



הלשכה המרכזית לסטטיסטיקה
Central Bureau of Statistics
دائرة الإحصاء المركزية

**Commuting time from home to work as a
component of work-life balance dimension in the
framework of quality of employment indicators –
evidence from Israeli Labour Force Survey**

Mark Feldman
Director of Labour Sector
Central Bureau of Statistics, Israel
markf@cbs.gov.il

It's All in the Numbers

Introduction

- The issue of work-life balance is very important as dimension in the framework of quality of employment, one of the components of the employed-person's day is commuting time. This time has to be added to the working time, and misses from the home/leisure time. There are more subjects that commuting time relate to, as, transports areas, urban planning and more.
- In Israel LFS new set of questions was added from January 2018.
- One of the questions was about commuting time (one-way in minutes)

In the presentation

- The version of the question.
- Analysis of preliminary findings. (the percentages of those who answer “yes” to the matching’s question)

The version of the question

➤ **For all employed persons:**

4.140

How long, in minutes, does it typically take you to travel to your main workplace?

Approximately 15% answer “not known” or refuse to answer to this question.

Methodology and definitions- commuting time

- **Employed persons** - employed persons with commuting time >0 , not included absent from work neither working from home.

22% of employed persons (not included absent from work) had non-known in almost one of the next variables: commuting time, number of actual working-days or mean hours per day.

5% of employed persons (not included absent from work) worked from home.

The findings based on 73% of employed persons (not included absent from work).

- **Commuting time** – A direct question among employed persons, the index is mean duration of commuting time between work and home (one way). Maximum commuting time is 240 min.
- **Employed persons with commuting time to work more than one hour** - There is some possible attitudes to decide how long commuting time, absolute and relative. After some checking of the data, we decided to take threshold 60 mins and more - about 15% of the employed persons.

Methodology and definitions – potential leisure time

Introduction:

Following absence of time use survey, we tried to learn about the time use in Israel indirectly.

We can divide the day of the worker to 3 main parts: work, sleeping and arrangements and leisure time. The internal division change from individual to other, but it makes sense that we can estimate these parts among common groups.

Methodology and definitions – potential leisure time

Definitions:

Lw: Number of potential leisure's hours per week

Ld: Number of potential leisure's hours per working days

WHw: actual working hours per week

CTd: commuting time (one way) per day

NWDw: actual working days per week

Constants:

7 days per week

24 hours per day

8 hours for sleeping and other arrangements (based on data from Israeli Social Survey 2017)

Methodology and definitions – potential leisure time

L_w : Number of potential leisure's hours per week

$$L_w: 7 \times 24 - \langle \{WH_w + [CT_d \times 2 \times NWD_w]\} - 8 \times 7 \rangle$$

$$L_w = 112 - \{WH_w + [CT_d \times 2 \times NWD_w]\}$$

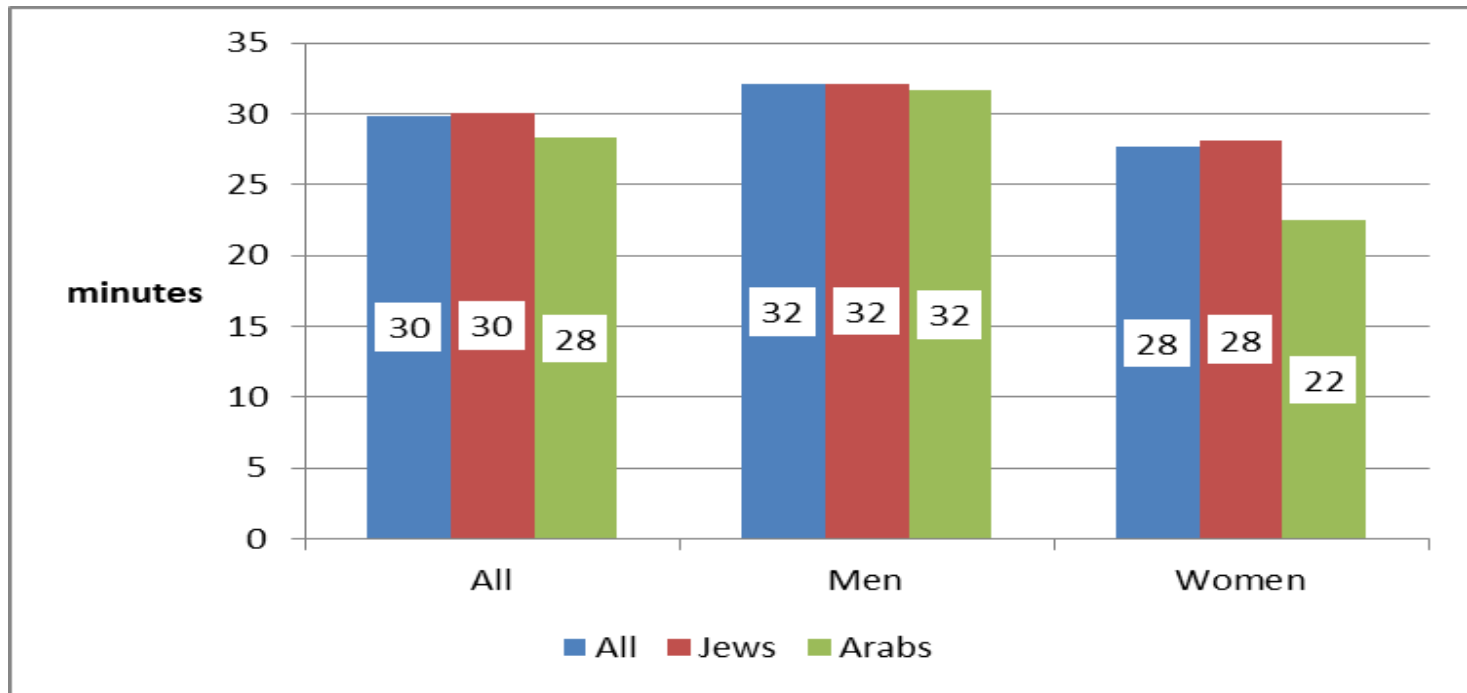
L_d : Number of potential leisure's hours per working days

$$L_d: \frac{(24 \times NWD_w) - [WH_w + (CT_d \times 2 \times NWD_w)] - 8 \times NWD_w}{NWD_w}$$

$$L_d = 16 - \frac{[WH_w + (CT_d \times 2 \times NWD_w)]}{NWD_w} = 16 - \frac{WH_w}{NWD_w} - CT_d \times 2$$

Main findings

Commuting time (one way) by population group and sex, 2018

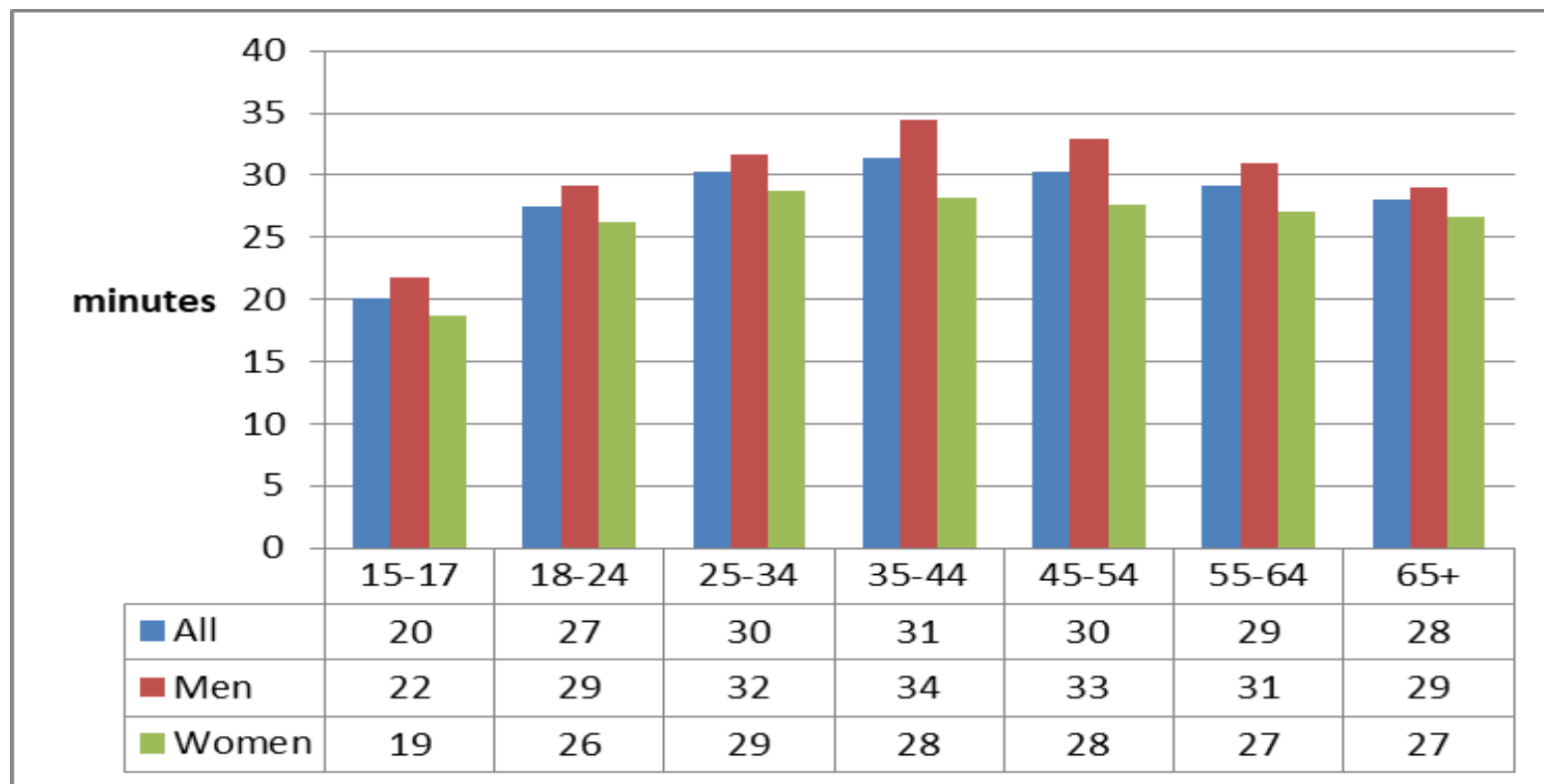


Commuting time of men was higher than women.

Jewish women had higher commuting time than Arabs women

Main findings

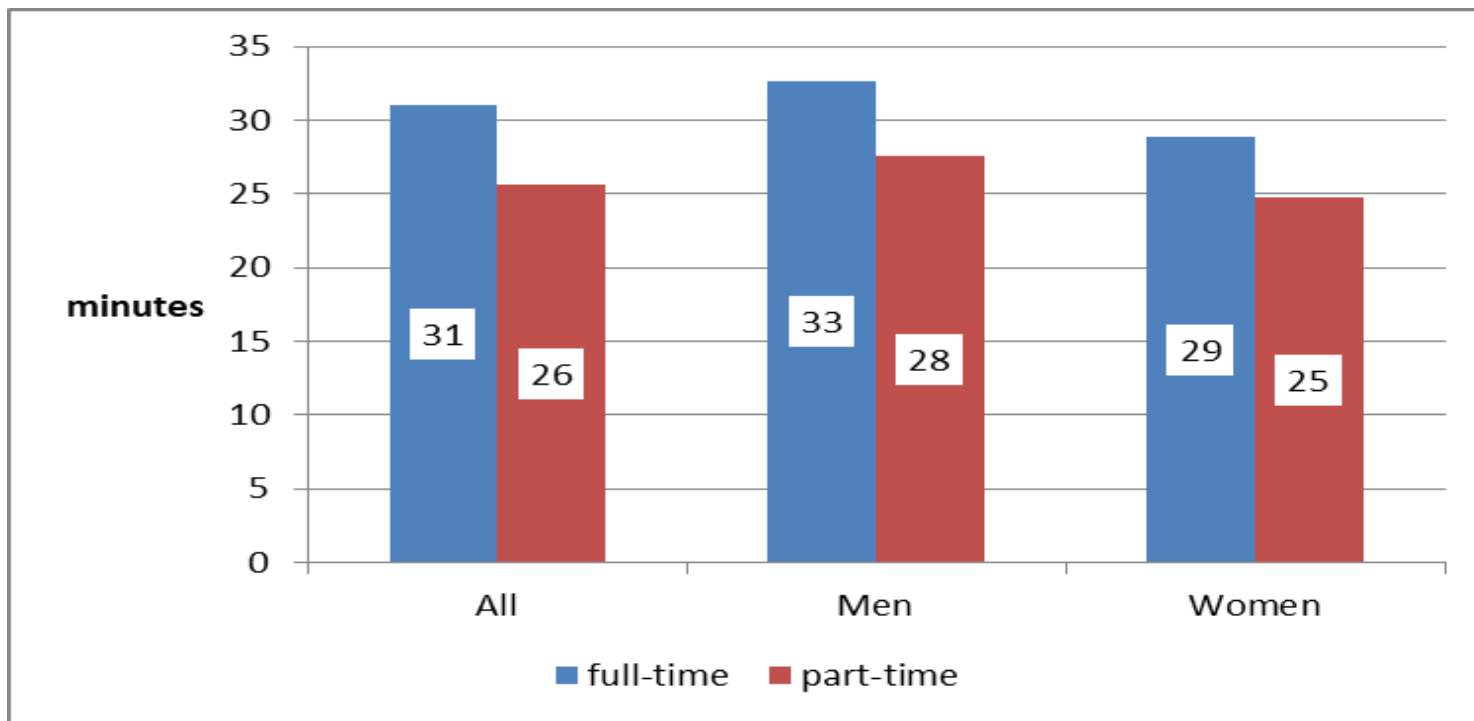
Commuting time (one way) by age and sex, 2018



Youngers (15-17) had less commuting time than elders

Main findings

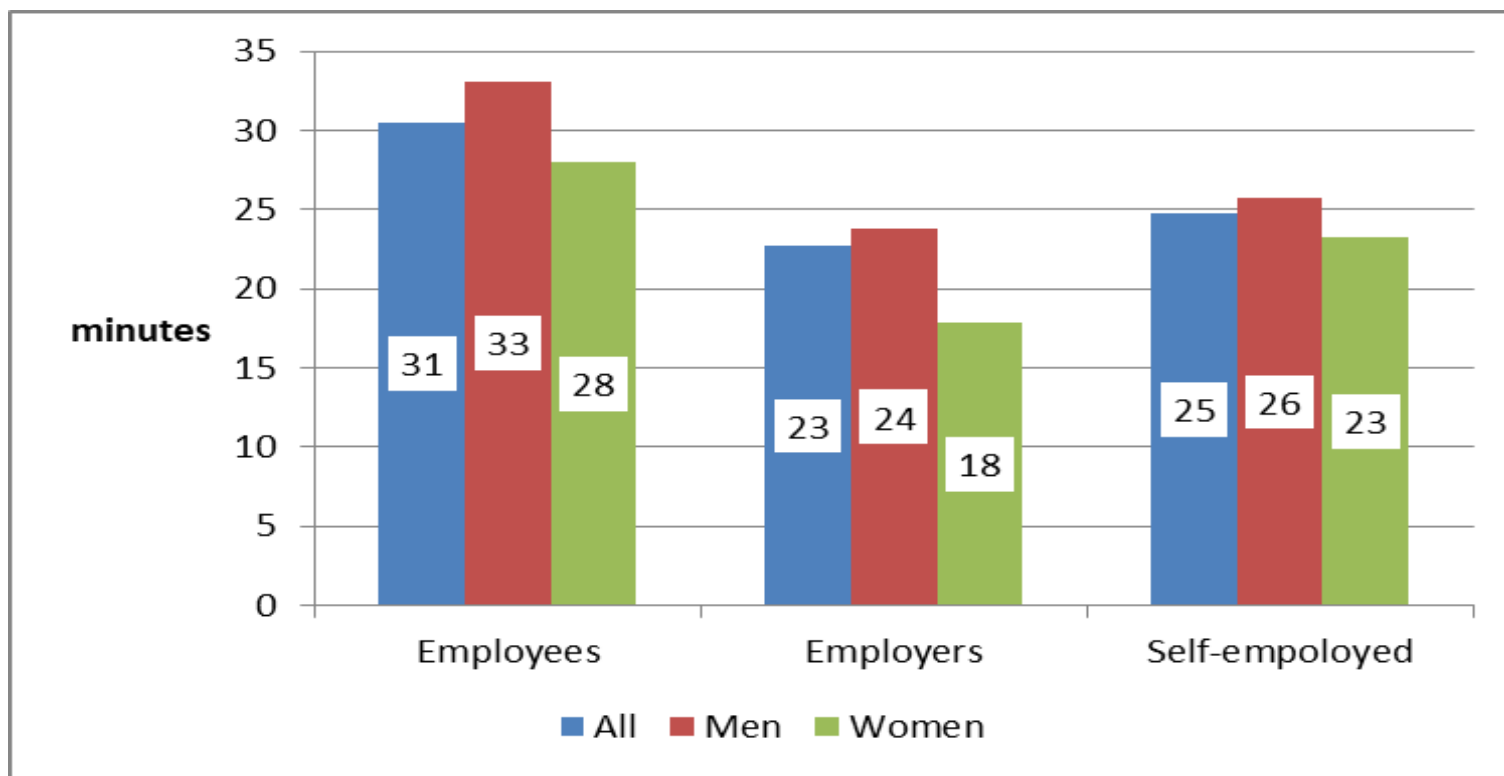
Commuting time (one way) by usual extent of work and sex, 2018



Employed persons with full-time job had larger commuting time

Main findings

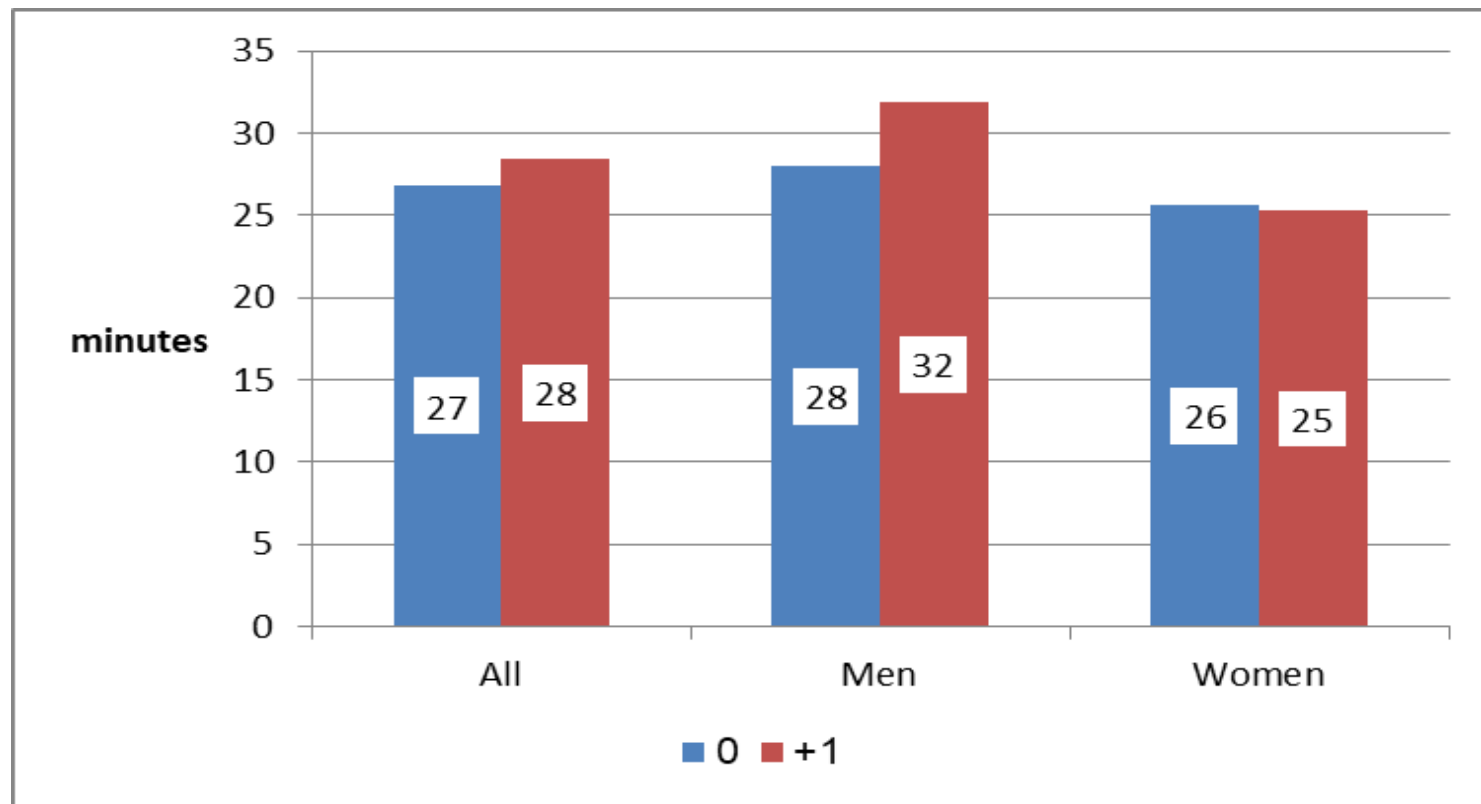
Commuting time (one way) by status of work and sex, 2018



Employers had less commuting time than employees, and women employers had the shorter commuting time (18 mins.)

Main findings

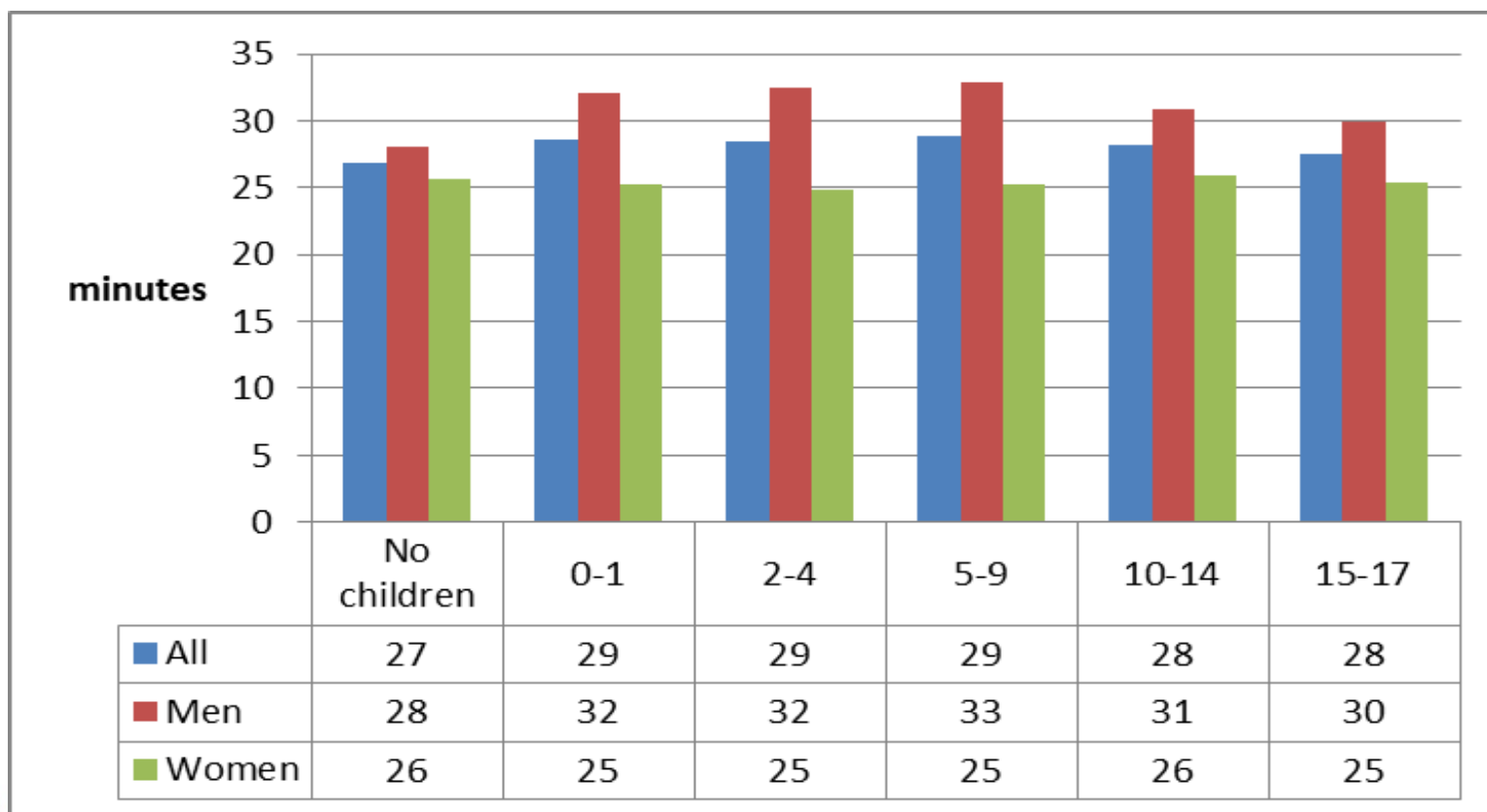
Commuting time (one way) by number of children in household and sex, 2018



Men with children had higher commuting time than men without children

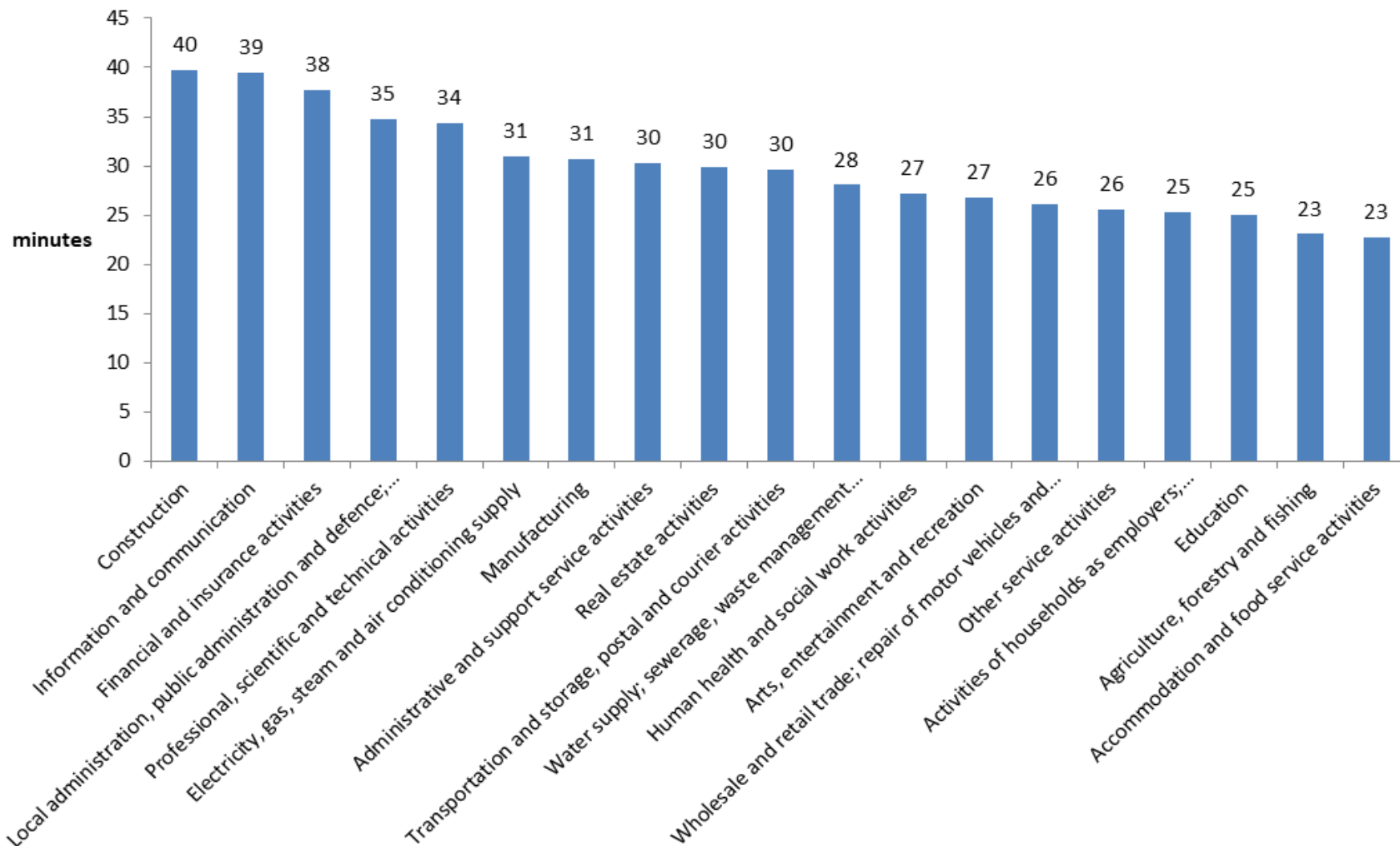
Main findings

Commuting time (one way) by age of youngest child in household and sex, 2018



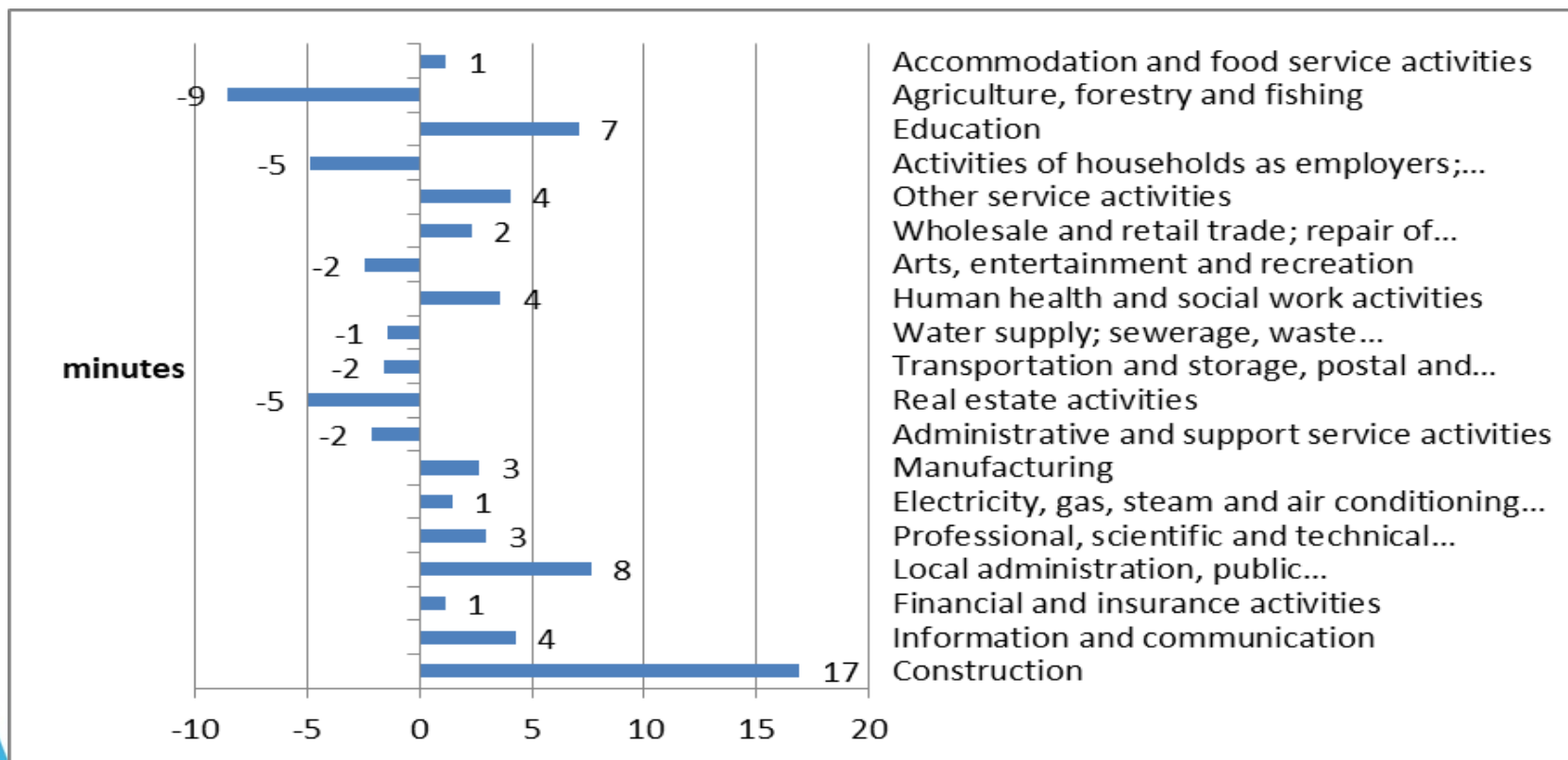
Main findings

Commuting time (one way) by industries



Main findings

Commuting time (one way) by industries, Gap by sex, 2018

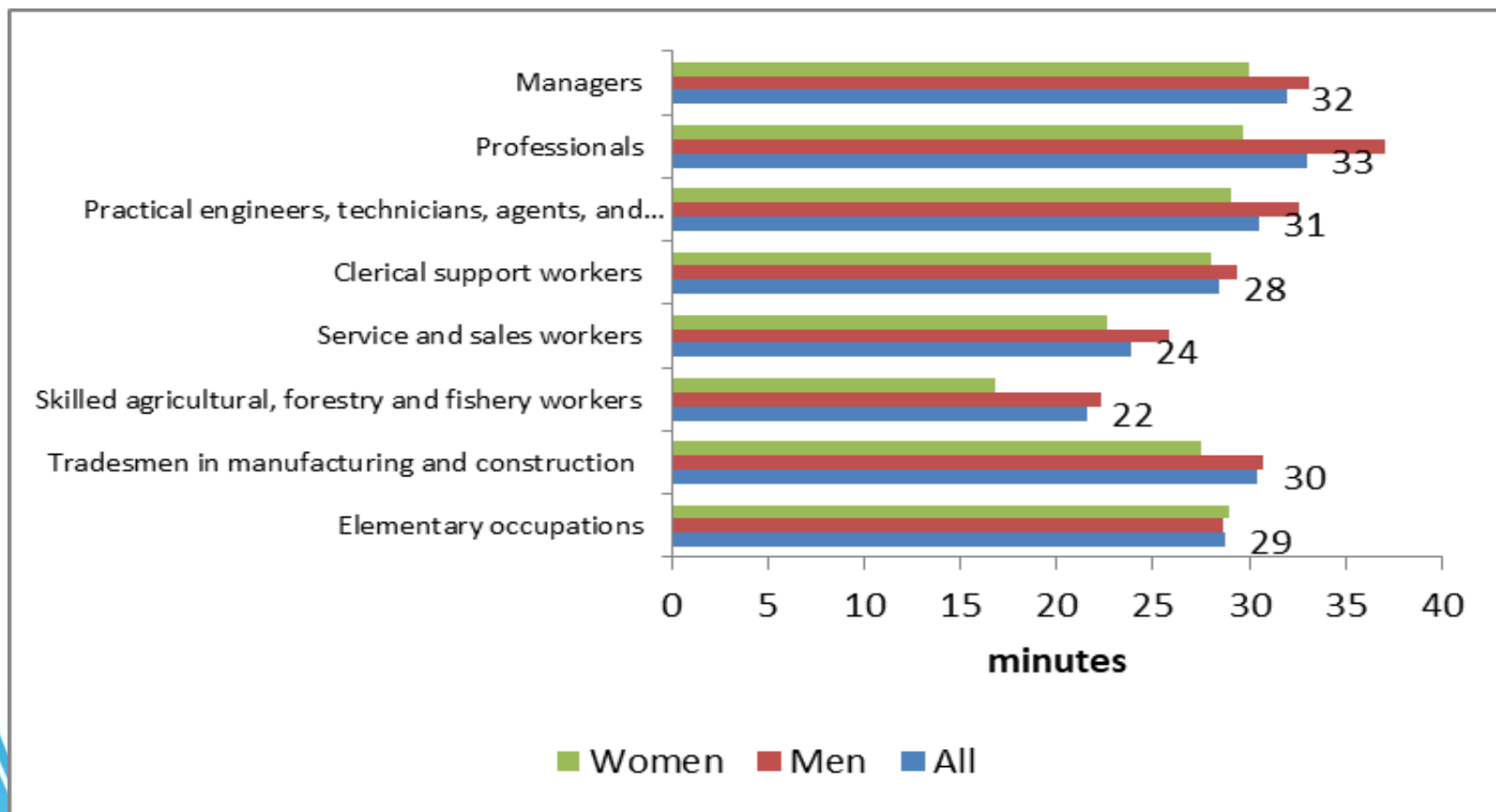


Value positive= men's commuting time higher than women.

Value negative=women's commuting time higher than men.

Main findings

Commuting time (one way) by occupations, 2018

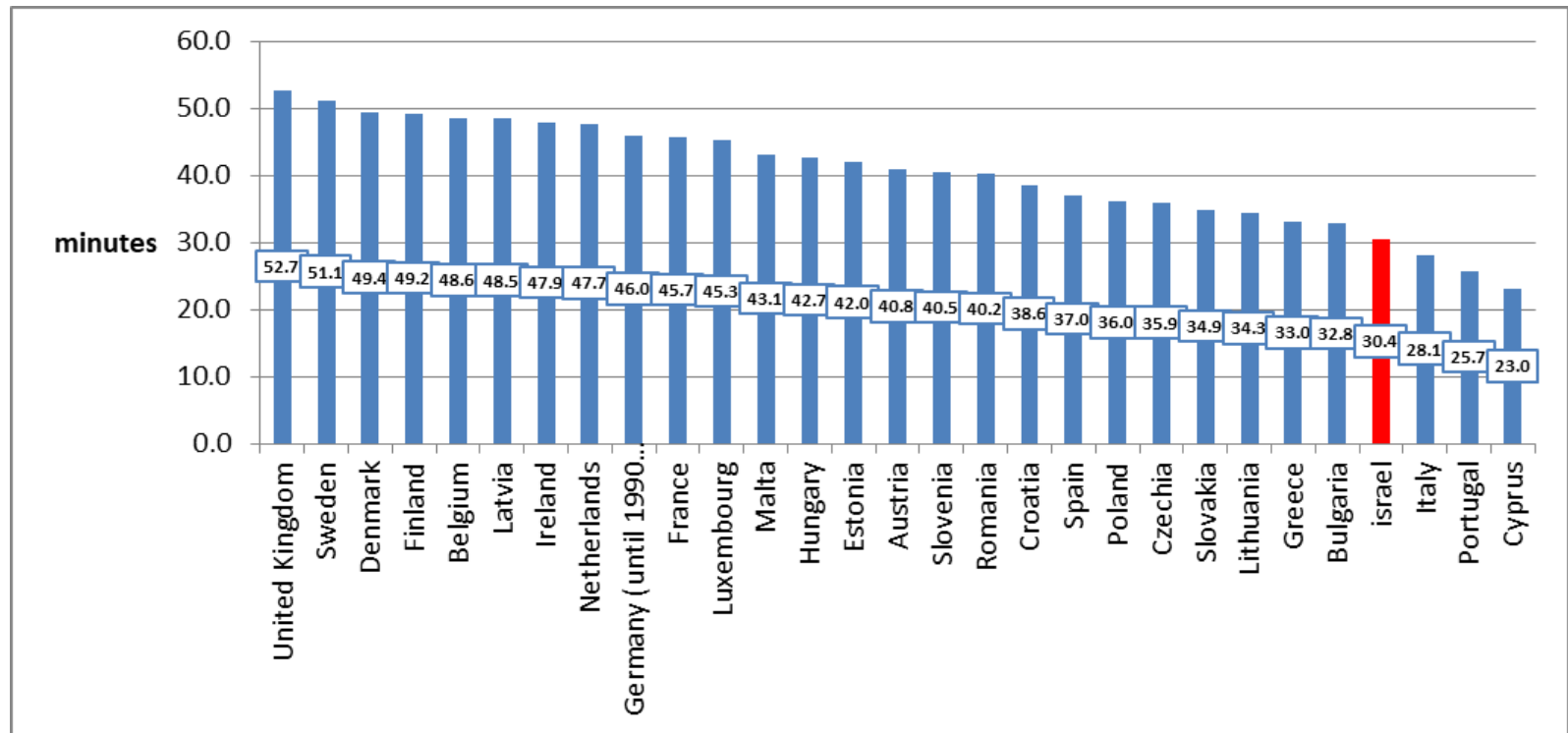


Managers and professionals had the higher commuting time among employed-persons.

The variance among women was lower than among men.

Main findings- international comparison

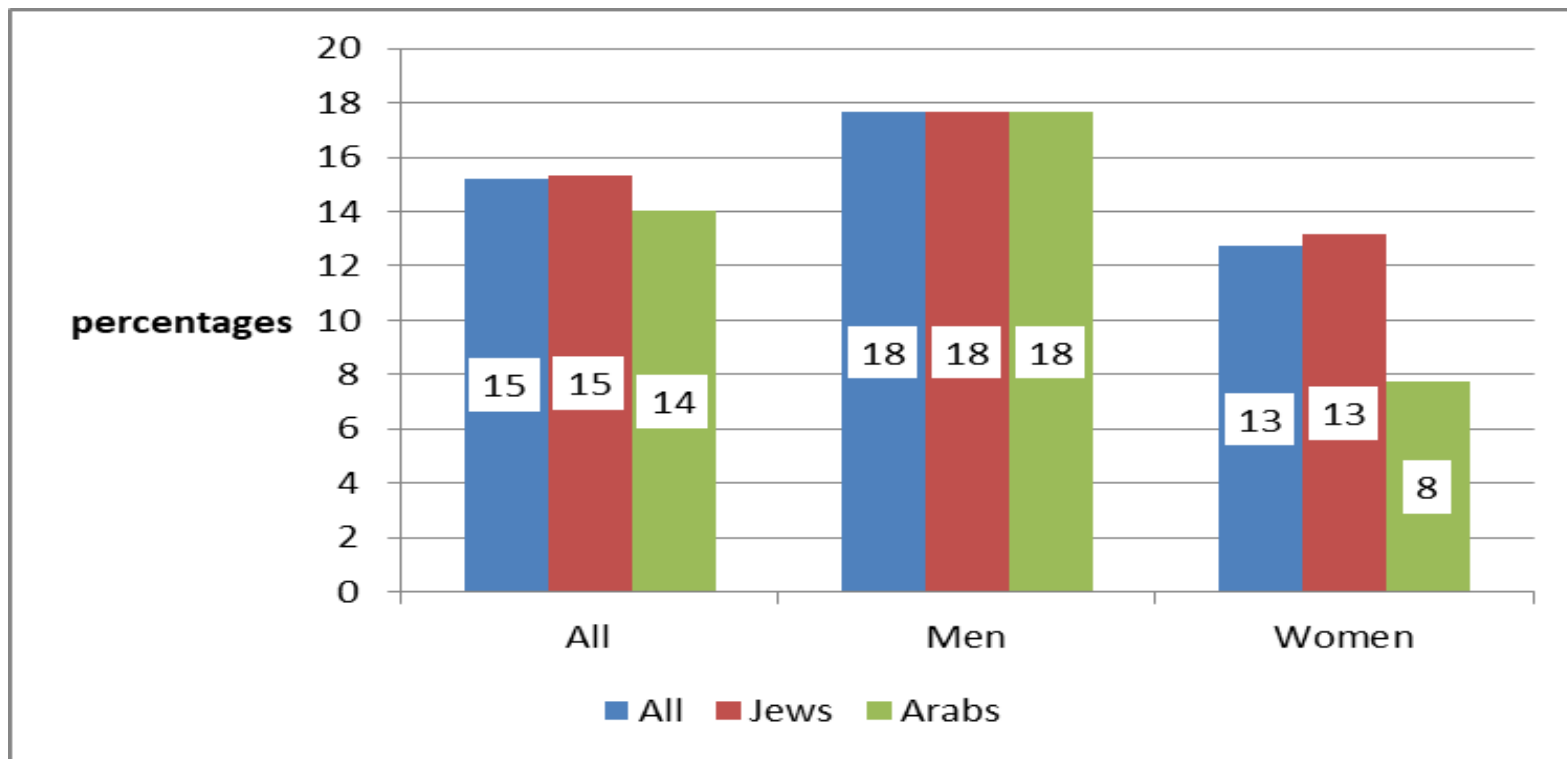
Commuting time (one way), aged 25-64 (Eurostat, 2015. israel,2018)



Israel is small area country than most of European countries. It can be one of the explanations why in Israel the commuting time is lower than in European countries.

Main findings- Employed persons with commuting time to work more than one hour

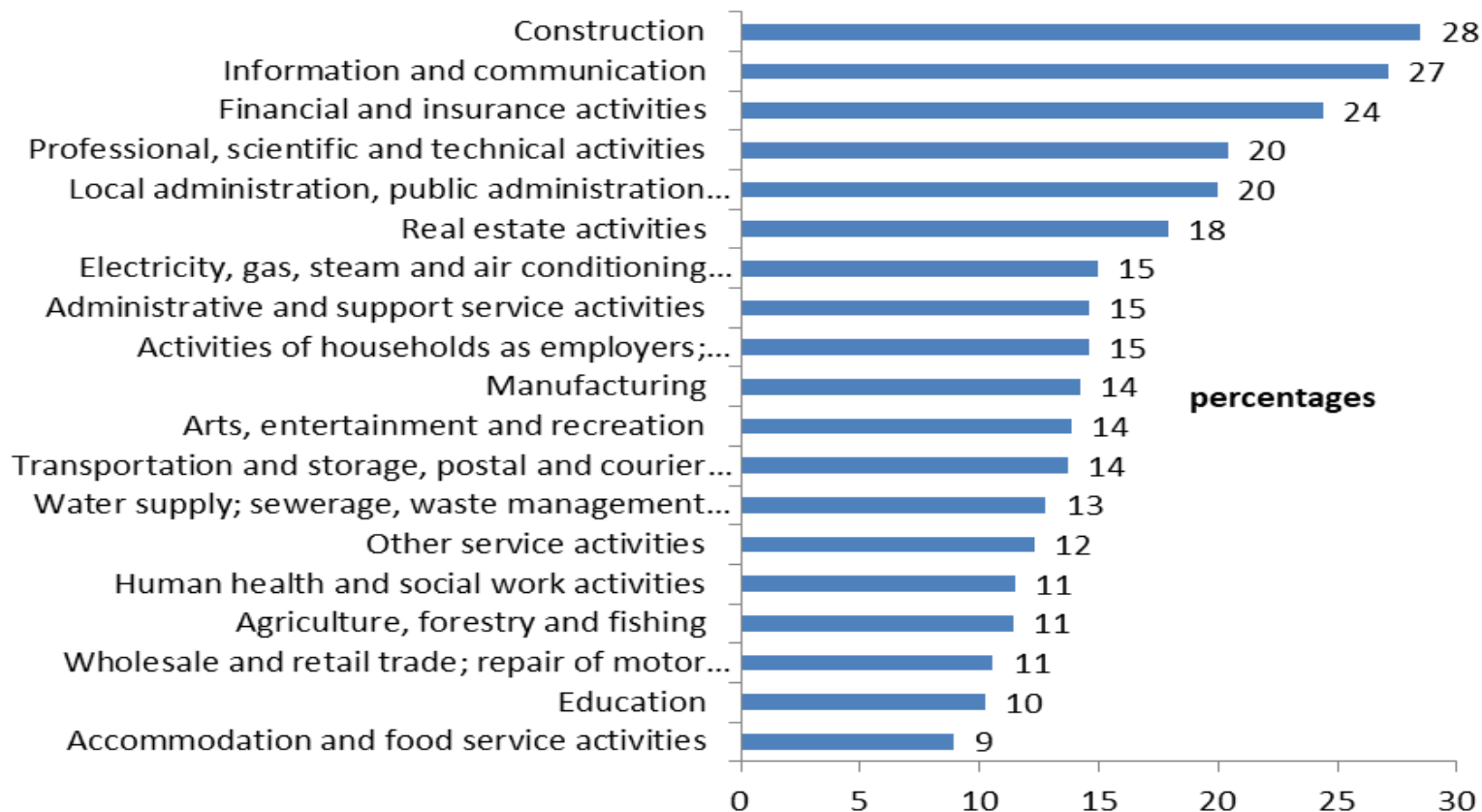
Share of employed person with commuting time (one way) more than one hour, by population group and sex, 2018



Among women, there was difference between Jewish and Arabs.

Main findings- Employed persons with commuting time to work more than one hour

Share of employed person with commuting time (one way) more than one hour, by industries, 2018



Main findings- Employed persons with commuting time to work more than one hour

Share of employed person with commuting time (one way) more than one hour, by occupations, 2018



Potential leisure time

Introduction

Following absence of time use survey, we tried to learn about the time use in Israel indirectly. We can divide the day of the worker to three main parts: work, sleeping and arrangements and leisure time.

1. Work – based on LFS, combined of working hours and commuting time.
2. Sleeping and arrangements – based on social survey (2017), this time estimated as 8 hours a day.
3. Potential leisure time – rest of the 24 hours a day.

Potential leisure time (p.l) - some findings

Employed persons (not included absent from work), by time not in work neither sleeping, and other characteristics

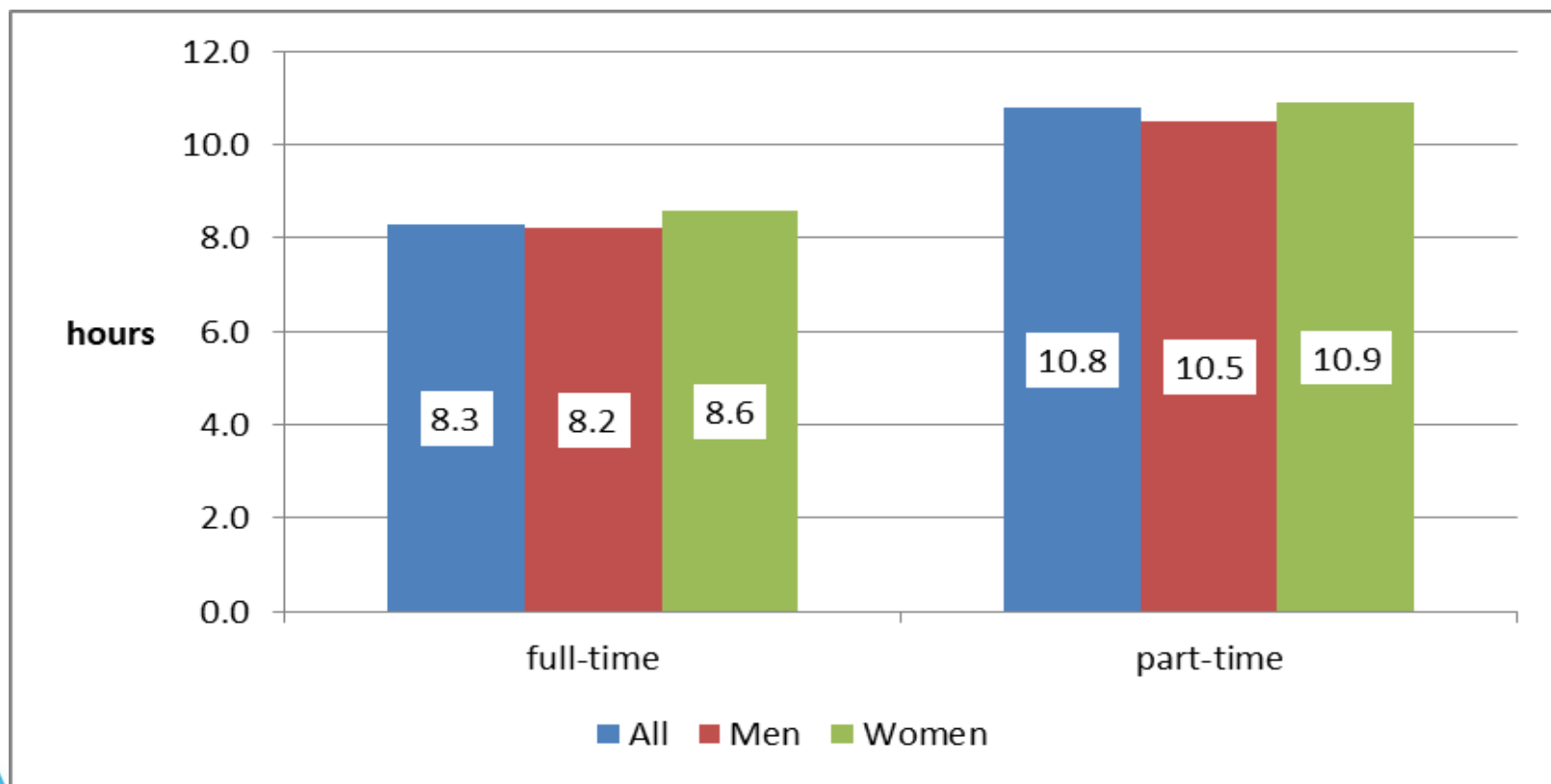
			I = Time not in work, commuting time and 8 hours a day for						Average hours per week of potential leisure	Average hours per workingdays in a week of potential leisure
			hours per week							
			0-14	15-27	28-55	56-69	70-83	84+		
	Thousand	Percentages								
All	2637.7	100.0	..	0.2	13.4	47.3	21.2	17.9	69.3	9.0
Men	1330.2	100.0	..	0.3	20.7	52.8	14.6	11.6	65.1	8.6
Women	1307.6	100.0	-	0.0	5.9	41.7	28.0	24.4	73.7	9.5
Jews	2167.4	100.0	..	0.1	13.4	45.7	21.5	19.2	69.8	9.0
Arabs	375.6	100.0	..	0.3	11.8	55.7	20.7	11.5	67.3	9.1
15-17	24.6	100.0	-	-	..	8.0	10.2	80.8	94.2	10.9
18-24	246.6	100.0	7.3	41.8	21.6	29.2	74.2	9.4
25-34	613.1	100.0	..	0.1	13.3	48.7	21.4	16.5	68.9	8.9
35-44	675.5	100.0	..	0.2	15.5	50.3	21.1	12.9	67.2	8.8
45-54	539.3	100.0	..	0.2	15.5	49.9	21.3	13.1	67.3	8.9
55-64	388.2	100.0	..	0.1	13.6	47.5	21.3	17.4	69.1	9.1
65+	150.5	100.0	-	..	8.1	33.0	22.3	36.6	76.6	10.1

Women had more p.l than Men (we can assume that connect to the unequaled responsibility in home/children care).

Aged 35-54 (prime working-aged group) had less p.l than others.

Potential leisure time (p.l) - some findings

Potential leisure time by extent of work and sex, (p.l per working-day)



The main influence on potential leisure (time not in work neither sleeping) is extent of work.

Questions for future researches

- The effect of salary (income) on commuting time
- Quality of public transportation and commuting time
- Differences between countries: size of countries, different habits in choosing place of resident in context of commuting time
- Other modes of working-places: home, on the way to work, non-fixed...
- Add Questions on: commuting time to place of study, modes of transport...

Thank you for your attention!