


2014

# A Picture of the Nation

## Israel's Society and Economy in Figures

Dan Ben-David

- 
- Education
  - Higher Education
  - Labor Productivity
  - Poverty and Income Inequality
  - The Elderly – Poverty and Employment
  - Employment
  - Women in the Labor Force
  - Haredi Employment
  - Health and Healthcare



**TAUB CENTER**  
for Social Policy Studies in Israel

*With deepest appreciation  
in memory of  
Dov Lautman (z"l)  
Taub Center Board Member,  
dear friend and partner*

# **A PICTURE OF THE NATION**

## ***Israel's Society and Economy in Figures***

### **2014**

*Dan Ben-David*



Taub Center for Social Policy Studies in Israel  
*Jerusalem, May 2014*

## *Taub Center for Social Policy Studies in Israel*

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# FOREWORD

This publication, *A Picture of the Nation 2014*, presents a concise summary of some of Israel's key social and economic issues. As in all of the Taub Center's publications, the goal is to present a big-picture perspective of Israel, showing long-run trends and international comparisons. The figures in this year's publication complement the material that came out in last year's booklet, so interested readers are invited to use both for a more complete picture of the country's socioeconomic scene. As was the case last year, most of the topics covered here are detailed in considerably more depth in chapters written by Taub Center researchers in *The State of the Nation Reports*. These publications are a part of our efforts to shift the basis of the public discourse and policy making to a broad evidence-based platform.

Professor Dan Ben-David  
Executive Director  
Taub Center for Social Policy Studies in Israel

# EDUCATION

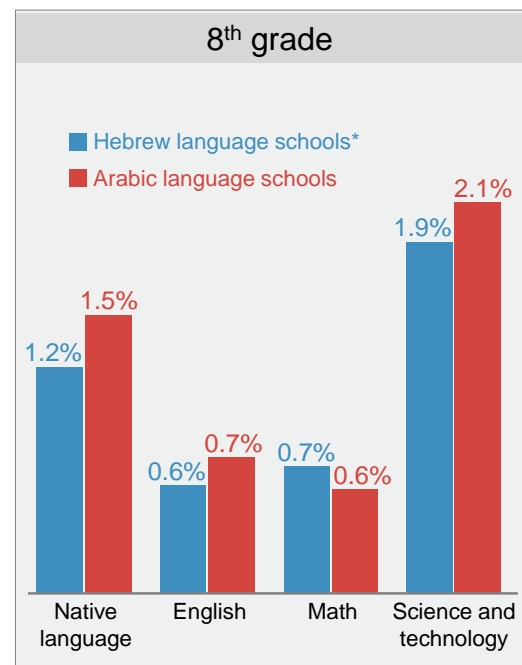
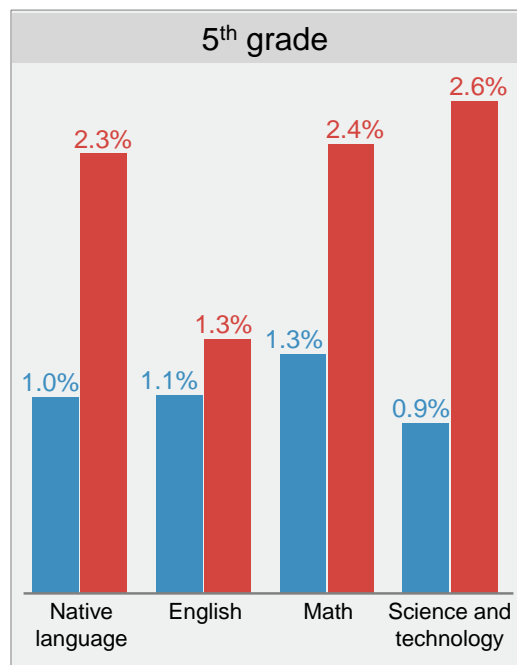
Achievement in core curriculum subjects has improved in recent years. That said, the achievements of Israeli children are still at the bottom of the developed world while educational gaps are the highest. In Israel's increasingly segmented educational framework there is a very large and rapidly growing share of children receiving what can only be described as a developing world education – with all of the implications that this has for the country's future.

## Overall improvements in basic education

During Israel's first 60 years, it did not employ any measurement tools in the education system to show changes in pupil achievement over time. The first such measure that was calibrated over time was the Meitzav exam in 2007-2008 given in a number of core subjects. Even in these tests, many of the country's children – primarily, Haredi (ultra-Orthodox Jews) children – did not participate. Furthermore, Israel has never set standards for each grade level, so it is still not possible to know what percentage of pupils have learned what they are expected to each year.

Despite these deficiencies, and many others in the actual administration of the Meitzav exams, the results do indicate improvement since 2008 among both Hebrew speaking and Arabic speaking pupils, with the greatest improvements among 5th grade Arab speakers.

### AVERAGE ANNUAL CHANGE IN MEITZAV EXAM SCORES, 2008-2013



\* Not including Haredi pupils

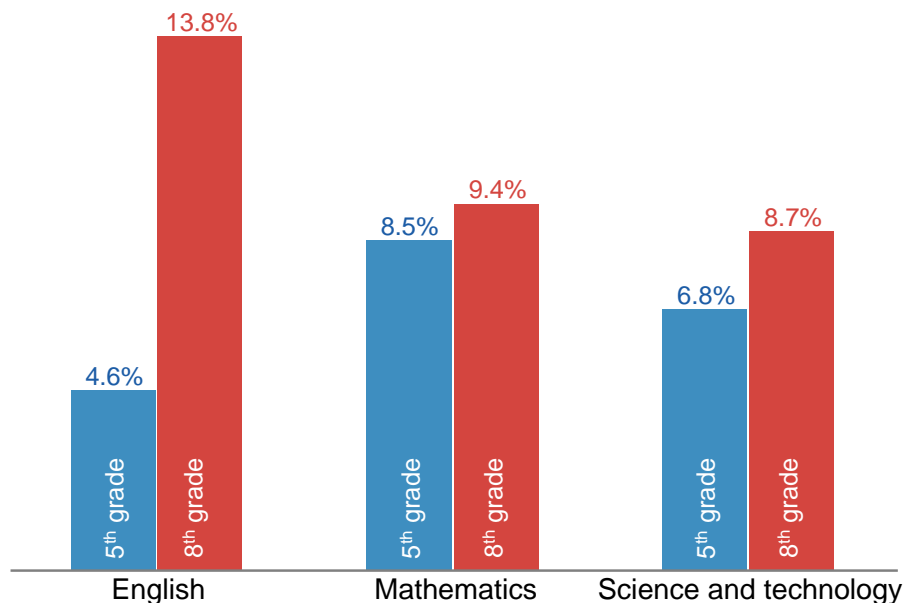
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: National Authority for Educational Measurement and Evaluation

## Large gaps in achievement between Hebrew and Arabic speakers

In light of the very large educational achievement gaps that exist between Hebrew and Arabic language speaking children in Israel, the fact that Arab Israeli children exhibited the biggest gains in educational achievement is an important accomplishment. However, the remaining gaps between the two groups are still large.

GAPS BETWEEN HEBREW\* AND ARABIC SPEAKERS IN MEITZAV EXAMS, 2013



\* Not including Haredi pupils

Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: National Authority for Educational Measurement and Evaluation

## Educational achievements are low relative to the developed world

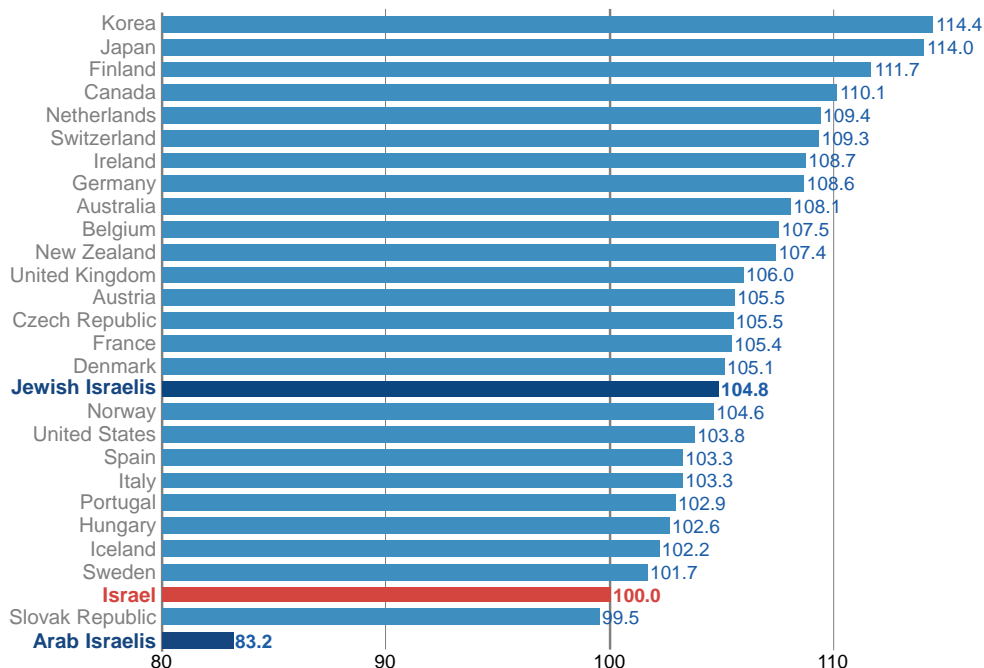
Average nationwide scores on international exams – excluding Haredi children who do not study core curriculum subjects and do not take these tests – are among the lowest in the developed world.

The education provided to Arab Israeli children yields achievements in math, science and reading that are below those of children in developing world countries such as Jordan, Tunisia and Malaysia.

Educational achievement in basic subjects among the remaining Israeli children – non-Haredi Jews – has risen to just under the level of the median developed country.

### COUNTRY AVERAGE IN PISA\* EXAMS IN 25 OECD COUNTRIES

Index: Israel=100 (not including Haredim\*\*)



\* National average in math, science and reading exams

\*\*Haredim are ultra-Orthodox Jews

Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: PISA, National Authority for Educational Measurement and Evaluation

## Educational inequality is consistently the highest in the developed world

To the extent that education serves as a springboard to the labor market, then inequality in education provides some indication of the kinds of income gaps that lie ahead.

In basic core curriculum subjects, the gaps between pupils within Israel's education system – even excluding Haredi children, who do not study key core curriculum subjects and do not participate in the exams – are consistently the highest in the developed world.

### ACHIEVEMENT GAPS ON CORE SUBJECTS\*

Year	Exam	Number of participants (out of 25 developed countries)	Israel's ranking
1999	TIMSS	14	First place
2000	PISA	23	First place
2003	TIMSS	14	First place
2006	PISA	25	First place
2007	TIMSS	11	First place
2009	PISA	25	First place
2011	TIMSS	11	First place
2012	PISA	25	First place

\* Standard deviations in math, science and reading achievements in 25 OECD countries and Israel; not including Haredi (ultra-Orthodox) pupils

Source: Dan Ben-David, Taub Center and Tel Aviv University

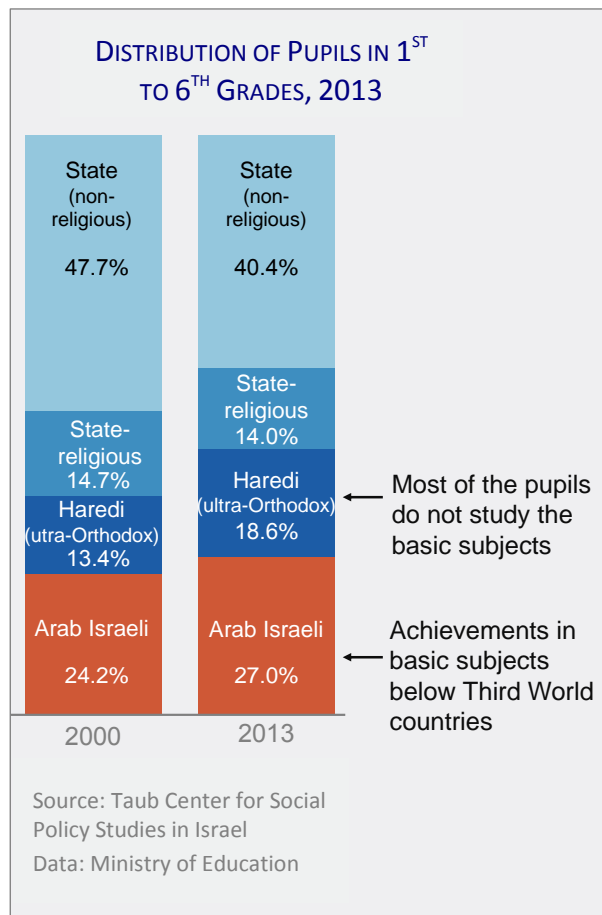
Data: PISA, TIMSS

## A large and rapidly growing share of children receive a developing world education

The educational achievements of roughly half of Israel's primary school children are below those of some developing world countries – with a large share of these children not even studying basic subjects.

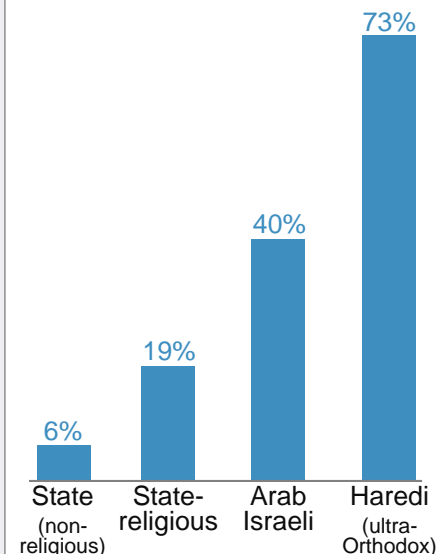
A very large portion of these are Arab Israeli and Haredi children, whose enrollment rates have increased by 40% and 73% respectively in the past 13 years alone – with a slight decline in the rate of increase in recent years. Their combined share of the total number of primary school children increased from 37.6% to 45.6% between 2000 and 2013.

Children receiving an education below developing world levels will have major problems contending with the needs of a First World economy – with all of the obvious economic implications that this entails.



## INCREASE IN ENROLLMENT OF PUPILS FROM 2000 TO 2013

1<sup>st</sup> to 6<sup>th</sup> grades



Source: Dan Ben-David, *State of the Nation Report 2010* (updated), Taub Center  
Data: Central Bureau of Statistics

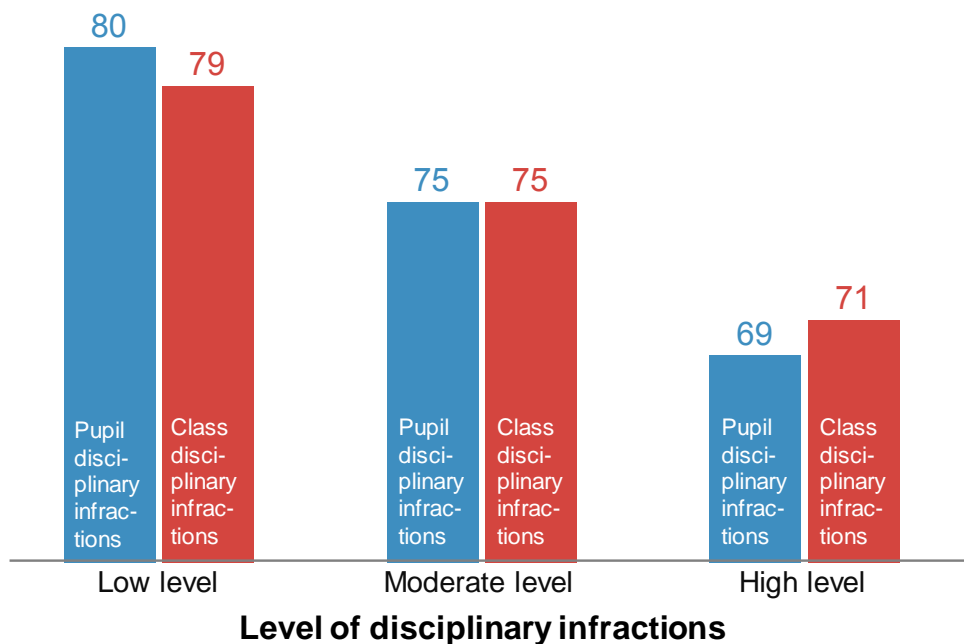
## Disciplinary issues negatively affect educational achievements

While there are questions about the core curriculum focus of studies in Israeli schools as well as the quality, training and compensation of teachers, there are also major issues related to the way that the system operates in general and the manner in which schools function in particular.

One specific issue of concern is class discipline. Especially well-behaved pupils attained grades in the nationwide Meitzav exams in Hebrew that were 11 points above pupils with high levels of disciplinary infractions.

Pupils in relatively disciplined classes scored 8.4 points higher than pupils in relatively undisciplined classes.

MEITZAV SCORE IN HEBREW BY DISCIPLINARY LEVEL\*, 2009



\* Differences in disciplinary infractions were measured in terms of standard deviations, starting from two standard deviations below the average (of the pupil or the class) up to two standard deviations above the average.

Source: Yossi Shavit and Carmel Blank, Taub Center

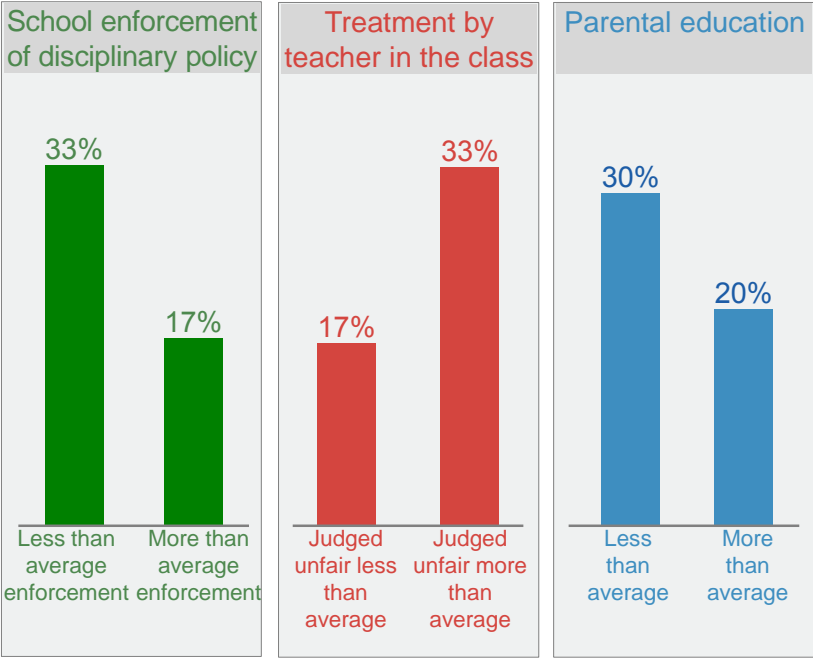
Data: National Authority for Educational Measurement and Evaluation



# School discipline strongly affected by enforcement

Relatively strict enforcement of discipline reduces the share of undisciplined classes to roughly half the rate of that found in schools with less strict enforcement. Two factors found to play a major role in the percentage of undisciplined classes are the behavior of teachers and parents' level of education. The rate of pupil disciplinary infractions was twice as high in classes where teachers' treatment of pupils was perceived as unfair.

PERCENTAGE OF UNDISCIPLINED CLASSES\*  
out of all classes in the study



\* Classes in the upper quartile in terms of disciplinary infractions

Source: Yossi Shavit and Carmel Blank, Taub Center

Data: National Authority for Educational Measurement and Evaluation

## Father's occupational prestige related to children's educational achievement

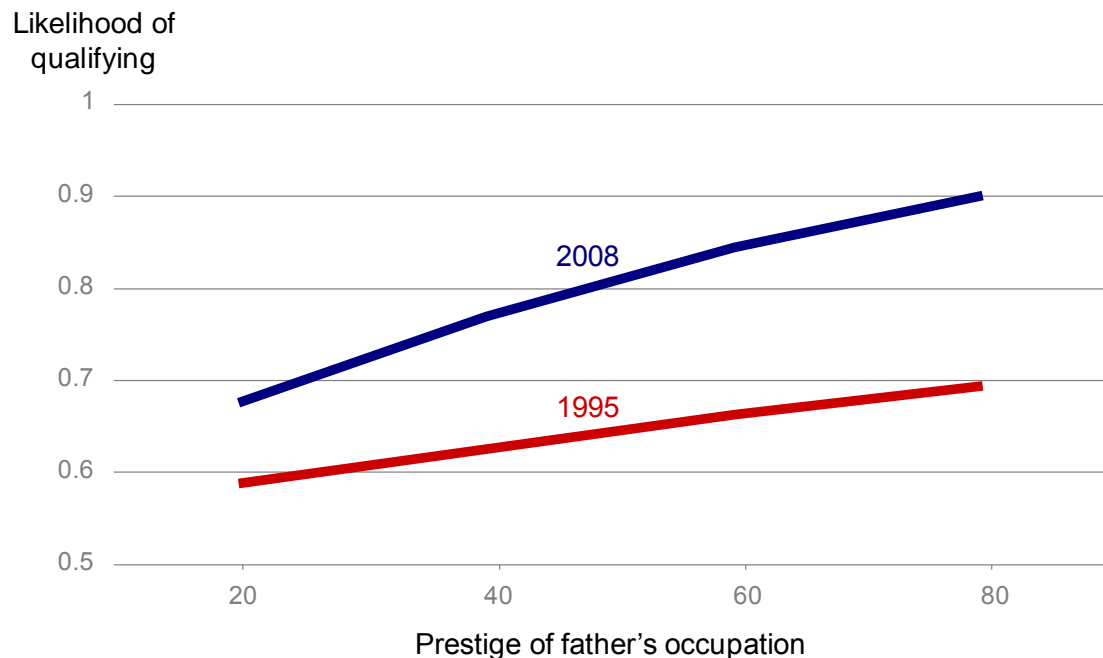
Just as the educational attainments of parents are strongly correlated to the educational achievements of their children, the prestige of a father's occupation is strongly related to the likelihood of a secondary school pupil completing high school and earning a bagrut\* (matriculation) certificate. This link existed in 1995 and grew a bit stronger in 2008, alongside a general increase in the attainment of a bagrut certificate regardless of the father's occupation.

There is also a strong relationship between the prestige of a father's occupation and children's attainment of an academic degree.

The implication of these links is that inequality grew between generations over time.

### LIKELIHOOD OF A SECONDARY SCHOOL PUPIL EARNING A BAGRUT\* CERTIFICATE

by prestige of father's occupation\*\*, 1995 and 2008



\* Bagrut or matriculation examinations assess knowledge on subjects studied in high school. It is often compared to the New York State Regents' Exams.

\*\* According to the ISEI scale, range 1-100

Source: Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics

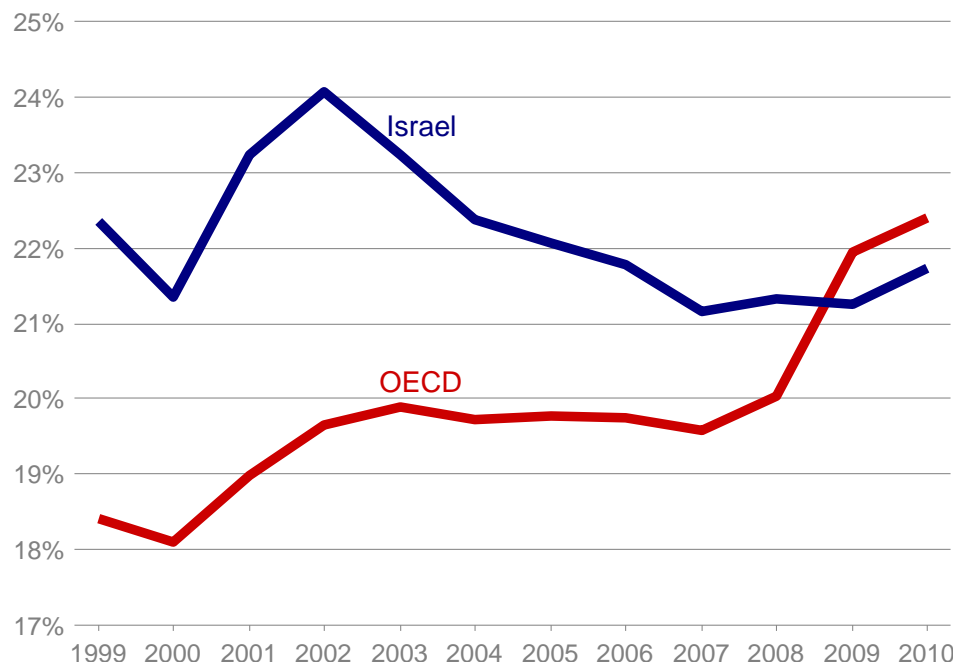
## Public spending on primary education has fallen to below OECD levels

Israel spent \$5,758 per pupil (national expenditure adjusted by purchasing power parities) on its primary education system in 2010, compared to an average of \$7,974 in the OECD countries.

While this is the popular way of comparing education expenditures, it can be misleading. Over 90% of the education spending in Israel and in other countries is on wages, and these reflect a nation's living standards. Countries with higher living standards invariably have higher education expenditures per pupil. A more representative way to examine such spending is to normalize expenditures per pupil by dividing these by GDP per capita, the common measure for living standards.

While the OECD countries have been steadily increasing their public expenditures per pupil – as a share of GDP per capita – Israel, which used to spend more than the OECD, has been reducing its expenditures to below OECD levels. A comprehensive wage bargaining agreement with teachers led to a turnaround in recent years.

PRIMARY EDUCATION EXPENDITURE PER PUPIL\* RELATIVE TO GDP  
PER CAPITA, 1999-2010



\* Full-time equivalents

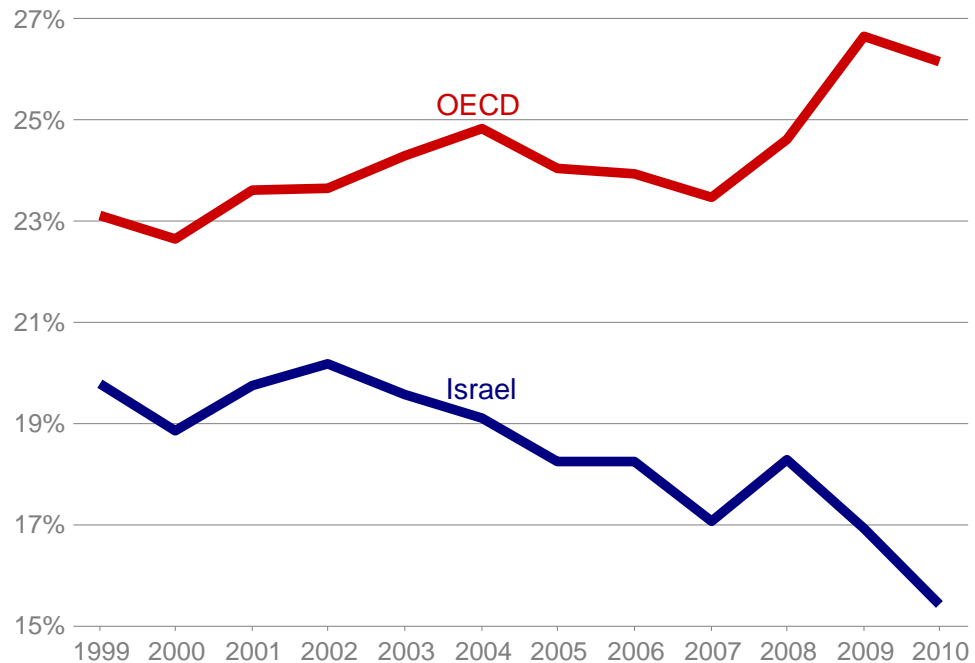
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: World Bank

## Growing gap in public spending on secondary schools between OECD and Israel

Public spending per pupil on secondary education – relative to living standards – has been steadily growing in the OECD over the past decade. Spending in Israel has been both lower and declining during this same period.

PUBLIC EXPENDITURE IN SECONDARY EDUCATION PER PUPIL RELATIVE TO GDP PER CAPITA, 1999-2010



Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: World Bank

# HIGHER EDUCATION

While the demand by Israelis for higher education has substantially increased over the past several decades, the country's national priorities have moved in other directions. This is evidenced by the sharp drop in the number of senior faculty members per capita as well as by the smaller per student budgets allocated to higher education.

An increasing number of Israelis have been choosing to continue their studies towards a higher education. Most of this increase has been in the many non-research colleges that have opened during the past two decades.

More Haredim (ultra-Orthodox Jews) are also studying towards a higher education. But contrary to conventional wisdom, the share of academics among the younger Haredi population is actually lower than in the older Haredi population. This is because of the massive increase in the overall Haredi population – which has more than offset their increasing numbers in academia.

## A sharp turnaround in Israel's national priorities - away from its research universities

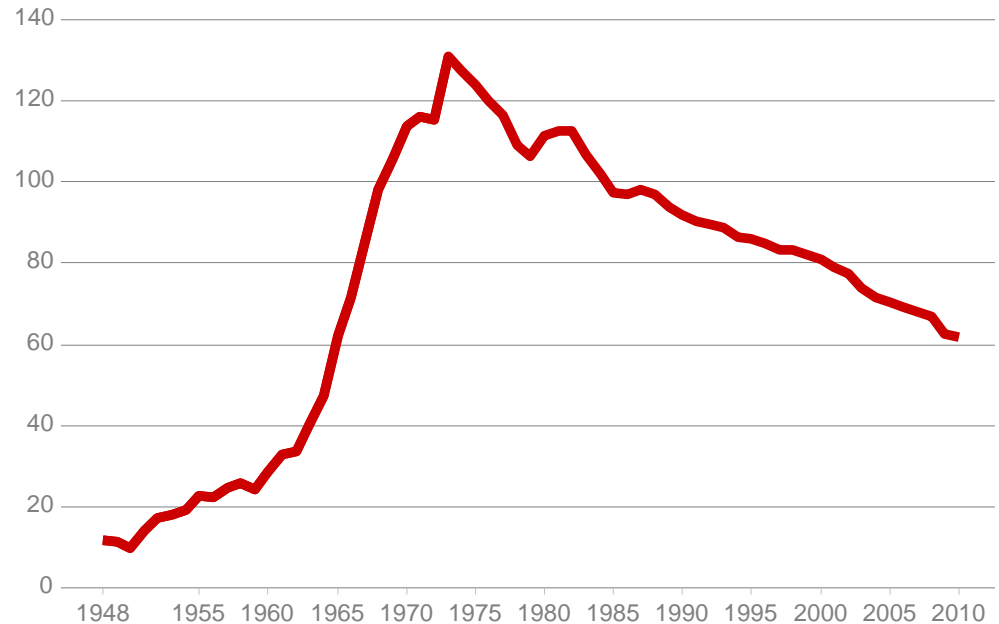
By the end of the quarter century between independence in 1948 and the Yom Kippur War in 1973, Israel had 7 major research universities. The number of senior faculty members per capita rose to American levels.

The investments made in the country's research universities during this period enabled Israel to capitalize on the high tech revolution that subsequently followed.

Since 1973, the number of senior faculty per capita in the U.S. has risen while the number in Israel has declined by 53%. Although the number of university students has risen 2.5-fold, not one additional research university was created (the only exception being Ariel, with political rather than academic motives leading to its declaration as a university).

### SENIOR RESEARCH FACULTY IN UNIVERSITIES\*

senior research faculty per 100,000 people, 1948-2010



\* Senior research faculty includes full professors, associate professors, senior lecturers, and lecturers

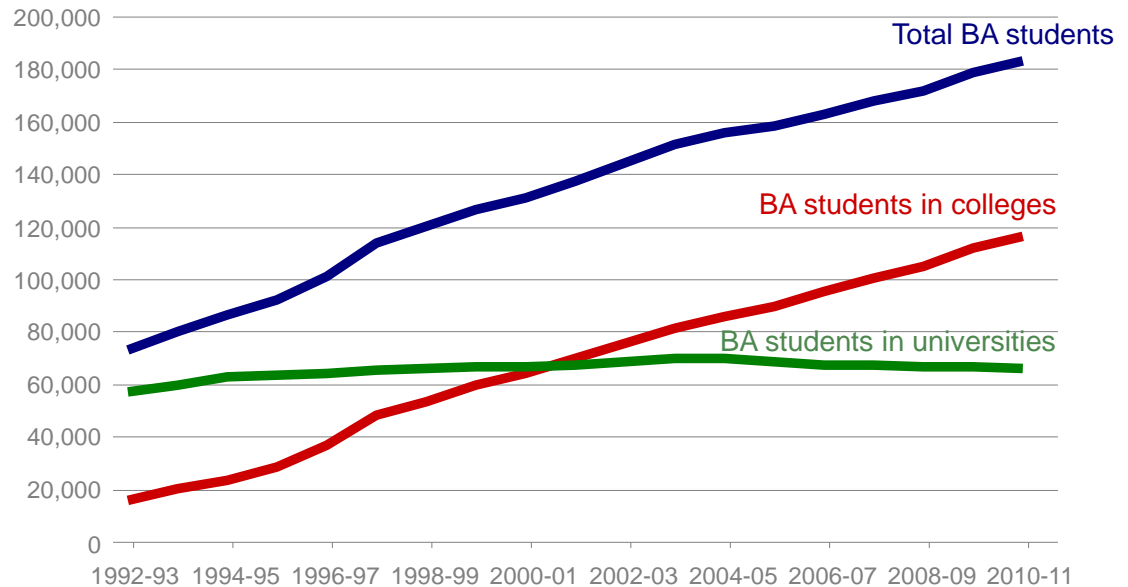
Source: Dan Ben-David, *Brain Drained* (updated), 2008

Data: Central Bureau of Statistics, Council for Higher Education Planning and Budgeting Committee

## Non-research colleges are primary source of substantial increase in students

The creation of academic non-research colleges in the 1990s led to a marked rise in the number of undergraduate students in Israel over the past two decades. While there were negligible changes in the number of undergraduate students in the research universities, the number of undergraduate students in colleges has risen steadily – from less than 20,000 in the early 1990s to close to 120,000 this decade.

### BACHELOR'S DEGREE STUDENTS



Source: Taub Center for Social Policy Studies in Israel

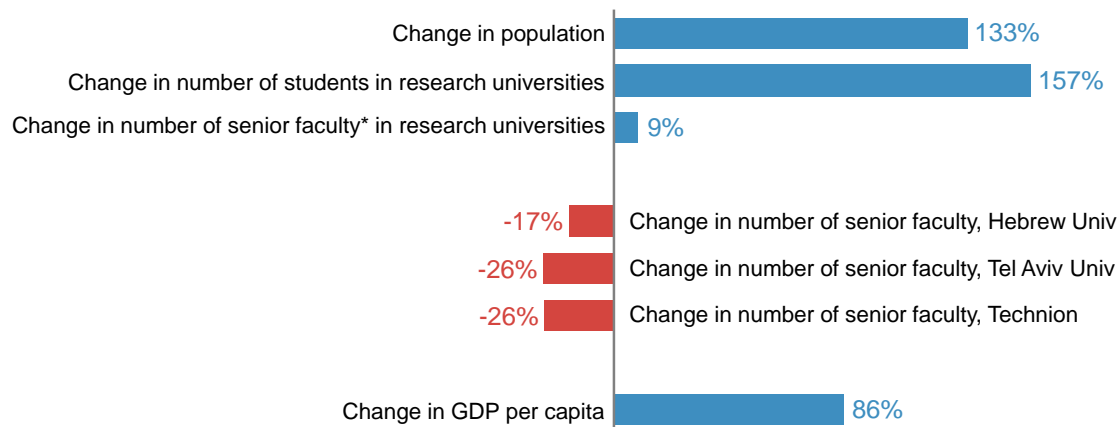
Data: Council for Higher Education

## Sharp rise in students versus small increase in senior faculty

Israel's population has increased by 133% over the past 4 decades. During this period, the student population in research universities grew by 157%, while the number of senior faculty in these universities rose by just 9%. Enrollment in the entire higher education system – including non-research colleges – rose by 428% while the number of senior academic faculty in all of the colleges and universities rose by just 40%.

The size of the academic faculty in Israel's two flagship universities, the Hebrew University and Tel Aviv University, is smaller today than it was in the 1970s, as is the case at the Technion, Israel's leading technology university.

### CHANGES FROM 1973 TO 2010



#### Changes in all universities and colleges

428% Increase in number of students  
40% Increase in senior faculty

\* Senior research faculty includes full professors, associate professors, senior lecturers, and lecturers

Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, Council for Higher Education Planning and Budgeting Committee



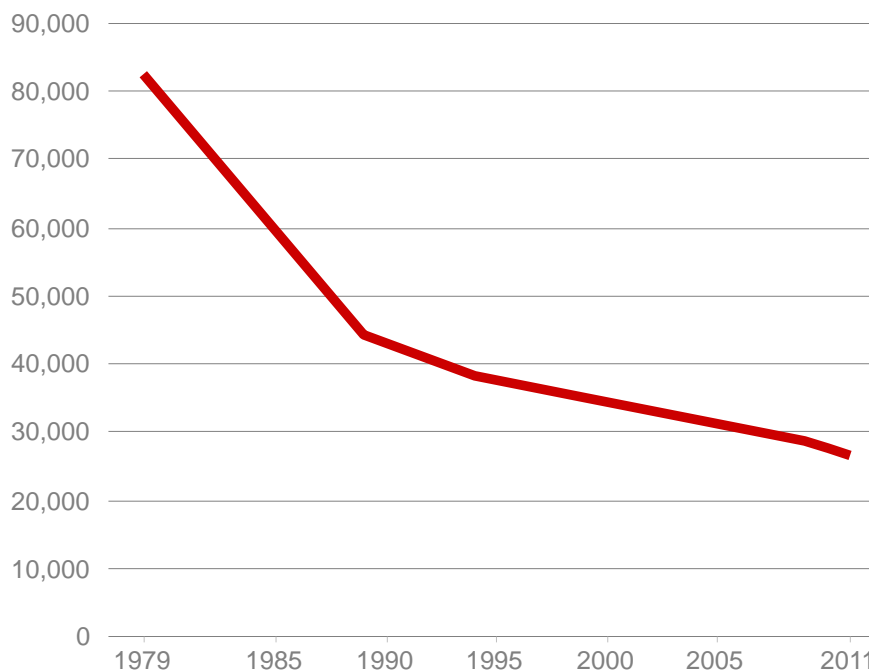
## Spending less on higher education per student

While Israel's standard of living – as measured by its GDP per capita – rose by 86% in real terms (i.e., net of inflation) since 1973, public expenditure on higher education per student fell by over two-thirds. Part of this is undoubtedly due to the creation of the considerably cheaper non-research colleges, which serves to reduce average spending per student.

Another important reason for this decline is the shift in national budgetary priorities away from higher education.

### PUBLIC EXPENDITURE PER STUDENT IN HIGHER EDUCATION, 1979-2011

current budget, in 2010 shekels\*



\* Deflated by the price index for public civilian consumption

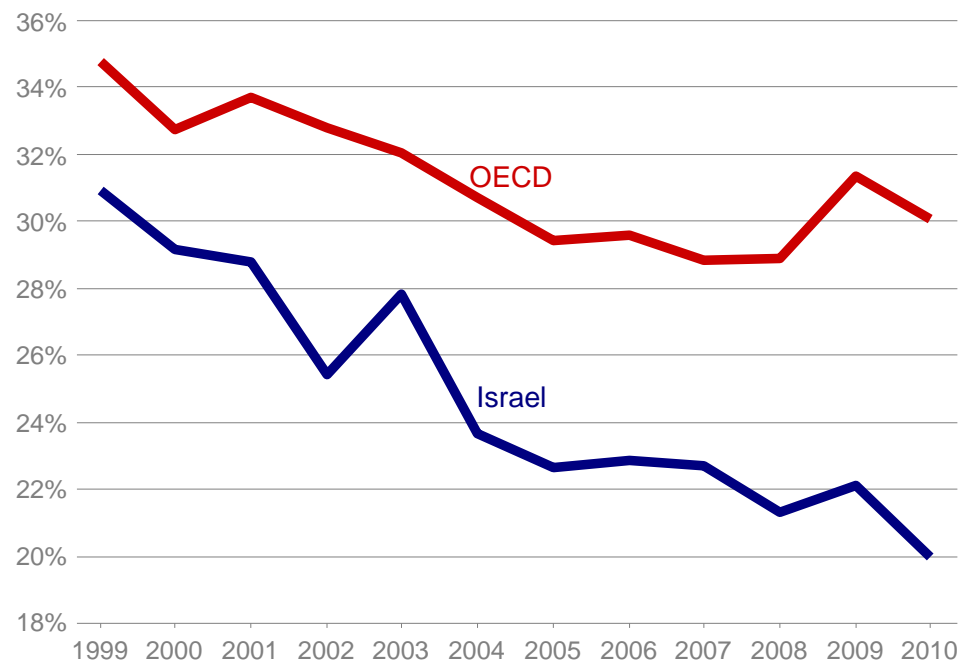
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, Ministry of Finance

## Public spending on higher education falling further and further behind the OECD

A comparison of public expenditure on higher education between Israel and the OECD – relative to national standards of living – reflects the divergence in national priorities between the developed countries and Israel.

PUBLIC EXPENDITURE IN TERTIARY EDUCATION PER PUPIL RELATIVE TO GDP PER CAPITA, 1999-2010



Source: Dan Ben-David, Taub Center and Tel Aviv University

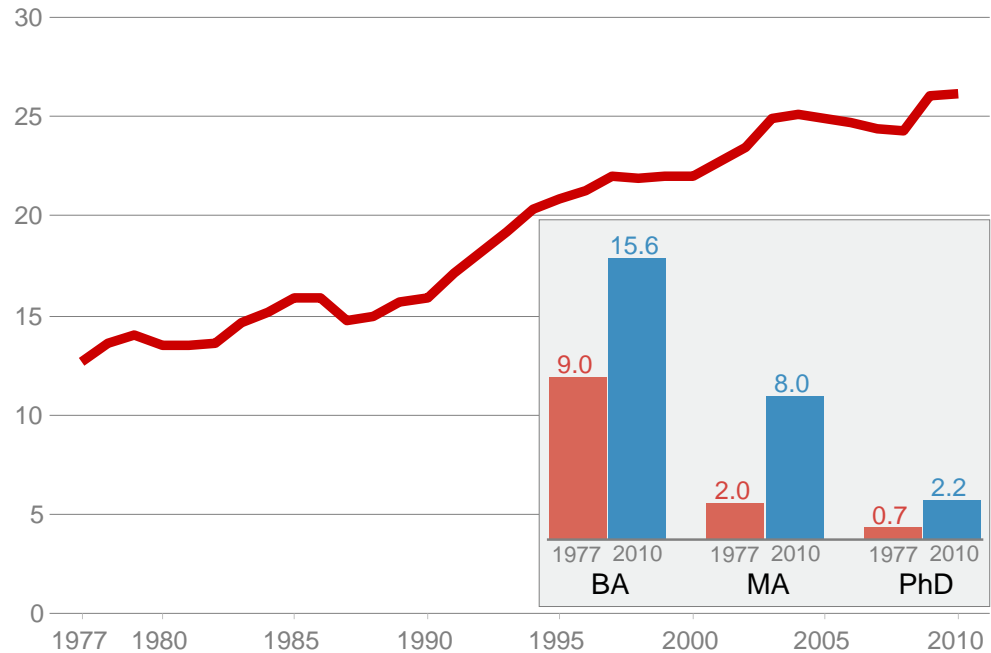
Data: World Bank

## Rising number of students per academic faculty

The importance of Israel's cutting-edge research universities is not only to push the frontiers of human knowledge, but also to impart this knowledge to future generations. That ability has steadily diminished since the 1970s.

The number of students per senior faculty member more than doubled between 1977 and 2010, from 12.6 students per professor to 26.1. The number of PhD students – the next generation of researchers – to professors rose from less than 1 student per faculty member to over 2 students per professor. The number of MA students to professors rose four-fold, from 2 to 8.

RATIO OF STUDENTS TO SENIOR FACULTY, 1977-2010



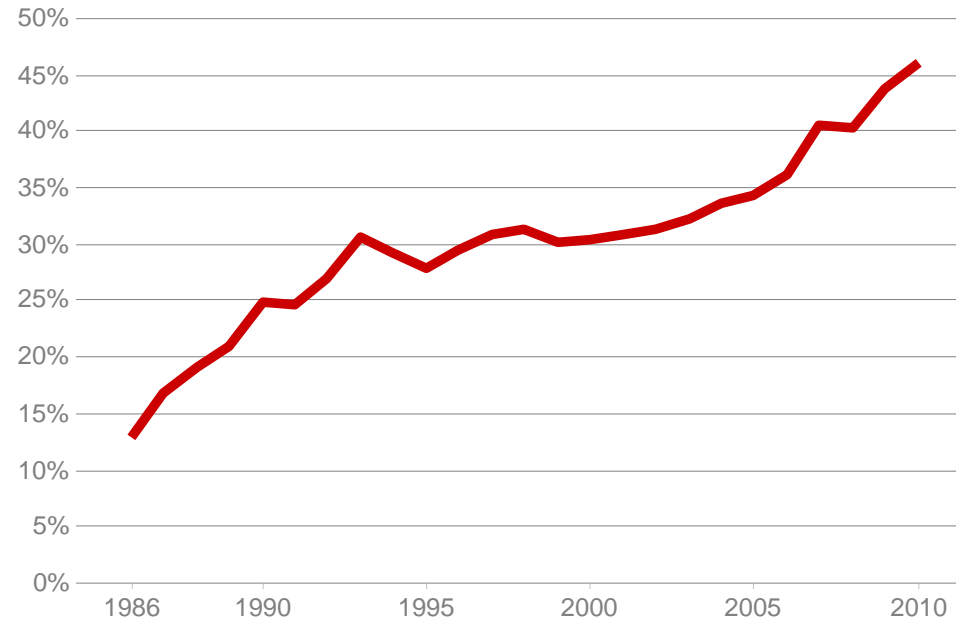
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, Council for Higher Education Planning and Budgeting Committee

## External lecturers brought in to fill the void

In the absence of sufficient research faculty positions, the research universities essentially outsourced to fill the teaching void. External lecturers were hired in increasing numbers to augment the tenured and tenure-track research faculty. The ratio of external teachers to senior research faculty rose from 13% in 1986 to 46% in 2010.

RATIO OF EXTERNAL LECTURERS TO SENIOR FACULTY IN THE UNIVERSITIES, 1986-2010



Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Council for Higher Education Planning and Budgeting Committee

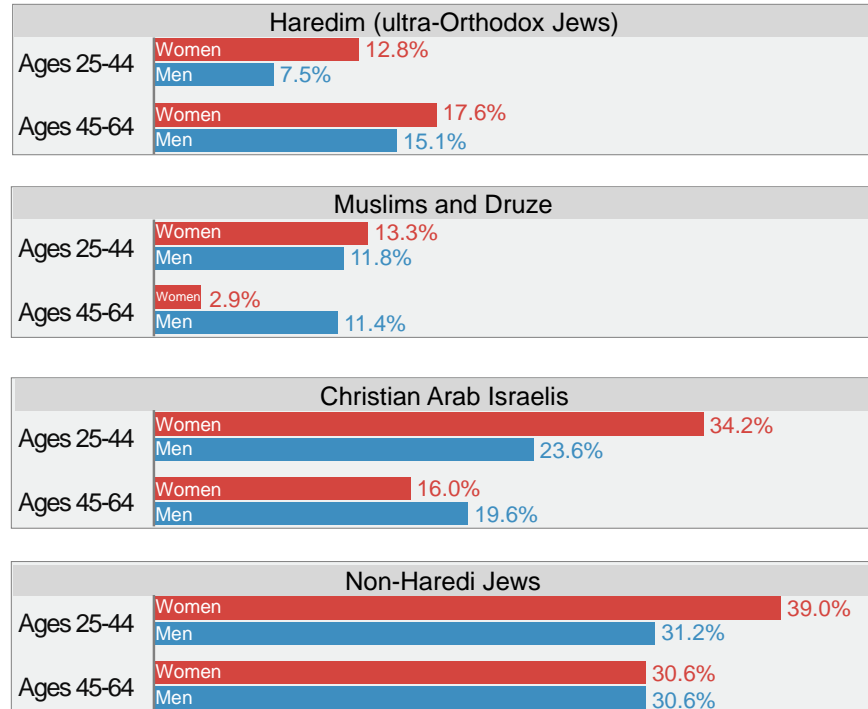
## In contrast to conventional wisdom, smaller share of Haredim attending college

The percentage of academic degree holders among both Haredi men and women is much lower than the percentage among non-Haredi Jews – with the resultant negative effect that this has on Haredi integration in the labor market and on their poverty rates.

While the share of academic degree holders is increasing for all other population groups – particularly among women – the share of younger Haredim (ages 25-44) with an academic degree is substantially lower than among their parent's generation (ages 45-64).

### SHARE OF ACADEMIC DEGREE HOLDERS, 2008

by gender, religion, and age group



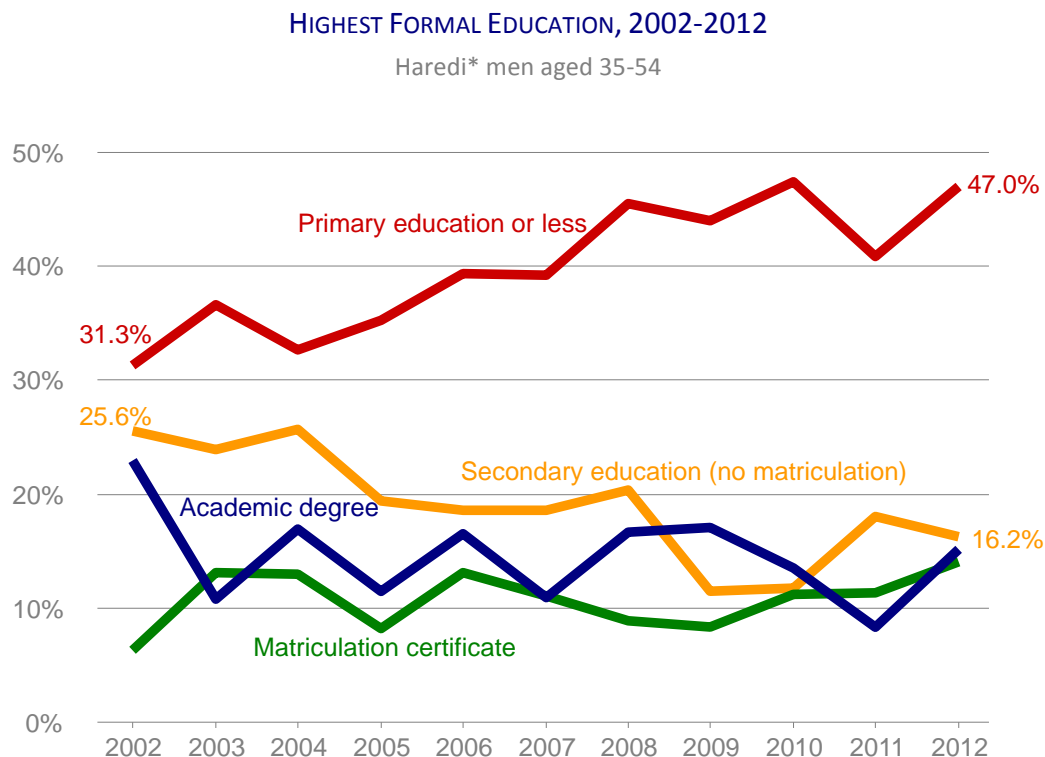
Source: Eitan Reggev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

## The largest – and fastest growing – group of Haredi men have only a primary education

There has been a sharp decline in the length of formal studies among Haredi men. The largest group of prime working-age Haredi men are those with no more than a primary school education – a group whose share of the total has been steadily growing.

In 2002, 31% of all Haredi men aged 35-54 had at most a primary education. Within a decade, this share jumped to 47%. The reason for the substantial decline in formal education has been a steady transition to religious studies, at the expense of secondary school and academic studies.



\* Haredi are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

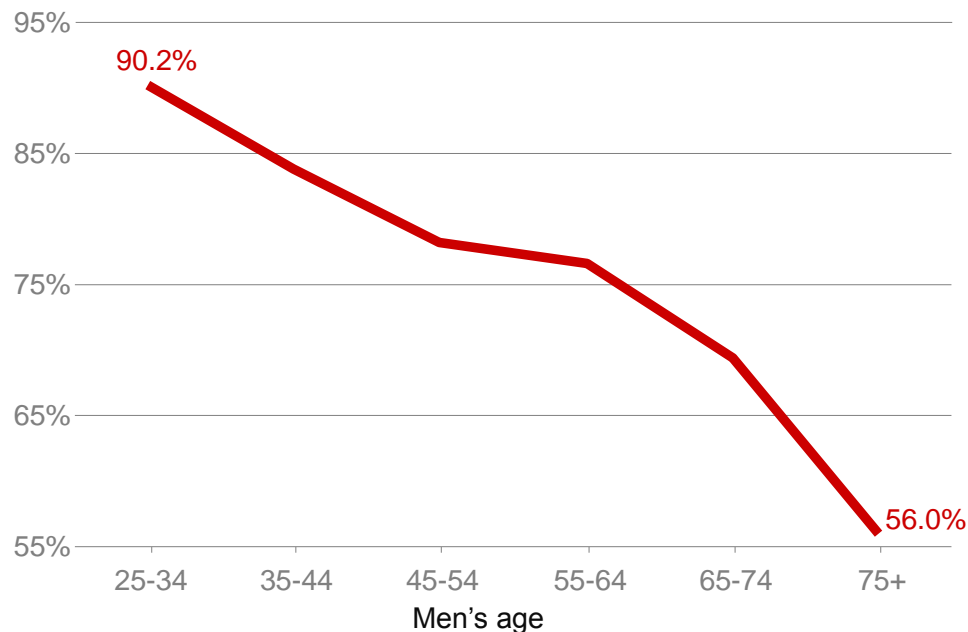
Data: Central Bureau of Statistics, *Social Survey*

## Steadily larger shares of younger Haredi men studying in yeshivas

While an ever decreasing share of Haredi men are receiving a formal education, there has been a steady rise in the share of Haredi men who have studied in a great yeshiva (religious studies for men 18 and over including kollels for married men).

The share of Haredi men studying at a great yeshiva is inversely related to age, rising from 56% among Haredi men aged 75 or older to 90% of Haredi men aged 25-34.

PERCENT OF HAREDI\* MEN WHO ARE STUDYING OR HAVE STUDIED  
IN A GREAT YESHIVA BY AGE GROUP, 2008



\* Haredi are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

# LABOR PRODUCTIVITY

Productivity is a key element to increasing economic growth in the steady state and to increasing incomes and wages. Israel's labor productivity is among the lowest in the developed world – and it has been falling further and further behind for decades. The low labor productivity is not just at the national average level but is also widely prevalent throughout Israel's business sectors. The widespread nature of this problem suggests that it is due to nationwide issues including poor educational infrastructure, inadequate physical capital infrastructure, and heavy bureaucratic infrastructure. A host of additional issues range from too little competition to a flooding of the country's labor market – which is already inundated by large numbers of poorly educated and unskilled citizens – with hundreds of thousands of foreign workers with similar characteristics.



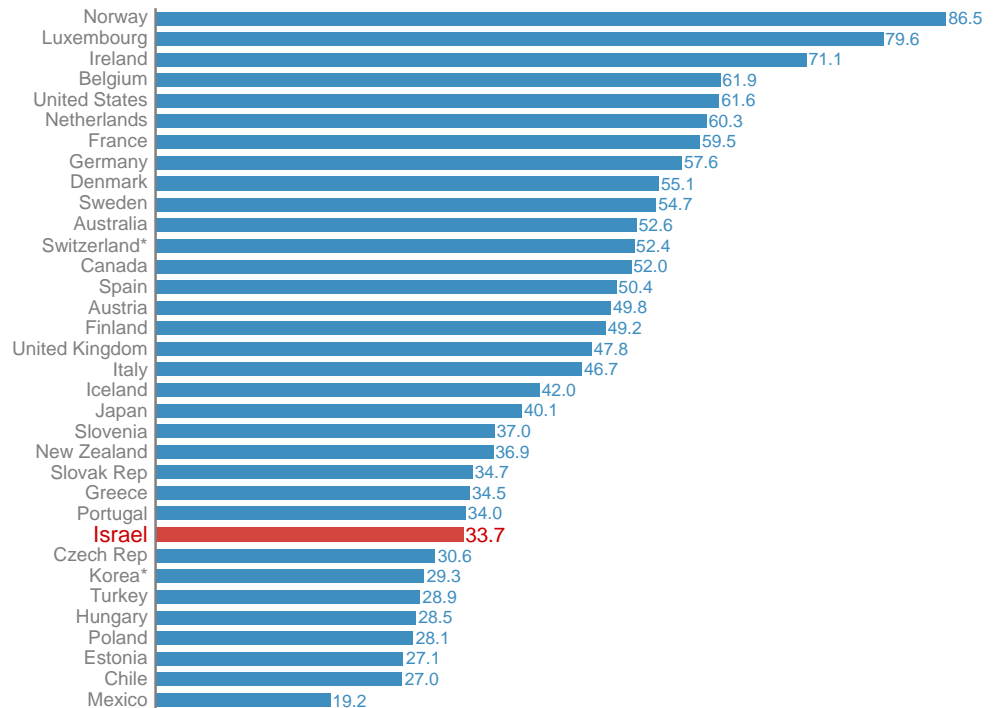
## Labor productivity in Israel among the lowest in the developed world

Productivity is the basis for steady economic growth over the long run. An increase in labor productivity, defined as GDP per hour worked, is also a necessary – though insufficient – condition for wages to rise.

Although Israel is home to some of the world's leading universities and cutting-edge high tech firms, the country's labor productivity is among the lowest in the developed world.

### GDP PER WORK-HOUR IN 34 OECD COUNTRIES, 2012

in current PPP-adjusted dollars



\* Data for 2011

Source: Dan Ben-David, *State of the Nation Report 2011-2012* (updated), Taub Center

Data: OECD

## Gap in labor productivity between G7 and Israel has been rising for decades

Israel's labor productivity is not only low, it has been falling steadily behind the world's leading economies, the G7 countries, in relative terms. A productivity gap has been growing over the past four decades between the G7 and Israel – with potentially negative implications for Israel's future ability to keep its brightest minds at home.



Source: Dan Ben-David, *State of the Nation Report 2009* (updated), Taub Center  
Data: Central Bureau of Statistics, Bank of Israel, OECD

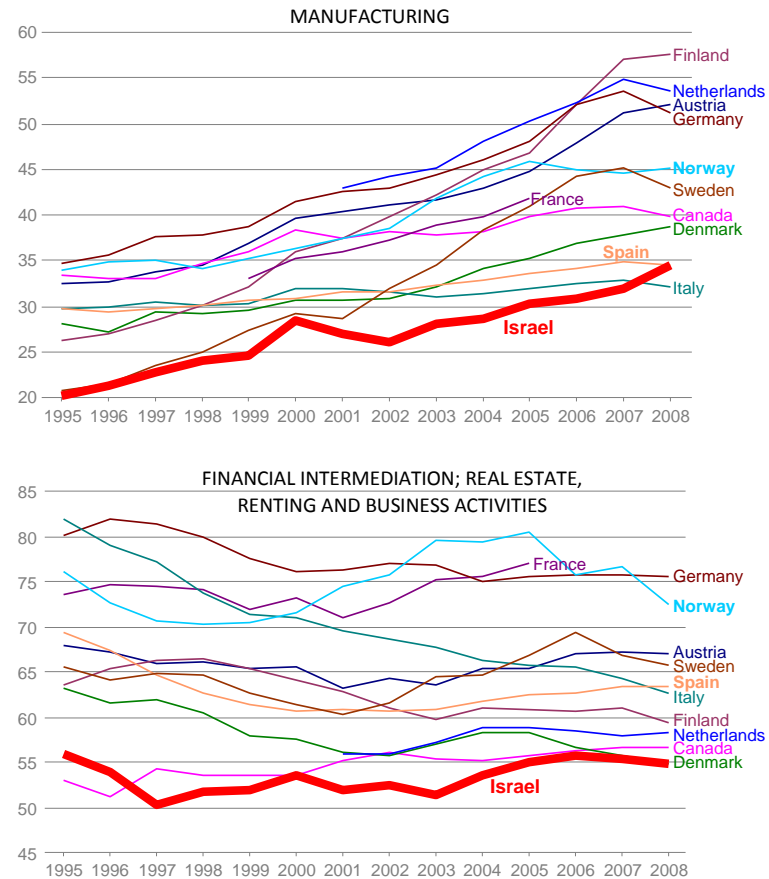
## Low labor productivity across Israeli business sectors

As comparisons with OECD countries of labor productivity across various parts of Israel's business sector indicate, low labor productivity is a nationwide phenomenon.

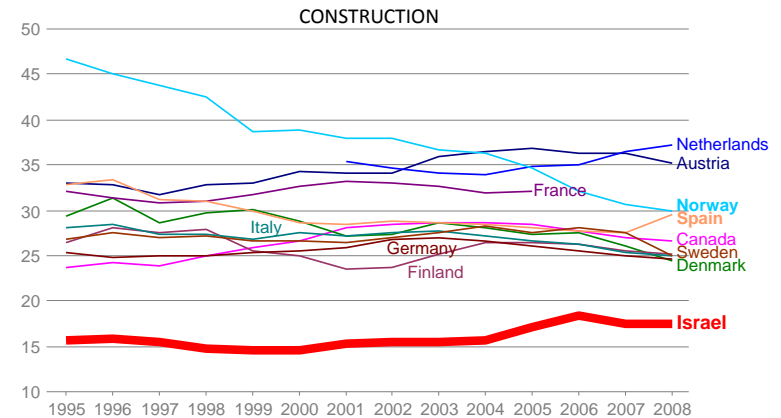
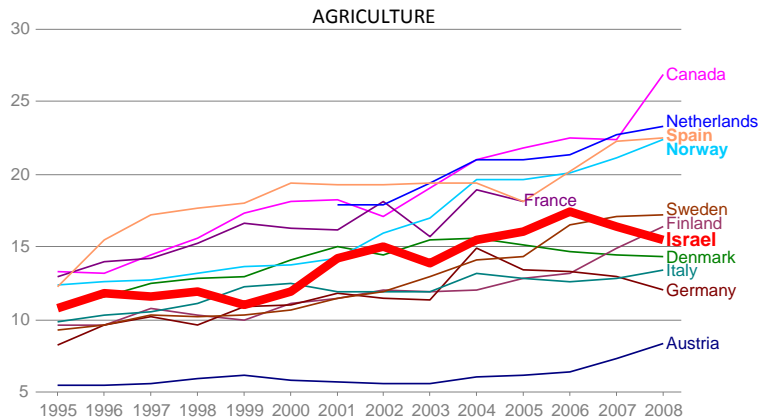
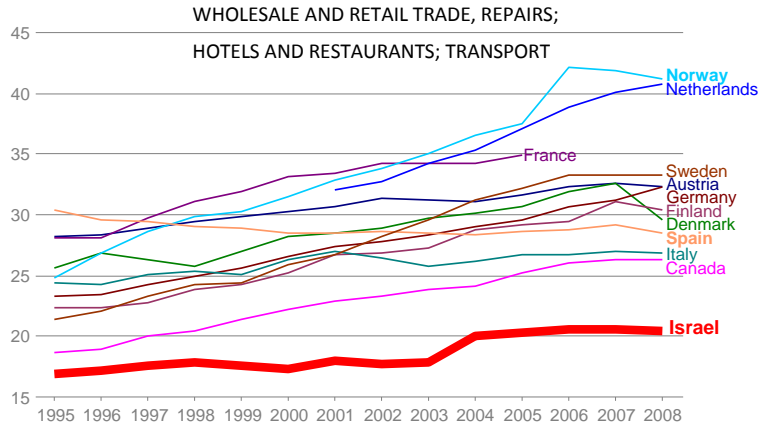
Average labor productivity in the OECD is 16% greater than in Israel. In manufacturing, the gap increases to 30% while in wholesale and retail trade, and in construction, gaps between the OECD and Israel rise to roughly 60%. In agriculture, Israel is the most similar to the OECD, although this is a branch that is characterized by relatively low productivity relative to other branches.

### LABOR PRODUCTIVITY IN ISRAEL AND OECD, 1995-2008

GDP per work-hour in constant 2005 dollars\*



(CONTINUED)



\* Conversion to dollars using purchasing power parities

Source: Dan Ben-David, Taub Center and Tel Aviv University

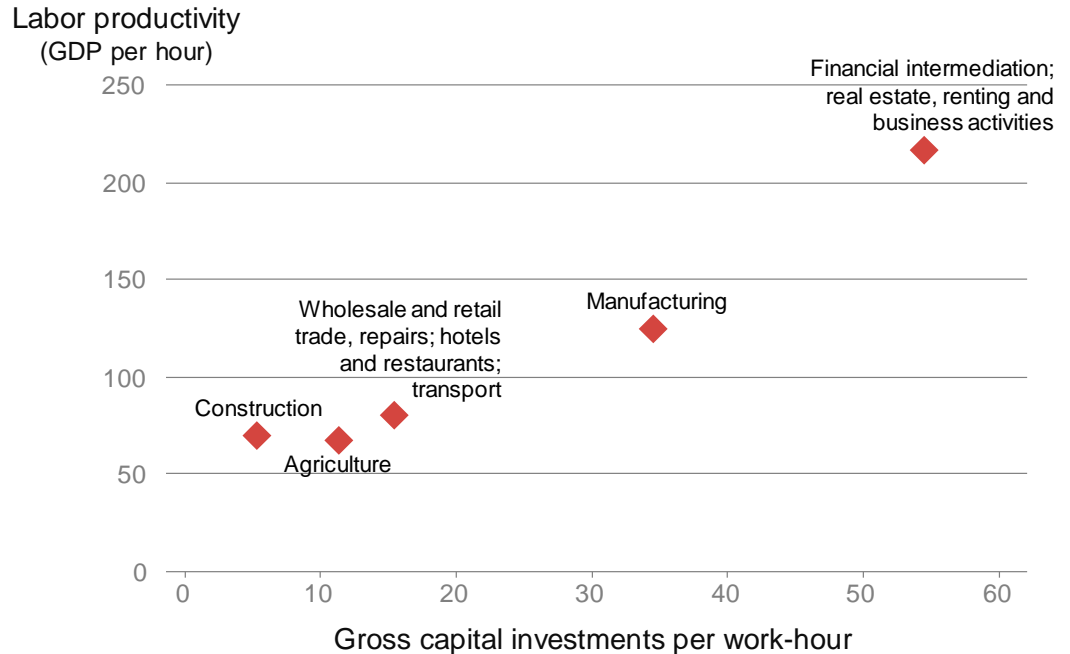
Data: Central Bureau of Statistics, OECD

## Low capital investments – low productivity

Labor productivity and capital investments are positively related. With Israel's capital formation at the low end of the OECD, this serves as an important factor in explaining Israel's low productivity.

### CAPITAL INVESTMENTS AND LABOR PRODUCTIVITY IN 30 OECD COUNTRIES

current PPP-adjusted dollars, 2011



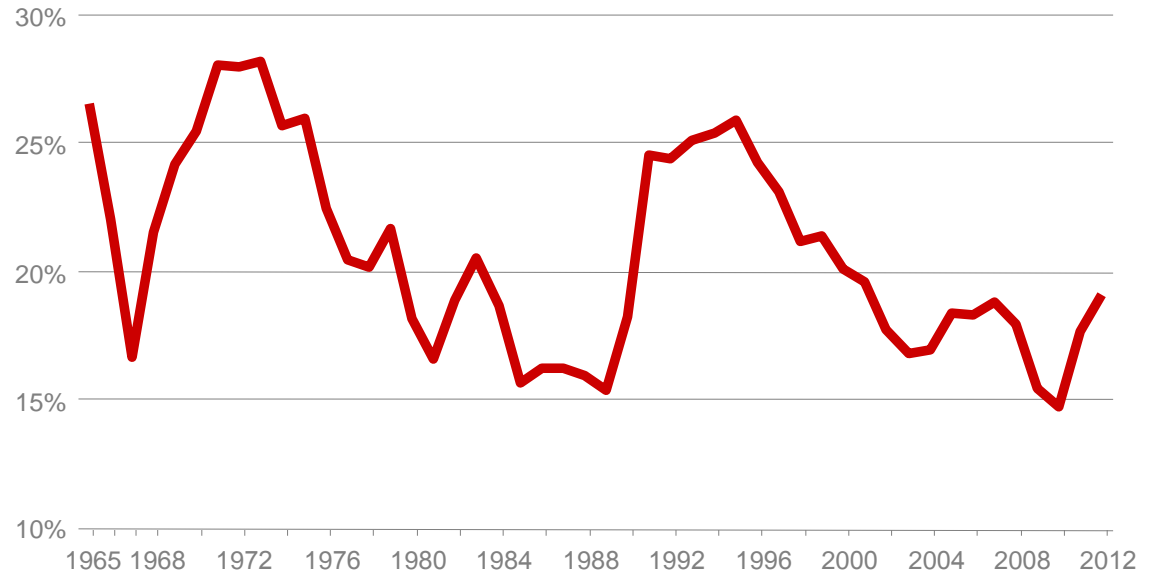
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: OECD, World Bank

## Investment has declined over the decades

Gross domestic investment (on equipment, machinery, buildings, etc.) fell from 28% of GDP in the early 1970s to under 20% in the early 2000s, with only a slight rise in recent years.

GROSS DOMESTIC INVESTMENT  
as percent of GDP, 1965-2012



Source: Eran Yashiv and Daniel Premisler, Taub Center  
Data: Central Bureau of Statistics

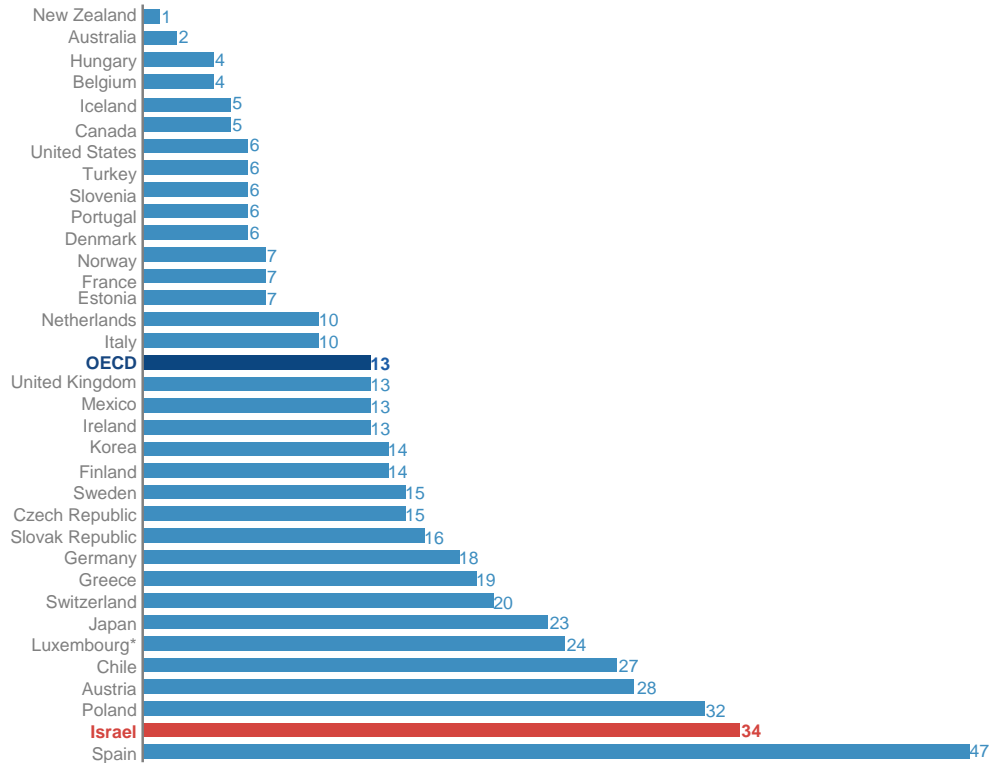
## Heavy bureaucracy not conducive to productivity

Productivity in Israel is also constrained by a cumbersome governmental bureaucracy that diverts resources away from production. One example is that an average of 34 days is needed to start a business in Israel, which is the second highest in the OECD, and two and a half times the OECD average of 13 days.

The country's small domestic market is concentrated in the hands of too few individuals, with too much regulation, and insufficient competition – inhibiting physical and human capital investments necessary for productivity growth. All of these factors combine to yield higher domestic prices that further reduce the viability and attractiveness of Israel's economic environment.

### NUMBER OF DAYS NEEDED TO START A BUSINESS IN 2010

in all 34 OECD countries



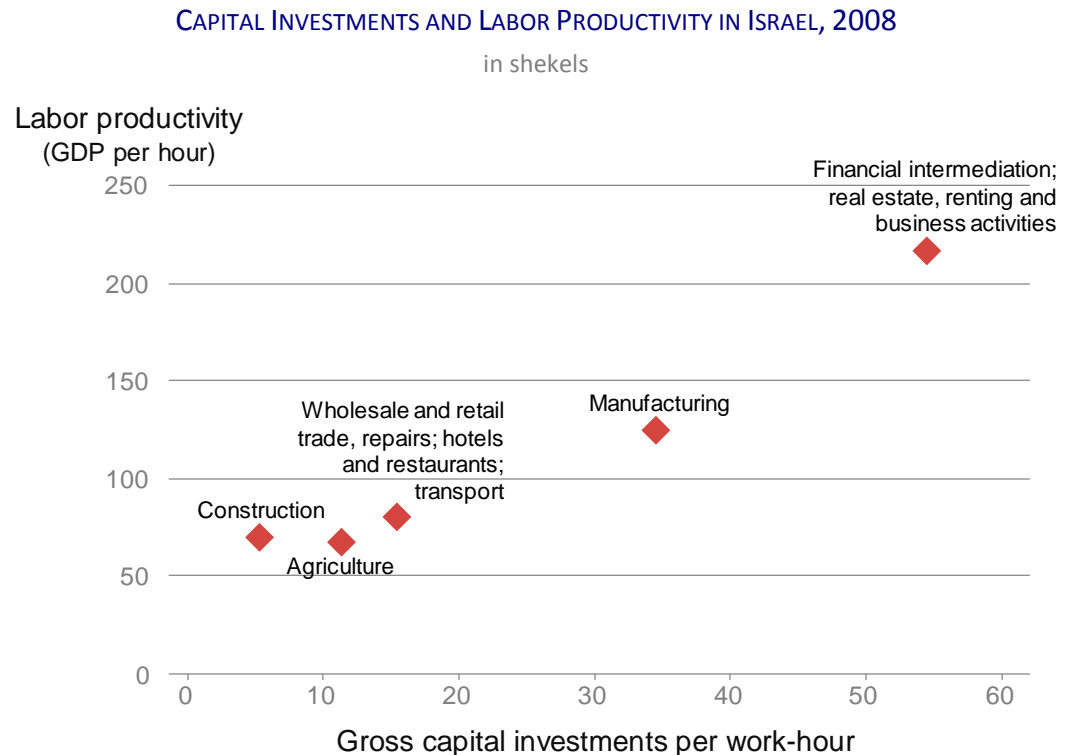
\* Data from 2009

Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: World Bank

## Greater capital investments are related to higher labor productivity across sectors

The relationship between physical capital investments and labor productivity across sectors within Israel is similar to the positive relationship found between the two variables across countries.



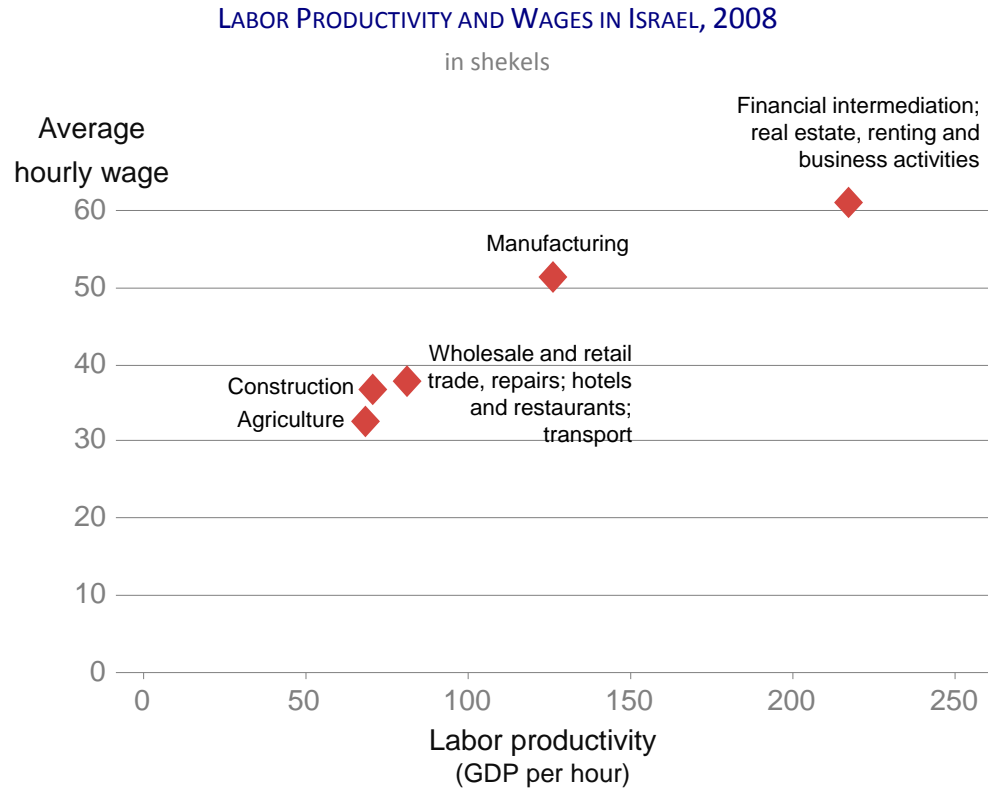
Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, OECD



## Higher labor productivity related to higher wages

The positive relationship across business sectors between labor productivity and wages is no coincidence. The more that is produced per hour by a worker, the more that worker can be compensated.



Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, OECD

# POVERTY AND INCOME INEQUALITY

Israel's poverty and income inequality rates are among the highest in the developed world – and considerably higher than they were in Israel several decades ago. These problems are particularly widespread among Haredim (ultra-Orthodox Jews) and Arab Israelis. Within the non-Haredi Jewish Israeli population the rates of poverty and income inequality are among the highest in the developed world. Furthermore, even after the wealthiest 25 percentiles and the poorest 25 percentiles of Israel's population are excluded from the sample, the gap between the top and bottom of the middle class is the highest in the developed world.

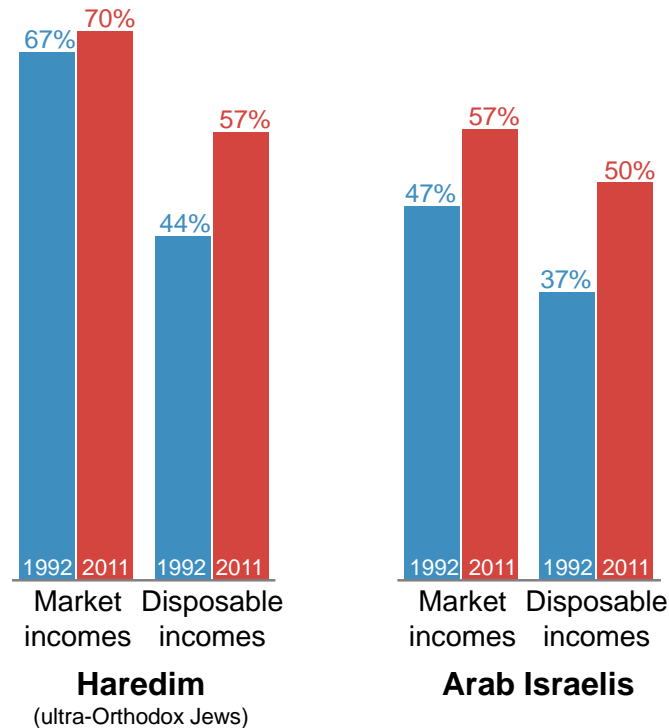
## High and rising poverty rates among Haredim and Arab Israelis

More than half of Haredi and Arab Israeli households are below the poverty line in terms of their market income (i.e., prior to receipt of welfare benefits and payment of taxes). This is a higher percentage today than two decades ago.

By definition, disposable income poverty rates (that is, after welfare benefits and taxes) among these households are lower. Nevertheless, the increase in disposable income poverty rates has been substantial and has risen to over 50% for both population groups.

### PERCENT OF HOUSEHOLDS UNDER THE POVERTY LINE\*

1992 and 2011



\* Poverty line is the same in all cases. Data does not include East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Central Bureau of Statistics

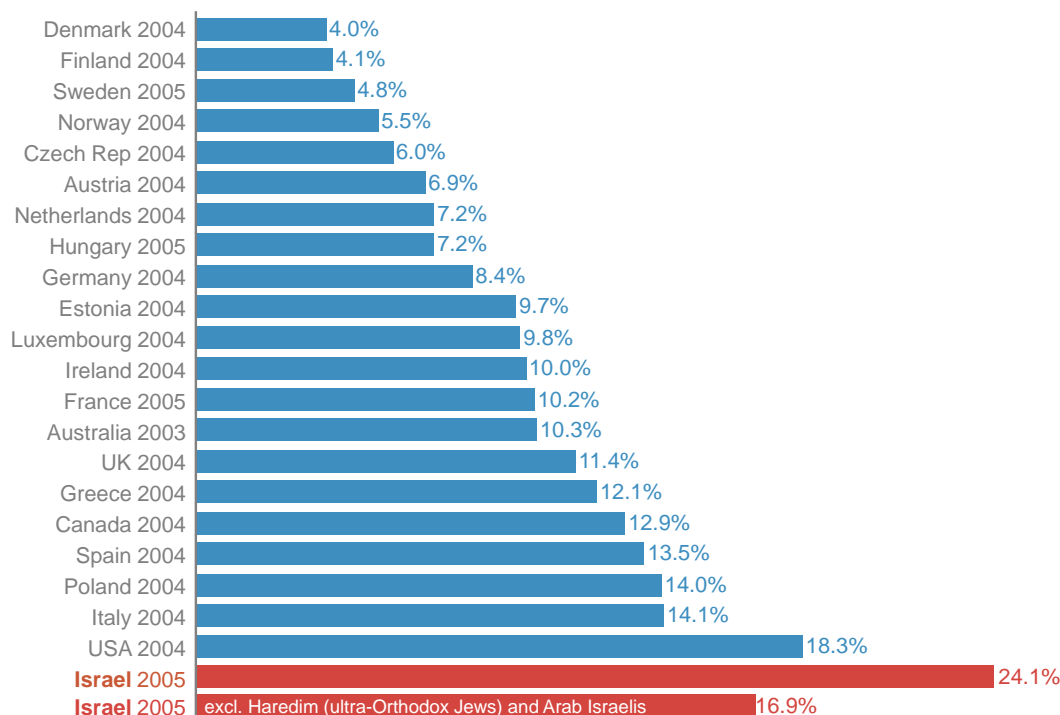
## Even after excluding Haredim and Arab Israelis, poverty rates in Israel remain among the highest in the developed world

When the focus moves to poverty among individuals, as opposed to households, disposable income poverty rates in Israel are the highest in the developed world, with almost one-quarter of the population living under the poverty line.

In contrast to conventional wisdom, exclusion of Haredim and Arab Israelis from the sample – which also requires recalculation of the poverty line – yields poverty rates among Israel's remaining Jewish population that are still very high, exceeding those in all but one (the U.S.) of the other developed countries.

### PERCENT OF INDIVIDUALS UNDER THE POVERTY LINE\*

22 OECD countries, mid-2000s



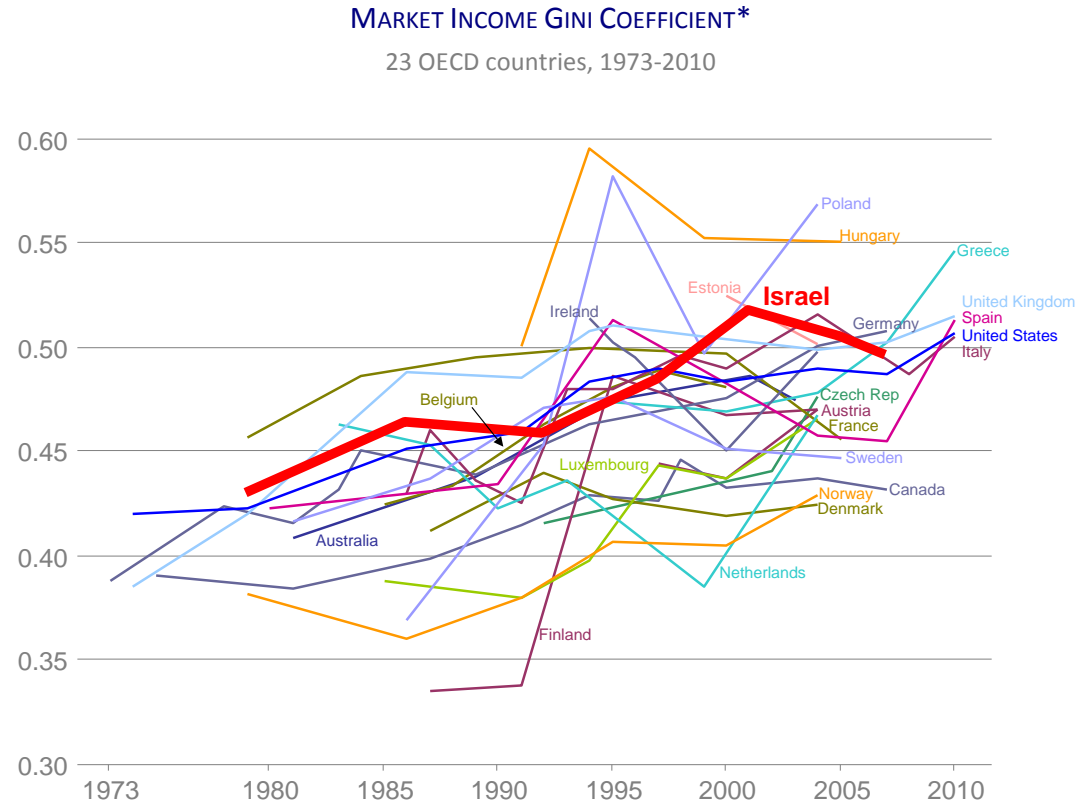
\* Calculations according to National Insurance Institute method. Israel includes East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study

## Market income inequality in Israel is rising; slight decline in recent years

Levels of inequality in market incomes (i.e., prior to receipt of welfare benefits and payment of taxes) have been rising in most of the developed world over the past several decades. Income inequality in Israel is among the highest of these countries, although it has fallen a bit in the past decade, while inequality in other countries has increased during the recent major recession.



\* Based on individual weights. Israel does not include East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study

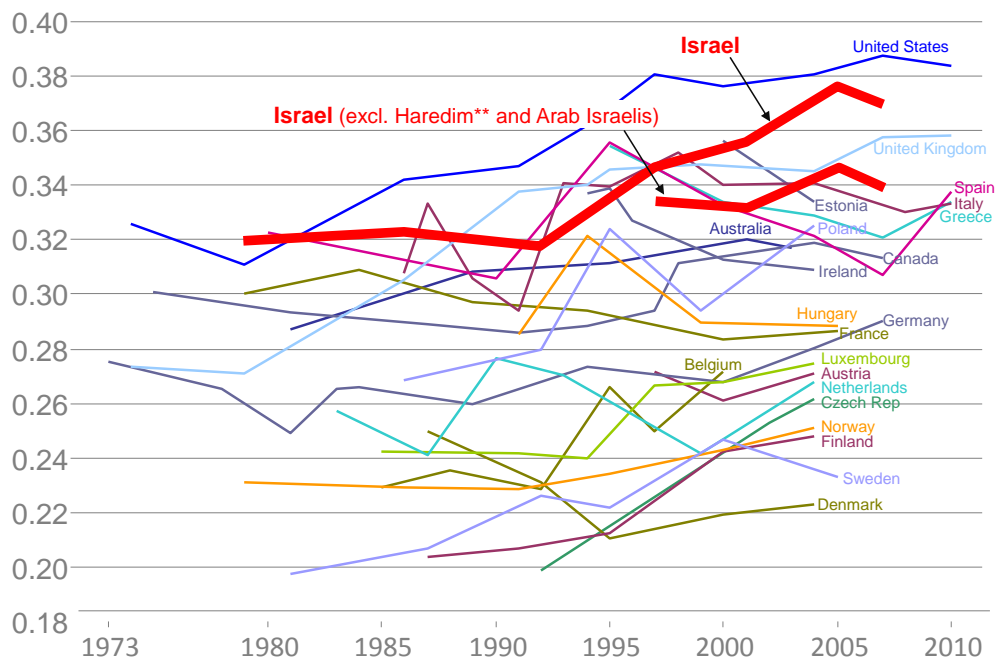
## High disposable income inequality for decades

Disposable income inequality in Israel has consistently been near the top relative to other developed countries even as inequality has risen across the OECD countries. The gaps between countries in the rate of income inequality are much greater in disposable incomes than they are in market incomes. This is due to the considerable variance in the social safety nets offered by each country's welfare and tax systems.

Even when Haredim and Arab Israelis are excluded from the sample, income inequality among non-Haredi Jewish Israelis is still greater than the inequality in all developed countries except two.

### DISPOSABLE INCOME GINI COEFFICIENT\*

23 OECD countries. 1973-2010



\* Based on individual weights. Israel does not include East Jerusalem.

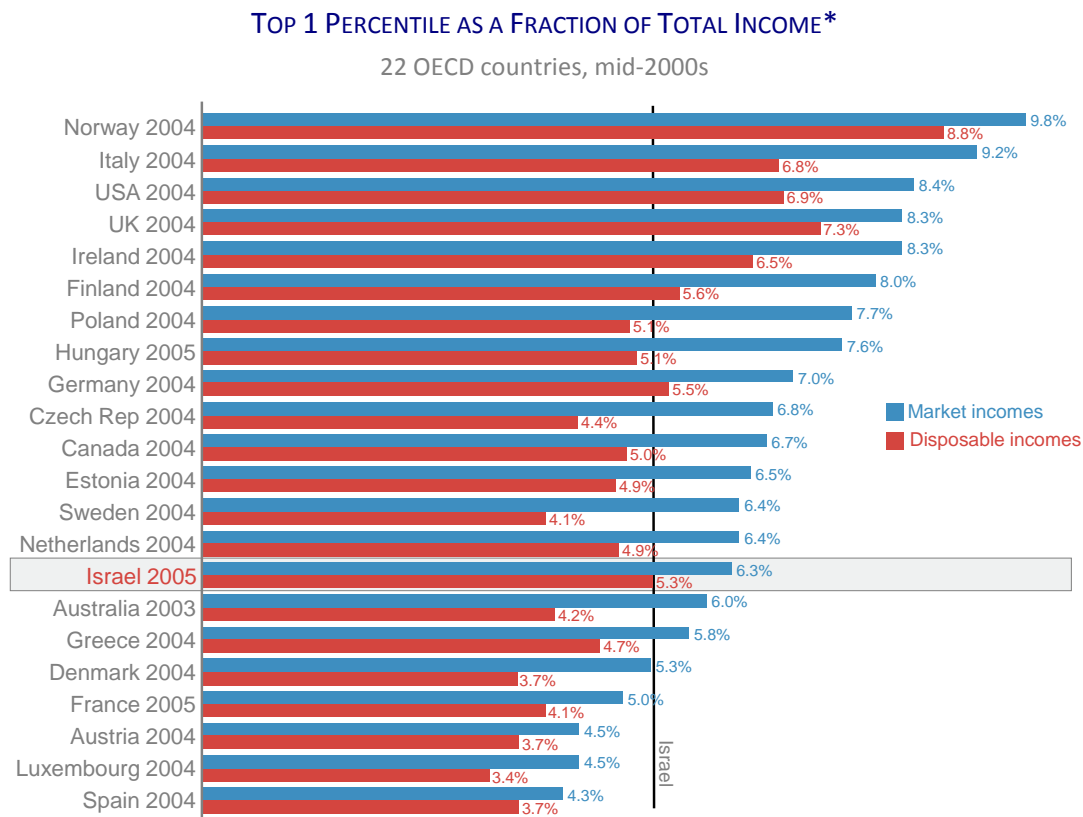
\*\*Haredim are ultra-Orthodox Jews

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study, Central Bureau of Statistics (for category "Israel – excluding Haredim and Arab Israelis" only)

## Share of income going to Israel's wealthiest close to middle of the OECD

The wealthiest 1% of the population receives 6.3% of Israel's total market income and 5.3% of its total disposable income. These shares place Israel at roughly the middle of the developed world in terms of the concentration of income at the top end of the income spectrum.



\* Percentiles calculated according to National Insurance Institute method. Israel includes East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study

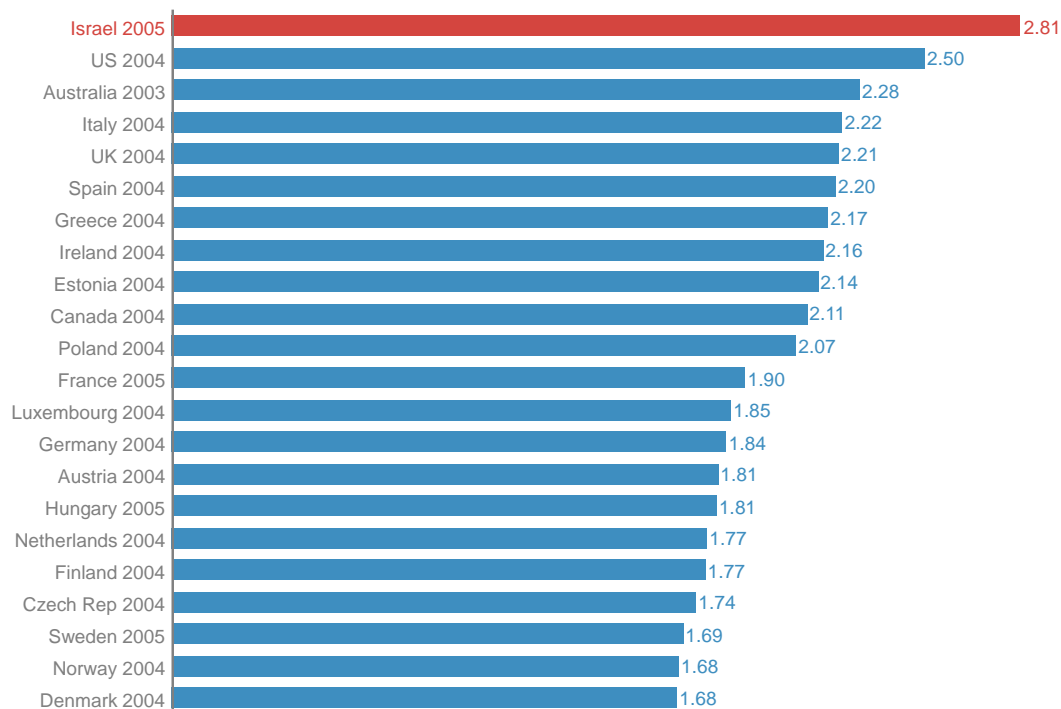
## