#### EGGE - EC's Expert Group on Gender and Employment

#### National Reports on the Unadjusted and Adjusted Gender Pay Gap

Luxembourg

**Copyright Disclaimer:** This report was produced as part of the work of the European Commission's Expert Group on Gender and Employment (EGGE) and was funded by the European Commission. The European Commission has granted permission for this report to be published in this website. The opinions and views expressed in this report remain the responsibility of the authors and authors alone, and should not be taken to be representative of the views of the European Commission.

# The gender pay gap in Luxembourg Robert PLASMAN – Salimata SISSOKO

DULBEA-ETE

Report to the Expert Group gender and employment DG5 September 2002

Robert PLASMAN - Salimata SISSOKO DULBEA – ETE CP140 - 50 av ROOSEVELT B-1050 BRUSSELS - BELGIUM +32 2 650 4132 rplasma@ulb.ac.be

# Table of contents

<u>1. N/</u>	ATIONAL MEASURES OF UNADJUSTED GENDER PAY GAP	2
<u>1.1</u>	Review of pay trends over time	2
G	EVIEW OF NATIONAL STUDIES THAT ESTIMATE AN ADJUSTED ENDER PAY GAP AND COMPARISON WITH ESTIMATES OF	
<u>U</u>	NADJUSTED PAY GAP.	6
<u>2.1</u>	The unadjusted and adjusted wage gap	6
<u>2.2 Var</u>	riables used in the model	8
<u>2.3</u>	Effects of the variables on the gender wage gap	9
<u>2.4 Sho</u>	ortcoming of the study	11
<u>3. NAT</u>	IONAL INSTITUTIONAL FACTORS AND GENDER PAY GAP	12
<u>3.1</u>	National wage-setting system	12
3.2	How is low pay regulated	13
3.2.1	Description of the female employment	13
<u>3.2.2</u>	<u>Measure to regulated low pay</u>	18
3.3	Regulation of pay (and other benefits) for pat-timer workers and changes that	
	may have impacted on the gender pay gap	19
<u>3.3.1</u>	Description of the part-time employment	19
<u>3.3.2</u>	<u>Measure on part-time employment that could have impact on the gender wage</u> <u>gap</u>	20
<u>3.4</u>	Recent changes in childcare and parental leave infrastructure	21
3.4.1	Childcare infrastructure	21
<u>3.4.2</u>		23
<u>3.4.3</u>	Leave for family reasons	24
<u>3.5</u>	Others Issues	24
3.5.1	Individualisation of the social security rights	24
<u>3.5.2</u>		26
<u>BIBLIC</u>	<u>OGRAPHY</u>	28
	×	30

For the first time in 1995 the principle of wage equality between female and male workers has been written down in the agreement n°100 of the International Labour Organisational. Since that Luxembourg and others European countries have adapted their legislation in function.

Despite a positive evolution of the female employment and female education level, gender wage differences are still significant.

These differences in average wage between men and women reflect many realities that cannot only amount in gender discrimination.

We shall see throughout this report that different factors are associated with the gender pay gap in Luxembourg. First the model of human capital provides several explanation of the gender wage gap. But even by taking these differences in account force is to note among others that:

- Women's employment choices may be more constrained than men's choices;
- The human capital's remuneration in a occupation seem not to be independent of the sex composition of the workforce (highly feminised occupations are often related with low wages);
- Concerning the education choice, they may reflect perceptions of employer discrimination, who disadvantage women in comparison to men in term of allowance of vocation continuing training and career prospect.

Therefore women seem to suffer from discrimination on the labour market. In particular the women concentration in constrained number of sector of activity and occupation as it is the case in Luxembourg, may largely contribute to the gender wage gap.

In particular the weak results of the female employment in Luxembourg are largely due to the lower female education level compared to that of men. Indeed women are more frequently unemployed, beneficiary of subsistence level or guaranteed income. On average, women earn less than men first because they are less well skilled and because they practice occupations in traditionally low pay sectors.

Moreover several elements dissuade women to work: the tax system which weighs when the married women has a secondary income, the lack of children reception structure and of opening hours more adapted with a working activities. Moreover, career breaks depreciate the diploma of women and make the reinsertion on the labour market more difficult.

The government conscious of these difficulties has implemented last years several measures to improve gender equality.

These measures are related to the improving of the female education level and diversification of training choices, the ease of conciliation between professional and private life (with the extension of children care and possibilities of day care structure with more flexible opening hours, leave system (maternity, parental, for family reason, of adoption, etc) and the ambition to revise the tax system.

1

## 1. National measures of unadjusted gender pay gap

#### 1.1 Review of pay trends over time

The data us in this section are annual data published by the STATEC. These data concern only the private sector, the wage of workmen is expressed in average gross hourly wage and that of employees is in average monthly gross wage. The later means that the wage gap will be partly due to the relative importance of part-time

The tables  $n^{\circ}1$  and  $n^{\circ}2$  are reporting the female and male gross wage for both employees and workmen and the gender wage gap.

We note that gender wage gap are significant in all sub-sectors, the female average gross wage are inferior to those of men even if the gaps are decreasing on the time.

The gross wage trends reflect the evolution of the female employment characteristics during the period 1980-2001. In fact for both female employees and workwomen the gross wage has more strongly increase than the male's one. What could let think to a catching up of women thanks their better human capital characteristics on average (women have at present higher education level and higher total experience and seniority than before because they stay longer on the labour market).

The highest gender wage gap at the beginning of the period for employees was registered in the industry (52%) and retail trade (51%) and the lowest in the sector of bank (38%). In 2001 the retail sector is now the sector with the lowest gender gap (29%). This result is certainly due to development of this sector where women are numerous. In fact, those sectors with low gender wage gap are sectors where women are well represented. In particularly, the financial sector contributes to the reduction of gender inequalities in Luxembourg. Indeed, in this relative high wages sector, where the employees' share is the most important (82%) of the economy, women are more numerous than men (52%) but hold much less managerial occupations than man (12% of women in this sector in 2001).

Almost the same patterns are observable for the blue-collars: the highest gender wage at the begin for workmen was registered in the insurance sector with a differential of 51%, this subsector remains the sector with the highest differentials at the end of the period (28% in 2001) but had also had the highest reduction of its differential on the period (45%). The sector with the lowest differential at the beginning of the period was the sector of bank sector (29% in 1980) and has been beaten by the sector of retail trade at the end of then period (15%).

Moreover, the gender wage gap level for the employees is larger than that of the workmen. This difference can be explain by the fact that the employee category is more heterogeneous that the one of workmen. In fact in the employee category we find together the managers and office clerks. Another justification is that the employees trends is expressed in gross monthly wage, the larger part of female part-timers compared to men influence the differentials (however the salary is in full-time equivalence, the part-timers wage is still lower than the full-time one).

A fact is that women earn in average less than men. These differences concern, almost partially, a certain form of discrimination on the labour market. This discrimination takes three forms: the unequal pay for the same job, an unequal access to certain occupations (vertical segregation) or lower average wage in typically female sectors (horizontal segregation).

r

	1	The industry	7	Wh	olesale		Reta	il Trade		В	anks		Insu	rances	
	Men	Women	GWG	Men	Women	GWG	Men	Women	GWG	Men	Women	GWG	Men	Women	GWG
1980	1,689	805	0.52	1,383	811	0.41	1,258	614	0.51	1,680	1,070	0.36	1,639	1,018	0.3
1981	1,930	979	0.49	1,497	880	0.41	1,378	700	0.49	1,878	1,184	0.37	1,715	1,121	0.3
1982	2,102	1,108	0.47	1,589	940	0.41	1,397	757	0.46	2,043	1,284	0.37	1,871	1,246	0.3
1983	2,219	1,203	0.46	1,700	1,035	0.39	1,507	847	0.44	2,220	1,441	0.35	2,042	1,311	0.3
1984	2,386	1,284	0.46	1,787	1,116	0.38	1,540	411	0.73	2,389	1,535	0.36	2,204	1,463	0.3
1985	2,468	1,362	0.45	1,863	1,184	0.36	1,595	941	0.41	2,431	1,602	0.34	2,233	1,506	0.3
1986	2,613	1,430	0.45	1,931	1,254	0.35	1,626	969	0.40	2,518	1,691	0.33	2,380	1,569	0.3
1987	2,644	1,461	0.45	2,008	1,267	0.37	1,636	989	0.40	2,606	1,746	0.33	2,414	1,617	0.3
1988	2,724	1,509	0.45	2,080	1,335	0.36	1,771	1,073	0.39	2,673	1,838	0.31	2,561	1,678	0.3
1989	2,934	1,605	0.45	2,222	1,426	0.36	1,876	1,133	0.40	2,841	1,968	0.31	2,622	1,823	0.3
1990	3,096	1,724	0.44	2,350	1,530	0.35	1,950	1,209	0.38	3,010	2,080	0.31	2,818	1,907	0.3
1991	3,234	1,833	0.43	2,440	1,605	0.34	nd	nd	nd	3,220	2,233	0.31	2,927	2,015	0.3
1992	3,453	1,975	0.43	2,625	1,733	0.34	2,086	1,353	0.35	3,458	2,381	0.31	3,095	2,198	0.2
1993	3,507	2,083	0.41	2,708	1,834	0.32	2,169	1,426	0.34	3,599	2,503	0.30	3,170	2,290	0.2
1994	3,542	2,145	0.39	2,711	1,845	0.32	2,191	1,463	0.33	4,151	3,447	0.17	3,496	2,372	0.3
1995	3,610	2,197	0.39	2,948	2,009	0.32	2,249	1,516	0.33	3,833	2,700	0.30	3,431	2,538	0.2
1996	3,737	2,246	0.40	2,964	1,963	0.34	2,241	1,531	0.32	3,890	2,802	0.28	3,475	2,551	0.2
1997	3,732	2,321	0.38	3,026	2,050	0.32	2,299	1,602	0.30	4,060	2,866	0.29	3,756	2,624	0.3
1998	3,712	2,346	0.37	3,091	2,071	0.33	2,279	1,582	0.31	4,076	2,911	0.29	3,847	2,703	0.3
1999	3,815	2,440	0.36	3,180	2,134	0.33	2,353	1,646	0.30	4,185	3,017	0.28	3,860	2,716	0.3
2000	3,862	2,528	0.35	3,356	2,239	0.33	2,448	1,714	0.30	4,340	3,117	0.28	4,168	2,812	0.3
2001	3,963	2,601	0.34	3,498	2,367	0.32	2,519	1,788	0.29	4,603	3,281	0.29	4,407	2,939	0,3

