791209</td> <td>46,1176186</td> <td>2</td> <td>Elche</td> <td>ŕ</td> <td>12,36263736</td>	N	Bera Bera	94		29344	2 Ro				1,892042	5	Rocasa			152,8348026	2	Rocasa	4	12,08791209	46,1176186	2	Elche	ŕ	12,36263736
(mode) (mod) (mod) (mod) <td>en</td> <td>Rocasa</td> <td>ą</td> <td></td> <td>33625</td> <td>Gu</td> <td></td> <td>ŕ</td> <td></td> <td>9844222</td> <td>e</td> <td>Guardes</td> <td>f</td> <td></td> <td>133.1360947</td> <td>-</td> <td>Alcohendas</td> <td>30</td> <td>10.71428571</td> <td>14.7959184</td> <td>en</td> <td>Rocasa</td> <td>-</td> <td>11.53846154</td>	en	Rocasa	ą		33625	Gu		ŕ		9844222	e	Guardes	f		133.1360947	-	Alcohendas	30	10.71428571	14.7959184	en	Rocasa	-	11.53846154
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Milana	2		21602	4 Abol	ondas	32 B 70		19636201		Alcohendas			103 3238730	4	Guardes		8.701208701	7.28536201	4	Internation		10.43055044
mutu c mutu mutu <		Zinne	3		14000	d	- AL	00		0001000		Eleha			17 74704007		Breitio		1001001000	17150763		Guodee		0.010204010
Model Model <th< td=""><td></td><td></td><td>5 8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>and the second se</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			5 8									and the second se												
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•	Namadord	8		21892	9	970	100'1 97		59/86/1	•				12,53049149	D	FICUE	T	A1/582418	78879070'0	D	10UUO	T	81479971
With the second state Control in the second state Cont	~	Porrifo	19		23536	7 Aula	aladolid	28 7,69		17159763	~	Pomfio	1		36,52940466	-	ula Valadold		6,593406593	3,47301051	~	Cleba	T	6,043956044
Unit Control C	00	Valencia	ę		10554	B	encia	21 5,78.		28402367	•	Zuazo			33,28402367	•	Zuazo		6,043956044	6,52940466	•	Zuazo		5,494505495
modelia i decode decode <	a	Elche	ģ		10554		101	21 5,78.		28402367	a	Valencia			33,28402367	a	Valencia		5,769230769	3,28402367	6	Alicante		21978022
1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	9	Grandlers	18		56841		sta	19 5,21		24610554	9	Malaga			30,18959063	₽	Cleba		5,494505495	00,18959063	₽	Valencia		5,21978022
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		a Calzada	8		56841		at	18 4,94		15356841	F	Cleba	Γ		16,98164473	÷	Alcante		5,21978022	27,24610554	÷	Itrako		4,67032967
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7	Wilavede	#		39941		ollers	18 4,94		15356841	7	Granolers			16,98164473	7	Castel/defels		4,67032967	21,81197923		Kulaga		4,395604396
Unit 1 Unit	13	Acobendas	ţ		10204		edo	2.47		3392102		astelidetels	-		3.698224852	ţ	Contoba		3.571428571	2.75510204		astelidefeis	T	4.120879121
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td>14</td> <td>Cieba</td> <td></td> <td></td> <td>53157</td> <td></td> <td>autz</td> <td>6 1.64</td> <td></td> <td>17063157</td> <td></td> <td>Condoba</td> <td></td> <td></td> <td>2.717063157</td> <td>4</td> <td>Kukulaga</td> <td></td> <td>3.296703297</td> <td>0.86825263</td> <td></td> <td>stro Urdiales</td> <td></td> <td>0.5494505495</td>	14	Cieba			53157		autz	6 1.64		17063157		Condoba			2.717063157	4	Kukulaga		3.296703297	0.86825263		stro Urdiales		0.5494505495
NIX S Model Mode		TOTAL	364	h	1006		TA	1	-	8763774		TOTAL	1	h	106 6109417		TOTAL	1	t	28 2514180		t		Ŧ
International Internat		MEAN	×		145468		AN C	2010		and a state of the		MEAN			00030245458		MEAN	Ī		0003646468		-		3434505000 0 (newm*n*n)5
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) <th< td=""><td></td><td>t</td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>CIUC</td><td></td><td></td><td>1</td><td></td><td>1000</td><td></td><td></td><td>ľ</td><td></td><td>210.4</td><td></td><td>-</td><td></td><td></td></th<>		t				1				CIUC			1		1000			ľ		210.4		-		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		t			-	5		-				t	_		and a second second			_				+	_	1
11111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111 <th< td=""><td></td><td>t</td><td>01/0000000</td><td></td><td></td><td></td><td></td><td></td><td>ľ</td><td>00+00 70</td><td></td><td>T</td><td>*1 14070470'n</td><td></td><td>10,10,00007</td><td></td><td></td><td></td><td></td><td>0/00001 777</td><td></td><td></td><td>1771010710</td><td>5</td></th<>		t	01/0000000						ľ	00+00 70		T	*1 14070470'n		10,10,00007					0/00001 777			1771010710	5
International and the point of th			55,49450549					4015385				t	56,58340659				ľ	269/0626'19				T	6,85613167	
Norwer (1)Stretch (1)Stretch (1)Stretch (1)Stretch (1)Stretch (1)Stretch (1)Stretch (1)Stretch (1)Stretch 								ſ									0000 0000	ſ		Ì		1000	ſ	
		2102-1102				ł	1102					2009-2010					5002-2002					2007-2008		
		IEAM	SIND				ž	n	+	zJmL	NOILION	IEAM		-	(SirTuujr2	NOILISON	IEAM		SI'TUU	ZUNNLIS		IEAM		8
Ber los Constrained <	-	Iteaso	8		10111	-				0849414	-	COMO I			159,7029344	-	Doawo		13,730203/4	28,0842414	-	Valencia	T	11,49144254
President 2 President 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	N	Bera Bera	\$		48026	3				7959184	N	Bda			139,5513827	N	Parc Sagunt		11,81318681	39,5513827	N	Elda		11,00244499
Noncontrol Image Number Numb	m	arc Sagurt	я		6213	3 Parc				(3238739	m	Paro Sagunt			114,7959184	m	Bida		11,53846154	33,1360947	m	trako		10,51344743
Nove 2 6.1705001 5 0.8801000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.8001000 5 0.80	4	Vicobendas	R		35201	4 Ab	ante	-		24791692	4	Alcante			97,81427364	4	Bera Bera	4	10,98901099	20,7583625	4	Bidebieta		9,535452323
Even S = 1 4 7 100 cm T 200000 (170000 (170000 (170000 (170000 (170000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000 (17000(KD	Alicante	Ø		35201	5 Ben	Bera	30 8,24		12657892	w	Cietos			72,53049149	LD	Alicante	36	9,89010969	77,81427364	in a	Sagunto		8,557457213
Reade 2 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0.000010 3 0	9	Elche	8		57892	9	ato	28 7,69.		17159763	ø	Bera Bera			63,4736143	9	Elche		7,692307692	69,17159763	9	dobendas	Γ	8,068459658
Char 2 Common 2 Comm	-	Rocasa	×		235.36	-				10673361	2	Fiche			43.47301051	-	Town Konnert	Ì	7.417582418	6 02052892	-	Granoliens	T	7 679462103
End 2 6000000 8:500000 0:0 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:0 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:0000000 0:000000		Cloba	8		10466	R Castro		T		10673361		Two Knowed	T		13.47301051	a	Clebs	T	1 318681310	0 02572061	8	otro I Indiales	t	6 601466000
No. Second method		Elds	8					T		100000		Settor I Individue	T		1000000		a Cabrada	T				Dordino	t	a secondary a
Marcal Display Display <thdisplay< th=""> <thdisplay< th=""> <thdi< td=""><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>,</td><td></td><td>T</td><td></td><td></td><td></td><td></td><td>T</td><td></td><td></td><td></td><td></td><td>t</td><td></td></thdi<></thdisplay<></thdisplay<>			1								,		T					T					t	
Portion 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 </td <td>2</td> <td>Murca</td> <td>3</td> <td></td> <td>59063</td> <td></td> <td>8</td> <td>8'6</td> <td></td> <td>10670407</td> <td>2</td> <td>Aucobencias</td> <td>T</td> <td></td> <td>LOCE ICTA'RE</td> <td>2</td> <td>Accoences</td> <td>T</td> <td>0102010201010</td> <td>4'1 17500201</td> <td></td> <td>a Carson</td> <td>t</td> <td>0,0234/1883</td>	2	Murca	3		59063		8	8'6		10670407	2	Aucobencias	T		LOCE ICTA'RE	2	Accoences	T	0102010201010	4'1 17500201		a Carson	t	0,0234/1883
Control Contro Control Control <th< td=""><td></td><td>ouuo-</td><td>R</td><td></td><td>51005</td><td></td><td>Annovar</td><td>4,14</td><td></td><td>1000041</td><td></td><td>HOCASA</td><td>İ</td><td></td><td>21,24610554</td><td>=</td><td>HOCASA</td><td></td><td>3,5/14285/1</td><td>2,/5510204</td><td></td><td>arc sagure</td><td>1</td><td>4,8899/1505</td></th<>		ouuo-	R		51005		Annovar	4,14		1000041		HOCASA	İ		21,24610554	=	HOCASA		3,5/14285/1	2,/5510204		arc sagure	1	4,8899/1505
Makinga 1 J.00070052 9.12007061 0.10024053 1 3.00070070 0.1200303 1 3.00070070 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.1003401 1 1 0.1003401 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.10034010 1 1 0.1004401 1 1 0.1004401 1 1 0.1004401 1 1 0.1004401 1 1 1 0.1004401 1 1 0.10044010 1 1 1 0.1004401 1 1 0.10044010 1 1 1 1 1 1 1 1 1 1		istro Urdiales	16		1338		Koppert	17 4,61		81197923		Marina Park			16,98164473	12	Ribarroja		3,296703297	0,86825263		Roquetas		4,645476773
I (Lotata) 4 (March Par) 12. March Par) 13. 2. March Par) 14. Rear Par) (March Par) 12. March Par) 14. March Par)		Kukulaga	F		51165		casa	15 4,12		98164473	13	La Calzada			10,86825263		Zuazo		2,197802198	1,830334501		Gijdn	13	3,178484108
34 HH 66.7417 TOTA. 34 HH 66.74076 TOTA. 34 HH 66.74076 TOTA. 34 HH 66.74076 TOTA. 34 HH 66.74076 TOTA. 36.7 HH 66.74076 TOTA. 36.7 HH 66.74076 TOTA. 36.7 HH 66.74076 TOTA. 107.4 36.7 HH 66.74076 TOTA. 107.4 36.7 HH 66.74076 TOTA. 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 107.4 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7		La Calzada	4	-	83625		a Park	8 2,19.		1034501	14	Ribarroja	0		•	-	Iran Monovar	9		2,717063157	-	Chapela	8	1,95599022
Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star Difference NEW Star		TOTAL			3147	F				6478686		TOTAL		Ŧ	869,762106		TOTAL			16,5559715				Ŧ
12.4463366 11.477-073 2105 11.627-073 214 51.05V 11.237-073 146 51.05V 12.463366 51.05V 12.463366 11.027-073 166 51.05V 01.4053031 011 0.5574032 014 0.238496972 014 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.24834643 011 0.2484443 011 0.2484443 011 0.2484443 011 0.2484443 011 0.2484443 011 0.2484443 011 0.2484443 011 0.24844443 011 0.2484443		MEAN			246468	W				139246468		MEAN		2/(n"n"mean)),0	1003924646782		MEAN			00039246468			29,21428571 2	Zi(n*n*mean) 0,000349283967
Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances Constances C					p	T2	Ŧ			2146				1+1/2"2+1/3"3	2064				1+1/2"2+1/3"3	1956			11,95619293 x1-	x1+x2"2+x3"3
			4794360213		92936					91993721			7,4841596429		2613814757			5522330223		3037676609		Ĩ	4092584378	Gini 0.2258120852
			53 2067033					Ļ																

Annex 1: Spanish women's handball league's latest classifications and calculations

