

Executive Report

Women for a healthy economy November 2018



ClosinGap:

ClosinGap: analysing the opportunity cost of gender inequality



Spain is positioned 24th out of the 144 countries studied in the Global Gender Gap Report of the World Economic Forum, which estimates that it has achieved a reduction of its gender gap close to 75% so far. However, there are still many inequalities that persist between men and women.

From this evidence, ClosinGap arises. The objective of this cluster, which was presented publicly on September 7th, 2018, is to **analyse the opportunity cost for the Spanish economy of the persistence of gender inequalities** in areas such as health, work-life balance, pensions, use of free time, consumption, tourism, mobility or digitalisation. In other words, to measure the effects that these gaps and their social consequences have regarding the economy and the loss of female talent, and determining how much Spanish growth decelerates due to it not taking advantage of the full potential of women. On the other hand, it seeks to generate the necessary debate in our society in order to accelerate the closing of the global gender gap that, according to the World Economic Forum, could take us around 170 years at the current rate.

REPORT I. The opportunity cost of the gender gap in health

The first ClosinGap case study is driven by Merck, a leading company in science and technology and an expert in the area of health, and aims to analyse some of the main causes and effects of inequality between women and men in the health sector.

The report is based on two key concepts:

- **The gender gap in health.** A set of existing inequalities in the state of **physical, psychological and social welfare and by gender** that, therefore, can be avoided.
- **Opportunity cost.** The economic value of the alternative rejected when deciding on a specific action or expense. This value equals the benefits that would have been obtained from having chosen the best possible alternative.

The opportunity cost of the gender gap in health

Health patterns of people are determined by **biological (natural) and social (standard) causes** that determine the different types of risks throughout life, from earliest childhood through to maturity, through adolescence, youth, adulthood (fertile periods in the case of women) and old age.



Causes of gender gaps in health



Biological (natural)

Fertility / maternity
Prevalent pathologies
Longevity



Social (standards)

Non-professional care
Access to and use of health services
Lifestyle and risk behaviours
Unconscious gender biases in health
Social stereotypes
Occupation

Biological factors mean some people are genetically more predisposed genetically to certain health problems and diseases, while social factors determine the vulnerability of people based on demographic, geographic and socio-economic factors such as gender, age, income, educational level, employment situation or residence, among others. This group includes non-professional care, access to and use of health services, unconscious gender biases in health, lifestyle and risk behaviours, stereotypes and main occupational sectors.

Both types of factor affect the health of women throughout their lives, especially during fertility and at the end of their lives, as well as during old age when, in addition, they are alone. The risks to health are therefore not neutral with regards to gender, nor are their effects, which therefore can be avoided.

Effects of the gender gap on health

With the objective of, ultimately, counteracting such effects, the report focuses on their detection. The state of one's health has economic and welfare effects. The deterioration of one's health reduces the ability to generate income, produces direct, indirect and intangible costs, affects the demographic and economic health of the country, the quality of human capital and the productivity and limits the growth potential of individuals and that of the economy as a whole.

When there is a difference in the levels of health between men and women, we face a gender gap. Consequently, the opportunity cost is estimated from the different effects that the gender gap in health causes in the economy and in the welfare of people and of society as a whole, through its impact on the potential to generate income, on the quality of human capital and on the allocation of resources, amongst others factors.

These are the main effects of identified causes by groups:

	Opportunity cost		
	Personal and family sphere	Economy and society	Public budgets
Inequalities in the prevalence of diseases and life habits	<p>Health problems, pathologies and main causes of death</p> <p>Effects on morbidity and mortality in the short, medium and long term.</p> <p>Tobacco, alcohol, sedentary lifestyle, obesity, risk practices that produce accidents</p> <p>Access to and use of primary health care and hospital care services</p>		
	Physical, social and psychological consequences on the affected person, her family and the immediate environment.		Mental health impairment / eating disorders (ED)
The reduction in the fertility rate has effects on the demographic and economic health of the country		Demographic health → Growth of the population and working-age population (WAP) → Growth of potential GDP → Dependency rate	
The role of the caregiver from a gender perspective	Deterioration of physical and mental health. Waiver of income by occupation	Dedication that would generate potential jobs for professional caregivers	Temporary incapacity of informal caregivers due to depression, anxiety
Employment and its consequences in health	Sectors of occupation Exposure and accumulation of exposure to agents Work accidents		Duration of recovery from occupational diseases
Unconscious gender biases in health	Accuracy in diagnostics and procedures		
Women live four years longer but with worse health		Better health care throughout life saves on the cost of care in old age.	