Table n°1: Trends of the gross monthly wage for employees (1980-2001)

Source: STATEC, own calculations

		The indu	ıstry	Whol	esale		Retail	Trade		Ba	nks		Insurances		
	Н	F	GWG	Н	F	GWG	Н	F	GWG	Н	F	GWG	Н	F	GWG
1980	237	154	0.35	199	123	0.38	185	123	0.34	218	155	0.29	302	148	0.51
1981	251	159	0.37	211	140	0.34	197	134	0.32	246	176	0.28	331	175	0.47
1982	272	173	0.36	224	149	0.33	213	144	0.32	268	194	0.28	358	199	0.44
1983	294	191	0.35	240	166	0.31	224	160	0.29	306	219	0.28	378	220	0.42
1984	305	198	0.35	249	176	0.29	229	170	0.26	315	218	0.31	376	232	0.38
1985	314	207	0.34	256	182	0.29	236	179	0.24	320	229	0.28	368	244	0.34
1986	324	209	0.35	263	194	0.26	241	184	0.24	335	242	0.28	384	261	0.32
1987	330	217	0.34	271	196	0.28	250	189	0.24	345	278	0.19	403	267	0.34
1988	343	218	0.36	283	204	0.28	264	196	0.26	345	242	0.30	407	276	0.32
1989	361	233	0.35	300	217	0.28	281	209	0.26	375	268	0.29	443	265	0.40
1990	366	248	0.32	310	226	0.27	291	219	0.25	396	267	0.33	456	258	0.43
1991	385	265	0.31	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd
1992	410	278	0.32	351	258	0.26	330	250	0.24	451	303	0.33	549	286	0.48
1993	425	300	0.29	367	272	0.26	343	265	0.23	473	318	0.33	555	328	0.41
1994	441	314	0.29	380	283	0.26	353	286	0.19	487	329	0.32	571	338	0.41
1995	441	322	0.27	388	292	0.25	362	288	0.20	453	341	0.25	554	366	0.34
1996	441	320	0.27	383	291	0.24	363	289	0.20	449	352	0.22	512	375	0.27
1997	451	336	0.25	400	307	0.23	368	302	0.18	450	355	0.21	540	380	0.30
1998	456	338	0.26	415	319	0.23	374	305	0.18	459	351	0.24	520	374	0.28
1999	475	351	0.26	428	330	0.23	388	319	0.18	461	399	0.13	545	405	0.26
2000	489	377	0.23	439	343	0.22	403	337	0.16	466	353	0.24	587	414	0.29
2001	496	383	0.23	443	353	0.20	415	351	0.15	495	390	0.21	599	432	0.28

Table <u>n°2: Trends of the gross hourly wage for blue-collar (1980-2001)</u>

Source: STATEC, own calculations

# 2 Review of national studies that estimate an adjusted gender pay gap and comparison with estimates of unadjusted pay gap.

The only study carried out in Luxembourg regarding the gender pay gap is "Les différences salariales en 1995" by B. Lejealle (2001).

The study is based on the 1995 *Structure of Earning Survey* carried out in Luxembourg by STATEC. It is based on information dating back to 1995. The field of study expands to firms of more than ten employees and covers the following sectors:

- Manufacturing industry
- Construction
- Wholesale and retail trade
- Catering industry
- Transport, storage and communication
- Banks and insurance
- Business-to-business services (Real estate, renting and other business activities).

The sample questioned gathers 800 firms based in Luxembourg and about 18,000 employees, residents or frontier workers.

#### 2.1 The unadjusted and adjusted wage gap

In her study, B. Lejealle (2001) shows that the **unadjusted gender wage gap** in Luxembourg is about 15.3%. Indeed, in 1995, the average female hourly wage was 15.3% lower than the average male hourly wage<sup>1</sup>. As B. Lejealle points out, this simple comparison of averages does not mean that there exists a pay discrimination against women. Therefore, it is necessary to take into account the **differences in structure** between female and male employment. For instance, women do not have the same occupations as men, the same level of qualifications or the same responsibilities, do not cover the same sectors of industry, and so on... A lower average female hourly wage could simply have been brought along by the different structure of female employment (hence the concentration of women in subordinate professions) and is not a case of discrimination (or at least direct discrimination).

The occupation is, in fact, the most discriminating element of wage, therefore it is more significant to compare wages for the same profession in order to highlight other characteristics.

<sup>&</sup>lt;sup>1</sup> The indicator of remuneration used is the hourly gross wage :

<sup>-</sup> **hourly** because women's working time is frequently lower than men's ; the hourly remuneration allows us to compare wages with the same unit of time ;

<sup>-</sup> gross means not deduced from contributions and taxes retained for social security purposes, as these elements depend on the employee's family situation and were not available in the survey.

#### Average gross wage by occupation and sex

Groups of occupations*		/age gross a Flux/hour)	iverage	Average ratio (Female wage/ Male wage)	Difference in %**
	Males Females Total				
Senior and corporate managers	1395	987	1329	70.8	-29.2
Intellectual and scientific occ.	954	810	919	84.9	-15.1
Intermediate occupations	717	638	687	89.0	-11.0
Office clerks	540	477	504	88.3	-11.7
Cust. service.clerks, salespersons	391	330	362	84.4	-15.6
Skilled workmen on machines	460	327	448	71.1	-28.9
Skilled workmen of artisanal type	460	372	458	80.9	-19.1
Unskilled Workmen and empl.	357	287	322	80.4	-19.6
Total	568	481	543	84.7	-15.3

Source: the 1995 Structure of Earning Survey – STATEC

\*It refers to the International Classification Type of Professions (CITP) created by the BIT.

\*\*difference in %=((female hourly wage-male hourly wage)/male hourly wage)x100.

Considering this table, B. Lejealle (2001) observes a higher wage gap for most "male" occupations. In fact, the lower the part of women in an occupation, the wider the disparity<sup>2</sup>. Occupations as Senior, corporate managers and skilled workmen on machines display the highest differentials (respectively 29.2 and 28.9%). These are the professions with the lowest part of women (respectively 16.3 and 3.1%)<sup>3</sup>.

Conversely, the occupations where the part of women is high are those which suffer fewer disparities. Which the author interprets as:

- Whether, numerous, women are more able to have their rights respected and to reach the same wage levels as men;
- Whether men working in highly feminised sectors enjoy the same conditions as women. The wage they obtain is lower than the one that they could earn in a firm where men are more numerous.

As mentioned before, the unadjusted wage gap is calculated from the average wage of both women and men. This comparison does not take into account the difference in structures between female and male employment. The method commonly used to endogenyse the structure of gross wage is **a multiple linear regression** that explains the variance of the hourly gross wage (or the logarithm of the hourly gross wage) between workers by several factors introduced into the model. We obtain a wage equation (gives the contribution of each factor to the wage). The **unadjusted gender wage gap** is then measured by the coefficient of the gender dummy of this wage equation.

At this stage of the analysis, if the unadjusted wage gap is not due to discrimination but to other differences linked to sex, such as career advice for young people, the choice of certain occupations, access to promotion, the weight of family and domestic tasks, etc, this gap would disappear.