Source: own elaboration

11,875 1 9,16666667 8	The second								8		POSITION	TEAM		001.12	St tunit 2	POGITION	TEAM	POINTS	
84,0277778	0	1 Barcelona		1111111111	123,4567901	-	Barcelona	8		158,25	-	Barcelona	65	12,29166667	151,0850694	-	Barcelona		
	778	2 Bidasoa Irun		8,660130719	74,99786407	8	Ademar León			117,8367382	01	Bidasoa Inn	45	9,375	87,890625	8	Ademar León		8,958333333 80,25173611
78,5625	52	3 Logrofio La Rioj	a Rioja 47	7,679738562	58,97838438		Logrofio La Rioja	8		97,38573407		ografio La Rioja	4	8,75	76,5825		Granollers	T	
53,16840278 60.17361111	53,16840278 En +7364444	4 Granoters	4 50	7,679738562	58,97838438 58,07838438	•• u	Dunna Inun	57	8,881578947 7 565780474	78,8824446	4 4	Ademar León	30	7,708333333	50,41840278 50,41840278	+ 4	Logrofio La Rioja	41	8,541666667 72,96006944 7 7/10210120 ED 4484/0775
6	50,17361111	6 Cuenca	; 9 ; 9	7,026143791	49,38669657	9	Granolers			47,7190097		Huesca	5 8	6,875	47,265625	n 10	Anaitasuna	T	
8	39,0625	7 Ademar León	Ledn 39	6,37254902	40,60938101	2	Guadalajara			27,70083102	7	Mético Valladolid		6,875	47,265625	7	Huesca	Π	
8	36,50173611	8 Puente Geni		5,882352941	34,60207612	80	Puente Geni		_	24,34643352	80	Cuenca		6,875	47,265625	••	Guadalajara		
3	34,02777778	9 Addiso Valladolio	ladolid 35	5,718954248	32,70643769	a 9	Nava Nava	2 3	4,605263158	21,20844875	a ş	Benidorm	8 8	6,25	39,0625	a ş	Atletico Valladolid	8	5,83333333 34,0277778
	29 34027778			5.065359477	25.65786663	: =	Puerto Sagunto	. 4		21.20844875	: =	Sinfin		5	55	; =	Benidorm	T	5 208333333 27.12673611
	29,34027778	12 Nava	24	3,921568627	15,3787005	12	Benidorm	4		21,20844875	5	Guadalajara	23	4,791666667	22,96006944	12	Puente Genil	Γ	
	21,00694444			3,921568627	15,3787005	13	Anaitasuna			18,28687673	t	Puente Genil	6	3,958333333	15,66840278	13	Morrazo	Π	8
	19,140625			3,594771242	12,92238028	7	Sinfin	ņ		18,28687673	z	Morrazo	2	3,75	14,0825	#	Abarel Teucro		
	17,3611111	15 Guadalajara 16 Puerto Saount	ajara 22 ounto 18	3,504771242	12.92238028 8.650519031	ti ti	Huesca	₽ ∞	3,618421053 2,631578947	13,09297091	έ	Albarei Teucro Alcobendas	<u>ت</u> م	2,708333333	7,335069444	t t	Puerto Sagunto Zamora	13 14 16	2,708333333 7,335069444 2,708333333 7,335069444
	711,8055556	17 Clane		1,960784314	3,844675125		TOTAL	304	Ħ	748,7880686		TOTAL	480	Ŧ	730,9027778		TOTAL		_
	0,000260416667			1,797385621	3,23059507		MEAN		(u	004111842105		MEAN		2/(n*n*mean)	3,0002604166667				ŝ
	3313	1014	4L 612	Ŧ	659,7355718		ST. DEV.	118	x1+x2*2+x3*3	2007		ST. DEV.		x1+x2*2+x3*3	3199			-	x1+x2*2+x3*3
	0,1997395833	MEAN		2(n*n*mean)	0,0001815541031		5	0,4596357304	Ghi	0,2372532895		Q	0,4251361438	Gini	0,2294270833			0,4001545031	Gini 0,222916666
		ST. DEV.		x1+x2*2+x3*3	4471		C(5)	49,67105263				C(5)	45,83333333				-	46,8333333	
		C(5)	42,81045752		CODI /700tt7'O														
		2					2014-2015					2013-2014					2012-2013	Π	
	(Sir100)^2	POSITION TEAM	A POINTS	Si*100	(SI*100)^2	POSITION	TEAM	POINTS	Si+100	(Si'100)/2	POSITION	TEAM	POINTS	SI*100	(SI*100)^2	POSITION	TEAM	POINTS	Si*100 (Si*100)^2
	156,25	1 Barcetona		13,333355554	111111111111		Barcelona 10000010 Biolo	8 4	47 Q	196,19		Barcesona Constitut a Biolog	8 9	12,5	156,25	- •	Anter Media		
	76.5425	3 Adomar Lado		0.047610048	R1 R5041043		Cranifers -	4		80.25173611		Grandlers	9	875	76 5825		Loomfo La Biola	T	R 75 78 5605
-	59.41840278	4 Granolers	37	8.80952381	77.60770975	•	Anaitasuna	7 8		56.25	. 4	Huesca	9	8 33333333	69 4444444	• •	Ademar	12	7.916666667
6.666666667 4	44 444444	Morrazo	8	6.666666667	44,4444444	- 40	Canoas	8	2982	11.4144444		Ademar León	8	7.5	56.25	- 10	Aradon	T	
4	41.71006944	6 Vila de Aranda	anda 27	6,428571429	41.32653061		Benidorm	T		44.4444444	9	Ouence		6.041666667	36.50173611	•	Granollers	T	
	39,0625	7 Anatasuna	28 28	6,19047619	38,32199546	2	Ademar	T		41,71006944	2	Anatasuna		5,833333333	34,0277778	2	Anaitasuna	8	6,25 39,0625
5,833333333	34,02777778	8 Benidorm	m 24	5,714285714	32,66306122		Vila de Aranda	Γ	8	34,0277778	80	Guadalajara		5,625	31,640625		Huesca	Γ	
5,208333333 2	27,12673611	9 Puerto Sagunto		5,238095238	27,43764172	•	Huesca	Π		31,640625	6	Aragón		5,208333333	27,12673611	•	Puerto Sagunto	Π	5,208333333
	19	10 Huesca		5,238095238	27,43764172	9	Puente Genil	2		25	9	Morrazo		5,208333333	27,12673611	9	Cuenca		
	22,96006944		22	5,238095238	27,43764172	ŧ	Guadalajara	ñ	ú	25	÷	Puente Genil	23	4,791666667	22,96006944	Ŧ	Villa de Aranda		
6	22,96006944	12 Guadalajara	jara 21	5	25	51 5	Puerto Sagunto	a 8	1000	25	51 52	Juartersa	RI 8	4,791666667	22,96006944	92 Ş	Attetico Valladolid	8 8	4,58333333 21,00694444
* 100000001 F	10, 140040			*20000000	20/40404070	2 7	unitere	T		10 140000	2 7	Tueno cegunio	3 8	* 1000000000		2 2	Connection	T	
	111192.11	15 Albarei Teucro	andro 16	3.80952381	14.51247166	t ti	Zamora	6	3 958333333	15,66840278	4	Mitico Valiadolid	3 8	4.583333333	21.00694444	t fü	Octavio	Т	3.958333333 15.6684027
-	7,335069444		•		•	16	Juanfersa	1		2,77777778	16	Bidasoa Inn	8	1,875	3,515625	16	Paima del Rio	Γ	
HHI 7	723,611111	TOTAL		Ħ	761,5646259		TOTAL	480		724,5650722		TOTAL	480	Ħ	723,2638889		TOTAL		HH 723,6079167
	0,0002604166667	MEAN		2)(n*n*mean)	0,0002976190476		MEAN			0,0002604166667		MEAN			0,0002604166667				2/(n*n*mean) 3,00026041666
d	3271	ST. DEV.		¥1×	2745		ST. DEV.		1	3263				x1+x2*2+x3*3	3278		ST. DEV.	12,31259518 x1+	x1+x2*2+x3*3
Gini	0,2106770833	Q		Giri	0,2455357143			0,4122207248	Gini	0,2127604167			0,4095164267	Gini	0,2088541667				Gini
		C(5)	48,0952381					45,625					46,875					46,875	
		C.0H0C	111				2009-2010					2008-2000					2007.2008	ſ	
Si*100	(Sir100)^2	OSITION TEAM	A POINTS	81-100	(SI*100)*2	POSITION	TEAM	POINTS	Si*100	(SI'100)/2	POSITION	TEAM	POINTS	SI*100	(Si*100)*2	POSITION	TEAM	POINTS	
8	146,0069444	1 Barcelona	58 58	12,08333333	146,0069444	-	Attitico Madrid		12,5	156,25	-	Ablifico Madrid	8	11,66666667	136,111111	-	Atitico Madrid	25	11,875 141,015825
11,875 1	141,015625	2 Ablisco Madrid	ladrid 54	11,25	126,5625	8	Barcelona	8	11,45833333	131,2934028	8	Barcelona	52	10,83333333	117,3611111	8	San Antonio	53	
	84,02777778	3 Ademar		8,958333333	80,25173611	e	Valladolid	46	9,58333333	91,84027778	8	tittico Valiadolid	8	9,583333333	91,84027778	m	Ademar León		20833333 104,2100694
	80,25173811	4 Granol	43	8,95833333	80,25173611	4	Ademar	q ;		60,4444444	4	San Antonio	4 :	9,166666661	84,0277778	4	Barcelona	T	
6,458333333 4	41,71006044	6 ADDOCO VARIADONO	41 0000	8,547855558	F0.4444444	. .	San Antonio	8 3		50,17361111	nœ	Grandlers	4 3	2/18	78,5825	n (c	Alletoo Valadord Arantin	1	8,125 08,015625 8,1253 50,17361111
	36,50173611	7 San Antonio		6,666666667	44,4444444	-	Arapón	5	6,458333333	41,71006944		Logradia	8	6,25	39,0625	-	Granoliers		
	29,34027778	8 Cuenca		5,833333333	34,0277778	80	Granollers	27		31,640625	8	Aragón	27	5,825	31,640625		Arrate	Γ	
5,410666667 2	29,34027778	9 Logrofio La Rioja		5,416666667	29,34027778	a	Alcobendas	8		27,12673611	8	Octavio	26	5,416666667	29,34027778	a	Tomevieja		
5	19	10 Antequera	610 54	5	25	₽ ;	Ciudad encantada	a 2	un u	35	2;	Los Dólmenes	8	5,416666667	29,34027778	2	Algeciras	T	4,375
	21,0004444	11 Ionev 13 Duarts Sa		*,0000000		= \$	Tomatala	st 5	4 176	25 +0 +40000	: :	T-resident	4	4 976	19,140625	= \$	Particular and a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	T	4,166666667 11,3611111 4,16666667 17,3611111
• •	11111192 21	12 Puerto Sagurto 13 Guadalara	durto 21 terra	3.75	14, 0625	2 g	Arrate	T		18, 140940278	2 52	Cuence	20	4.16666667	12, 140343	a ta	Allea	4 4 8 8	
	14,0625	14 Analtas		2,916666667		2	Toledo	T		14,0625	2	Aloobendas	ħ	3,125	9,765625	#	Lografia	Γ	3,75
٣	12,54340278		5	2,291666667		ħ	Octavio	T	3,125	9,765625	ŧ	Teucro	ħ	3,125	9,765625	ħ	Cantabria	Γ	
-	251736111	AI	das 5		1,085069444	16	П		1,458333333	2,126736111	16	Ameria	9	1,041666667	1,085069444	16	Bidasoa Inn		3,333333333
14	748,8715278	101		Ŧ	777,34375		TOTAL	480	Ħ	760,4166667		TOTAL	480	Ħ	761,71875		TOTAL	480	-
2\(n*n*mean)).00	0,0002604166667	MEAN		2)(n*n*mean)	0,0002604166667				2/(n*n*mean))/(002604166667		MEAN	8	2)(n*n*mean)	0002604168667				
x1+x2*2+x3*3	3156	ST. DE		ct+x2*2+x3*3.	3003				1+x2*2+x3*3	2928	Ī	ST. DEV.	14,49137675	x1+x2*2+x3*3. Givi	3066		ST. DEV.	14,14213562 x1+	x1+x2*2+x3*3. 3143
_	0,240625	5	0,5099019514		0,28046875				GN	0,3		2	0,4830458915	Gin	0,2640625		5	0,4714045208	

Annex 2: Spanish men's handball league's latest classifications and calculations

Source: own elaboration

	(SIr100)*2	175,763315	158,25	129,1322314	120.6668962	112,4885216	104 5071074	1000000	FT 30210285		46,48760331	20,66115702	3.587006428	1.291322314	1010 061802		1,000631313131313	1310	0,2563131313						(SI*100)^2	272,7043178	215,4700783	202 2136184	101 3001700		0761705/775	CONTRACTOR OF	TOPERADO' It	41,24231967	13,46687989	26675015,01	10,31057992	•	1143,422271	0,0007645250939	962	0,3478593272			(SI-100)^2	0+B 0024714	175,763315	129,1322314	120,6668962	120,6668962	51,79637282	46,48760331	46,48760331	28,12213039	20,66115702	11/36111111	14,34802571	969,7268136	0,0006313131313	1331	0,243055556	
	SI'100	13,25757576	12,5	11,36363636	10.98484848	10,60606061	10 22727273	10000000	1 67575757676		6,818181818	4,54545454545	1.893939394	1.136363636	Ħ			x1+x2*2+x3*3	Gini						SI*100	16,51376147	14,67885908	14 22018340	10 086001	and a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second sec	0,0000000000	The sector of the	0,000,000,000,00	6,422018349	3,669724771	3,211009174	3,211009174	•	Ħ	2i(n'n'mean)).00076452599	x1+x2*2+x3*3	Gini			SI'100	10101011 14	13,25757576	11,36363636	10,98484848	10,98484848	7,196969697	6,818181818	6,818181818	5,303030303	4,545454545	4,186666667	3,787878788	Ŧ		x1+x2*2+x3*3	Gini	
	POINTS	35	33	8	8	38	22	2	5		ę	5	5		364	ş		_	0,4616863329	58,71212121					POINTS	36	8	æ	5		4 8	4	2;	2	00 P		7	•	218			0,6371299782	67,43119266		POINTS	g	35	8	8	20	19	18	18	2	12	÷	₽	364			0,4524746217	61,36363636
2017-2018	TEAM	openhagen	Odense	Heming	NAK	Estierg	Vibron	Caboboon	Banders		Holstebro	Aamus	Rindkabing	Alax	TOTA		MEAN		2	C(5)				2012-2013	TEAM	Heming	Hotstebro	Vhore	Durdan		V upon	Raher		Skive	Sanderjyske	Aalborg	Odense	Slagelse	TOTAL	MEAN		S	C(5)	2007.2008	TEAM	Vibree	Heming	HF	Slagelse	Vejen	Randers	Aarhus	Gudme	Estjerg	Aalborg	Horense	Team Nord	TOTAL			2	C(s)
	POSITION	-	2	en	4	u	œ				5	₽	ŧ	2											POSITION	-	0	e			n														POSITION		• ••	m	4	u	9	~	80	6	₽	F	12					
	(Si-100)^2	166,7220142	146,1176186	120,7583825	120.7583825	103,3238739	72 53049149	C+ 000400+0	TRECOMPCIES		33,28402367	19,321338	14.79289941	14.79289941	3 608 224852		/stsa/	903,1216037	0,0003924646782	1982	0,2935635793				(Si*100)^2	218,2334711	185,9504132	158.25	1002200		20 444444			51,79637282	24,24816345	14,348025/1	5,165289256	3,587006428	1054,005969	313131313	1250	0,2941919192			(SI*100M2		185,9504132	137,8845271	112,4885216	89,6751607	69,4444444	63,27479339	51,79637282	46,48760331	20,66115702	5,165280256	0,5739210285	1061,179982	313131313	1249	0,2948232323	
		12,91208791 166.	12,08791209 146.	10,98901099 120,		10,16483516 103,							3.846153846 14.7					HH 903.		x1+x2*2+x3*3	Gini 0,293				SI*100 (SI*	14,77272727 218,		12.5	ş		10,1040404040 1.00,10							3	HH 105	8	-	Gini 0,294			SI'100 (SI'	6			10,60606061 112,	9,46969697 89,6	-	7,954545455 63,2	7,196969697 51,7				878	HH 1061	8	ei l	Gini 0,294	
T	00		44 12,06			Ē				T				t		T	1		26 2yh1	13,8730508 x1+x2	0,5335788769 0	57,14285714			POINTS SI	Ē							T	T	13 4.92	T	T	1,890					64,01515152	Γ	POINTS		ŕ				-		19 7,196	Π		6 2,277		No.		12,01514196 x1+x2		62,12121212
2014			Esbjerg									Skanderborg				Ring			MEAN		CV 0,533		_	4	TEAM PO							Union of			Copenhagen			Sanderjyske				CV 0,5374		PUR-PUR	ŀ	ł	E		Herning		Vejen			Horsens		ander)yske	Slagelse				CV 0,5481	
2010	TE	Ode		3 Her	Coper	2			H									2	W	ST	0	٥		2013	_		2 Her								9 Coper				2	W	ST.	0	0	2006					4 Her		9			9 Hor				2	W	ST.	0,	2
	POSI	8			4							_						25	1076		12				POBITION POBITION											_	_		10	1313		33			POSITION											_		ę	1313		82	
		152,4157903	123,4567901	4 116,6033394	4 116,6033394	9 85,73388203							4 13.71742112				+	886,8693797	8	3 1798	0,278659612				(SI*100)*2	2 196,424472	-	117 8945271										-	982,5528007	000	3 1333	0,2417929293			(SI*100)*2	•			4 137,8845271	6 129,1322314		2 75,90105601	1 36,73094582					1059,458219	2\(n*n*mean) 3,0006313131313	3 1250	0,2941919192	
	SI-100	12,34567901	1111111/11	10,80246914	10,80246914	9,259259259	0.250250250	0.00400	7 008765430		6,790123457	4,012345879	3.703703704	2.460135802	2 1604037		2,16040342			x1+x2*2+x3*3.	8 Ghi				SI'100	14,01515152	13,63636364	11 74243434	CT070712 01		Interested o	7.05454545		6,81818181818	5,68181818182	4,924242424	4,545454545	2,272727273	Ŧ		x1+x2*2+x3*3.	Gini			Si*100	14 20200100	13,63636364	11,74242424	11,74242424	11,36363636	9,46960697	8,712121212	6,060606061	5,681818182	4,924242424	1,136363636	1,136363636	Ŧ	2\n*n*mear	×1*	ghi	
	¥		8						8		8	\$	5						23,14285714	11,80519535	0,5101010338	24,32090745,M2			POINTS	37	98	5	5	1	9 8	3 2			ŧ		Ħ	9	Ŕ	8	9,723448696	0,4419749407	50,0909090		POINTS	9	8	8	5	8	25	8	\$	\$	t	m	m	38	8	11,96965861	0,5440753914	62,878787888
2019-2020	TEAM	Esbjorg	Odense	VIborg	Copenhagen	Silkeborg	Hemino	Andrea	Bandece		N/K	Ajax	Hotsebro	Horsens	Chardenthouse		Biodey	TOTAL	MEAN	ST. DEV.	2	C(5)		2014-2015	TEAM	Esbjerg	Heming	Hiddehm	Viboro		Booters			Aamus	Copenhagen	Ringkating	Skive	Ŋķ	TOTAL	MEAN	ST. DEV.	2	C(5)	2009-2010	TEAM	2	Viborg	Heming	Randers	Vejen	Esbjorg	Aaborg	Holstebro	Odense	Aamus	Sanderlyske	Horsens	TOTAL	MEAN	ST. DEV.	2	C(5)
	POSITION	F	8	m	4	5	œ		•		a	₽	÷	2	Ş		<u>r</u>								POSITION	-	2	e			0 9	•			a (2	÷	12							POSITION		• ••	m	4	s	9	2	**	•	9	÷	12					
	(Si'100)*2	59,7029344	159,7029344	146,1176186	92,4556213	77,28535201	77 28536201	10 47301051	AS SOADAGE		33,28402367	27,24810554	27.24610554	16.98164473	2717063157	CONTRACTOR D	788/9078/9/0	900,7064364	0,0003924646782	1994	0,2888540031				(Si'100)^2	165,8631772	146,9237833	112 4865716	104 E07 1074	and the second second	101/00/00/00	0000171000		63,27479339	57,39210285	38,73094582	28,12213039	•	965,9090909	0,000631313131313	1378	0,2133838384			(SI*100)*2	220 5684114	185,9504132	129,1322314	120,6668962	89,6751607	75,90105601	51,79637282	46,48760331	41,46579431	36,73094582	11,62190083	0,5739210285	1019,570707	00631313131313	1294	0,2664141414	
		12,63736264 1	12,63736264 1	12,08791209 1		8,791208791 7							5 21978022 2				-	Ŧ		x1+x2*2+x3*3	G				SI'100	12,87878788		10 6060601			0.00000000						303	1			x1+x2*2+x3*3	Gini			Sr100	ų	-		10,56484848 1	9,46969697		7,196969697	6,818181818 4				978	Ŧ	2\(n*n*mean) 3,0006313131313	c1+x2*2+x3*3	Gini	
I	00	48			-	32	1	Ť						T		T	1		58	13,78404875 x1+	0,5301557212	55,76923077			POINTS	-	ŕ								5 20	-	4	•			9,16515139 x1-	0,4165977905	56,06060606	Γ	POINTS		ŕ		-	-	Ē			17 6	-	ei G				10,86278049 x1-	0,4937627496	60,60606061
1202-0202	TEAM	Esbjerg	Odense	Viborg	Herning	Copenhagen	W	Anthe	Shehorn		Holstebro	Ajax	Randers	Horsens	Constant on the	A second	vensyssel	TOTAL	MEAN	ST. DEV. 13		C(5) 55		2015-2016	TEAM	Esbjorg	Herning	Vibom	Holefolder.		Antonia and			Silkeborg	Odense	Aarhus	Ringkebing	nder)yske	TOTAL			CV 0.4		2010/2011	ŀ		Viborg	Heming	Vejen	Esbjorg	Holstebro	Aarhus	Ш	Odense	Aalborg	Roskilde	Senderlyske	TOTAL	MEAN	×	CV 04	
	POSITION	-	0	en	4	8	œ					9		1										20	POSITION	-	~	e			0 9				a (÷							20	POSITION		. 01	e	4	5	9	-		a			12 Sø			0,		
		9414	8026	0184	0184	8143	0800	0040	1051		0466	338	4473	9941	6.963		Vels	7452	646782	5	75081					4711	2314	0000	010		10/4	1000	1070	0.285	9431	1192	0083	6428	3308	131313		81818					472	1772	1772	5281	7.282	4582	5785	3039	3039	2571	0083	0661	131313		82626	
		3374 188,6849414	3736 152,8348026	3571 114,7959184		2967 63,4736143					ea		121 16.98164473				1	885,3097452	8	G*3 2025	0,2766875081				0 (SI'100)^2	1727 218,2334711		120 6668062										-	903,1703398	8	d*3 1329	0,2443181818			0 (SI'100/v2	ľ			3788 165,8631772	091 82,6446281		36,73094582	3182 32,28305785				-	1021,00551	2(n*n*mean) 1,0006313131313		0,2626262626	
T	Т	13,73626374	12,36263736	10,71428571	10.71428571	7,967032967	7.417582418	7 447067440	REAL PROPERTY		6,043956044	4,305604396	4.120879121	3,846153846	70-CBULL90C B		1		2\n"n"m.	3385 x1+x2*2+x3*3.	9174 Gini	1549			S SI'100	14,77272727	11,36363636	10 99494949	+ u ananana		0/7/7/7/70		Transport a	7,5757576	6,430303030	3,78787888	3,409030909	<u>.</u>			3516 x1+x2*2+x3*3.	8871 Gini	1545		S-100	2	14.01515152	12,878788	12,87878788	10000000016	7,196969697	6,060606061	5,681818182	5,303030303	5,303030303	3,787878788	3,41			¥‡X	II14 Giri	576
	8					8							ora 15						8	I 13,20256385	0,5077909174	55,49450549		12	POINTS	8		8			¥ 8		5		4						V. 10,08343516		67,95454545	6	POINTS	ŀ					ţ			\$		-	_			V. 10,90454451		63,25757576
2002-1202		Odense	Esber	Heming	Vborg	Nyk	Silkehom	Horeane	Concertance		Aamus	Ajax	Skanderbord	Randers	Directoria		Hotstebro	TOTAL	MEAN	ST. DEV.	2	C(5)	_	3		Heming	NWK	Vibori			Chest		lialoca -	Randers	Aartus	Holstebro	Ringkabing	Skanderborg	TOTAL	MEAN	ST. DEV.	2	C(5)	0110-1110			Holstebro	Randers	Heming	Esbjerg	FIF	Aamus	Aaborg	Vejen	Odense	Slagelse	Silkeborg	TOTAL	MEAN	ST. DEV.	5	
	POSITION	-	8	m	4	s	œ		•		a	9	÷	9	Ş		#								POSITION	-	N	e			0	0			a ;	2	F	12							POSITION	•	- 04	m	4	w	ø	2	••	a	₽	ŧ	9					