Qualitative projection

Quantitative estimation

01

Inequalities in the prevalence of diseases and life habits

To get to know the state of health and identify the differences in prevalent illnesses, the report analyses the diagnostic statistics in Primary and Hospital Care, that also allows to focus on different age groups, in order to accompany the analysis throughout people's life cycle.

In the first place, there are no differences between men and women in terms of the access to and use of health services, except for a greater frequency of Primary Care in women, and of Hospital Care in men.

When visiting a medical professional, it is remarkable that in **Primary Care** men and women share the same health problems. However, the most frequent health problems for men are related to general problems, the respiratory and digestive systems, and skin and nails; and for women, the genital and urinary tracts, the nervous system and family planning, pregnancy, childbirth and puerperium. If those related to the genital tract and breast are eliminated, men present, more frequently than women, disorders related to cardiovascular systems (myocardial infarction, cardiac ischemia without angina); respiratory; endocrine, metabolism and nutrition (gout) and digestive and psychological problems derived from the abuse of drugs and alcohol, while women suffer differentially from problems related to the locomotor system; the endocrine, metabolism and nutrition systems; nervous; blood urinary; circulatory cardiovascular (varicose veins) and skin and psychological problems related to depression.

On the other hand, in **Specialised Ambulatory Care**, the distribution of diagnoses is similar between men and women, with urology and general and digestive surgery predominating in the case of men, and obstetrics and gynaecology, traumatology and orthopaedic

surgery, groups of pain unit and rheumatology in the case of women. Not counting those related to the genitals and breasts, men have a higher frequency of diagnoses related to bladder cancer, bronchial or lung cancer, coronary atherosclerosis and other heart diseases and abdominal hernia. Women, on the other hand, present more frequently than men diagnoses related to problems of acquired foot deformities, miscellaneous mental disorders and other disorders of the nervous system.

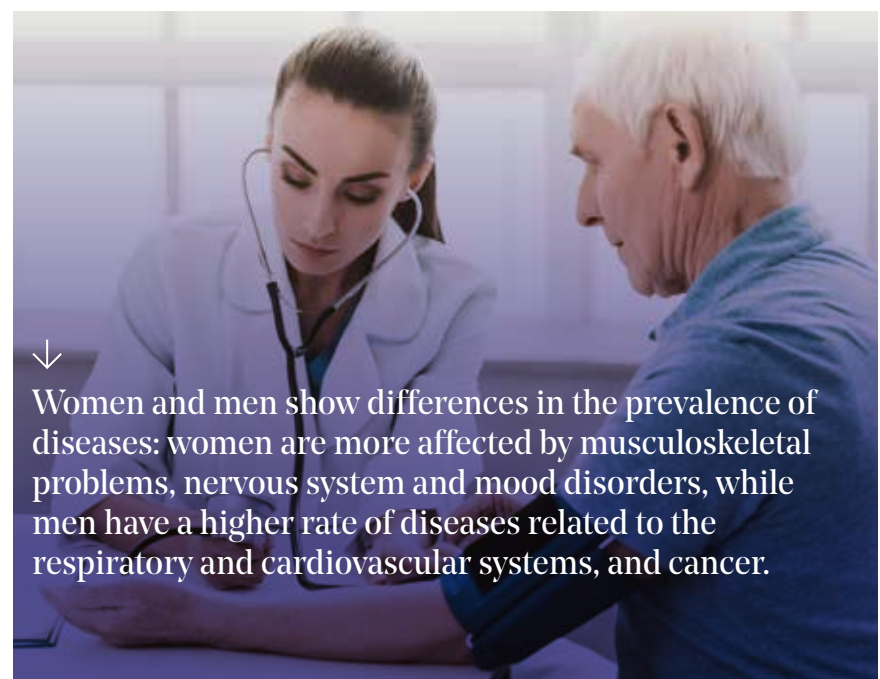
Finally, in **Hospital Admissions**, in **men diseases of the cardiovascular and respiratory circulatory system** are more frequent, while in **women** it is again the diagnoses related to the complications of pregnancy, childbirth and puerperium. Thus, one in five (19%) cases of hospital admissions recorded by women is related to **maternity (complications of pregnancy, delivery and puerperium)**, and rises to three out of five (60%) if we focus on the segment of women in ages between 25 and 44 years old.