The author analysed the gender wage gaps within groups of occupation according to criteria aiming to the homogeneity. Those criteria are the following: the group of occupations, the professional experience of the worker, their seniority in the firm, their level of education, the

 $<sup>^{2}</sup>$  The correlation coefficient between the part of women in the professions and the wage difference between women and men is 0.7; the coefficient lying between 0 and 1, this correlation of 0.7 can be said to be relatively high.

<sup>&</sup>lt;sup>3</sup> B. Lejealle (2001), "Les différences salariales en 1995", Document PSELL n°124, p.30

<u>supervision</u> of other workers and the <u>field of activity</u> of the firm. This model explains rather well the wage differences across the whole population (76% of the variance).

The result is that, after the introduction of these characteristics into the model, the gender wage gap is only about 11%, all occupation groups (for recall: it was 15% before the neutralisation of the wage structure). The decomposition by occupation groups is the following:

Groups of occupations	Unadju	sted gap	Adjus	ted gap	Differences (in points)
	ratio	in %	ratio	in %	
Intellectual and scientific occ.	0.86	-13.8	0.90	-10.2	-3.6
Intermediate occupation	0.90	-9.9	0.94	-6.4	-3.5
Office clerks	0.89	-11.4	0.95	-4.5	-6.9
Cust. service clerks, salespersons	0.85	-14.5	0.87	-13.0	-1.5
Skilled workmen	0.74	-25.6	0.74	-25.6	=
Unskilled Workmen and empl.	0.81	-18.9	0.86	-13.9	-5.0

#### Unadjusted and adjusted gender wage by occupation

Source: the 1995 Structure of Earning Survey – STATEC

We note that:

- In appearance, the discrimination within the intermediate occupations is relatively low (-9.9%, the unadjusted gender wage gap); after the neutralisation of the effects of structure, this discrimination falls to -6.4% (adjusted gender wage gap).
- The gender discrimination within the occupation of skilled workmen seems to be persistent (no decrease can be seen of the wage gap after neutralisation of the effects of structure).
- The field of activity which records the largest decrease of the gender wage gap due to the neutralisation of the effects of structure is the one of office clerks, where the gap falls from -11.4% to -4.5%.

These results confirm those found at the beginning of this study: the occupations which suffer the lowest disparities (office clerks, intermediate, intellectual and scientific professions) are the most feminised and skilled professions. Conversely, those undergoing the highest disparities are particularly the most masculinised and least skilled (customer service clerks, salespersons, employees and workmen).

#### 2.2 Variables used in the model

The variables introduced in the model to neutralise the effects of structure are variables that influence the wage setting. It is the individual characteristics of workers and features of employers in each sector: (1) the sex, (2) the residential geographical origin and nationality, (3) the level of education, (4) the total potential experience<sup>4</sup>, (5) the seniority in the firm, (6) the occupation, (7) the supervision of other workers, (8) the field of activity, (9) the size of the firm, (10) the signature of a collective agreement, (11) the portion of part-time employees in the firm.

<sup>&</sup>lt;sup>4</sup> The data in the 1995 *Strucure of Earning Survey* does not give information about actual work experience, only potential work experience is available: age minus age at leaving school. The potential work experience does not reflect the experience of workers with interruption in their work history as women.

## 2.3 Effects of the variables on the gender wage gap

In her study, B. Lejealle (2001) has thus computed the **unadjusted gender wage gap** as the difference between the average male and female hourly gross wage (**15.3%**). As said before, this average gender wage gap does not take account of differences in structure of employment between men and women. Therefore, by a method of multiple linear regression, the author has introduced variables (factors) to neutralise these differences (information about the individual characteristics of workers, characteristics of the employer and existence of a collective agreement). This way, the **adjusted gender pay gap** obtained is about **11%**.

Let us see in detail the effect of the progressive introduction of each variable on the wage differentials between men and women.

#### 1. Effect of the industry

The account of field of activity seems to have a different effect on the gender wage gap, according to whether the occupation is skilled or low skilled. In fact:

-the disparities between men and women rise in **skilled occupations**<sup>5</sup>. Women in these occupations usually choose the most remunerated industry (banks and insurance companies). The account of the industry reveals new wage differences.

-In **low-skilled occupations**<sup>6</sup> where women are proportionally more numerous than men. The account of the industry reveals a disadvantage against women because they work in low pay industries; disparities are then reduced.

It should be noted by the membership to the sector of banks and insurance companies is very profitable compared to other sectors of the economy. Especially for women, who earn 20% more than in other sectors. Women are numerous to move towards this sector and thus to benefit from this effect of structure. The increasing part of women in the sector questions the traditional picture of female employment in posts, sectors and qualifications that are less interesting from a financial viewpoint. Indeed, employment in the banking environment concerns especially young women.

#### 2. Effect of the level of education

The possession of high diplomas acts towards reducing the disparities for all occupations, particularly for intermediate occupations.

Women have on average lower levels of education; this account contributes to give smaller differentials. It is only for intellectual and scientific occupations, where men and women have more or less the same level of education, that the adjusted wage gap is stronger.

#### 3. Effect of the nationality and the place of residence

The account of this effect of structure has little impact on the gender pay gap. We just note that being frontier workers is associated with lower wages for all occupations except for unskilled workmen and employees (the occupation with the smallest part of Luxembourg

<sup>&</sup>lt;sup>5</sup> The so-called upper occupation (intellectual and scientific occupations and intermediate occupations) and the skilled workers.

<sup>&</sup>lt;sup>6</sup> Customer servic clerk, salepersons, unskilled workers and employees.

residents). The highest difference appears between intellectual and scientific employees (with a differential of 9% in comparison with frontier workers).

The foreign residents are also less remunerated in intermediate and lower occupations, but not in upper occupations (certainly due to foreign workers working in international organisms and having high qualifications and remuneration).

#### 4. Effect of the remuneration of overtime

Since the practice of overtime seems to have a penalising effect on the basic pay and the fact that women work less overtime than men, the account of this variable tends to reveal larger disparities (an adjusted gender wage gap larger than the unadjusted one)

#### 5. Effect of the size of the establishment

The introduction of the size of the establishment seems to have no impact on the gender wage gap, except for skilled workmen. The skilled workmen are paid in large companies and in small ones. Considering that workwomen are proportionally numerous in large firms, the gender pay gaps are larger after taking account of this characteristic.

#### 6. Effect of the existence of a collective agreement

The existence of a collective agreement has a different affect according to the group of occupations: it tends to increase the wages of skilled and unskilled workmen and employees and to reduce the wage of customer service clerks and salespersons. Women who have such occupations and work more often in firm which have no collective agreement about them. Therefore, the account of this variable decreases the gender wage gap in the first group of occupation and increases it in the second one.

#### 7. Effect of the total general experience and the seniority

The results obtained for the experience confirm the human capital theory: it has a positive effect on wage.

The results show an increase in the return of wage throughout the career of all the employees. However, this increase depends on the period of life:

- The most significant return on general human capital (or professional experience) is made as the beginning of the active life (particularly between 2 and 6 years of professional experience).

- The return of marginal investment is always positive.

- The specific training (or seniority) of employees is generally less remunerated than the total general experience.

- The return of the seniority is almost constant.
- -
- The analysis per group of occupation highlights the fact that the increase of returns differs for those groups. The return of employees in intellectual and scientific occupations (the most skilled) rises clearly with years of experience. Conversely, as one goes down the hierarchy, the return of the professional experience is lower with the years.

#### 8. Comparison return of total professional experience / seniority

Although the specific training (seniority) of employees is generally less remunerated than the total general experience, two profiles seem to take shape: on the one hand, the occupations for which the profits outside are higher than the one inside, and, on the other hand, those for which the profits inside are higher than the ones outside (internal markets theory).

The occupations that correspond to the first profile are the upper and skilled occupations (intellectual, scientific and intermediate occupations and skilled workmen) and customer service clerks and salespersons. For these occupations, shifting firms is more profitable that remaining in the same firm, because it allows wage bargaining<sup>7</sup>.

As regards the second profile, it concerns occupations such as office clerks, unskilled employees and workmen. For these occupations, fidelity to the firm is clearly more profitable see as their experience is not easily negotiable outside.

A gender decomposition of the profile of profitability reveals that the males' does not differ from the profile of the whole population of employees (because of their overrepresentation). On the other hand, the return of professional experience of **women** gets quickly stable in favour of the profitability of seniority<sup>8</sup>.

The lower remuneration of the females' experience could be a consequence of the biased estimation of this duration. Just like the better remuneration of females' seniority could be the result of a selection effect (selection of women who have real prospects of career or strong motivation for their job).

#### 2.4 Shortcoming of the study

The main restriction of the study is due to the data that does not reflect life cycle. In fact, the data represents characteristics of people at different ages considered at the same moment. Moreover, there exists within the same occupation a certain mobility that this data does not enable us to take into account. The 1995 *Structure of Earning Survey* approaches the labour market through the firms, in other words, from the demander's viewpoint. Whereas the provision of data about the biographic trajectories would be an approach from the supplier's viewpoint.