Annex 3: Danish women's handball league's latest classifications and calculations

Source: own elaboration

Oli TEAM Services Serv	POINTS 41 42 45 55 56 58 58 58 58 58 58 58 58 58 58 58 58 58	11.5.384614 31.1.304072 11.5.3846164 31.1.304072 11.5.3846164 31.1.304072 11.5.3847564 32.1.1.304072 11.5.384756 32.3.1.304072 11.5.384756 32.3.1.304072 11.5.384756 32.3.1.304072 11.5.384756 32.3.1.304074 11.5.384756 32.3.1.304074 11.5.384756 32.3.1.3.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2	Part 2010/22 PM 2010/22 PM 2010/22 PM 2010/22 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/27 PM 2010/2	N	TEAM POINTS Aarborg 42 GOG 34 Hotatebro 33 erringbrofstedo 23 Store 33	1 81"100 12.5 10,11904782 9,821428571 8,630952381	(Sir100)*2 156,25 102,3951247 96,46045018 74 40045018	POSITION TEAM 1 Aaborg 2 GOG	TEAM POINTS Auaborg 41 GOG 40 enringbio/Silkebo 37 Hotstebro 35	8 Si'100 11,26373626 10,96901099 10,16483516		POSITION 2 2	4 TEAM Skjem GOG	8	SI*100 11,81318681 11,53846154	(SI*100)^2 130 6613827
0000 52 1,000010 52 1,000010 52 1,000010 52 1,000010 52 1,000010 52 1,000010 52 1,000010 52 54 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 56 <th< th=""><th>44 45 55 55 55 56 56 56 56 56 56 56 55 55 55</th><th>3234615 3234615 323 32407304 32407304 326 443066044 324 326 443066044 324 324 443066045 324 324 324315 324 324 443066045 324 324 324316 324 324 324318 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324</th><th>1360047 171546 171546 1844222 1844222 1866013 1736143 17301651 17301051 17301051 17301053 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 18600</th><th></th><th></th><th>12,5 10,11904782 9,821428571 8,630952381</th><th></th><th>1 Aab</th><th></th><th>11,2637362 10,9890100 10,164835</th><th></th><th>F 01</th><th>Skjem GOG</th><th></th><th>11,81318681</th><th>130 6613827</th></th<>	44 45 55 55 55 56 56 56 56 56 56 56 55 55 55	3234615 3234615 323 32407304 32407304 326 443066044 324 326 443066044 324 324 443066045 324 324 324315 324 324 443066045 324 324 324316 324 324 324318 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324 3244 324 324	1360047 171546 171546 1844222 1844222 1866013 1736143 17301651 17301051 17301051 17301053 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660063 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 18660005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 1866005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 186005 18600			12,5 10,11904782 9,821428571 8,630952381		1 Aab		11,2637362 10,9890100 10,164835		F 01	Skjem GOG		11,81318681	130 6613827
Jong 47 1.0002/10 2.015/10/1 2.015/10/1 2 Sylonicon 35 5.740877 7.0170076 7.517306 7.517306 Propriosition 35 5.740877 7.0170076 7.517306 7.517306 Propriosition 32 5.016062 2.5174063 2.517306 7.517306 Propriosition 23 5.016062 2.5174053 2.5174053 2.5174053 Propriosition 23 5.2300626 2.616476 2.5174053 2.5144617 Propriosition 23 5.2300626 2.6164676 2.5174053 2.5144617 Propriosition 23 5.51467 2.5106626 2.5144617 2.5144617 Propriosition 23 5.51467 2.5164617 2.5144617 2.5144617 Propriosition 23 5.514617 2.5144617 2.5144617 2.5144617 Propriosition 23 5.514617 2.5144617 2.5144617 2.5144617 Propriosition 23 23 23 2.5146171<	41 25 29 29 29 29 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Additional 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 - 108 (200 -	171546 6844222 686213 736143 736143 736143 736143 736143 736163 8660063 8660063 8660063 8660063 866064 8610554 8536841	-		10,11904782 9,821428571 8,630952381		0		10,9890105		5	gog		11.53846154	and a state of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the local division of the loc
Spend Bandendon Manuellic Frances SST 40001 SST 40001 SST 400001 SST 400001 <td>98 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20</td> <td>(4.3056044 1005 8.702506 24.4 8.7025067 24.4 8.7025067 24.4 8.71559415 50.4 8.445546 24.4 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.445545 24.8 8.445645 24.8 8.4456455 24.8 8.4456455 24.8 8.44565555555555555555555555555555555555</td> <td>1844222 566213 7361443 7361443 7361443 7361443 7001051 89660063 89660063 89660063 89660063 8066041 5356841</td> <td></td> <td></td> <td>9,821428571 8,630952381</td> <td></td> <td></td> <td></td> <td>10,164835</td> <td></td> <td></td> <td>-entertheory 2 Heads</td> <td></td> <td></td> <td>133.1360947</td>	98 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	(4.3056044 1005 8.702506 24.4 8.7025067 24.4 8.7025067 24.4 8.71559415 50.4 8.445546 24.4 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.4455445 24.8 8.445545 24.8 8.445645 24.8 8.4456455 24.8 8.4456455 24.8 8.44565555555555555555555555555555555555	1844222 566213 7361443 7361443 7361443 7361443 7001051 89660063 89660063 89660063 89660063 8066041 5356841			9,821428571 8,630952381				10,164835			-entertheory 2 Heads			133.1360947
Standing SS 145173 SS 1463773 SS 1463773 SS 1463773 Rengenositika 23 SC 100473 SS 1796043 SS 1796043 Rengenositika 23 SS 100462 SS 1796043 SS 1796043 SS 1796043 Rengenositika 23 SS 100462 SS 179643 SS 100462 SS 100462 Rengenositika 23 SS 100462 SS 100462 SS 100462 SS 100462 Rengenositika 23 SS 100462 SS 100462 SS 100462 SS 100462 Rengenositika 23 SS 100462 SS 100462 SS 100462 SS 100462 Rengenositika 23 SS 100462 SS 100462 SS 100462 SS 100462 Rengenositika 23 SS 100462 SS 100462 SS 100466 SS 100466 Rengenositika 23 SS 100462 SS 100466 SS 100466 SS 100466 Rengenositika 23 SS 100466 SS 100466 SS 100466 SS 100466 Rengenositika 23 SS 100466 SS 100466 SS 1	255 279 284 284 284 284 284 285 285 285 285 285 285 285 285 285 285	rirstaneris 224 en 7020567 24,4 en 7020567 24,4 en 7020567 24,5 en 7020567 25,5 en 44505667 20,1 en 445056465 20,1 en 445056465 20,1 en 445056465 20,1 en 445056455 20,1 en 445056455 20,1 en 445056455 20,1 en 44505645 0,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 4450564 20,1 en 44505644 20,1 en 4450564 20,1 en 44505664 20,1 en 445056666666666666666666666666666666666	566213 736143 736143 7301051 8050063 8050063 4610554 4610554 4610554 2351864			8,630952381		S Brindon					COLUMN TO DESCRIPTION OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER		10,98901099	120,7583625
memory functions 32 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.7.100.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00 5.0.00	29 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	errozater ea. errozater ea. erroza	736143 736143 0052802 0052802 00558063 006568063 006568 4610554 4610554 4610554				annonet t	4 Holst		9,615384615	15 92,4556213	4	Aalborg		8,791208791	77,28535201
Findencia 20 6,000/10 6,000/10 6,000/10 6,000/00 Reveloped 21 5,000/10 24/10/00 2 Reveloped 21 5,000/20 24/10/00 2 Reveloped 21 5,000/20 24/10/00 2 Reveloped 21 5,000/20 24/10/00 2 Reveloped 20 4,000/20 24/10/00 2 Reveloped 20 25/200/20 24/10/20 2 Reveloped 20 25/200/20 25/200/20 2 Reveloped 20 21/17/20/20 20/12/20/20 2 Reveloped 20 21/17/20/20 20/12/20/20 2 Reveloped 20 21/17/20/20 21/17/20/20 2 Reveloped 20 2	20 24 24 26 20 15 11 11 11 11 11 11 11 11 11 20 20 20 20 20 20 20 20 20 20 20 20 20	87702367 83.4 87702367 83.4 85.02308308 35.0 84955695 30.1 84955695 30.1 84955695 30.1 84955695 30.8 8455595 30.8 8455595 30.1 8467 30.1 660 0.1 660 0.1	736143 0052802 1201051 8950063 8950063 8910554 63568841 5368841 5368841	5 Skjem		8,333333333	w	5 Skjern		9,340659341		9	Holstebro		8,516483516	72,53049149
Uno. Sim Sim <td>22 29 20 20 20 20 20 20 20 20 20 20 20 20 20</td> <td>117582418 55.00 44455645 30.11 44455645 30.11 44455645 30.11 44455645 30.11 44455545 30.11 221978022 913 221978022 913 221978022 913 20197802 913 20197802 013 20197802 00000000000000000000000000000000</td> <td>0052892 7301051 2050063 8650063 4610564 4610564 5556841 5556841</td> <td></td> <td></td> <td>8.035714286</td> <td></td> <td>6 Skanderborn</td> <td></td> <td>8.791208791</td> <td></td> <td></td> <td>Kolding</td> <td></td> <td>6.868131868</td> <td>47.17123536</td>	22 29 20 20 20 20 20 20 20 20 20 20 20 20 20	117582418 55.00 44455645 30.11 44455645 30.11 44455645 30.11 44455645 30.11 44455545 30.11 221978022 913 221978022 913 221978022 913 20197802 913 20197802 013 20197802 00000000000000000000000000000000	0052892 7301051 2050063 8650063 4610564 4610564 5556841 5556841			8.035714286		6 Skanderborn		8.791208791			Kolding		6.868131868	47.17123536
Lunnig 34 21.300502 30 30 Lunnig 23.00503 25.00503 25.00612 2 Nongipland 21 5 5 5 1 Nongipland 21 5.300513 25.646501 2 1 Nongipland 20 4.5300613 25.646501 2 1 Nongipland 20 25.500613 25.646501 2 1 Nongipland 20 25.646501 2 2 2 Nongipland 20 2 2 2 2 2 Nongipland 20 2 2 2 2 2 Nongipland 20 2 2 2 2 2 Nongipland 2 <	24 20 19 11 11 11 11 11 11 11 11 11 11 11 11	233405500 43,47 44,405 20,19 44405446 20,19 44405446 20,48 44405402 21,28 44405402 20,13 444 44 444 24 4405402 20,13 441 44 441 45 440 441 45 441 45 45 45 45 45 45 45 45 45 45 45 45 45 4	201051 1056003 6056063 610554 610554 610554 5356841 5356841	7 Ribe-Esbjerg		7.142857143		7 Aartus		7,967032967			Nordsjælland		6,503406503	43,47301051
Ununque 22 3.000530 2.4/31473 0 Roundyale 22 3.000530 2.4/41673 2.5 Roundyale 23 2.3.4/4163 2.4 1 Roundyale 23 2.3.4/4167 2.5.4/4167 1 1 Roundyale 24 2.3.4/4167 2.5.4/4167 2.5.4/4167 1 1 Roundyale 2.5.4/4167 2.5.4/4167 2.5.4/4167 2.5.4/4167 1 1 Roundyale 2.5 2.5.4/4167 2.5.4/4167 2.5.4/4167 1 1 Roundyale 2.5 2.5.4/4167 2.5.4/4167 2.5.4/4167 1 1 Roundyale 2.5 2.5.4/4167 2.5.4/4167 2.5.4/4167 2 1 1 Roundyale 2.5 2.5.4/4167 2.5.4/4167 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td< td=""><td>20 19 11 11 11 11 11 11 11 11 11 11 11 11</td><td>04405465 30.18 04405465 20.18 14905465 20.48 04605465 24.48 046054045 24.48 0446154052 013 0444 8172 0444 8172 0444 8172 0444 8172 0444 8172 0444 9172 0444 9172000000</td><td>1969063 8969063 4610554 5368941 2351165 2351165</td><td>8 Mors</td><td>24</td><td>7,142857143</td><td>51,02040816</td><td>ō</td><td></td><td>6,318681319</td><td>19 39,92573361</td><td>**</td><td>Aarhus</td><td>8</td><td>6,318681319</td><td>39,92573361</td></td<>	20 19 11 11 11 11 11 11 11 11 11 11 11 11	04405465 30.18 04405465 20.18 14905465 20.48 04605465 24.48 046054045 24.48 0446154052 013 0444 8172 0444 8172 0444 8172 0444 8172 0444 8172 0444 9172 0444 9172000000	1969063 8969063 4610554 5368941 2351165 2351165	8 Mors	24	7,142857143	51,02040816	ō		6,318681319	19 39,92573361	**	Aarhus	8	6,318681319	39,92573361
Nonlogialized 21 25 25 10 Rewonyche 10 4530003 20446500 12 Homonych 10 4530003 20446500 12 Homonych 10 4530003 20446500 12 Homonych 20 4530003 20446500 12 Homonych 20 4574051 20446500 14 Homonych 20 2574001 2644500 14 Homonych 20 274001 2644500 14 Homonych 20 274001 274001 274001 F1 20043011 20 274001 274001 274001 Homonych 21 11 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 274001 2740010 2740010 27401	00 14 11 11 11 11 11 11 11 11 11 11 11 11	04405405 30.18 24979022 27.29 24979022 24.18 2497922 24.18 144 24.1 10003 24.13 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24.1003 24	2050063 1610554 536841 5358841 2351165			6,547619048	42,87131519			6,318681319			Mors		6,318681319	39,92573361
Section(alloc) 2.1 5.2 3.5 1.1 Repaired 1.0 4.2.000.cl 2.6446501 1.1 Repaired 1.0 4.2.000.cl 2.6446501 1.1 Repaired 1.0 4.2.000.cl 2.6446501 1.1 Repaired 2.0144512 2.574600 1.1 1.1 Repaired 2.000.cl 2.6446501 2.700000 1.1 Repaired 2.000.cl 2.000.cl 2.0044501 1.1 Repaired 2.000.cl 2.000.cl 2.0000000 2.00000000 Repaired 2.000.cl 2.000.cl 2.000.cl 2.00000000 2.0000000 2.00000000 2.0000000 2.00000000 2.00000000 2.0000000 2.00000000 2.00000000 2.00000000 2.00000000 2.00000000 2.00000000	19 11 11 11 11 11 11 11 11 11 11 11 11 1	21978022 27.24 44.054945 24,42 021978022 9,13 021978022 9,13 1411 8172 1411	1610554 5356841 2351165 2351165	10 Aarhus		6,547619048	42,87131519			4,67032967	21,81197923		Ribe-Esbjerg		6,043056044	36,52940466
Londong 10 4.52000.03 0.64461501 12 Bound 5 4.52000.03 0.64461501 14 Bound 5 4.5700.03 0.64461501 14 Bound 3 5.740011 2.574001 2.5540004 14 Bound 3 5.740011 2.5740004 2.5440051 14 Bound 3 5.740011 2.5740004 2.5440051 14 Bound 3 0.000114 2 2 2 Bound 4 0.000114 2 2 2 Bound 3 0.000000 2 2 2 Bound 3 0.0000000 2 2 2 <	11 11 264 264 264 266 0.0303619662 2.0303619662 2.0303619662 2.0303619662 2.0303619662 2.0303619662 2.030361966 2.031575 2.031575 2.0315757 2.0315757 2.031575757 2.031575757 2.031575757 2.03157575757 2.0315757575757 2.03157575757575757575757575757575757575757	H5054945 24,45 221978022 9,13 11978022 9,13 11978022 9,13 110777msan) 2,000 10717msan) 2,000 10717msan) 2,000 1071 0,211 0,211	2351165 2351165			4,761904762	22,67573696	11 Nordsjælland		4,67032967	21,81197923	÷	Sanderlyske		4,67032967	21,81197923
(1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) <td>11 191 364 364 202 202 202 202 202 202 202 20</td> <td>221978022 9,132 HH78022 9,132 HH707mean 2,0002 Mmran 2,0002 Mmran 2,0021 Gini 0,211</td> <td>2351165</td> <td>12 Kolding</td> <td></td> <td>3,860047619</td> <td>14,96052948</td> <td>12 Lemvig</td> <td></td> <td>3,571428571</td> <td>71 12,75510204</td> <td></td> <td>Skanderborg</td> <td></td> <td>4,67032967</td> <td>21,81197923</td>	11 191 364 364 202 202 202 202 202 202 202 20	221978022 9,132 HH78022 9,132 HH707mean 2,0002 Mmran 2,0002 Mmran 2,0021 Gini 0,211	2351165	12 Kolding		3,860047619	14,96052948	12 Lemvig		3,571428571	71 12,75510204		Skanderborg		4,67032967	21,81197923
Singling Sig Sig Sig Sig Sig NUNL AD SP	11 364 364 364 364 36 36 90,24939661006 30,24939662 30,24939662 30 35 35 35 35 35 35 35 35 35 35 35 35 35	211078022 9,132 HHI 8171 httm:mean) 1,00031 227-x373 0.1	20th and			3,869047619	14,96952948			3,296703297	97 10,86825283		Midtivland	5	3,571428571	12,75510204
Biolog 61 2.574/487 2.5750004 2.574000 MKM 0.00 2.574/487 2.550004 2.554004 MKM 0.0001470 2.00 2.5134004 2.554004 CO 0.0001470 7.00 2.5134004 2.5040045 CO 0.0001470 7.00 2.5134014 2.5040045 Di64251 1.4273404 2.50400045 2.00014004 2.50400045 Di64261 1.4273404 2.5040046 2.5040046 2.5040046 2.5040046 Multipod 2.51 2.4759404 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.5040046 2.50400466 2.5040046 2.5040046 </td <td>264 264 20030505 2417505 20030505105 265 265 233 233 233 233 235 235 235 235 235 23</td> <td>HHH 817.2 httm://maan) 2,00031 x2*2+x3*32 Gini 0,21</td> <td></td> <td></td> <td></td> <td>2,678571429</td> <td>7,174744898</td> <td>14 Rings</td> <td></td> <td>3,021978022</td> <td></td> <td></td> <td>Tender</td> <td>12</td> <td>3,296703297</td> <td>10,86825263</td>	264 264 20030505 2417505 20030505105 265 265 233 233 233 233 235 235 235 235 235 23	HHH 817.2 httm://maan) 2,00031 x2*2+x3*32 Gini 0,21				2,678571429	7,174744898	14 Rings		3,021978022			Tender	12	3,296703297	10,86825263
101/Li 0.00 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 10	26 0.393419662 x 0.393419662 x a, 10.24319662 x a, 2341962 x 35 35 35 35 35 35 35 35 35 35 35 35 35	m'mean) 2,00035 22*2*43*323 Gini 0,219	322183	101		Ŧ	811,189059	TOTAL	TAL 364	Ŧ	827,6476271		TOTAL	ġ	Ŧ	817,5341142
Intent State <	0,24319662 x 0,24319662 x 0,03039691006 x 0,3039691006 x 0,033039691006 x 0,0330395 x 0,133175 x 0,13315 x	Gini 0,211	24646782	ME	AN 24	2\\n"n"mean)	2/in*n*mean) 0.000425170068	MEAN		2/(n*n*mean)	8	782	MEAN	8	2((n*n*mean)	3.000392464678