When the diagnoses related to the genital tract and breasts are eliminated, men present a higher frequency of diagnoses related to coronary atherosclerosis and other heart diseases, mental health history and abuse of psychotropic substances, COPD and alcohol-related disorders, and women thyroid and mood disorders and osteoarthritis.

In relation to **mortality**, the study indicates that women die more frequently than men in situations of senile and presenile mental disorder, Alzheimers and from causes related to hypertensive diseases, and in a greater proportion from cardiovascular diseases (cerebrovascular diseases being the first cause of death in women). For men, the main differential causes of death with respect to women are tumours, chronic diseases of the lower respiratory tract, self-inflicted injuries and cirrhosis, and the main cause of death are malignant tumours of the trachea, bronchi and lungs.

With regards to **habits and lifestyle**, there is a higher prevalence of **tobacco and alcohol** consumption in men, although it is increasing in women. In addition, higher levels of **obesity** and being **overweight** is detected in men, less physical activity in women and higher rate of **domestic accidents** in women against **work accidents** in men.

Finally, one of the health determinants associated in part with **social gender stereotypes** refers to **eating disorders**, such as **anorexia** and **bulimia**. These diseases affect women mostly, in a 7: 1 ratio.



Women and men show differences in the prevalence of diseases: women are more affected by musculoskeletal problems, nervous system and mood disorders, while men have a higher rate of diseases related to the respiratory and cardiovascular systems, and cancer.

02

The reduction of the fertility rate has effects on the demographic and economic health of the country

Maternity determines the relationship of women with health services, as well as their state of health throughout their lives.

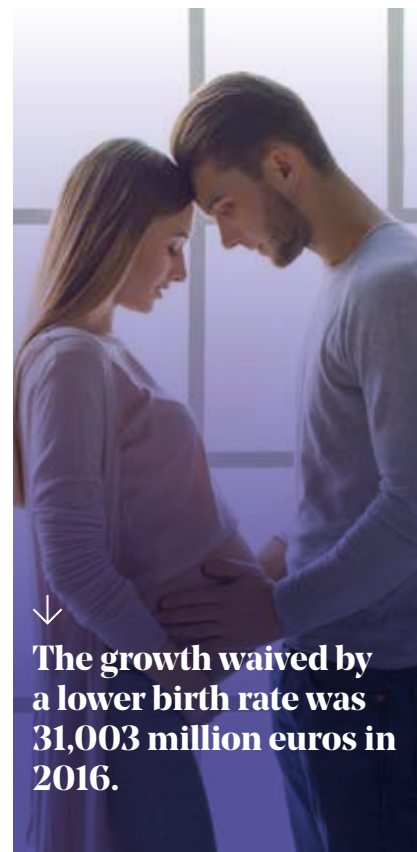
Although fertility is biologically associated to women, the practice of maternity is conditioned by the economic and social context. And the effects of that practice have an impact on the demographic and economic health of the country.

In this regard, the birth rate is determined by multiple factors: from individual personal and family freedom to the circumstances or conditions in which this practice is carried out (age, occupation, income, social benefits, etc.) or the effects on the economic welfare of the family (distribution of time for work, care, leisure and other activities, etc.).

Since 1975 the gross birth rate has fallen 2.5 times in Spain and the total fertility rate has fallen more than twice. **In 2017 the number of births were 58% of the amount registered in 1975** and the average age at the birth of the first child has increased six years, to 31.

If the variation of the average birth rate of the surrounding countries since 1984 is applied to Spain, in 2016 there could have been **47.7 million inhabitants in the country, 1.2 million more than today. 900,000** of them would be part of the working-age population, which could have reduced the dependency rate by 0.8%.