Longitudinal data would be more suitable. This data could give information on continuous training, which is a more reliable measure of human capital, or on mobility of employment on an individual level.

Generally speaking, characteristics that would improve the explanation of the gender wage gap are mainly:

<sup>&</sup>lt;sup>7</sup> The bringing together of the customer service clerk / salesperson occupation to the one of intellectual and scientific occupation undoubtedly results from the strong rotation of labour in the occupation of services and sales.

<sup>&</sup>lt;sup>8</sup> Results show that after 20 years of professional experience for a woman, one supplementary year has almost no return, whereas the return continue to grow for men.

However, seniority is better remunerated for women because it generates a wage increase of 10% after 9 years. This only occurs after 13 years for men.

- from a **personal** point of view: the family education and the family antecedent, the marital status, the presence of children, health, the geographical localisation, dynamism of the employee, his aversion towards risk.

- from a **professional** point of view: the geographical mobility, the professional situation of the spouse, linguistic knowledge, the professional trajectory of the employee (their failures, successes).

- from the **company**'s point of view: good health of the company, its sales turnover, its profits, its position on the market, the extent of its market, its dominance in capital or labour force, the rate of unionisation, the rate of dismissal, the system of remuneration, team- or night work, the number of teams, the part of workmen in the company, the part of foreigners, the part of women in the company.

# 3. National institutional factors and gender pay gap

#### 3.1 National wage-setting system

In general the collective bargaining in Luxembourg takes place either at the sectoral level, either at the company level. The collectives bargaining may concern every aspects of work, the remuneration subjects included. The social policy tools largely influence the salary policy implemented in Luxembourg, i.e. biannual adaptation of the minimum wage or the automatic and wage indexation. Hence, the wage setting is often disconnected from any consideration relative to the productivity evolution of the labour factor.

Luxembourg law defines a collective agreement as an agreement on labour relations and general terms and conditions of employment concluded between one or more manual workers' or white-collar workers' unions on the one hand, on the other, either one or more sectoral or occupational employers' association or an individual employer who is asked by the relevant employee representatives to enter into negotiations with a view to concluding a collective agreement is under a obligation to do so. Where an employer expresses a preference to negotiate within a grouping of enterprises or in conjunction with other individual employers within the same occupation, if no such negotiations have commenced within a time-limit of 60 days the duty to bargain separately reverts to the individual employer concerned. If an employer refuses to enter into negotiations the parties are unable to reach agreement, the National Conciliation Service produce prescribed by current legislation must be initiated.

#### • The trade-unionism

There are two big general confederations in Luxembourg. It is the general Confederation of Labour in Luxembourg (CGT-L): it groups the OGB-L (Independent trade-union confederation in Luxembourg), FNCTTEL (transports, civil servants and employees) and FLTL. It counts 56000 members and is based on the free syndicalism. The other confederation is the Christian syndicates confederation of Luxembourg (LCGB), it counts 33000 members and is based on the Christian syndicalism.

#### • The representativeness

The recognition of the employees' organizations passes by the obtaining of the status of *the most representative organisation in the national plan*. More precisely, the law of 12 June 1965 on collective agreements considers as unions the most representative on the national plan those that are characterised by three criteria:

- the important number of their members
- their activities
- their independence.

The representativeness is measured thought the results of the social elections (professionals chambers, disease funds, shop steward election) giving a better measure of the trade-union influence than its membership.

• The single collective-agreement system

Collective bargaining is based on a single collective-agreement system; this means that for any given group of enterprises, enterprise or department of enterprise there must be only one collective agreement covering all manual workers and one collective agreement covering all white-collar workers, with supplementary provisions specifics to particular occupations annexed to this main agreement. The pay conditions of seniority executives are not governed by the agreement covering the white-collar category as a whole.

Approximately 60% of employees in Luxembourg have their terms and conditions of employment regulated by collective bargaining (some half of these by sectoral-level agreements and half by company-level agreements). Those excluded work primarily in the small firms sector. Bargaining at sectoral level, as example in building and banking, establishes conditions binding on all employers and therefore allows no company-level bargaining to take place. Where no sectoral agreement exists, bargaining at the company level may take place in, for example, large retail outlets, major parts of the hotel and catering industry and large companies. In the public sector one national collective agreement, in effect, regulates terms and conditions of employment for all employees who have a private-law contract of employment.

#### 3.2 How is low pay regulated

#### 3.2.1 Description of the female employment

In 2001, the female employment rate in Luxembourg was of 50,9%. The female employment is characterizes by:

1) A Overrepresentation of women in low pay sectors (except banks and insurance):

The presence of women differs largely from branches of activity. The sectors privileged by women are the sale, health and social, education and catering sectors. The women are on the other hand very few compared to their male counterparts in the industrial sector (energy included), and in the sector of construction where they account for only 16 and 6%.

Distribution of workers t	<i>y</i> 30010	Numbers			entage ir	lina	Doro	entage ir	
Occupations	XX7		T						
	W	M	Т	W	M	Т	W	M	Т
Framing, hunting, forestry	230	1000	1230	18.7	81.3	100	0.3	0.7	0.5
Fishing, aquaculture230	0	6	6	0.0	100	100	0.0	0.0	0.0
Extractive industry	26	283	309	8.4	91.6	100	0.0	0.2	0.1
Manufacturing industry	5,924	28,362	34,286	17.3	82.7	100	6.6	18.6	14.2
Electricity, gas, steam and hot water supply	109	802	911	12.0	88.0	100	0.1	0.5	0.4
Construction	1,598	24,450	26,048	6.1	93.9	100	1.8	16.0	10.8
Retail trade, repair of motor vehicles and motorcycles and personal household goods	15,109	18,162	33,271	45.4	54.6	100	16.9	11.9	13.8
Hotels and restaurants	5,182	4,950	10,132	51.1	48.9	100	5.8	3.2	4.2
Transport and communication	3,607	16,698	20,305	17.8	82.2	100	4.0	10.9	8.4
Financial intermediation	13,023	15,870	28,893	45.1	54.9	100	14.6	10.4	11.9
Real estate activities	12,578	17,465	30,043	41.9	58.1	100	14.1	11.4	12.4
Public services	12,486	17,445	29,931	41.7	58.3	100	14.0	11.4	12.4
Education	715	416	1,131	63.2	36.8	100	0.8	0.3	0.5
Health and social action	10,782	2,425	13,207	81.6	18.4	100	12.1	1.6	5.5
Social collective and personal services	3,627	2,671	6,298	57.6	42.4	100	4.1	1.8	2.6
Domestics services	3,114	73	3,187	97.7	2.3	100	3.5	0.0	1.3
Extra-territorial activities	521	234	755	69.0	31.0	100	0.6	0.2	0.3
Others activities	711	1,294	2,005	35.5	64.5	100	0.8	0.8	0.8
Total	89,342	152,60 6	241,94 8	36.9	63.1	100	100	100	100

#### Distribution of workers by sector, gender (2000)

Source: The Ministry of Female Promotion (2002) - IGSS

#### 2) Overrepresentation of women in low qualified occupations

Linked to the branches of activities, the female occupations are concentrated in services activities.

Occupations	Men	Women	Total
Senior and corporate managers	4.0	1.9	3.2
Intellectual and Scientifics occupations	15.7	14.7	15.3
Intermediate occupations	17.4	21.7	19.1
Office clerks	12.0	23.0	16.4
Customer service clerks, salespersons	7.3	14.2	10.1
Farmer and farming skilled workmen	2.0	0.3	1.3
Artisan and workmen of artisan type	21.4	0.8	13.1
Machines drivers and assembling workmen	13.5	1.5	8.7
Unskilled workmen and agent	6.5	21.8	12.7
Army	0.2	0.0	0.1
Total	100.0	100.0	100.0

#### Distribution of workers by groups of occupations, gender (2000)

Source: The Ministry of Female Promotion (2002) - Labur force survey 2000 - STATEC

Women in Luxembourg are generally less qualified than men and more numerous in less qualified occupations. Indeed, women represent 66% of unskilled employees and workmen, 62% of customer services and salespersons and 55% of office clerks.

Conversely, women are only 1.9% to be company director and manageress and are also few in posts of skilled workmen of artisan type.

3) Women are less qualified than men

Considering the whole resident population, we note that women have in general a lower level of diploma than men. They are more numerous of only having achieved the primary level (41% of women against 26% of men). Just as, they have less frequently followed post-secondary studies (15% of women against 30% of men).

# Distribution of residents of Luxembourg who left the education system by gender and attained level of education, 1999

Level achieved	Men	Women	Total
No formation, primary, upper primary, complementary teaching	26,0	41,2	33,8
Certificate of apprenticeship, tech. and lower professional teaching	10,5	11,2	10,9
Higher technical and professional teaching (CATP)	23,1	19,2	21,1
Lower general secondary education	3,3	6,5	4,9
Upper general secondary education	6,5	7,1	6,8
Certificate controls artisan and Bac+2	10,6	3,9	7,2
Bac+3 and more	20,0	11,0	15,4
Total	100,0	100,0	100,0

Source: The Ministry of Female Promotion (2002) - PSELL 1999-CEPS/Instead

But things are changing, the analysis by generation shows an increase in the women's qualifications and a lengthening in time of their schooling.

The gender education gap among the younger generations has almost disappeared. We observe in the generation of people under 30 that, men are 18.4% of having a level of bac+3 and women 20.2%. We did not observe such a closing gap for previous generations.

Moreover women remain longer at school, according to the Ministry of Female Promotion (2002), the women average age of study end went from 16 for women older than 60 years to 19 for women under 30. Such a lengthening has not been observed for men, their average age of study end has only increased of 6 months.

Distribution of residents of Luxembourg who left the education system by age,	
gender and attained level of education, 1999	

Level achieved/age	<=29	30-39	40-49	50-59	>60
Level achieved/age	years	years	years	years	years
Male					
No formation, primary, upper primary, compl. teaching	21.0	21.4	24.6	26.3	36.1
Certificate of apprenticeship, tech. and lower prof. teaching	16.8	8.7	9.7	7.5	10.8
Higher technical and professional teaching (CATP)	30.0	24.8	23.1	20.5	18.0
Lower general secondary education	2.0	2.2	3.9	3.4	4.8
Upper general secondary education	4.8	5.1	7.3	6.6	8.5
Certificate controls artisan and Bac+2	7.2	9.2	11.7	11.8	12.8
+	18.4	28.5	19.7	24.0	9.0
Total Man	100.0	100.0	100.0	100.0	100.0
Total Men	100.0	100.0	100.0	100.0	100.0
Female	100.0	100.0	100.0	100.0	100.0
	17.4	23.7	35.4	43.7	70.3
Female					
<b>Female</b> No formation, primary, upper primary, compl. teaching	17.4	23.7	35.4	43.7	70.3
<b>Female</b> No formation, primary, upper primary, compl. teaching Certificate of apprenticeship, tech. and lower prof. teaching	17.4 16.1	23.7 11.7	35.4 12.3	43.7 14.1	70.3 6.0
<b>Female</b> No formation, primary, upper primary, compl. teaching Certificate of apprenticeship, tech. and lower prof. teaching Higher technical and professional teaching (CATP)	17.4 16.1 31.0	23.7 11.7 24.8	35.4 12.3 24.3	43.7 14.1 13.5	70.3 6.0 7.9
<b>Female</b> No formation, primary, upper primary, compl. teaching Certificate of apprenticeship, tech. and lower prof. teaching Higher technical and professional teaching (CATP) Lower general secondary education	17.4 16.1 31.0 2.5	23.7 11.7 24.8 5.8	35.4 12.3 24.3 7.1	43.7 14.1 13.5 10.0	70.3 6.0 7.9 7.1
<b>Female</b> No formation, primary, upper primary, compl. teaching Certificate of apprenticeship, tech. and lower prof. teaching Higher technical and professional teaching (CATP) Lower general secondary education Upper general secondary education	17.4 16.1 31.0 2.5 8.0	23.7 11.7 24.8 5.8 9.5	35.4 12.3 24.3 7.1 6.9	43.7 14.1 13.5 10.0 6.9	70.3 6.0 7.9 7.1 4.8

Source: The Ministry of Female Promotion (2002) - PSELL 1999-CEPS/Instead

The Ministry of Female Promotion adds that the education level of foreign residents (except Portuguese and Italians) increase the level of education of the whole of residents. This increase is especially notable for women, only 10% of women with the nationality of Luxembourg have at least a Bac+3 level, this part rises to 15% when we observe the whole of female residents<sup>9</sup>.

4) The social minimum wage and the subsistence level

In Luxembourg the social minimum wage (SSM) is traditionally high and is subject to a biannual adaptation.

Date	SSM	SAM_qualifi ed	Date	SSM	SAM-qualified
06/01/93	999.19	1,99.04	04/01/01	1,290.21	1,548.27
01/01/94	999.19	1,99.04	01/01/02	1,290.22	4,548.26
02/01/94	1,024.16	1,28.98	06/01/02	1,322.47	1,548.26
01/01/95	1,057.95	1,269.54			
05/01/95	1,084.38	1,301.27			
01/01/96	1,084.38	1,301.27			
01/01/97	1,119.15	1,342.99			
02/01/97	1,147.12	1,376.55			
01/01/98	1,147.12	1,376.55			
01/08/99	1,162.08	1,394.50			
01/01/99	1,191.12	1,429.35			
01/01/00	1,191.12	1,429.35			
07/01/00	1,220.88	1,465.05			
01/01/01	1,258.75	1,510.49	]		

Guaranteed minimum wage trend since 1993 (euros)

Source: IGSS

<sup>&</sup>lt;sup>9</sup> See table in Annex

Therefore, at the 1<sup>st</sup> June 2002:

- The guaranteed income (SSM) for unskilled workers is of 1,322.42 euros.
- The guaranteed income for skilled workers is of 1,548.26 euros.

The SSM for unskilled workers has increase of 25% during de period 1993-2002 and that of skilled workers of 29% during the same period. This constant raise of the minima wages make part of the policy of the Luxembourg to fight low wages and poverty.

Men and women are not equal in front of minimum wage. According to Guastalli, Lejealle, Lorentz (2002), since 1998 the number of men on minimum wage is higher than the number of women. Yet, the proportion of women paid the minimum wage is larger than the proportion of men (respectively 22% and 13% of female and male salary earners). This is partly explained by the structure of female employment (generally less qualified jobs).

This inequity is also reflected by the distribution of the beneficiaries of the subsistence level:

(1990-2	2001)											
SEX	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Men	2,511	2,550	2,667	2,682	2,874	3,129	3,213	3,392	3,483	3,942	4,079	4,505
Women	3,568	3,655	3,822	3,785	3,930	4,058	4,318	4,541	4,654	4,741	4,883	5,519
TOTAL	6,079	6,205	6,489	6,467	6,804	7,187	7,531	7,933	8,137	8,683	8,962	10,024
Source: SN	AS											

Evolution of the number of beneficiaries of the minimum level by gender, age (1990-2001)

Women are more numerous to be pay at the subsistence level, in 1990, they represented 58% of the beneficiaries of subsistence level; this part is slightly decreasing since it represented 55% in 2001.

The decomposition according to the age reveals that this is people between 18 and 60 who are the most numerous category of subsistence level beneficiaries of (57 % of the whole beneficiaries in 2001) for both men and women. The Ministry of the female promotion remarks that this tendency is balanced by decomposition by age of men and women separately. It notes that whereas the majority of male beneficiaries of subsistence level are aged of 18-60, we find a women's not unimportant part in the age group 60 and more. These women are often concerned with the subsistence level because they are with no spouse or pension.

This is the Social Action National Service (SNAS) that is in charge of the take care of the social accompanying of the subsistence level beneficiaries. Particularly it organises and carries out measures aiming at the integration or at the professional reinstatement, for persons legally obliged to submit themselves to it

Figures show that 88% of women and 78% of men household member may not follow such professional insertion measures. This can be justified because, among the exempted households members

- certain people are minor or still following studies (represents 30 %);
- others are older than submission age of these measures (22 %). It concerns more often women because the female life expectation is higher than that of the men;
- others are in permanent or temporary incapacity (27 %).

On the other hand, among the individuals in age and having the ability to work, the reasons of exemption are bound: firstly, to the bringing up of children or of taking care of one person (12.5% of the women and only 0.5% of the men people); secondly, to the fact that people already hold a professional activity (2.5%); and finally to the fact that those do not meet allocation's criteria of the subsistence level (age, duration of place of residence, etc., 3.8%).

#### 3.2.2 Measure to regulated low pay

One of the main explanations of low wage among women is their lower formation and their more frequently use of part-time jobs and career breaks.

The Government of Luxembourg have implemented several initiative to fight this phenomenon:

• The fiscal reforms of 1991 and 1998

In Luxembourg a real effort is granted to make low wages no more subject to taxation. The government has adopted new regulations making the taxation more employment-friendly:

- Since the 1<sup>st</sup> January 1998, minimum tariff income tax-free is established at 270,000.-LUF (it was about 243,600.-LUF since 1995 and 222,000.-LUF in 1991)
- Since the reform fiscal of the 23 December 1997, the starter rate has been reduced from 10% to 6%.

Both measures reduce the tax burden of little qualified workers.

- The minimum social wages (SSM) for workmen has been increased from 35,444.-LUF in 1991 to 46,564.-LUF in 1998. Hence, these fiscal reforms have brought the income tax to historically low levels.
- A System of tax subsidies to ease the reintegration of unemployed on the labour market has been introduced. This system is in favour of the taxpayer who hires people that have been unemployed for 3 months, this subsidy represents 10% of the monthly gross remuneration and can be applicable for 36 months as from the month of recruiting.
- The law of 12 February 1999 concerning the implementation of the National Action Plan for employment 1998

Concerning problems related to the concentration of women in economics activities where they are overrepresented. The law provides for an increase of 15% in financing from the Employment Funds in the event of jobseeker of the sex that is underrepresented in an enterprise or a sector being recruiting. Monthly reimbursement to private sector employers of the part of compensation paid to young people on a temporary auxiliary contract by the employment fund are 65% instead of 50% when members of the sex which is underrepresented in a sector of activity and/or in occupations in which underrepresentation of one of the sexes justifies application of a specific measure. The same applies to occupational integration traineeships for young people or unemployed adults.

Moreover, the law registers the access of people on leave without pay to the continuing vocational training like obligation of the collective bargaining.

• The law of the 22 June 1999

Given that the vast majority of women wishing to return to the labour market have no or unadapted formation, the law introduces **vocation-training measures** to ease the reintegration into the active life.

Efforts were implemented to increase and to diversify the range of continuing vocational training for women whishing to reintegrate the labour market and for unemployed workers. It is important to accentuate the diversification of the training supply since once again women have tendency to head towards the services industry and follow formation in office technology.

The participation of women on leave for family reason (maternity leave, parental leave, sabbatical leave, etc) being low, the supplies of training sessions will also be extend and made available to those women whose contract have been interrupted. Moreover companies are encouraged to open their continuing vocation training to women on leave for family reason. This way, employees on leave would keep contact with the company and would benefit from the handing-over on levels as well as other employees.

• The "Femmes, sciences et technologies" pilot project

The project "Femmes, sciences et technologies" has been implemented in response to the low rate of participation of women on the labour market and their orientation to feminised industries (a cause of low pay among women). This project have to encourage young girls to consider a wide range of occupation options, to cannel them towards future oriented training courses especially in sciences and technology.

• *The "Employée de maison" formation* 

This training has been introduced in 2000, its aim is to contribute to rise the qualification of cleaning ladies in order to increase the respect and favour their prospects of employment.

# 3.3 Regulation of pay (and other benefits) for pat-timer workers and changes that may have impacted on the gender pay gap

#### **3.3.1 Description of the part-time employment**

The part-time concerns essentially women in Luxembourg.

In 2001 part-time represents 14.6% of the whole employment, 28% of women employment and only 7% of men employment. The number of people working part-time has increased of 14.7%, which represents a larger increase than the number of full-time workers for the same period (11.8%). But working full-time remains largely the most used labour regime (84% of the whole employment).

	Working time	evolution	(1999-2001)
--	--------------	-----------	-------------

	1999		20	00	2001	
Nondefinite	3,351 1.5%		1.5% 3,842 1.6%		3,535	1.4%
Part-time*	32,570	14.2%	33,954	14.1%	37,358	14.6%
Full-time	192,495	84.3%	203,481	84.3%	215,393	84.0%

Source: Ministère du Travail et de l'Emploi Luxembourg - IGSS

\*figures provide by the IGSS contains work hours of employees by months, but they do not make it possible to conclude with certainty that part-time corresponds to the terms defined according to the law. (IGSS: less than 120 hours by month=part-time).

Although, it is concerns essentially women who work part-time (71% of those workers are women), we note an evolution of the workers repartition according to the working time, the increase of female full-time workers is larger than the one of male full-time workers (14% for women against 11% for men). Just as, the rise of male part-time workers is larger than the one of female part-time workers (23% for men against 12% for women).

	1999		200	00	2001		
	Male Female		Male	Female	Male	Female	
Nondefinite	Part-time 8,700 (6%) 23,870 (28%)		1,620 (1%)2,222 (2%)8,652 (6%)25,302 (28%)142,334 (93%)61,818 (69%)		1,811 (1%)	2,312 (2%)	
Part-time					10,690 (7%)	26,668 (28%)	
Full-time					148,921 (92%)	66,472 (70%)	

Working time evolution by gender (1999-2001)

Source: Ministère du Travail et de l'Emploi Luxembourg – IGSS

An interesting remark from Guastalli, Lejealle, Lorentz (2002) is that resident women in Luxembourg work less frequently part-time than frontier workers. This observation comes from the comparison between figures of the IGSS (Inspection Générale de la Sécurité Sociale) and those of EFT (Enquête sur les forces de travail) of STATEC<sup>10</sup>. According to the IGSS (which takes account of resident women and frontier workers), 35% of women work part-time in 2000, whereas according to the EFT (which takes only account of resident women), they are only 27%. Therefore, frontier workers work more frequently part-time.

#### 3.3.2 Measure on part-time employment that could have impact on the gender wage gap

The law of the 16<sup>th</sup> February 1993 had had, by her rigidity a negative impact on the part-time job supply. Indeed, this law stipulated that the modalities on the working time repartition and the overtime had to be fixed in the contract. This limited really the flexibility of the part-time worker and employers complained of the rise in the cost of part-time workers.

In addition to this lack of the law's flexibility, part-time workers (essentially women) suffer of discrimination on the point of view of their career prospect, training, etc.

The law of the 12 February 1999 contains measures to encourage equality of treatment between part-time and full-time workers and a higher flexibility.

It has introduced the creation of POT (Plan d'organisation du Travail) covering the fixed reference period of four weeks, which can be reduced or increases to up 12 months by social partners or the Ministry of Labour. Now, full-time and part-time workers have the same

<sup>&</sup>lt;sup>10</sup> STATEC considers worker as part-time worker if they work less than <sup>3</sup>/<sub>4</sub> of the usual working time (hence less than 130 hours per month in comparison to 173 hours by month).

regime: they may accumulate overtime if they do not exceed 20% of the daily and weekly schedule that stand in the contract. This measure is temporary in order to observe the effects on the part-time supply. The adoption of the four days week is also possible for part-time workers

The flexibility of working time has also been increased by the introduction of a premium paid by the Employment Fund to the employer equivalent to all the social security contributions due for an employee who has switched from full-time to part-time employment, as long as the employer recruits a jobseeker of the underrepresented sex on a permanent contracts. This premium is otherwise equal to the employer's share of social security contributions.

### 3.4 Recent changes in childcare and parental leave infrastructure

#### 3.4.1 Childcare infrastructure

A significant constraint upon the professional activity of women is the lack of day care structures. According to Guastalli, Lejealle, Lorentz (2002), single parents and biactive couple have largely recourse to grandparents to care their children. Yet, one child on two is cared by is grandparents when the mother do not have a professional activity, they are 35% when the mother work part-time and 31% when she work full-time.

The most significant element concerning the system of care chosen is the mother working time: the heavier the mother working time, more frequently the household let informal care system for specialised care structures (child minder, publicly funded day care centres or the non-publicly ones).

Principal mode of care	Couple: man a	Couple: man active and the women is					
	Inactive	Active at	Active at	Single parent			
	mactive	part-time	Full-time	active			
Grandparents	49	35	31	31			
Day care or after-school centres	18	23	30	26			
Child minders, baby-sitter	16	21	22	23			
Friends, Neighbours, family	17	21	17	20			
Total	100%	100%	100%	100%			

Principal mode of children care in 1999 by the activity of parents

Source: PSELL 1999 - CEPS/Instead

Field: Children care at least one's a month by other persons than their parents.

Since the 1998 NAP the aim has been to create 1000 childcare places in a medium term, 188 have already been supplied. The objective is far from being achieved and the Ministry of Women's Affairs admits that the process is slower than expected. The government keeps increasing the possibilities of places in collaboration with the Minister of the Family, of the Social Solidarity and Ministry of youth.

Presently, the Family Ministry realises a census of all supplies offers of the care of two months old children until the end of primary education teaching.

The Family Ministry in association with the municipalities:

- Extent the increase action of available places in publicly funded day care structures to all care of children by municipalities to ensure a framing of children apart from the school (morning take care before the courses (between 7.00 to 8.00 AM), school canteen (between 12.00 to14.00 PM), assistance with the homework and activities of playtime up to 18.30 hours, activities of holidays.
- Takes of 50% of the loss balance and 50% of the costs of infrastructure of publicly funded day care centres.
- Rents places, since 2000, in non-publicly funded day care centres in order to underrent them at lower price to low pay households. The non satisfied demand is mostly focused on places for children between 0 and 4, which is also the most expensive ones.
- Takes part, in collaboration with the Ministry of Female promotion, in the promotion of (by its technical help and subsidies) positive actions with companies, such as the creation of a day care centre for the personnel. The day care centre can then take into account the enterprise's specific requirements, such as working hours (e.g. hospital) or staff's linguistic roots (e.g. European institutions), or may relieve parents or customers of the burden of care for a short period of time. Finally some companies offer their customers a day care centre for children for period of several hours, enabling the parents to peruse a short-term activity without their child. The basic idea is to offer the children more interesting and more suitable activities for their age during this time.
- Since the 1998/1999-year school, some 20 on the 118 municipalities have offered preschool education for child of 3. The number of children having taken part of this action is non negligible in comparison with the number of children in day care centres. The widening of the possibilities of care of children at school seems to meet needs of households. Therefore, pre-school education will be introduced to the Grand Duchy in the year to come. The municipality have been asked to draw up plans for introducing it and it will have to be available without fail in every municipality from 2005 onwards.

At The 12.31.2000<sup>11</sup>, the number of public day care structures for children is 177 units (non and publicly funded) and 8 day cares structures provided by companies.

A analyse of the publicly funded day care structures shows a increasing of the inscriptions of children this last years with a placement of the full-time children to the detriment of the others systems of placement

In $2000^{12}$ , the inscriptions of children w	ere the follow	ving:
Full-time Inscriptions	1361	75.70%
5 to 8 half-days inscriptions	330	18.35%
Less than 5 half-days per week	107	5.95%

Type of Inscriptions	1998	1999	2000
Full-time	71.40%	75.00%	75.70%
Half-time	20.50%	20.21%	18.35%
<5 half-time per w.	8.10%	4.79%	5.95%

Source: Ministry of the Family

<sup>&</sup>lt;sup>11</sup> The female employment in Luxembourg (2001), p. 23

<sup>&</sup>lt;sup>12</sup> The female employment in Luxembourg (2001), p. 23

Concerning the companies day care structure, in 2000<sup>13</sup>, the structures were the following:

Types of institution	Number of places	Structures managed by
European institution	615	European Parliament
	108	BEI
Hospital institution	38	Centre Hospitalier
	18	Hôpital de la Ville
Sales company	17	Hôpital St. Louis
Administration	36	Banque Dexia-BIL
	42	State personnel
	23	Social Security

Source: Ministry of the Family

#### 3.4.2 Parental leave

The parental has been introduced by the law of the 12<sup>th</sup> February 1999. The law grant the right, under certain legal conditions, to all parents bringing up one or several children, under 5, in their household to a parent leave of 6 months full-time or 12 months part-time. The compensatory payment is of approximately 60,000 FLUX.

The parent leave is individual right. The employed parents see their employment contract is suspended for the period of the parental leave it will automatically find it at the end of the leave. For this period the social rights (sickness insurance, pension insurance via baby-years) are maintained as well as the other rights related to the seniority and other advantages that the employee had acquired at the beginning of his\her leave. During this leave, the employee is protected by a prohibition from dismissal.

The single parent ones can take their parental leave up to the time their child has reached the age of five.

The parental leave must be taken in entirety and only once. Under penalty of losing its leave, one of the parents must take consecutively his parental leave with the maternity leave or the leave of greeting. The other parent may take its leave until the 5 years age accomplished of the child.

As the two parents cannot take their parental leave full-time (but part-time), if the two parents ask it, priority will be granted to the mother.

For the second leave the employer can under certain conditions of deferring the parental leave until the maximum of 2 months and for the companies of less than 15 employees up to 15 month.

1 erioù jrom the 1 April 1999 to the 1 Mars 2001							
	Total of indemnified leaves	Full-time leaves	Part-time leaves				
	2070	779					
Source: Ministry of the family - Female employment in Luxembourg (2001)							

Period from the 1<sup>st</sup> April 1999 to the 1<sup>st</sup> Mars 2001

<sup>13</sup> The female employment in Luxembourg (2001), p. 24

The ministry of the Family in collaboration of the CNPF and The ADEM note that:

- The parental leave formula gains a large success.
- The full-time leave is more successful that the part-time one.
- Part-time leave is increasing.

Fathers				Mothers		
Months	Total	Full-time	Part-time	Total	Full-time	Part-time
4.99-2.01	262	137	125	1808	1154	654

Period from the 1<sup>st</sup> April 1999 to the 1<sup>st</sup> Mars 2001

Source: Ministry of the Family – Female employment in Luxembourg (2001)

Women represent 90% of the parental leaves with a large preference for the full-time one. Men, who constitute the other 10%, take their parental leaves part-time as well as full-time.

Fathers don't take parental leave because they think it is a matter of women. Besides, fathers who take the leave suffer from the lack of understanding of their colleagues and employers. Action will be undertake in firms to incite fathers to take their parental leave and to reduce their resistance.

#### 3.4.3 Leave for family reasons

The leave for family reason has been introduce by the law of the 12<sup>th</sup> February 1999. This leave gives the possibility to employed parent to stay with a child, a seriously sick, under than 15, when no other person can do so. The maximal period of this leave is two days per child and per year, could be outnumber only if the child is suffering from an extremely serious disease. A medical certificate should be submitted to provide evidence of the illness, the need for the employee's presence and the duration thereof.

In spite of certain increasing of the demand since 1999, the demands are still lower than the number of potential beneficiaries. This is generally women who have recourse to this type of leave.

#### 3.5 Others Issues

#### 3.5.1 Individualisation of the social security rights

The idea of a personal right has never been extent to the fields of the social security, there has never been question to go to universal regimes covering the resident population et grant universal right to everyone independently of his/her familial or professional statute.

Legislative modifications that have been implemented since 1999 to promoted individual rights:

Concerning baby-years, the law of the 6<sup>th</sup> April 1999 adapting the general regime of pension insurance, in particular by removing the time of 2 years for the presentation of the demand for baby years and by creating the possibility to parents to share them. Moreover, the monthly average that serve to the computation of the contribution

subsidized by the State will be determined on the base of the 12 months before the childbirth (instead of 36), this generally more favourable.

- The law of the 6 April 1999 introduced several modifications to the general regime of pension insurance. The aim was to give the possibility to women to constitute themselves specific rights to the pension. (i) The negative effects of the 175 article have been lightened, particularly the no accounting of the mounts under 64 hours worked for the opening of the pension rights, this disposition disadvantaged part-time workers, mainly women, (ii) It introduce a facultative insurance to the pension insurance like the voluntary illness insurance. This way the worker has the possibility to assure him/herself in a voluntary way, as in a retroactive ways (retroactive sales), if he/she has leaved or reduced his/her occupation for family reasons, under condition of having been obligatorily affiliated for at least twelve months, to be old of less than 60 years at the time of the request, not to be entitled to a personal pension and to reside at Luxembourg.
- The introduction by the law of the 12<sup>th</sup> February 1999 of the parental leave of 6 months during which compensatory payment of parental leave is paid. This payment is tax free, but the contribution to the illness insurance for health cares and the dependence contribution is retained. The contribution to the pension insurance is taken in burden by the State, like in the case of the baby-years. The law of the 12 February 1999 has also introduced the family leave. This allow parent of ill child to stay caring of him. This is a right for each employed parent, the allocation is determinated the same way as illness allowance (100% of the wage) and is subjected to the social contributions and the taxes. The allowance is supported entirely by the State.
- The projected measure of the sharing of the pensions or of the pension rights in case of divorce ("splitting").

This bill (n°3883 of the 8<sup>th</sup> March 1994) concerns the sharing of the pension rights, acquired during the marriage, between divorced couple.

According to Mady Kries  $(2000)^{14}$  in the rapport for the national Council of women the opinions are divided on this subject and the advantages are as numerous as the disadvantages. The author notes that the advantages of the splitting are:

- A share is considered as prolongation of the alimony allowance, so as a derived right.
- The share insures the treatment equality between married and divorced couples.
- The computation of the splitting is quite easy.
- The divorced spouse and the survival spouse are treated the same way.
- This system doesn't comprise any exemption from the traditional system of the derived rights.
- The solution of the derived right from the sharing of the pension may coexisted with the alimony allowance, which could be reduced or removed.
- The share of the shared pension can be adapted easily to the cost of live and the level of wages.

The disadvantages are the following:

- The sharing would be applicable only to couple divorced people after the application of the law and would be for any interest for the others.

<sup>&</sup>lt;sup>14</sup> Ministry of the Female Promotion and the National Council of Women, "Etude descriptive et comparative de la situation des femmes et des homes dans le système de la sécurité sociale et de la fiscalité", October 2000, p.64-67.

- The splitting remains the spouse caring partially or full-time of the household in a situation of dependency to the spouse who has a professionally activity.
- The sharing of the pension results to two reduced pension and perhaps to the payment of two complements to the guaranteed minimum income.
- Some element will be excluded from the computation of the pension share, particularly the sales of retroactive period carried out outside the period of marriage, the periods of illness insurance achieve by the spouse in a foreign insurance regime or international that don't envisage the splitting, the insurance periods achieve in a private regime of insurance or complementary, etc.
- The sharing does not undermine the maintenance obligation between spouses, with reserve that the debtor spouse can ask for a deduction of the alimony insofar as the credit spouse profits on the one hand from pension.
- The sharing doesn't apply automatically but to request of the creditor ex-spouse.
- The splitting of pension in case of divorce doesn't not introduce a individual right for pension insurance, but a new derived right, which could even coexisted with the services of traditional reversion, survivor pensions.

Mady Kries (2000) concludes by noting that the splitting of pension doesn't have to be considered as a determining element of the individualization of the social security rights, but constitute a way to improve the situation of persons who cannot justify a complete career of insurance, without forgetting that only the divorced people can profit from it.

#### 3.5.2 Individualisation of the fiscal rights

Certain incomes are subjected to a deduction at the source of income tax. It is in particular, incomes providing from a salaried occupation, pensions and revenues touched under the terms of an old paid occupation or served by an autonomous case of retirement fed in all or partly by the contributions of the insured persons.

The deduction has to be paid by the manager or pension funds to the contributions. Sylvie Trausch-Schoder (2000)<sup>15</sup> remarks in the the national Council of women's rapport that this is at the level of the deduction at the source that women fell the most injured by the tax system on the income in application in Luxembourg.

Indeed, the system of "splitting" (in application, to all the married taxpayers collectively taxable with their spouses, from the fiscal reform of the  $6^{th}$  December 1990) is based itself on the principle bases according to which the fiscal burden relating to the common income of a household must be the same one as if the two spouses were treated like single people having carried out each one half of the common income. This process subjects spouses having together the same income to the same tax burden without taking the effective source of the income of one and other of the couple in account. The target of the individualisation of the fiscal right is to put married and non married couples on the same footing.

In general with the splitting, taxpayers pay fewer taxes than if they were subject to a separated taxation (or at least the same level if the income of the two spouses is exactly the same). This

<sup>&</sup>lt;sup>15</sup> Ministry of the Female Promotion and the National Council of Women, "Etude descriptive et comparative de la situation des femmes et des homes dans le système de la sécurité sociale et de la fiscalité", October 2000, p.72.

system is extremely favourable for married couples where one of the spouses realizes almost the totality of incomes.

• Separated taxation of married spouses

The advantage of such a system is in the individual approach based on the notion of productive unity of income. On the other hand, it disadvantages in comparison to the actual system, couples where a spouse earns a large share of the incomes.

• Orientations to be considered

The orientation considered are of two kind, that which is based on *the right individualisation the with recognition of the role sharing between men and women* and, that concerning *the right individualisation with recognition of the equality between man and women*.

The first one is related to systems which suggest either (i) the taking out a insurance for the "spouse-helper", (ii) the continuation of the assistance duty between spouse during the marriage for people who are too older to constitute themselves their own rights, (iii) the obligatory payment of the gross monthly domestic wage to the pension funds, (iv) separated taxation with abolition of the splitting: model where every body have to work, to pay their own contributions and taxes. But is at the present disadvantageous to households where the female perceives a wage that complete that of her spouse, (v) the creation of a guaranteed domestic wage, which allows the creation of own rights as well as any salary, and finally, (vi) the Centre of Information and Documentation for women proposes to revising the pension system in order to reduce differences between people who have had a complete career and those who had career breaks to bringing up children.

The issue related to this orientation is that it does not promote the employment and equal remuneration between men and women and takes the situation of household women or women receiving an appoint wage as a norm.

The other orientation encourages gender equality. Indeed it suggests either (i) the introduction of a new redistribution in the tax system which may combine a separate taxation with the payment of a "maternal wage", (ii) the Netherlands' s model which constrains the number of people receiving a survivor pension and thus motivates female professional activity, (iii) the Danish model which considers the marriage as privacy and every individual such as a economically active people. This system strongly disadvantages nevertheless people who could constitute themselves their own rights.

## Bibliography

Borsenberger Monique (2001), *La résonance sociale du congé parental*, Population et Emploi, CEPS/Instead, 3/01, août, Luxembourg.

Borsenberger Monique et Lejealle Blandine (2000), La garde des enfants au Luxembourg, Document PSELL n°120, CEPS/Instead, mars, Luxembourg.

Dickes Paull, *Pauvreté et conditions d'existence*, Document PSELL n°8, CEPS/Instead, Luxembourg.

Hausman P., Langers J. et Lejealle B. (1998), *La discrimination salariale entre les femmes et les hommes employés privés : Un phénomène apparent ou réel ?*, Cahiers socio-économiques du CEPS, n°2, Luxembourg.

Lejealle Blandine (2000), *A travail égale, salaire égal*?, Population et Emploi, CEPS/Instead, 2/00, juillet, Luxembourg.

Lejealle Blandine (2001), Les différences salariales en 1995, Document PSELL n°124, CEPS/Instead, février, Luxembourg.

Ministère de l'Emploi et du Travail (2002), *Evaluation nationale de la stratégie européenne de l'emploi*, mai, Luxembourg.

Ministère de la Promotion féminine (1997), Les femmes et le marché de l'emploi - Etude statistique, novembre, Luxembourg.

Ministère de la Promotion féminine (1999), Les femmes et le marché de l'emploi - Etude statistique II, mars, Luxembourg.

Ministère de la Promotion féminine (2000), Rapport d'activité 1999, mars, Luxembourg.

Ministère de la Promotion féminine (2001), L'emploi des femmes au Luxembourg – Mesures réalisées et défis futurs, mars, Luxembourg.

Ministère de la Promotion féminine (2001), Rapport d'activité 2000, mars, Luxembourg.

Ministère de la Promotion féminine (2002), Les femmes et le marché de l'emploi – Actualisation 2001, novembre, Luxembourg.

Ministère de la Promotion féminine (2002), Rapport d'activité 2001, mars, Luxembourg.

Ministère de la Promotion féminine et le Conseil national des femmes luxembourgeoises (2000), *Etude descriptive et comparative de la situation des femmes et des hommes dans le système de la sécurité sociale et de la fiscalité*, octobre, Luxembourg.

Plan d'action national pour l'emploi 1998, Grand-Duché de Luxembourg

Plan d'action national pour l'emploi 1999, Grand-Duché de Luxembourg

Plan d'action national pour l'emploi 2000, Grand-Duché de Luxembourg

Plan d'action national pour l'emploi 2001, Grand-Duché de Luxembourg Plasman Robert and Michael Rusinek (2002), *Evaluation of the Luxembourg Action Plan For Employment*, Expert Group Gender and employment, April.

Plasman Robert and Rycx François (2000), *Evaluation of the Luxembourg Action Plan For Employment*, Expert Group Gender and employment, June.

Wagner Alain (1992), La loi sur le Revenu Minimum Garanti – Quelques avis du public, Document PSELL n°43, CEPS/Instead, Luxembourg.

# Annex

Distribution of indivi	duals by	y level o	of occu	pation,	age and	l sex, r	nationalit	y (1999	9)
Level achieved	Luxem	Portug	France	Italia	Belgium	All	Yougosl	Others	Total
Men									
Under primary	21.9	72.3	10.9	49.0	4.9	11.3	33.6	9.7	26.0
Certificate of appren.									
/tech. And lower									
teaching prof.	11.3	10.2	8.9	9.7	6.0	9.9	13.8	6.0	10.5
Higher tech. And									
prof.									
teaching (CATP)	25.1	13.2	30.0	21.8	3.7	24.0	37.7	17.7	23.1
Lower general									
secondary education	4.4	0.4	2.4	2.0	1.2	0.0	0.0	0.0	3.3
Upper general									
Secondary education	7.5	1.7	2.2	5.2	7.0	4.6	4.7	8.7	6.5
Certificate controls									
artisanal and Bac+2	12.4	0.3	15.7	1.4	14.3	8.1	3.9	9.7	10.6
Bac+3 and more	17.4	1.9	29.8	10.9	62.7	42.1	6.3	48.3	20.0
Total Men	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women									
Under primary	41.3	70.6	17.3	55.9	21.5	19.9	51.8	17.8	41.2
Certificate of appren.									
/tech. And lower									
teaching prof.	12.7	7.9	4.1	11.5	4.0	5.6	11.8	12.3	11.2
Higher tech. And									
prof.									
teaching (CATP)	20.9	10.9	24.7	19.1	5.1	24.4	28.3	12.8	19.2
Lower general									
secondary education	8.1	2.2	8.3	2.5	2.6	1.7	0.0	1.8	6.5
Upper general									
Secondary education	6.8	5.7	6.0	3.8	7.0	6.4	4.8	17.2	7.1
Certificate controls									
artisanal and Bac+2	3.1	0.0	11.6	2.0	13.9	10.1	3.2	5.3	3.9
Bac+3 and more	7.2	2.7	28.0	5.1	45.9	31.9	0.0	32.8	11.0
Total Women	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Distribution of individuals by level of accuration, and any notionality (1000)

Source: The Ministry of Female Promotion (2002) - PSELL 1999-CEPS/Instead