ST CK Start 27:0 CG 0.0001147 0.0001147 0.0000147 CG 0.0001147 0.0001147 0.0001147 CG 0.0001147 0.0001147 0.0001147 ADDEST 0.0001147 0.0001147 0.0001147 ADDEST 0.0001147 0.0001147 0.0001147 ADDEST 0.000114 0.000114 0.000114 ADDEST 0.000114 0.000114 0.000114 ADDES	a (13036691006 a (13411340 POINTS 36 35 33 33 33 26 28 28 28 25 25 25 25 25		2180	ST DEV	9.17		2032	ST.DEV	10.7	11			ST. DEV.	10.25820497	x1+x2*2+x3*3	2187
Unit Description Description Description Description 2016-2017 1 2000-0001 2000-0001 2000-0001 2000-0001 2016-2017 2000-0001 2000-0001 2000-0001 2000-0001 2000-0001 2016-2017 2000-0001 2000-0001 2000-0001 2000-0001 2000-0001 2010-0001 201 2000-0001 2010-0001 2000-0001 2000-0001 2010-0001 201 2000-0001 2010-0001 2000-0001 2000-0001 2010-0001 201 2000-0001 2010-0001 2000-0001 2000-0001 2010-0001 201 2010-0001 2000-0001 2000-0001 2000-0001 2010-0001 201 2010-0001 2000-0001 2000-0001 2000-0001 2010-0001 201 2010-0001 2010-0001 2000-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001 2010-0001	90, LEALTSID 200 355 355 333 333 333 335 335 335 335 3		0.215855573	0			0.2	6		_	02	-	2	0.304546345		0.2131083203
Circle Application Control 2018-2011 2018-2011 2018-2011 2018-2011 2018-2011 2018-2011 2018-2011 2018-2011 2018-2011 2018-2014 2018-2014 2018-2012 2 Allowing 41 11.5.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	POMTS 36 35 33 33 33 25 25 25			CIRICO	t			50	t				010	51 B4876165	Ļ	
Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series Sine Series	POINTS 36 35 35 33 33 33 35 35 35 35 35 35 35 35			5	Ľ	2		2					100			
2014-017 S*1001 S*1001 CONTON TEAM MONON 41 1,0,3000.44 7,000 2 ProMIDIN 31 0,0,3000.44 0,3000.44 3 2 2 ProMIDIN 31 0,0,3000.44 0,3000.44 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	POINTS 39 35 35 33 33 33 33 33 28 28 28 25 25															
Million Same Same Same Control Million 44 0.44676 547 74 0.44676 1 Million 44 0.44676 342 74 0.44676 3 1 Million 44 0.44676 342 74 347 74 3 3 3 Million 24 0.44676 30.44676 30.44676 3 3 3 Million 24 0.44676 30.44676 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3<	POINTS 36 35 35 33 33 28 28 28 25 25			2014-	2015			2013	2014				2012-2013			
memory and method 41 31207368 30517758 31 memory and method 2 3050605 2 2 memory and method 2 0.0580616 2 2 memory and method 2 0.0580616 2 2 method 2 0.0580616 2 2 method 2 0.0580616 2 2 method 2 0.058061 2	35 35 33 33 33 25 25 25 25 25	SI'100 /SI'	(SI'100M2 PC	POSITION TEAM	M POINTS	8110	CM01-187	POSITION TEAM	AM POINTS	8-10	(SP-100M)	PORTION	TEAM	POINTS	81-100	087100140
monology methodised 3 0.020504 0.02050 3 0.020504 0.02020 2 Methodise 3 0.020504 0.020207 3 3 Methodise 3 0.020504 0.020207 3 3 Methodise 3 0.020504 0.020207 3 3 Methodise 2 0.020504 0.020207 0.0 3 Methodise 2 0.020207 0.020207 0.0 3 Methodise 2 0.020207 0.020207 0.0 3 <td>35 35 33 33 33 33 33 28 28 28 23 23</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>N-141-1</td> <td></td> <td></td> <td></td>	35 35 33 33 33 33 33 28 28 28 23 23									1			N-141-1			
m m m m m m m m 3 0,046516 0,046516 0,0328753 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	33 33 33 33 33 33 33 33 28 28 28 23 23	100741200 100741200	No. ACCORD	Control of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s		00/00/00/21				11/010101010			animo o	\$	12/00/01/11	CY00000 001
Quent 3 Current Curren	33 33 25 25 25 25			1						1 DEDUCTION					propriate PF	
Op/ID 2.2 D. Normany Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation Internatio Internatio Internation Internatio Internation Internatio Inte	33 30 25 25 25		517000	8	0	010400010/8		10121000		G874L/ 01			ann south and		11,203/30.00	0+0/1/2/071
0.000 22 1,4,132,418 5,00556300 5 Relaciony 22 7,4,132,418 5,00556300 5 Relaciony 22 7,4,132,418 5,00556300 5 Relaciony 22 7,4324,18 5,00556300 10 Seenonyche 22 7,4324,18 5,00556300 10 Seenonyche 22 5,74320106 3,334,00200 11 Seenonyche 22 5,74320106 3,334,00200 11 Bandeloony 20 5,4366,000 11,412,133 11 Bandeloony 10 2,4366,000 11,412,133 11 Bandeloony 10 2,4366,000 11,412,134 11 Bandeloony 10 2,4366,000 11,412,144 11 Bandeloony 20 2,4366,000 11,412,144 11 Bandeloony 20 2,4756,100 11 11 Bandeloony 20 2,4757,123 11,412,142 11 Cid 2,4756,100	33 28 39 33		82,19116049			145700045'A				10,43056044		4	Guoden	31	10,10483510T	NE / 98275 E 01
Mons Zit X,1738x18 Scondensity Z Reference Zit Scondensity Z Z Reference Zit Zit Zit Z Z Reference Zit Zit <td></td> <td></td> <td>82,19116049</td> <td>Skjem</td> <td></td> <td>8,791208791</td> <td></td> <td></td> <td>Sanderlyske 32</td> <td>8,791208791</td> <td></td> <td>-</td> <td>Holstebro</td> <td>8</td> <td>9,615384615</td> <td>92,4556213</td>			82,19116049	Skjem		8,791208791			Sanderlyske 32	8,791208791		-	Holstebro	8	9,615384615	92,4556213
Relation 27 7.1.4327-143 5.0.004660 7 Annual 23 7.1.4327-143 5.0.004660 7 Samonyona 23 7.1.4327-143 5.0.004660 7 Samonyona 23 7.1.4327-143 5.0.004660 7 Samonyona 20 5.7.43267-15 5.0.004660 11 Samonhoun 20 5.7.43567-15 12.3.400000 11 Samonhoun 20 5.7.43567-15 12.3.400000 11 Banohoun 1 2.4.55527-13 12.3.400000 11 Round 0 2.4.75527-13 12.4.1300000 11 Round 0 2.4.755000 2.4.755000 11 Round 0 2.4.755000 2.4.755000 11 Round 0 <t< td=""><td></td><td></td><td>789/0076/19</td><td></td><td></td><td>7,002307042</td><td></td><td></td><td></td><td>8,516483516</td><td></td><td>0</td><td>Aamus</td><td>R</td><td>7,142857143</td><td>51,02040816</td></t<>			789/0076/19			7,002307042				8,516483516		0	Aamus	R	7,142857143	51,02040816
Notiong 23 7,148,171 5,020,3616 6 Amma 21 5,194,817.14 5,020,3616 6 6 Mappinet 21 5,194,817.14 5,020,7516 1 1 1 Mappinet 21 5,446,666 0.186,600 1 1 1 Towak 10 4,397,4867 1,576,1004 1 1 1 Towak 3,57,4867 1,576,1004 1 1 1 1 Towak 3,57,4867 1,576,1004 1 1 1 1 Towak 3,57,4867 1,576,1004 1 1 1 1 Towak 3,574,6867 1,576,1004 1 1 1 1 Towak 3,574,6867 1,478,497 0 3,593,000 1 1 Towak 0,03,30677 2,03,30607 0 3,593,000 1 1 Towak 0,04,304 0,04 0 3,593,000 1 1 <td></td> <td></td> <td>59,17159763</td> <td></td> <td></td> <td>7,417582418</td> <td></td> <td></td> <td></td> <td>8,516483516</td> <td></td> <td>•</td> <td>Mors</td> <td></td> <td>6,583406583</td> <td>43,47301051</td>			59,17159763			7,417582418				8,516483516		•	Mors		6,583406583	43,47301051
Annua 21 5,740,003 9 Sanonjycka 21 5,740,003 9 Sanonjycka 20 5,740,003 11 Sanonjycka 20 5,740,003 11 Sanonjycka 10 2,750,004 11 Sanonjycka 10 2,750,004 11 Router 10 2,725,733 (11,300,00 Router 36 2,725,733 2,725,733 Router 36 37 2,725,733 Router 36 37			47,17123536			7,417582418			arringbro/Silkebol	7,967032967		+	Sanderlyske	8	6,318681319	39,92573361
Samonychwa Z1 Schwardszog Sch	T		39,92573361	2		6,868131868		8		7,417582418	40	_	Ribe-Esbjorg		5,494505495	30,18959063
Mailand 20 6,4406,065 311646,055 3116460,05 31 Manohong 10 3,3964,056 3,14164,055 13 Randen 1 3,3964,056 3,14164,055 13 Randen 1 3,2752,73 1,313,950 13 Randen 3,43 2,4752,73 1,313,950 13 Rutexix 3,43 2,473,950 14 14 Rutexix 3,473,950 2,473,950 14 Rutexix 3,473,950 2,473,950 14 Rutexix 3,473,950 2,473,950 14 Rutexix 3,473,950 2,473,950 14 Rutexix 4 2,473,950 2,473,950 2,473,950 Rutexix 4 2,213,950 3 2,473,950 2,473,950 Rutexix 4 2,213,950 4 2,473,950 2,473,950 2,473,950 Rutexix 2,213,950 2,213,950 2,213,950 2,473,950 2,443,950 2,443,950 2,443,950<			27,24610554			6,503406583				4,305604306		_	Vbog		5,21978022	27,24610554
Bandefordy 1 5,7,12,051 1,2 Tenator 1 5,5,14,027 1,27,55,0214 1,2 Tenator 3 5,5,14,027 1,27,55,0214 1,3 TOTAL 3 2,57,24,027 1,27,55,0214 1,4 MEAN 3 2,57,24,027 1,27,55,0214 1,4 MEAN 3 2,57,24,027 1,255,0214 1,4 MEAN 3 2,57,24,027 1,255,0214 1,4 MEAN 3,02,020,027 2,02,020,027 1,4 1,4 OUT-DOL 0,01 2,01,020,02 1,4 2,001,000,02 1,4 OUT-DOL 0,01 2,01,020,02 2,001,000 1,4 1,4 OUT-DOL 0,01 2,01,020,01 2,000,000 1,4 1,4 OUT-DOL 0,01 2,01,020,01 2,01,020,01 1,4 1,4 OUT-DOL 0,01 2,01,020,01 2,01,020,01 2,4 1,4 1,4 OUT-DOL 0,01 2,01,020,01	61 23		27,24610554	11 Sanderlyske	lyske 24	6,503406593		11 Nordsjælland		3,021978022		Ŧ	Skanderborg	12	4,67032967	21,81197923
Prover 1 2.752/713 (1.756/0004) 1 Runders 9 2.7527/73 (1.956/0004) 1 MEMA 864 2.7527/73 (1.956/0014) 1 MEMA 364 2.7527/73 (1.756/0014) 1 MEMA 364 2.7527/73 (1.756/0014) 1 MEMA 3647/20466 1.4727/437 2.000030468703 1 CGB 2.7577/73 0.000030468703 2.0000304 1 CGB 2.7577/73 0.000030468703 2.0000304 1 CGB 2.7577/73 0.000030468703 2.0000304 1 CGB 2.96 0.00003468703 2.0000304 1 Audorg 47 2.757702707 1.00003468704 1 Audorg 5 2.97002907 1.00003468704 1 Audorg 5 2.97002907 1.00003468704 1 Audorg 5 2.97002907 2.47701907 2 Audorg 5 2.970029	1		27,24610554	12 Lemvig		3,021978022		2	sbjerg 11	3,021978022			Ringsted	t	3,571428571	12,75510204
Patients 0 2.7.227.17 5.1.10100 14 REAM 36 2.0.5207.01 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 <td></td> <td></td> <td>19,321338</td> <td></td> <td></td> <td>2,747252747</td> <td></td> <td></td> <td>о 9</td> <td>2,472527473</td> <td></td> <td></td> <td>Skive</td> <td></td> <td>2,747252747</td> <td>7,547397657</td>			19,321338			2,747252747			о 9	2,472527473			Skive		2,747252747	7,547397657
NDAL Sol Non-Weight Sol Non-Weight Sol Non-Weight Sol Non-Weight Sol Non-Weight Sol Non-Weight Sol Sol <td>٦</td> <td>4</td> <td>7,547397657</td> <td></td> <td>1</td> <td>P</td> <td></td> <td>14 Ringsted</td> <td></td> <td>1,373626374</td> <td></td> <td></td> <td>Nordsjælland</td> <td></td> <td>2,747252747</td> <td>7,547397657</td>	٦	4	7,547397657		1	P		14 Ringsted		1,373626374			Nordsjælland		2,747252747	7,547397657
NEM S. Structure Structure </td <td></td> <td></td> <td>786,8916797</td> <td>TOTAL</td> <td></td> <td>-</td> <td>840,0253593</td> <td>ġ</td> <td></td> <td>Ŧ</td> <td>882,8945779</td> <td></td> <td>TOTAL</td> <td></td> <td>Ħ</td> <td>864,0260838</td>			786,8916797	TOTAL		-	840,0253593	ġ		Ŧ	882,8945779		TOTAL		Ħ	864,0260838
STEN Mathematical Transmission Z001 CV 0.37556174 Gmi 2.0550026 Z001 C(6) 59 Gmi 2.0550026 Z001 ZM15072 F00 2.02550026 Z001 Z001 ZM15072 F00 2.02550026 Z001 Z001 ZM16072 F300 S100 S100 Z001 Z001 ZM16072 F300 S100 S100 S100 Z01 Z01 Aldore Z S1000507 S17.0504 E E Z01 Z01 Aldore Z S1000507 S1.7504 E E Z0100 Z Z0100 Z Z Z0100 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z			0,0003624646782	Ne l	4N 28		8	ME	1	2\(n^n/mean)	8	82	MEAN	8	2)(n*n*mean)	8
OV 0.7026001114 Control 0.7026000114 C(R) 9.5011000 5.0011000 5.0011000 2011-2012 5.001 5.0011000 5.0011000 2011-2012 5.001 5.0011000 5.00010 Add P.00013 5.001000 5.000100 Add 2.0100000 5.000100 5.000100 Add 2.0100000 5.000000 5.000100 Add 2.0000000 5.0000000 5.000000 5.0000000 Addom 2.00000000 5.0000000 5.0000000 5.0000000 5.0000000 Addom 2.00000000 5.00000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000 5.0000000	*	el l	2269	ST. DEV.		ŧ		ST. DEV.					ST. DEV.	12,35375094		
C(b) 50 2011-3012 5 2011-3012 5 115-3012 5 100 47 2011-3012 5 100 61 100 61 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 101 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0,3308586641	Gini 0,180	0,1809262166	ő		Gini	0,2307692308	0	-	708 Gini	0,273155416	0	2	0,475144613	en l	0,250811617
2011-3012 Smith Smith AG 7 9 9 9 9 AG 7 2.311-3012 1 1 1 AG 7 2.311-3012 1 1 1 AG 7 2.311-3012 1 1 1 1 AG 7 2.311-3012 1 2.312-3014 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	48,07692308			đ	50,54945055	99		ď	5) 53,2967033	33			C(5)	55,49450549		
Total ST(0) S************************************				100 0000	010	Г		BUNC	0005	Γ			0000-2000			
AG cf 2.3 r280791 166/250142 1 Kolong 35 9.15/26115 9.46/26115 2 2 Kolong 35 9.15/26115 3.24/19161 3 3 Antongo States 31.44/19161 3 3.44/19161 3 4 Antongo States 31.44/19162 3.47/19161 5 4 Antongo States 32.47/19161 5 4 Antongo States 32.47/19161 5 5 Antongo 34 6.9340600 4,47/20161 7 Antongo 34 6.9340600 4,47/20161 7 Monad 34 6.9340600 4	POINTS	SI*100 (SI*	(SI'100M2 PC	POSITION TEA	M POINTS	SI'10	(SI*100/v2	POSITION TEAM	M POINTS	sr100	(SI*100M2	POSITION	TEAM	POINTS	SI'100	(SI*1001/2
Relief Sol Distance Sol Distance Sol Distance Sol Distance Sol Distance		1				2	217.3734385			÷			Ě	4	12.08791209	146 1176186
emilprovoltime 34 9,440344 57,34719422 3 Heatano 31 8,51448514 5,520,61440 4 Admon 21 8,51448514 5,520,61440 4 Admon 20 7,807,02647 8,4739162 5 Admon 20 7,807,02647 8,4739163 5 Admon 24 6,9349630 4,47301631 7 Mono 24 6,59346500 4,47301631 7 Banotencing 24 5,78020190 3,344219671 9 Banotencing 24 5,98020190 3,344219651 9 Banotencing 24 5,98020190 3,344219671 9	T		97,81427364	2 FCK		125		2 FCK		10.98901035	E	•	Aarhus	8	9,89010989	97,81427364
Holadaro 23 B_{12} (SL) B_{22}			92,4556213	3 Aalborg		11,53846154	ŧ	g	kebo	10,71428571		•	000	8	9,89010989	97,81427364
Antorg 20 7.66702667 6.47/364.43 5 Antorg 20 7.66702667 6.47/364.43 6 Antora 20 7.5092667 6.47/364.43 6 Antora 20 7.5092667 6.47/364.63 7 Vising 28 6.59046903 4.47/101651 7 Banachergy 24 5.79020790 3.3.4402067 9 Mons 21 5.79020790 3.3.4402067 9	35 9,6	9,615384615 92,4	92,4556213	4 Kolding		10,8974359	118,7541091	4 Koló	Kolding 38	10,43956044	44 108,9844222	4	erringtro/Silkebo		9,615384615	92,4556213
Sylom 28 7,300,300 0,4173143 6 Amma 28 6,590,3006 0,4173143 6 Amma 28 6,590,4006 0,41701051 7 Mong 28 6,590,4006 0,41701051 7 Monds 21 6,790,2006 0,344,701051 9	8	9,340659341 87,24	87,24791692	-	Nordsjælland 32	10,25641026	105,1939513	5 84	an 33	9,065934066	66 82,19116049	••	Kolding	8	9,615384615	92,4556213
Amnus 24 6,99,40690 4,47301051 7 Amnus 24 6,99,40690 4,47301051 8 Blanolefong 21 5,789,22076 33,3440267 9 More 21 5,786,20769 33,3440267 9	33		82,19116049	6 Skje		8,653846154		6 VB	Vborg 30	8,241758242		8	Skjem	a,	9,340659341	87,24791692
Viborg 24 6,593406803 43,47301051 8 Standarborg 21 5,760230760 33,28402367 9 Mors 21 5,780230760 33,28402367 9 10	31	8,516483516 72,53	72,53049149			7,051282051	49,72057857	7 Holst.		7,967032967	67 63,4736143	2	Aalborg		8,241758242	67,92657892
Shanderborg 21 5,789230769 33,28402367 9 Mors 21 5,789230769 33,28402367 9		8,516483516 72,53	72,53049149			6,730769231	45,30325444	8		6,868131868	68 47,17123536	80	Holstebro		7,142857143	51,02040816
Mors 21 5,769230769 33,28402367 10			27,24610554		a 19	6,08974359			Aarhus 22	6,043956044			Fredericia	5	6,593406593	43,47301051
			24,45356841			4,166666667				5,769230769			Viborg		5,789230769	33,28402367
Nordsjælland 19 5,21978022 27,24610554 11	14 3,8		14,79289941		e o o o o o o o o o o o o o o o o o o o	2,884615385				4,120879121			Nordsjælland		5,769230769	33,28402367
Sandariyske 17 4,67032967 21,81197923 12	1		12,75510204		8	2,564102564		12 Fredericia		4,120879121			Mors	13	3,571428571	12,75510204
17 4,67032967 21,81197923 13 M			7,547307657	13 Ringsted		1,923076923	3,69	13 Rings	ti 1	3,021978022		# :	Ringsted		1,923076923	3,698224852
Lemvig 16 4,389604.246 18,32538 14	5	*	1,886649414	ľ		•	0	ľ		1,3/36263/4			Skanderborg		0,5494505495	0,301805000
364 FIH /00/00/429	-		0		AL 312			2	101 IO					ğ a		2500001010000
28 290000, [mmman] 200000, [mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm	-	100	8/4,5%24405	ST DEV		-1	1,00045/8/545/UU	REAN ST DEV	4	20/07/07/24/24	1,0002004646782782	82	ST DEV	20101010101	(neamining)	1,00034246467
B/27	/10000002'67		2002								:		10.10	0 1001120120100		2007
stoci nou // 'n			0.0447346447		2401640201010		TORNOCTONO		CVEN ED 4776747		1007000470	0	5	0/10/11/10/10		Q
	0/5/20/12/951		/11917/	5		3		5		141			(2)	11/10000/110		