In terms of total GDP, the growth that we have lost due to a lower birth rate would be 31,003 million euros (2.8% of GDP in 2016 and almost 50% of the annual public expenditure on health in Spain). 9.3% of this amount would have been part of the collection for Social Security contributions, which means 2,872 million euros more in collections in 2016.



The growth waived by a lower birth rate was 31,003 million euros in 2016.

	1984	2016 observed	2016 estimated
Birth rate in Spain	12.3	8.7	10.0
N° births in Spain	473,281	410,583	464,754
Population in Spain	38,330,364	46,484,062	47,722,930
WAP	23,894,249	30,269,001	31,167,628
Over 65 years old	4,466,289	8,694,164	8,694,164
GDP (million €)	-	1,118,522	1,149,525
Δ GDP (million €)	-	-	31,003
% GDP 2016	-	-	2.8%
GDP per capita (€)	-	24,040	24,087
Dependency rate	18.7%	28.7%	27.9%

03

The role of the non-professional caregiver from a gender perspective

The role, still very extended, of women as caretakers of children or relatives in situations of dependency has important consequences on health.

Although having children under the age of 12 does not have a negative effect on the employment rate among men between 25 and 49 years old, for women it is the opposite and the existing gap widens to 23 percentage points.

On the other hand, in Spain 4.3 million people take care of elderly and chronically ill in a non-professional manner. **59% are women** (64% in the case of dependents) and dedicate 62% of the total hours declared, 1.8 billion per year. This is a non-professional work that, if formalised, would be equivalent to more than 977,000 full-time jobs per year, taking into account that the Spanish

Workers Statute establishes that the maximum legal workday in Spain is 1,826 hours per year. The economic potential of this greater dedication to care carried out by women amounts to **7,812 million euros per year**.

12.9% of women and 9.5% of men take care of elderly or chronically ill at least once a week. The report shows that **caregiving activities increase the probability of suffering depression in women by 3.4 additional points**. Thus, 13.4% of women caregivers and 7.3% of men caregivers report having suffered depression in the last 12 months. As

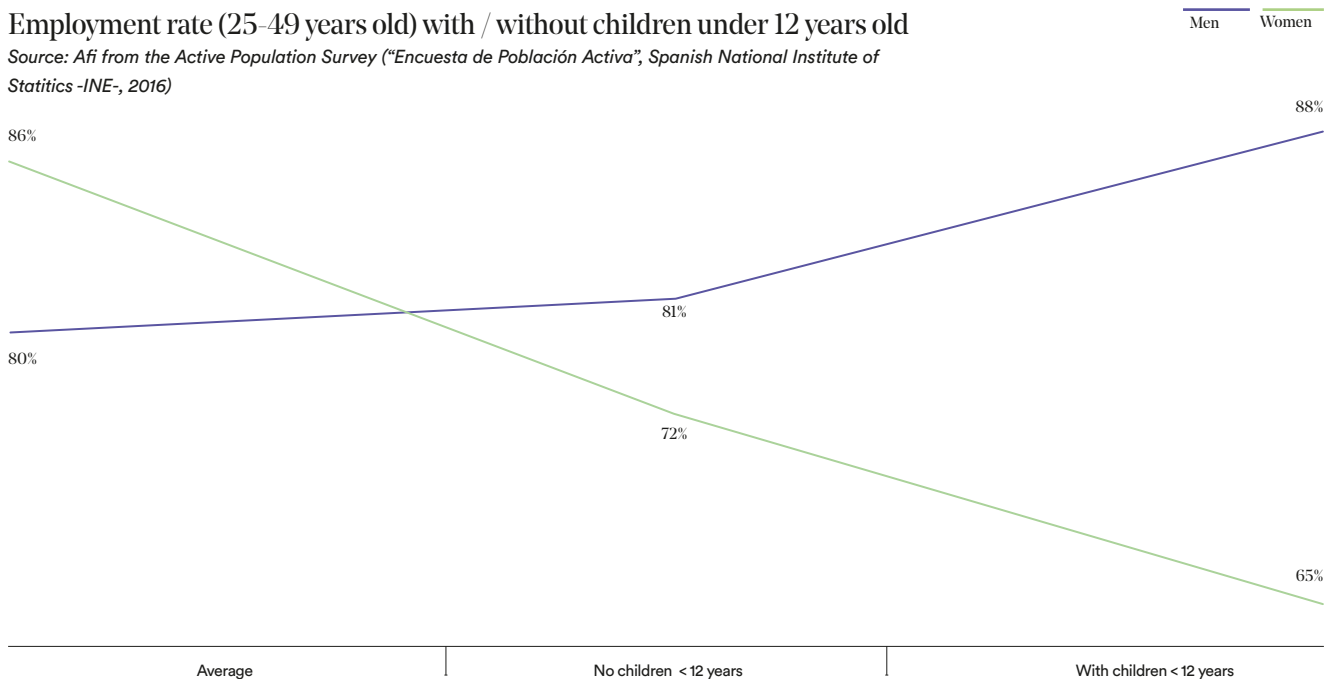
for anxiety, caregiving increases that probability by 2.7 additional points: the percentages of cases of this disorder for this same period reach 13.6% of women and 7.3% of men.

The cases of depression and anxiety in GDP as a temporary incapacity is, consequently, 345 million euros higher in women than in men, which is 0.03% of the Gross Domestic Product.



Employment rate (25-49 years old) with / without children under 12 years old

Source: Afi from the Active Population Survey ("Encuesta de Población Activa", Spanish National Institute of Statistics -INE-, 2016)



04

Employment and its impact in health

Employment is another dimension analysed in the report as a determinant element of health and, therefore, with the potential to generate value for the economy.

In this regard, it is observed that **six out of ten full working days are carried out by men**, compared to **one out of four of the part-time working days**.

The **main areas of occupation by number of employed men** are manufacturing (17.3%), commerce (14.6%), construction (10.0%), transportation and storage (7.4%) and hospitality (7.4%), while the main occupations for women are concentrated in the commerce sector (17.4%), health (14.2%), hospitality (10.2%), education (9.9%) and manufacturing industry (7.2%).

By **professional status**, most women are salaried employees (87.8%, of which 68.1% correspond to the private sector and 19.6% to the public sector), while only 12.2% of working women are self-employed. Four out of five men (79.9%) are salaried workers (private sector 66.8% and public sector 13.1%), and one in five (20.1%) is self-employed.

In this regard, the study detects in women an **accumulation of occupational diseases caused by different agents in the same sector of activity**. It is the case of **other services, primary sector, hospitality and education** (where there are those caused by physical agents and skin diseases), as well as **health and social services activities**, with those caused by chemical agents and skin diseases.

On this matter, the report indicates that the jobs predominantly done by women concentrate occupational di-

seases that require more recovery time, which could explain that the average duration of sick leave is 11 days higher in the case of women (105.84 days) than in men (95.21 days).

Finally, the report points out a higher incidence of **“home” accidents** reported by the women (twice as much as men). This data is contextualised in a scenario in which 92% and 83% of

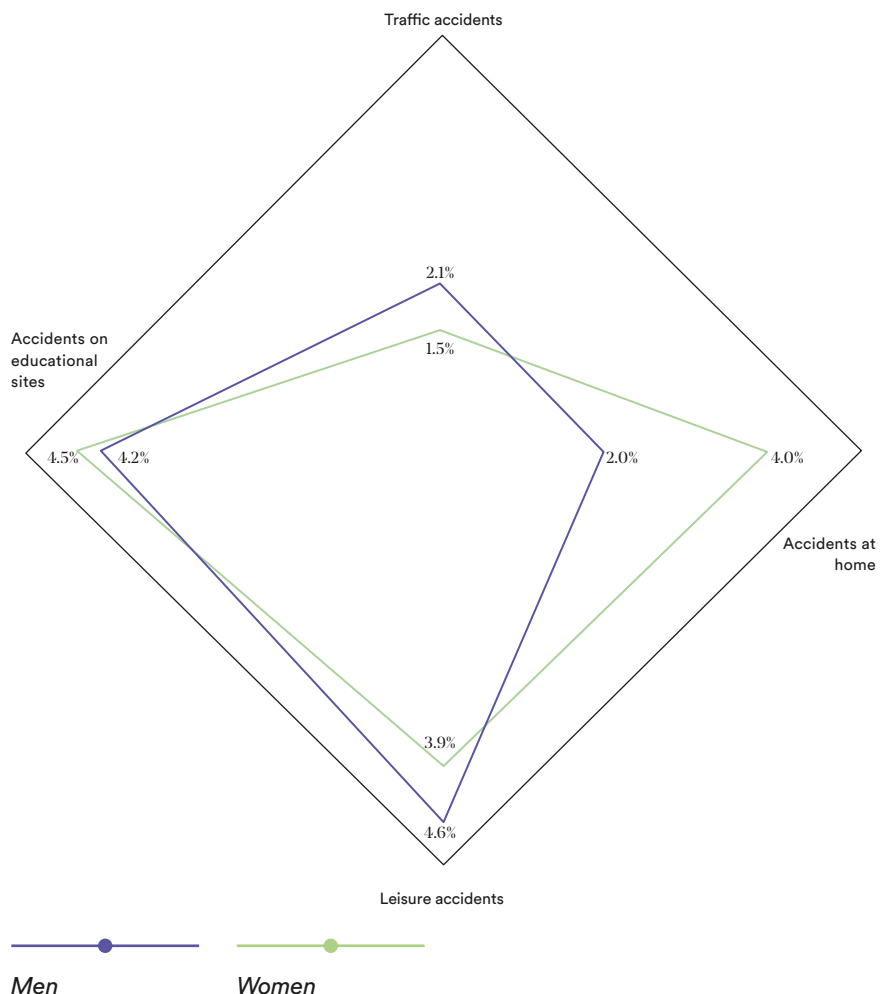
leave taken by women are for caring children and dependent relatives, according to data from the Spanish Ministry of Labour, Migrations and Social Security.



Occupations predominantly performed by women concentrate occupational diseases that require a longer recovery time.

Accidents (% population)

Source: Afi from ENS



05

Unconscious gender biases in health

Unconscious gender biases materialise, from a health point of view, into two types of expressions: the universalisation of diagnoses and therapies by extrapolation of results obtained with male subjects, and differential treatment based on beliefs or stereotypes.

In this regard, **in the field of diagnoses**, health problems related to cardiovascular diseases are better identified in men than in women, although the causes of death in women are more related to them than in the case of men. This lower diagnosis could be due to the fact that **women** may present a **symptomatology different** from that of men when having acute myocardial infarction, as well as a lower perception of the risk of suffering it.

On the other hand, in the **field of treatment**, for each diagnosis of acu-

te myocardial infarction, a greater number of procedures are performed on men than in women. For example, 80.9 out of 100 diagnosed men have a coronary arteriography and catheterizations, compared to 65.1 in the case of women. In acute cerebrovascular diseases, magnetic resonances performed in diagnosed men exceed in five points those performed in diagnosed women.



↓
Health problems related to cardiovascular diseases are better diagnosed in men than in women, despite more women dying from these illnesses.

06

Women live four years longer but with worse health

Finally, the report addresses **the consequences of the opportunity cost in the last phase of women's life**, focusing on the consequences of greater longevity in Spain. This country is in the top positions in the world in life expectancy at birth: 85.84 years in women and 80.31 years in men in 2016, according to the Spanish National Institute of Statistics.

In October 2018, the Institute for Health Metrics and Evaluation (IHME) in Washington published the results of a study that places Spain as the longest living country in the world in 2040. However, although women have a **life expectancy at birth six years higher** than men, and 3.9 years more from the age of 65, if we only considered years in good health, the difference disappears and, even, reverses in relation

to men, who they have better perspectives (67.47 vs. 66.06 years).

Therefore, **women live longer than men, but they do it with worse health**. Specifically, four additional years of life in a situation of poor health or disability. If women could live in better circumstances these four years, **the potential savings would be 8,945 million euros, which is close to 1 point of GDP (0.8%)**.

This amount is also 70% of pharmaceutical spending, that would have allowed to launch solutions that help innovation and sustainability of the health system.

	Million €, annual	% over GDP	Potential savings (difference between women and men)
Women > 75 years	18,059	1.6%	8,945 million euros
Men > 75 years	9,114	0.8%	0,8% of GDP

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If women could live in better health conditions the four more years that they live with respect to men, the potential savings would be 8,945 million euros.