Annex 4: Danish men's handball league's latest classifications and calculations

Source: own elaboration

	Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image <th< th=""><th></th><th>2021-2022</th><th></th><th></th><th></th><th></th><th>2020-2021</th><th></th><th></th><th></th><th></th><th>2019-2020</th><th></th><th></th><th></th><th></th><th>2018-2019</th><th></th><th></th><th></th><th></th><th>2017-2018</th><th>Γ</th><th></th></th<>		2021-2022					2020-2021					2019-2020					2018-2019					2017-2018	Γ	
No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. <th>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</th> <th>POSITION</th> <th>TEAM</th> <th>POINTS</th> <th>Sr 100</th> <th>(Si*100)^2</th> <th>POSITION</th> <th>TEAM</th> <th>POINTS</th> <th>Si*100</th> <th>(Sl*100)*2</th> <th>POSITION</th> <th>TEAM</th> <th>POINTS</th> <th>Si*100</th> <th>(Sir100)*2</th> <th>POSITION</th> <th>TEAM</th> <th>POINTS</th> <th>Sr100</th> <th>(Si*100)*2</th> <th>POSITION</th> <th></th> <th></th> <th></th>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	POSITION	TEAM	POINTS	Sr 100	(Si*100)^2	POSITION	TEAM	POINTS	Si*100	(Sl*100)*2	POSITION	TEAM	POINTS	Si*100	(Sir100)*2	POSITION	TEAM	POINTS	Sr100	(Si*100)*2	POSITION			
visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit visit <td< td=""><td>m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m</td><td>-</td><td>Metz</td><td>78</td><td>10,98501549</td><td>120,6003302</td><td>-</td><td>Breat</td><td>37</td><td>10.16483518</td><td>103.3238730</td><td>-</td><td>Brest</td><td>-</td><td></td><td>125.0885851</td><td>-</td><td>Metz</td><td>63</td><td>11,93181818</td><td>142,3682851</td><td>-</td><td></td><td>-</td><td></td></td<>	m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m	-	Metz	78	10,98501549	120,6003302	-	Breat	37	10.16483518	103.3238730	-	Brest	-		125.0885851	-	Metz	63	11,93181818	142,3682851	-		-	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	Brest	89	9,577484789	91,72783178	2	Metz	37	10,16483516	103,3238730	8	Metz	ſ		125,0885851	8	Brest	50		124,8636038	8			
Mat No Mat No Mat No Mat No Mat No Mat No Mat No o No <th< td=""><td>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td>m</td><td>Paris</td><td>89</td><td>8,873239437</td><td>78,7343781</td><td>e</td><td>Nantes</td><td>5</td><td>8,516483516</td><td>72,53049149</td><td>m</td><td>Floury Loiret</td><td>-</td><td></td><td>18,92150126</td><td>e</td><td>Niza</td><td>55</td><td>10,41666667</td><td>108,5069444</td><td>en</td><td></td><td></td><td></td></th<>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	m	Paris	89	8,873239437	78,7343781	e	Nantes	5	8,516483516	72,53049149	m	Floury Loiret	-		18,92150126	e	Niza	55	10,41666667	108,5069444	en			
		4	Besarroon	61	8,501540206	73,8147193	4	Paris	30	8,241758242	67,92657892	4	Nantes			38,92150126		Besancon	40		88,12402433	4		-	
New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New New <td>0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>50</td> <td>Nantes</td> <td>8</td> <td>8,160014085</td> <td>66,73279111</td> <td>'n</td> <td>Niza</td> <td>50</td> <td>7,967032967</td> <td>63,4736143</td> <td>sa</td> <td>Paris</td> <td>-</td> <td></td> <td>94,83379501</td> <td>w</td> <td>Nantes</td> <td>48</td> <td></td> <td>82,6446281</td> <td>w</td> <td></td> <td></td> <td></td>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50	Nantes	8	8,160014085	66,73279111	'n	Niza	50	7,967032967	63,4736143	sa	Paris	-		94,83379501	w	Nantes	48		82,6446281	w			
were i construction i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i <td>0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>9</td> <td>Chambray</td> <td>3</td> <td>7,484788732</td> <td>55,72307082</td> <td>9</td> <td>Besancon</td> <td>8</td> <td>7,967032967</td> <td>63,4736143</td> <td>9</td> <td>Niza</td> <td></td> <td></td> <td>73,14750803</td> <td>9</td> <td>Fleury Loiret</td> <td>4</td> <td></td> <td>30,444444</td> <td></td> <td></td> <td>-</td> <td></td>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	Chambray	3	7,484788732	55,72307082	9	Besancon	8	7,967032967	63,4736143	9	Niza			73,14750803	9	Fleury Loiret	4		30,444444			-	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality mutuality <t< td=""><td>1</td><td>Niza</td><td>5</td><td>7,183008502</td><td>51,50600538</td><td>2</td><td>Chambray</td><td>28</td><td>7,602307602</td><td>59,17159783</td><td>2</td><td>Besancon</td><td></td><td></td><td>0,4444444</td><td>1</td><td>Chambray</td><td>40</td><td></td><td>57,30210285</td><td>7</td><td></td><td></td><td></td></t<>	1	Niza	5	7,183008502	51,50600538	2	Chambray	28	7,602307602	59,17159783	2	Besancon			0,4444444	1	Chambray	40		57,30210285	7			
Mathematical and anotation of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the sector of the s	Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method I Method <	•0	Dija		6,61971831	43,8206705	80	Boung de Peage	58	7,142857143	51,02040816	80	Dip			52,32686981	90	Toulon	30		54,55836777	80			
Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix 1 Matrix Matrix </td <td>Mark I Mark I Mark I Mark I Mark I Mark I Mark Mark</td> <td>a</td> <td>Bourg de Peage</td> <td></td> <td>6,056338028</td> <td>36,67923031</td> <td>•</td> <td>Floury Loiret</td> <td>21</td> <td>5,789230769</td> <td>33,28402367</td> <td>a</td> <td>Bourg de Peage</td> <td></td> <td></td> <td>52,37188366</td> <td>•</td> <td>Paris</td> <td>38</td> <td></td> <td>51,79637282</td> <td>•</td> <td></td> <td></td> <td></td>	Mark I Mark I Mark I Mark I Mark I Mark I Mark	a	Bourg de Peage		6,056338028	36,67923031	•	Floury Loiret	21	5,789230769	33,28402367	a	Bourg de Peage			52,37188366	•	Paris	38		51,79637282	•			
Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Under Und	Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit <th< td=""><td>10</td><td>Marignac</td><td></td><td>5,915402958</td><td>34,90305603</td><td>9</td><td>Toulon</td><td>21</td><td>5,760230769</td><td>33,28402367</td><td>¢</td><td>Taulon</td><td></td><td></td><td>19,24502182</td><td>10</td><td>Dijon</td><td></td><td></td><td>11,46579M31</td><td></td><td>urg de Peage</td><td></td><td></td></th<>	10	Marignac		5,915402958	34,90305603	9	Toulon	21	5,760230769	33,28402367	¢	Taulon			19,24502182	10	Dijon			11,46579M31		urg de Peage		
Moto 1 Control Contro Contro Control </td <td>Method 1 Condition Condition</td> <td>ŧ</td> <td>Toulon</td> <td>47</td> <td>5,915402058</td> <td>34,90305603</td> <td>F</td> <td>Saint Amand</td> <td>8</td> <td>5,494505495</td> <td>30, 18959063</td> <td>ŧ</td> <td>Chambray</td> <td></td> <td></td> <td>10,44513607</td> <td></td> <td>ourg de Peage</td> <td></td> <td></td> <td>38,73094582</td> <td>F</td> <td>Have</td> <td></td> <td></td>	Method 1 Condition	ŧ	Toulon	47	5,915402058	34,90305603	F	Saint Amand	8	5,494505495	30, 18959063	ŧ	Chambray			10,44513607		ourg de Peage			38,73094582	F	Have		
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) <td>Unit 1 Unit Un</td> <td>12</td> <td>Plan de Cuques</td> <td></td> <td>5,352112676</td> <td>28,6451101</td> <td>12</td> <td>Dion</td> <td>8</td> <td>5,404505405</td> <td>30,18959063</td> <td>12</td> <td>Merignac</td> <td>ſ</td> <td></td> <td>17,3611111</td> <td></td> <td>Saint Amand</td> <td>T</td> <td></td> <td>26,14027686</td> <td>12</td> <td>Dijon</td> <td></td> <td></td>	Unit 1 Unit Un	12	Plan de Cuques		5,352112676	28,6451101	12	Dion	8	5,404505405	30,18959063	12	Merignac	ſ		17,3611111		Saint Amand	T		26,14027686	12	Dijon		
(model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (model) (mode) (model) (model) (model) (mode) (mode) (mode) (m	Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication Mundication	13	Colos		4 798792904	22 03105704	13	Meriman	4	4 045054045	24.45356841		TOTAL	46		77 1020825		TOTAL	829		82 044590G			ľ	
Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Number 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0<td>2</td><td>Flourer Locate</td><td></td><td>A EDDA TOTAL</td><td>010101010</td><td>: :</td><td>and the second</td><td>2</td><td>A DIMONG</td><td>01 0110100</td><td></td><td>MEAN</td><td>Ī</td><td></td><td>00000000000000000000000000000000000000</td><td></td><td>MEAN</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>	Number 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>2</td> <td>Flourer Locate</td> <td></td> <td>A EDDA TOTAL</td> <td>010101010</td> <td>: :</td> <td>and the second</td> <td>2</td> <td>A DIMONG</td> <td>01 0110100</td> <td></td> <td>MEAN</td> <td>Ī</td> <td></td> <td>00000000000000000000000000000000000000</td> <td></td> <td>MEAN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	2	Flourer Locate		A EDDA TOTAL	010101010	: :	and the second	2	A DIMONG	01 0110100		MEAN	Ī		00000000000000000000000000000000000000		MEAN							
No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. <td>Mut Mut Mut<td></td><td>Color Annual</td><td></td><td>Corrected a</td><td>00070-010'07</td><td>•</td><td>Then on Luques</td><td></td><td>+ arustan</td><td>10100000</td><td></td><td>ALAN A</td><td>+</td><td></td><td></td><td></td><td>OF DOL</td><td>ť</td><td></td><td></td><td></td><td>t</td><td>÷</td><td></td></td>	Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut Mut <td></td> <td>Color Annual</td> <td></td> <td>Corrected a</td> <td>00070-010'07</td> <td>•</td> <td>Then on Luques</td> <td></td> <td>+ arustan</td> <td>10100000</td> <td></td> <td>ALAN A</td> <td>+</td> <td></td> <td></td> <td></td> <td>OF DOL</td> <td>ť</td> <td></td> <td></td> <td></td> <td>t</td> <td>÷</td> <td></td>		Color Annual		Corrected a	00070-010'07	•	Then on Luques		+ arustan	10100000		ALAN A	+				OF DOL	ť				t	÷	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	Denti Villeo			-			ş		normost inc.		OL UEV.	_	1					1					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		TOTAL	710		781,3065483		MEAN	8		0003924646782		2	0,2396160191		1271929825			2525220568		1376262626			4	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 <th< td=""><td></td><td>MEAN</td><td>47,33333333</td><td></td><td>0,0001877934272</td><td></td><td>ST. DEV.</td><td>6,633249581</td><td></td><td>2378</td><td></td><td>C(S)</td><td>50,43850649</td><td></td><td></td><td></td><td>T</td><td>51,80303030</td><td></td><td></td><td></td><td>Ť</td><td>246854</td><td></td></th<>		MEAN	47,33333333		0,0001877934272		ST. DEV.	6,633249581		2378		C(S)	50,43850649				T	51,80303030				Ť	246854	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ST. DEV.	18,46876385	5 x1+x2*2+x3*3			5	0,2551240830		0,1381475667														
10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10<	10 4 10 4 10 4 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 <td></td> <td>2</td> <td>0,390185151.</td> <td></td> <td>0,2022536211</td> <td></td> <td>C(5)</td> <td>45,05494505</td> <td></td>		2	0,390185151.		0,2022536211		C(5)	45,05494505																
Image: manage:	Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix<		C(5)	46,1971831																					
Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math <th< td=""><td>Math Math <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>ſ</td><td></td></th<></td></th<>	Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math Math <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>ſ</td><td></td></th<>																							ſ	
Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image <th< td=""><td>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td></td><td>2016-2017</td><td>-</td><td></td><td></td><td>1012000</td><td>2015-2016</td><td>00000</td><td></td><td>and a second second</td><td>1000000</td><td>2014-2015</td><td></td><td>-</td><td></td><td></td><td>2013-2014</td><td>-</td><td>-</td><td></td><td></td><td></td><td>+</td><td></td></th<>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2016-2017	-			1012000	2015-2016	00000		and a second second	1000000	2014-2015		-			2013-2014	-	-				+	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FUSITION	IEAM	PONIS		7.(mL.8)	NOTION	IEAM	SIND	81.100	Z-(nnLus)	Molilion	EAM			(Sirtuujr2	NOILISOL	EAM	PONIS		(Sr.100/2				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	Matz	6	12,95454545	167,8202479	-	Metz	8	16,98428571	287,7960808	-	Floury Loiret			811111.111	-	Metz	5		200,604444	-			
m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m m	Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image <th< td=""><td>N</td><td>Parts</td><td>8</td><td>11,38363636</td><td>129,1322314</td><td>N</td><td>Floury Loret</td><td>3</td><td>15,17857143</td><td>230,3890306</td><td>N</td><td>Parts</td><td>1</td><td>12,5</td><td>156,25</td><td>N</td><td>Fleury Loiret</td><td>5</td><td></td><td>200,694444</td><td></td><td></td><td>1</td><td></td></th<>	N	Parts	8	11,38363636	129,1322314	N	Floury Loret	3	15,17857143	230,3890306	N	Parts	1	12,5	156,25	N	Fleury Loiret	5		200,694444			1	
Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix<	Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum et Mum Mum <td>m</td> <td>Breat</td> <td>48</td> <td>10,45454545</td> <td>109,2975207</td> <td>m</td> <td>Parts</td> <td>8</td> <td>12,94642857</td> <td>167,6100128</td> <td>m</td> <td>Metz</td> <td></td> <td></td> <td>149,382716</td> <td>m</td> <td>Parts</td> <td>45</td> <td>12,5</td> <td>18,25</td> <td>m</td> <td></td> <td></td> <td></td>	m	Breat	48	10,45454545	109,2975207	m	Parts	8	12,94642857	167,6100128	m	Metz			149,382716	m	Parts	45	12,5	18,25	m			
0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 </td <td>Unit Example E</td> <td>4</td> <td>Besancon</td> <td>4</td> <td>9,545454545</td> <td>91,11570248</td> <td>4</td> <td>Niza</td> <td>8</td> <td>12,5</td> <td>158,25</td> <td>4</td> <td>Nimes</td> <td></td> <td></td> <td>1117,3811111</td> <td>•</td> <td>Toulon</td> <td>36</td> <td></td> <td>100</td> <td>4</td> <td></td> <td></td> <td></td>	Unit Example E	4	Besancon	4	9,545454545	91,11570248	4	Niza	8	12,5	158,25	4	Nimes			1117,3811111	•	Toulon	36		100	4			
Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit <th< td=""><td>1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td></td><td>Names</td><td>4</td><td>100000000</td><td>82,0446281</td><td></td><td>Besancon</td><td>8</td><td>125</td><td>158,25</td><td></td><td>Nantes</td><td></td><td></td><td>0.10753085</td><td>0</td><td>Have</td><td>3 8</td><td></td><td>99055761/6</td><td></td><td></td><td></td><td></td></th<>	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Names	4	100000000	82,0446281		Besancon	8	125	158,25		Nantes			0.10753085	0	Have	3 8		99055761/6				
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Chambray	;		1070440/70		Names	1	12,0000140	140,2003042		No.					Mice Digance	2		101734080				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit <thunit< th=""> Unit Unit <thu< td=""><td></td><td>Iouon</td><td>8</td><td>8,6363636363</td><td>74,58877888</td><td>-</td><td>union</td><td>8</td><td>9,821428571</td><td>96,48045018</td><td></td><td>Louion</td><td></td><td></td><td>19,01234568</td><td></td><td>NIZB</td><td>8</td><td></td><td>12576108/95</td><td></td><td></td><td>T</td><td></td></thu<></thunit<>		Iouon	8	8,6363636363	74,58877888	-	union	8	9,821428571	96,48045018		Louion			19,01234568		NIZB	8		12576108/95			T	
model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 model 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>Multical 0 Multical 0 Multical 0 Multical Multical</td> <td></td> <td>uolin -</td> <td>7</td> <td>8,4080800</td> <td>70,01280000</td> <td></td> <td></td> <td>2</td> <td>8075/1420/8</td> <td>84,5/2/0408</td> <td></td> <td>Have</td> <td></td> <td></td> <td>/4/1512345/</td> <td>0</td> <td>Nantes</td> <td>8</td> <td></td> <td>0,40382/16</td> <td>00</td> <td></td> <td></td> <td></td>	Multical 0 Multical 0 Multical 0 Multical		uolin -	7	8,4080800	70,01280000			2	8075/1420/8	84,5/2/0408		Have			/4/1512345/	0	Nantes	8		0,40382/16	00			
Cum Signed Signe Signe Signe	Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit Unit <th< td=""><td>Ş</td><td>Niza</td><td>8</td><td>21212121212</td><td>52 80258108</td><td>Ģ</td><td>Mine Riname</td><td></td><td></td><td></td><td>a ș</td><td>Mins Rinams</td><td></td><td></td><td>A 275 GORD A</td><td>Ş</td><td>Nimes</td><td>9</td><td></td><td>0.1404040</td><td>ş</td><td></td><td></td><td></td></th<>	Ş	Niza	8	21212121212	52 80258108	Ģ	Mine Riname				a ș	Mins Rinams			A 275 GORD A	Ş	Nimes	9		0.1404040	ş			
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td>TUR M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M</td> <td>:</td> <td>Cellos</td> <td>8</td> <td>6.0000000</td> <td>34 01735537</td> <td></td> <td>TOTAL</td> <td>224</td> <td>Ŧ</td> <td>1304.607781</td> <td>2</td> <td>TOTAL</td> <td>ľ</td> <td></td> <td>041 040383</td> <td></td> <td>TOTAL</td> <td>98</td> <td></td> <td>063 888890</td> <td></td> <td></td> <td>1</td> <td>t</td>	TUR M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M M	:	Cellos	8	6.0000000	34 01735537		TOTAL	224	Ŧ	1304.607781	2	TOTAL	ľ		041 040383		TOTAL	98		063 888890			1	t
Weta Originational conditional condital conditional condital conditional conditional c	No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. No. <td></td> <td>TOTAL</td> <td>440</td> <td>Ŧ</td> <td>948,6570248</td> <td></td> <td>MEAN</td> <td>224</td> <td>2/intrament) D.</td> <td>0008028571420</td> <td></td> <td>MEAN</td> <td></td> <td></td> <td>00555555556</td> <td></td> <td>MEAN</td> <td></td> <td></td> <td>005555555556</td> <td></td> <td></td> <td>T</td> <td></td>		TOTAL	440	Ŧ	948,6570248		MEAN	224	2/intrament) D.	0008028571420		MEAN			00555555556		MEAN			005555555556			T	
1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		MEAN	4	2\n"n"mean)	1.0004132231405		ST. DEV.	13.03158556		908		ST. DEV.	~		1774			17		1733		t	*	
0 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000 010000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ST. DEV.	8,752142505	*	2350		S	0,5817672125		0,2919642857		2	_		1144444444					1372222222				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0	0,2188035641		0,1161157025		C(5)	70,08028571				C(5)	58,33333333					60,2777778						
International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International Internat	International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International International Interna		C(5)	53,4000001									-												
NumColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorColorC			2011-2012		Г			2010-2014					0000 0000					0000-0000					3008	Γ	
	Nut 61 2777713 6127630 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 613 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 <td>POSITION</td> <td>TEAM</td> <td>ŀ</td> <td>SP-100</td> <td>(St+100142</td> <td>POSITION</td> <td>TEAM</td> <td>POINTS</td> <td>87-100</td> <td>087100142</td> <td>POSITION</td> <td>TFAM</td> <td>PONTR</td> <td>87+100</td> <td>(SP100142</td> <td>POSITION</td> <td>TFAM</td> <td>POINTR</td> <td>SP100</td> <td>081-100143</td> <td></td> <td></td> <td>T</td> <td></td>	POSITION	TEAM	ŀ	SP-100	(St+100142	POSITION	TEAM	POINTS	87-100	087100142	POSITION	TFAM	PONTR	87+100	(SP100142	POSITION	TFAM	POINTR	SP100	081-100143			T	
Print Control Control <thc< td=""><td>Print 0.37773 0.37773 0.37773 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.400</td><td></td><td>Motz</td><td>ŀ</td><td>12 7777778</td><td>163.2716040</td><td></td><td>Metz</td><td>55</td><td>12.6</td><td>158.25</td><td>-</td><td>Metz</td><td></td><td></td><td>16.0137631</td><td>-</td><td>Metz</td><td>36</td><td>15 0000001</td><td>53 0001736</td><td></td><td></td><td></td><td></td></thc<>	Print 0.37773 0.37773 0.37773 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.4001 0.400		Motz	ŀ	12 7777778	163.2716040		Metz	55	12.6	158.25	-	Metz			16.0137631	-	Metz	36	15 0000001	53 0001736				
No 6 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	Paris	4	12,777778	163,2716049	8	Harvor	53	12,04545455	145,0029752	64	Have			168,1767974	~	Havre	31	14,09090909	198,553719	2		ſ	
Hum 4 Num 64 Num 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94 94		en	Anor	45	12,5	158,25		Toulon	8	10,90909091	119,0082645	m	Mos Biganos	-		132,8804325	e	Nimes	28		161,0834711	e			
$ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Tube 0.17773 0.66.Byne 5 Tube 0.45 0.46.Byne 5 Tube 0.45 0.46.Byne 2 0.46.Byne 2 0.45 0.46.Byne 2 0.46.Byne 2 0.45 0.46.Byne 2 0.40.Byne 2 0.40	4	Have	43	11,9444444	142,6697531	4	Nimes	48	10,9090901	119,0082645	4	Nimes			132,8804325	4	Paris	26		139,6694215	4			
Metalgene 0 0.0000 0.00000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.00	Metalgione 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	Toulon		10,2777778	105,632716	u	Mios Biganos	ŧ	9,318181818	88,8285124	5	Toulon			96,0061125	w	Mice Bigance	8		119,0082645	w			
Mms 7 Fmulue 7 Fmulue 7 Unstant 1 Unstant 7 Unstant 1 Unsta	Mrmas Function 2 Constraint 7 Provinted 2 Constraint 2	9	Mios Biganos		2		9	Have	9	0,000000001	82,6446281	9	Dian			00,44174439	9	Besancon	8		100	0		T	
True Control C	The prime and contractioned a		Nmes Enviro		8,505050505 B			Pleary Loret	8 3	201010101010	60,34074878		Floury Loiret	T		CLU2040000		Dign	R		82,6446261			T	
Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren Upper barren<	Burrow 3 Control 0 Control 2 2 2 2		Disc.		10000000000000000000000000000000000000			2	5	7 OVEREAGE	STOCKOLD ON		Anne	T		PLUGOTA D		and a second	t		010000100	ľ			
TOTAL Main Use of the main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main Main	TOTAL 36 HH 165,3614 1 Capp-Femilie 3 5000000000000000000000000000000000000	9	Besancon	8	6.388888880	40.81790123	2	Besancon	8	6.363636364	40.49586777	9	mulane Charge	t		0.19633084		Toulon	t		438016629			T	
38 3hr/man) 1005655666 TOTA 40 1657 (1) 400 1674 (1) 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 201	Bit Minimum Difference TDL 440 Minimum Difference Difference <thdifference< th=""> <thdifference< th=""> <</thdifference<></thdifference<>		TOTAL	80	Ŧ	1055.246014	F	Cerov-Pontoise	38	5.90909090	34,91735537		TOTAL	Γ		1063.12651	F	Amor			438016629				
	8 (#1920107 1142 NEW 40 21/************************************		MEAN	36	2(n*n*mean)	1,000555555556		TOTAL	440	Ŧ	960,5371901		MEAN			105763688761		TOTAL	220		1121,487603	12			
0.2077/206010 Cold 0.11222222 ST CEV 9.2070/006 X1+07-14/74 2311 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 0.4 2110/74/14 1.4 2110/74/14 1.4 2110/74/14 1.4 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/14 2110/74/74 2110/74/74 2110/74/74 2110/74/74 2110/74/74 <t< td=""><td>0.437798910 Oils 0.11222222 0.11202222 0.110024 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144<td></td><td>ST. DEV.</td><td>8,919392107</td><td></td><td>1742</td><td></td><td>MEAN</td><td>9</td><td></td><td>0004132231405</td><td></td><td>ST. DEV.</td><td></td><td>1+x2*2+x3*3</td><td>1682</td><td></td><td>MEAN</td><td></td><td></td><td>00828446281</td><td></td><td></td><td></td><td></td></td></t<>	0.437798910 Oils 0.11222222 0.11202222 0.110024 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-453. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 61-027-653. 0.1100144 <td></td> <td>ST. DEV.</td> <td>8,919392107</td> <td></td> <td>1742</td> <td></td> <td>MEAN</td> <td>9</td> <td></td> <td>0004132231405</td> <td></td> <td>ST. DEV.</td> <td></td> <td>1+x2*2+x3*3</td> <td>1682</td> <td></td> <td>MEAN</td> <td></td> <td></td> <td>00828446281</td> <td></td> <td></td> <td></td> <td></td>		ST. DEV.	8,919392107		1742		MEAN	9		0004132231405		ST. DEV.		1+x2*2+x3*3	1682		MEAN			00828446281				
0.2777778 0.2040640400 Oni 0.1139504120 CQ5 0.204656147Q Oni 0.7745804655 0.01 0.214680455 17.02747777 0.02777778 CQ5 0.54464442 Oni 0.774580455 Oni 0.2148804417 17.02747777 CS5 55.64781411 CO5 57.6466445 CO5	のユアアアア CV 0.248488484 CM 0.198056172 CM 0.20865172 CM 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 20865172 208		2	0,2477608915		0,13222222222		ST. DEV.	9,97997996	x1+x2*2+x3*3	2311		2	0,2648406449		0,142074928				1+x2"2+x3"3	968				
568918184 5689181818 568918181 50 50 50 50 50 50 50 50 50 50 50 50 50	55,664781818		C(5)	60,2777778				5	0,240409409		0,1350504132		C(5)	60,51873199					0,5060516742		2743801653				
								C(5)	55,68181818										75,45454545						
																								8	

Annex 5: French women's handball league's latest classifications and calculations

Source: own elaboration

	2021-2022					2020-2021					2019-2020					2018-2019					2017-2018	Γ		
POSITION	TEAM	POINTS	31-100 31-100	(Sir100)^2	POSITION	TEAM	POINTS	SI*100	(Sir100)^2	POSITION	TEAM	POINTS	SI*100	(Si*100)^2	POSITION	TEAM	POINTS	SI'100	(Si*100)^2	POSITION	TEAM	POINTS	SI'100	(Si*100)^2
-	PSG	8	12,5		-	PSG	8	11,50627615	132,3943909	-	PSG	8	-	192,9012346	-	PSG	9	13,46153846	181,2130178	-	PSG			152,8348026
8	Nantes	9	10,20833333		2	Montpeller	8	10,46025105	109,4168519	8	Nantes	8		132,4326027	8	Montpelier	4	11,81318681	139,5513827	8	Montpelier			152,8348026
e	Aix		9,16666667		e	Nantes	4	9,832635983	96,68073038	e	Nimes	8		106,4499874	e	Chambery	4	11,26373626	128,8717546	m	Nantes	37 10		03,3238739
4	Montpeller		80		4	AK	9	8,368200837	70,02678525	4	Montpelier	8		78,21567145	4	Nantes	8	10,71428571	114,7959184	4	St Raphael			87,24791692
n 9	Mandey	8 8	8,125	000000	0 9	Torburgh	8 8	CENTROLOGIC C	885/1981/388	0 4	Ab	Q 9	1,808001431	64,96815823 64 00040846	ng	Nmos	8 8	CONTRACTOR CONTRACTOR	91/2142/304	0 4	Distants	1	Sautenced a	82,19116048
-	Toulough	8 8	C REGERERET	44		Chamberry		R 486355640	42 050803780		Durkemue			35.430830		of Dechand		6 PERT 1 1 PER	47 17123536		Nimes			65 00052862
	St Rachael	5	6.45833333			St Raphael	8	5,857740586	34.31312477		St Rachael	T	5,952380952	35,430839		Toulouse		6.318681319	39.92573361		Toulouse	T		55.02052892
a	Cesson	12	5,625	31,640625	a	Limoges	12	5,648535565	31,00695403	6	Chambery	1	5,55555556	30,86419753	a	Tremblay		6,043956044	36,52940466	a	Chambery		6,318581319	39,92573361
₽	Chartres		4,583333333	3 21,00694444	9	Durkerque	Ŕ	5,020920502	25,20964269	9	Chartres		5,556555556	30,86419753	10	Durkerque	ę	5,21978022	27,24610554	9	huy		4,395604306	19,321338
F	Cretel	5			F	Chartres	z	4,60251046	21,18310254	F	Istres			26,61249685	ŧ	Istres		3,846153846	14,79289941	F	Tremblay			14,79289941
12	Dunkerque	8	4	-	7	Cretel	8	4,60251046	21,18310254	12	huy		-	26,61249685	12	huy			7,547397657	12	Cesson			12,75510204
13	Limoges	8	3,75		ţ	Istres	8	4,184100418	17,50669631	13	Tremblay	a		12,75510204	13	Cesson	a		6,113392102		Saran	12 3,	3,296703297	10,86825263
2	Istres	41	3,54166667	5	2	Cesson	\$	3,765660377	14,18042401	14	Cretel	a	125	12,75510204	14	Pontault		1,648351648	2,717063157		Massy Essone	9	1,648351648	2,717063157
\$	Saran	12			15	łwy	9	3,347280335	11,20428564		TOTAL	252		833,3333333		TOTAL	364		901,4611762		TOTAL	364		866,1393552
16	Nancy	=	22	-	16	Tremblay	••	1,673640167	2,80107141		MEAN		_	0,000566893424		MEAN			0,0003924646782					0,0003924646782
	TOTAL	480		753,125		TOTAL	478	Ŧ	738,0823165		ST. DEV.	-	ri S	1500		×	-	ri M	1984		×	_	2	2061
	MEAN	8		ğ		MEAN	29,875	c (neam'n'n'n)2	0.0002615062782		5	0,4236592729	Gini	0,2210884354		5	0,5312278269	Gini	0,2927786499			0,4784857012	Gini	0,2625588697
	SI. DEV.	0.4676460776	1233 X1+X2-2+X5-3.	1 30M		SI. DEV.	13,124404/5		3148		(9)	85750085'75					5/,14285/14				C(2)	53,205/033		
	C(S)	48.54166667				C(S)	48.11715481		17420120270															
	2016-2017					2015-2016					2014-2015					2013-2014					2012-2013			
POSITION	TEAM	POINTS	SI'100	(Sr 100)^2	POSITION	TEAM	POINTS	SI'100	(Sir100)/2	POSITION	TEAM	POINTS	SI'100	(Si*100)^2	POSITION	TEAM	POINTS	Sr100	(Si*100)^2	POSITION	TEAM	POINTS	SI'100	(Si*100)^2
-	P8G	8	13,18681319		-	PSG	8	12,67217631	160,5840524	-	PSG	45	12,36263736	152,8348026	÷	Dunkerque	8 4	11,87845304	141,0976466	-	PSG	49	13,46153846	181,2130178
N	Nantes	\$	12,36263736		R	St Raphael	8	9,917355372	98,35393757	N	Montpelier	4	12,08791209 1	146,1176186	N	PSG		11,04972376	122,0963951	N	Dunkerque	Ì	10,71428571	114,7969184
m	Montpellier	9			m	Nantes	đ	9,366391185	87,72928382	m	St Raphael	8	-	87,24791692	m	Montpelier	8	10,49723757	110,1919966	m	Montpelier	38	10,43956044	108,9844222
4	St Raphael	8			4	Montpellier	8	8,815426997	77,71175314	*	Chambery	8	~	82,19116049	4	Nantes		9,668508287	93,4800525	4	Chambery	-		87,24791692
ŝ	Chambery	8			ŝ	Chambery	æ	8,539944904	72,93065896	50	Durkerque	8		77,28535201	ŝ	Toulouse		9,116022099	83,10185892	w	Nantes	-		87,24791692
ø	Durkerque	8			ø	Crete	8	7,713498623	59,498061	ø	Nantes			72,53049149	ø	St Raphael		8,011049724	64,17691768	ø	St Raphael			55,02052892
~	Toulouse	8	T		~	Durkerque	8	7,162534435	51,30189954	~	Cesson	2		43,47301051	-	Cesson	5	7,458563536	55,63017002	~	Cesson	5 28		51,02040816
ao a	ar a	8	T		10 G	Tordston	5 P	6,88/U52342	47,45148036	io a	Numero of		0101000110	1955/326/05	10 G	Chambery		7,458563533	2001/002	0 0	Selestar		6.760230760	196201492,55
a Ş	Nimes	8	6,043956044 6,043956044	4 36,52940466 4 36,52940466	a Ş	T outouse Nimes	8	6,611570248	43,71286114	a Ş	Crebel	T		33,28402367	a 5	Alk		5,248618785 5,248618785	27,54799915	n ş	AK Pur	T		33,28402367
5 ±	Cesson	4 ¥			2 =	NV.	1 9	5.23415978	27.3964286	2 =	Tremblav			30.18959063	2 =	Selestat		4.696132597	22.05366137	: =	Toulouse	1		30.18950063
5	Saran	9	T		5	Aix	11	4,683195592	21,93232096	5	Ak	T		27,24610554	12	Tremblay		4,143646409	17,16980556	ę	Tremblay			24,45356841
13	Cretel	16	Г		13	Chartres	12	3,305785124	10,92821529	13	Selestat	Γ		7,547397657	13	huy	Γ	3,038674033	9,23353988	13	Cretel	ŕ		19,321338
2	Selestat	ŝ			2	Tremblay	Ŧ	3,03030303	9,182736455	14	Istres			4,830334501	4	Dja			6,181130002	14	Billere	•		•
	TOTAL	18		858,5919575		TOTAL	363		805,4246446		TOTAL			834,8931288		TOTAL			835,1393425		TOTAL			859,3466073
	MEAN	8		2\(n*n*mean) 0.0003924646782		MEAN	25,92857143		0,0003935458481		MEAN	8	2(nmmean) 2.0	0,0003924646782		MEAN	25,85714286	2\n^nmmean) 1,0	0,0003946329913		MEAN	28	2(n'n'mean) 2,0	0,0003924646782
	01.UEV	P 12024404	_	5		SI. DEV.	1/00114/02/0	A11442 2145 3	27272		al. DEV.		1	2144				1	2110				1	2012
	C(5)	53,2667033	L			C(S)	49,31129477				C(5)	51,64835165	F				52,20994475					53,2967033	ſ	
	2011-2012					2010-2011					2009-2010					2008-2009					2007-2008			
POSITION	TEAM	POINTS	SI-100	(Sir100)^2	POSITION	TEAM	POINTS	Sr100	(Sir100)^2	POSITION	TEAM	POINTS	SI*100	(Si*100)^2	POSITION	TEAM	POINTS	Sr100	(Si*100)^2	POSITION	TEAN	20	81-100	(Si*100)^2
- 0	Chamber	* 8	12,2852471		- •	Chamber	8 4	CCCCCCCCC C1	9412282 071	- 0	Chamber	8 4		130,0040414	- 0	Chamber	ę 4	11 5,00434200	134 14090419		Chamber	4 2 2 2 2		1011212101/0
e	St Raphael		9,89010669		m	Durkerque	37	10,2777778	105,632716	m	Tremblay	8		82,19116049	e	Tremblay	12	7,627118644	58,17293881	m	huy	t	-	97,81427364
4	Nantes	5	8,516483516		4	Nantes	8	8,3333333333	69,4444444	•	St Raphael	8	_	77,28535201	4	Durkerque		8,757062147	76,68613744	4	Durkerque			72,53049149
40	Dunkerque		8,516483516		so i	St Raphael	22	7,5	56,25	50	huy	8		63,4736143	so i	huy		8,474576271	71,81844298	40	Nimes			63,4736143
0 1	Toulouse	8	6,593406593	4 347301051	DP	Tombien	8 8	1,722222222	52,16049383	D P	Durkerque	8 8	7962202967	63,4736143	D P	St Raphael	T	7,062146893	49,87391873		Tremblay C+ D-chool		7,142857143	51,02040816
- 00	Cretel	2 24	T		- 00	Touraine	88	5,555555556	30,86419753	• 00	Nimes	8 8		30,18950063	- 00	Istres	\$ 81	6,497175141	42,21328482	- 00	PSG PSG	4 51 6 52		47,17123636
	łwi	8				Nimes	₽	5	ĸ	a	Nantes	8		30,18959063	6	Nimes		5,93220339	35,19103706	a	Crehel			47,17123636
9	Cesson	8			\$	Toulouse	8	s	8	9	Dia	5	5,21978022	27,24610654	9	Auriliac	21	5,93220339	35,19103706	ę	Toulouse			43,47301051
Ŧ	Tremblay	8	Π		Ŧ	PSG	44	4,722222222	22,29638272	Ŧ	Cesson			24,45356841	÷	Toulouse		5,649717514	31,91930799	F	Selestat	Π	10	24,45356841
12	P8G	\$ 9			5	Cesson	9	4,44464444	19,75308642	12	Toulouse		4,395604396	19,321338	12	Nantes		5,367231638	28,80717546	5	Istres	17		21,81197923
1	Nimes	₽ ₽	4,945054945	5 24,45356841 7 21,81107023	2	Pilon Dilon	ā t	4,444444444	19,75308642	P 2	Croted	¢	4,305604396	19,321338	2	Releatat	4	4,802259887	23,06170002	13	Viletianche		1,923076923	3,608224852
	TOTAL	364	1			TOTAL	360	Ħ	837,962963		TOTAL	364		829,1571068		TOTAL	35	Ŧ	820,8050049		TOTAL	1		860,4033329
	MEAN	8		3		MEAN	25,71428571	2(h*h*mean) 3	0,0003968253968		MEAN	8	2\n*n*mean) 2,0	0,0003924646782		MEAN	8	2(n*n*mean) 0,	0,000403551251		MEAN	26		0,0003924646782
	ST. DEV.	9,290193341	-	3 2266		ST. DEV.	11,10390487		2141		ST. DEV.		6	2174					2153			~		2096
	5	0,3573151285	1285 Gini	0,1821036107		5	0,4318185226	Giri	0,2218253968		2	0,4161618851	Gini	0,2182103611		2	0,4007471961	Gini	0,202582728		CV	0,4693617045	Gini	0,248822606
	C(B)	50,54945055	2055				52,222,222				(9)	51,37362637				C(a)	8					52,1978022		

Annex 6: French men's handball league's latest classifications and calculations

Source: own elaboration

Concession of the second second second second second second second second second second second second second se	Z-(001-19)	173,892042	120,7583825	92,4556213	87,24791692	82,19116049	82,19116049	82,19116049	77,28535201	33.28402367	40.924330	10,024020	10,000,000	10/000/01	7,547397657	0,07547397657	888,6306002	0,0003924646782	2007					CVIUU-IS/	106 424472	185 9504132	175.763315	137,8845271	112,4885216	96,99265381	63,27479339	32,28305785	20,66115702	7 000520500	3,587006428	1049,701561	2((n*n*mean)),0006313131313	1256	0,2304040404				(SI'100)/2	167,9031938	146,7169212	133,3862329	102.8367387	86,4114263	41,97579845	38,40507836	31,73973418	25,70018460	22,93195794	938,3058917	2/(n*n*mean) 0,0004694835681	1884	0,1988262911
	0	13,18681319	10,98501059	9,615384615	9,340659341	9,065034066	9,065834066	9,065934066	8,791208791	5.769230769	A 100001300	antennone's	Decourses a	3,2001002,0	2,147252147	0,2747252747			K1+X2-2+X5-3					81100	14.01515152	13.63636364	13 25757576	11,74242424	10,60606051	9,848484848	7,954545455	5,681818182	4,545454545	4,166666667	1,893933394	Ŧ	2/(n*n*mean)	x1+x2*2+x3*3	B				SI*100	12,96774648	12,11267606	11 CROWNED UN	10.14084507	9,296774648	6,478873239	6,197183099	5,633802817	5,0704025636	4,788732394	Ŧ	2(n*n*mean)	x1+x2*2+x3*3	5
NO.000	NIN	48	40	35	큃	33	33	8	8	5	ş	e 9	2 5	2	P •	-	ġ.		13,33012/82	52.1978022				POINTS		5 8	35	F	28	26	M	\$P :	: 덕	-	- 10	264			0,532208305				POINTS	46	5	4	8 8	8	8	8	8	p q	4	355		_	0,3707001778 57,46478873
2017-2018	IEAM	Thuringer	Bietigheim	Budehuder	VB Dortmund	Metzingen	Leveriusen	Göppingen	omberg-Lippe	Olderburg	Mallocas	The second second	ingrunden of	Decision-motore	Neckarsumer	Rodena	TOTAL	MEAN	SI DEV					Z012-2013 TEAM	Thurtnoer	leinzia	Burtehuder	Oldenburg	Leverkusen	Goppingen	Frankturt	Blomberg-Lippe	Dienz/Weibern	Metzngen	d Widungen	TOTAL	MEAN		o ge			2007-2008	TEAM	Lepizig	everkusen	Employed and	Baver	Oldenburg	Trier	Dortmund	ale-Neustadt	Stornberg-Lippe	12-Bretzenheim	TOTAL			0180
	NOTIN	-	8	m	4	5	9	7	8						2	14								POSITION			e	-4	-		2			2									POSITION		24		• •		7		ľ		12	H			T
	2.(001.12)	188,6849414	188,6849414	120,7583625	82,19116049	59,17159763	59,17159763	55,02052892	36,52940466	30.18959063		201,10000001	24,40000041	toonicc/7	4,830334501	3,698224852	806,3289458	0,0003424646/62	201102					CMUU-181	266 2040054	196.424472	129 1322314	120,6668962	104,5971074	96,99265381	46,48760331	36,73094582	36,73094582	20,66115702	2,295684114	1061,179982	06313131313	1246	0,2967171705,0				(SI*100/v2		115,9763314	100	85 20710059	71,59763314	53,40236686	53,40236686	53,40236686	07-00000075 / H	17,89940828	890,2366884	00641025641	1463	0,1455128205
				10,98501059	9,065034066 8	7,692307692 5		7,417582418 5								8	H		21+17_2+12_3					SP-100	8									4,545454545		H	2/(n*n*mean) 2,0006313131313	e	e,				Sr100		140	10,010,010						0,9220/09225			2)(n*n*mean) 0,00064102564	d	5
COLUMN T	0		50 13	-	-	t	ŕ				t	T			N 1	1			13,6212503/ x1+	55 21978022			ſ	POINTS	-	t	-	29	ſ					4 0	• •	1			0,5461428164 62 87878788			Γ	POINTS		28	T	1	T	T		T	-	=	1			0,2355860923 52.30769231
2018-2019	EAM	tigheim	Thuringer	dzingen	dehuder	erkusen	berg-Lippe	Dortmund	Göppingen	Insheim-Auerbac	Oldarehum	hinning	Machine dance	and the second	Halle-Neustadt	Nellingen	OTAL		St. Dev. 13.					Z013-Z014		eiozia	eriusen	dehuder	1enburg	Metzingen	atgheim	ppingen	stomberg-Lippe	obier2/webem	nahaim	TOTAL			CV 0,54	Ĺ		8-2009		Leverkusen	eipzig	denuger	lenturo	mberg	berg-Lippe	Göppingen	Main Biener	Puriforder	stmund	TOTAL			
	NOIISO		5	3 W	4	5 Le	6 Blom	7 BVB	8	9 enshe	ç				13				0					20 NOTION				4 Bu	5	8	7			10 4006				ία				8	POSITION		3		- 8	2	7 Blom				5 5			ù	
	N	184,96	174,24	144	108,16	92,16	84,64	51,84	36	23.04	10.00	00'0	102	5	2,56	144	946,24	14782/14	1304					G CMUNE-181		59.7029344	126.8717546	87,24791692	87,24791692	82,19116049	72,53049149	33,28402367	21,81197923	21,8119/23	10,86825263	7,547307857	6,113392102	894,8194662	3924646782 2006	0,284144427			(SI*100)*2 P		175,783315	140,423/833	75.90105801	57,30210285	51,79637282	46,48760331	28,12213039	128,12213039	17,36111111	975,9527089	313131313	1348	0,232323232323
100				12	10,4		9,2								9		HH		Cini 0 304					SP-100	5				9,340659341 87,2					4,6/032967 21,8			g	HHI 894,		Gini 0,28			Sr100 (SI			12,12121212 10,0000004 140						2,303030303 28,1 2,16666667 17 3		HHI 975,	8		Gm 0,233
	20		33			-			-		+	+	+						10,501362456 x1+x2	L				POINTS				-	Γ	33 9,065	1		T	T	12 3,296				28 20/07 13 56465007 x1+x2*			Γ	POINTS			t	23 8.712	T	T		T	T	T	384		_	0,432089636
2020	z					Thuringer 2								uature	2					t				$\left \right $				Olderburg												-		2010	ŀ		Leverkusen 3												
2019-202		BVB Do	Bietig	Metzi	Blomber	μ.	Lever	Bundlet	ensheim-				uoppinden			t rptaiz Baren Kets			SI.DEV.	0				Z014-Z015 TEAM		Budehuder	Metzi	Older	Leip	Leven	Blomber	Fuchse Berlin			SVG Cele		Koblenz/Weibern	10	ST DEV	σ	5	2009-	TION TEAM		Lever	Older	Bunter	Göppingen	Frankfurter			Sindefingen		TOTAL	EN I	ST.D	5 3
1000	3		~		4	9	9	2		0				_	2			282	6					PUSIT				4	9		0		_					9	88	8			POSITION		-		2 40		5		_	_	- 1		313		5
				86,900316	82,99518816	82,99518816	61,44965527	40,39787417	37,74956909	37.74956909							818,820023	8	0.2148010412					Cv0004-05/										30,5401662		15,58171745		827,2853186	22555	8			(SI'100)^2			100,8631/72						14.53084541		1045,397153	8		0,2872474747
-	8	12,71186441	11,22881356	9,322033898	9,110169492	9,110169492	7,838983051	6,355932203	6,144067797	6.144067797	DECOLUCIO D	0/00101010	001000100't	1007/177**	3,813568322	3,389830508	Ŧ	unom u uloz	Cini Cini					SP 100	11 31578947	10.78947368	10.78947368	10,78947368	8,947368421	6,842105263	6,842105263	6,842105263	5,789473684	5,528315789	4 210526316	3,947368421	2,105263158			Gini			SI'100	14,77272727	13,25757576	88/8/8/8/21	10.60606061	7,5757576	7,5757575	7,196969697	5,681818182	3,7878787838	1,136363636	₹	2i(n*n*mean	ŧ	5
U.L.I.L.		8	8	4	4				52			8 8	1	3	P :	₽	472	1/98741/98	13,38442592	51,48305085				POINTS	4	4	4	4	3	28	28				₽	ŧ	8	380	11 20341392	0,412757355	52,63157895		POINTS	30	8	X S	8	8			÷	2 0		78	8	11,59153296	0,5268878618 63.63636364
2020-2021	IEAM	BVB Dortmund	Bietigheim	Metzingen	Thuringer	Biomberg-Lippe	Neckarsulmer	Oldenburg	Leverkusen	ensheim-Auerbac	Buddehuder	Development of the second	Hole Mountain	Interestion - Sector	Hosengarth	Goppingen	TOTAL	MEAN	SI. DEV.	COLE				2015-2016 TEAM	Thurmon	Metzingen	Leinzia	Bietgheim	Oldenburg	Dortmund	Budehuder	Levenusen	Biomberg-Lippe	Fuchse Berlin	Göppingen	SVG Cele	Rosengarten	TOTAL	ST DEV	9	C(5)	2010-2011	TEAM	Thuringer	Leipzig	Buotenuder	Oldenburg	Frankfurt	Sindefingen	Blomberg-Lippe	Göppingen	Reconsider	Bietigheim	TOTAL	MEAN	ST. DEV.	50
NOTITION.	NOILION	-	8	en	4	5	9	7	00	a		2 1	= \$	2	2	14								POSITION	-			4	5	9	2		a :	;	12	13	14						POSITION	-	24		r 10	0	7	80	a ;	2 7	12				
Construction of the local division of the lo	(Sichour's	195,3983119	139,9005665	104,3473234	83,53566886	69,4444444	56,65394843	48,84957799	31,86784509	26.09683085	00 0000 1777	27/18000/07	27/10000/07	10,400,200,404	8,743785409	7,226268933	1,156203029	1,156203020	0000360215054	2190	0,3266129032			0001-000	208 6419753	149.382716	111.4197531	84,0277778	79,01234568	60,49382716	52,16049383	37,34567901	30,86419753	30,89419753	13,04012346	7,716049383	3,780864198	886,1111111	2001	0,2773809524			(Sr100)r2	211,5702479	211,5702479	2514050,681	100	91,11570248	59,7107438	52,89256198	40,49586777	0 826446281	1133,057851	000826446281	883	0,2785123967	
	00.10	13,97849462	11,82795699	10,21505376	9,130784946	8,3333333333	7,52688172	6,989247312	5,64516129	5.107526882	A DECORDATY	CITADODOD'T	004070204US			2,668172043	1,075268817		2//n1/n1/mean/ 0/001360215054	x1+x2"2+x3"3				81100	14 4444444	12 2022022	10.55555556	9,166666667	8,888888889	811111111	1,222222222	6,11111111	5,555555556	5,000000000000000000000000000000000000	3,61111111	2,7777778	4	Ŧ	Z(n"n"mean) 0,0003968253968 x1+x2*2+x3*3 2001				Si*100	14,54545455	14,54545455	13,6363636364	10	9,545454545	7,727272727			12/2/2/2/2/2		•	e l	Ghi	
-	20			8	a 3	Γ	ſ	8	T	Γ	T	T	T	T	T	9	4	T	3/2	8		53,49462366		POINTS	Т	T	Ť		Γ				T	T	: #		7		25,71428571 2 13.08803665 x1		56,2777778		POINTS	L		R 8	1	T	T		Τ	0 0	530			0,5205768034	65,90909091
2021-2022	IEAM	Bietigheim	BVB Dortmund	Budehuder SV	Thuringer	Metzingen	Biomberg-Lippe	Neckarsulmer	Halle-Neustadt	Leverbusen	Andrew Australia	and Mild and and and	Ottophere	Ginguago	ZWICKBU	Hosengarth	rpfalz Baren Keta	Manz	MEAN			C(5) 5		2016-2017 TEAM	Rietoheim	Thuringer	Metzingen	Budehuder	Oldenburg	Dortmund	Leipzig	everiousen	Biomberg	Coppingen	Neckarsulmer	Nelingen	SVG Celle		ST DEV		C(5) 5	2011-2012	TEAM	Thuringer	Budehuder	Chinaburg	everbasen	Frankdurt	Göppingen	Blomberg-Lippe	Bad Wildungen	SUIT Celle	TOTAL	MEAN		2	
NO DE LA DESTRUCTIONE		-	8	e e	4	5	8	N 1	x 	0				2	2 :			2						NOTION			e	-	5	9	2		a !	ľ	1 1 1		-						POSITION	H	•		• •	ø	2			2 1					

Annex 7: German women's handball league's latest classifications and calculations

Source: own elaboration

					_				_		_							5				i i																		5	1.1.							_													8	a li	8
(\$1100)*2	83,7284805	80,76487676	74,90786407	06,74783203	64,10461788	44,88124228	36,55111282	30,86419753	25,65796663	24,02521953	18,04861378	Independent of	CONTRACTOR OF	6.007304683	CONTRACTOR NO.				0.2476307967					(St*100)*2		77,85467125	00,4444444	64,10461788	56,40636503	36,55111282	19/0209/15	22101400000	27,339912	20,95212012	10,000,000,00	8104000	6,007304683	6,007504683	1,7067445	2,00018155410	4383	17RCnowC7 n			(81*100)*2	22,34747312	77,85467128	17,10485,177	66,74783203	44,88124226	40,60638101	36,55111282 36,55111282		18,04881578						CC38922,728	-	4	0,2420116195
Si'100	9,150326797	8,986028105	8,680130719	8,102034641	7 679714560	6,620346405	6,045751634	5,55555556	5,065369477	4,2012/00/184	4,248308013	TE / Development &	2,2517173525	2,450000302	20041404246	2,124183007	Ŧ	20(n°mmean)	Grid Carl					St'100	Concernance of	8,823529412	8, 53333333	8,006535048	7,516333660	6,045751634	1002202200	5,302156863	5,22875817	4,575163300	4,08496732	2.614379065	2,450080302	2,450660302	Translation (21(n*n*mean)	dis221033	5			S1'100	9,967320261	8,823529412	B.823529412	8,162634641	6,629346405	6,37254902	6,045751634	4,738562092	4,248306013	4,08496732	3,921568627	2,941178471	2,941178471	2,941176471	IHH	23(n°n°mean)	c1+272+4373	10
POINTS	8	8	ន	8	a 4	Ŧ	22	3	5	8	11	q s	R 9	e 12		2	612	7	0.4446804535	12,97385621				POINTS	5	5 25	5	40	46	8	8 2	* *	я	11	n :	2 2	2	<u>ي</u>	8 65	7	15,50412451	43.05424857			POINTS	5	2	X 2	1 9	4	8	R 8	ន	8	n :	ត ក	8	8	8 7	612	3	4,906623655	10010101010
					- 14												-		ST. DEV.				012-2013	TEAM	Name of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street of Street o	win-Neckar	chae Berlin	temburgo	owe-Burgdor	Wetcher	ofangapte	Melsungen	oppingen	ubbecke	Bairgen	mmershach	condistad	echausen .	-1-		ST. DEV.		П	007.5008	TEAM	-														TOTAL			
OSITION	-	8	2:	4			80	a	2	=	1	2 2	2	2 2		. 1							8	OSITION .		2 2 2	4		8 Inn			- 9	=	2	# ;	t \$	9	2 2	2					0	DSITION	-	~		s ag	8		a o	. 2	5	2	ت ت	t 12	¥ 1	11	2			
0/2 P4	0648	4865	87128	1001	82012	8778	07612	21963	0101	20102	87518	0/110	1000	1000		15005	40348	2541031	73636					01/2	22.100	87128	98407	26503	6125	10185	210	21963	201	81378	51378	5000	SH096	23445	1975	5641031	8				01 ⁴²	197796	20803	26152	sector	0037	0007	72740	1000	43352	57873	2455	20250	528	73407	11210	748538	10	
0 (Sr10		102,6314665				1327 38,55564778			22,4539707		18,04861378						663,9540348	-	_					0 (Sr10		21129428,117 2146						1754 24,02921350							182210603/2 8260 AT MONTO COM		d*3_ 4460				0 (Si'100)*2	114,200		1150 67,625361						3526 24,34643352				9,765625	1053 0,24740 0,24740	1121238,473			
Sr10	10,45751	10,13071805	8,823535	8,162234641	12238/9	6,209150327	5,882355	4,901960	4,738565	4,411764	4,248362	ana ana ana ana ana ana ana ana ana ana	4,084.00	2,287581	2.28746	2,28758	Ŧ	2\mm	04 Cini	\$				Sr10	CODEC S	8,823529412	8,660130718	7,516338	6,535941	6,5725,6	2,227,0	4,901960784	4,738560	4,248362	_	_	_	_	_	2			1		8r10	10,69072	8,552631	8,223684211	7,23684	6,907894	6,907894	6,743421	4,934210	4,934210	4,27631	3,78280	3,762894	3,125	0,9968421053			65 x1+x2*2+x3*3	
8				8			8		8										0,4545203504					POINTS	8 8							5 8					2				15,115243	100000000000			POINTS	8	8				4		8	8	8	ุณ ส	ន	2	10 m		8		
TEAM	Flensturg	2	Magdetung	Phein-Necku	Fortune Burls	Bengischer	Goppingen	Erlangen	Wetcher	Bundary	remgo	and and and and and and and and and and	Minden	Ludwicshele	Contraction of the second	Bietigheim	TOTAL	MEAN	ST. DEV.	C(S)			2013-2014	TEAM		Flensburg	Hamburgo	Fuchse Berl	Magdetung	Metsurgen	terrover-Burg	Lethecke	Wetcher	Goppingen	Gummersha	Bendischer	Baingen	Elsenach	TOTAL	MEAN	ST.DEV.	3 8	inter the second second second second second second second second second second second second second second se	2008-2000	TEAM	No.	Hamburgo	Phein-Nectu	Flensturg	Goppingen	Mapdetung	Northorn-Ling	Fuchae Berl	Metsurgen	Großwahata	Wetdar	Baingen	Rheinland	Strateuroer	TOTAL	MEAN	ST. DEV.	
POSITION	-	N	•	•	•	•	•0	•	9	=	2	2 2	:	2 22	\$	\$								POSITION		• •	4	*	•			9	=	12	\$:	t ti	9 19	4	8						POSITION	-	2			•	4	•• •	2	F	2	# #	: ¥	¥ !	18	}			
Si'100/*2	02777778	78,5625	98,015625	20,25	0,1736111	44,4444444	11,640625	11,640625	31,640625	96006044	19, 140625			1111111	ACCREDING OF		86,02083333	02314814815	3620					Si'100/2	1140000010	100000000000000000000000000000000000000	49,24592182	7,7039089	19855682	34,19655682	4,7084573	24,7084573	20,54050819	17,97561643	17,97561643	10111145	13,35681126	355831126	CELEBOOK, 11	77,4080395	0001564436762	O TREASURE O			Si'100jh2	102,6314685	34747319	77,85467128	58.97838438	49636503	,09727028	42,7186125	18.04661578	16,68695801	12384126	14,12384126 10.67965312	8,650519031	1000000027	84675125	686,0075185	01815541031	4225	
										21000001	4,375	10000000	1 10000001		1 134	10 21222222	Ħ	("mean") 1,00	Cini 01					Sr100	1 1007000	894736842 61						4,970760234 2							1 00001020000 1	-	1				S-100		000000000000000000000000000000000000000							4,08498752 16					1,000784314 3,			1+*2"2+*3"3	-
	Τ					1 2				Ι		Τ	Τ		Τ				0.5084456049	3,625				onts	8 8	192	48	13	85	85	а: к :))	31	5	5 : R 2	21	12	50 SZ	_		35,41176471 2/7	-	9606187	Γ	NITS	5	6,0	5 9 8 9 9 9	1 1	45 7.5	42 6,8	8 9 8 9	1 2	25	2 2	2 2	8	2	5 S	612	12 12	5322284 ×1+3	
W	3	Sunda	ofundo	-Burgdor	Nector -	Melsurgen	bad	tdar	ofu.	ustus	totel .		undu	uen	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se				ST. DEV. 10.5 CV 0.508			-	2015	WN 3		turda (otungo	ingen	usôun	Berlin		burgo ersbach	usõu	acha	-Burgdor	ACM .	den	patration		1			C(S) 39,7	2010	AM P	3	ođing	dung Martur	mbach	ingen	ugo t	ultited.	actual in the	ofunda	usêu	-Burodor	unđu	hind	eldorf turn	TOTAL	NN	DEV. 16,9	
TE	*	Flen	Magd	tarmove	First of	Mark	3	W	3	665	78				induit 1	Northo	10	2	12	0			2014	NON TE		Par	Magd	Geo	Mela	Fucha		Gum	B	PP -	tarnove		-	Index		2	M	ā		2006	NON TE	*	Harr	Plen Bhain	- Ho	Geo	3	Große		Magd	Meta	A larnow	Ba	ada .	Me	12	M	ST.	
USO4	-	~	n -	•	n «		**	•	2		21	2 3				-	_		50		10			Posn			4	•••	*			» º	-	1	# ; • •		4	-	÷	8		2			POSIT	-	~			8	•		. 5	=	2 I	2 2	. #	*	2 4		ā		
2/00/-2	80,05540165	80,0654018	48,6322714	46,8144044	AB4523524	30,5401062	29,1031856											2,03487534	20001315769474	6239	0,221184210			-						43,79325526				12,19858348		6.62305363	3,379106007	2,16262975	0	0,0002042485	2045				(51100)*2									19,46366782				6,634978	6,00730466 3,23050505	060,4006579	1,0001815541	4265	
201.00	8,947368421	8,947368421	6,973684211	6,842105263	6,578947308	5,526315789	5,304736842	5,304736842	5,394736842	4,736842105	4,605263158	117600014-4	4,21000016	3,684210526	A PROPERTY AND A	2,236842105	1,973684211	1,447308421	201/1/mean)	x1+x2*2+x3*3.	8			Sr100	00/11/02/01	9,191178471	8,639705882	7,904411765	7,103117647	6,617647059	6,433623629	6,25	5,514705882	3,402647059	3,308823529	2.573529412	1,838235294	1,4705882255	•	21(n"n"maan)	x1+x22+x373	5			81100	10,13071895	8,986928105	8,586525105 8,660130710	7,352941176	7,182542484	6,862745008	5,6823552941	4,501560784	4,411764706	3,921568627	3,594771242	3,104575163	2,614379085	2,450980342	Ħ	20(n°n°mean)	x1+x2*2+x3*3.	
MUNIS	89	88	ន	8	8 9	4	17	4	4	8	R 3	5	R 8	8	*	-	5	=	92 SF	15,45451731	0,4066378239			POINTS	8	8	47	57	8	8	8 3	8 3	8	6	p ;	2 2	9	an a	•	30,2222222	16,92737274	10000000000000000000000000000000000000			POINTS	8	8	8 2	4	4	4	8 8	8	27	a 1	8	10	92	£ :	612	2	15,83740918 x1+	
TEAM	K	Persburg	Viegdeburgo	uchse Berlin	Comments	Leipzig	Melsungen	Lemgo	Wetzlar	nower-Bungdor	Berglacher	Changer of the	pulper a	Minden	and and and and and	ardhom-Lingen	Essen	Coburg	MEAN		5 8		2015-2016	TEAM	Contract of	Kiel	Melsungen	uchse Berlin	Goppingen	mown-Burgdor	dingastery	Wetdar	Leipzig	Bergischer	Lempo	Shifteet	Esenach	Lubbecke	TOTAL			080		2010-2011	TEAM	Hamburgo	Kiel	Tuchse Berlin Marker	Goppingen	Flensburg	Viegdeburgo	Immendach	rohvalstadt	Wetzler	Libbeche	Metsungen ternowe-Bunator	Bairgen	Reinland	mm-Westlaten	TOTAL			
NORTHON	-	-					-80	a	2		2 1			2 22	-		10	30						NORTHON .			-	•				, ,	=	2	₽;	t tu	9	5	<u>8</u>						VORTHON	-	2			-10			2	F	2 2	2 2			10	2			
(Si'100)*2	00,350648	80,81588278	786407	66,74783203	00,000004778 No.44111080	643769	20,07535633	20,07535633	24,02921953	22,4539707	19,46366762	20100000-01	0,04001370	00010001000	A NUMBER	100000	645,4304035	15541031	4587					(Si'100)*2		14,90786407	10000	20,4444444	44,88124226	38,55364778		20,46506762	15,3787005	15,3787005	14,12584126	12,02238028	12,92238028	7,716049383	10000057.9	1,0001815541031	4505				(Si'100)*2	123,4587901	19284	74,99786407	61,514802	10,60038101	38,95354778	20052520,02	24,02521953	22,4539707	19,46306782	15,3787005	14,12384126	8,650519031	040383	521205	15541031	1046	
8																81600 5,233	E CAS,A		1						AC DE LE															near() 2,00018	10.13																	16471 8,650	17778 7,716 47712 0.427	HHI 673,3621295	near) 1,00018	10.3	
5	10,4573	9,477124183	8,66013	8,162234641	5,20015032,8	5,71826	5,302156863	5,302156863	4,501960784	4,73856200	4,411764706	Children's a	4,24636001	2.94117647	P REALFORMED	2,267581606	Ŧ		7671 Cini 2				Π	Sr100	100 m	8,660130715	8,50333333	8,33333333	6,650346405	6,200150321	5,71895424	4,411764706	3,92156862	3,921563627	3,758162925	3.594771242	3,594771242	2,7777778	2,207351	2\/n*n	ŧ			Г	Sr100	111111/11	9,31372549	8,660130719	7,843157256	6,3725-6902	6,209150327	5,302156863	4,50196078-	4,73856200	4,411764706	3,92156962	3,758162935	2,94117847	2,7777	Ŧ	2/n*n*a	857 x1+x2*2+x3*3	
MON		8		8	8 P		8	8	8	8	pdor 27	1	8 3	4 2	2	3	H	*		42,97385621				POINT		8 8		5	4	8 i		R 13	gdor 24	a			8	•	* 5			07403400400 44 77124183			POINT	8		8 9 8 9	1 1	8		8 8 5 1	8 8	5	1	gdor 24	ន		2 4 0 5				
TEAM	Magdatum	an a	Fuchae Be	Flensburg	Coppinger	Wetchar	Metsurge	Lepzig	Rhein-Neckar	Bergische	farrover-Burgdo	undum un	gradman (Minden	Reference	N-Lubber	TOTAL	MEAN	ST. DEV	C(S)			2016-2017	TEAM	Ren-head	Kel	Fuchse Berle	Magdetury	Wetstar	Metsurgen	finde	Gopingen	tarrover-Burgdo	Minden	of more	Gumenbact	Bergische	Bairgan	TOTAL	MEAN	ST. DEV.	3 8	ł	3044-2043	TEAM	Kel	Flensbury	Fuchse Ber Herrhunn	Rhain-Neck	Magdetury	Lemgo	Goppingen	Metsurger	Cummershi	Croftwallstadt	tarmover-Burgd Balmoen	Wetchar	Bergischer	Hideshein	TOTAL	MEAN	ST. DEV	
POSITION	-	~	n	•		•	-	a	9	=	1	2	:	2 2	\$	\$								POSITION		• •	4	wn		-		a 9	=	12	₽;	t ti	9	4	8						POSITION	-	2	-	-	-		ao a	2	F	2 S	#	t 12	¥ !	19	2			

Annex 8: German men's handball league's latest classifications and calculations

Source: own elaboration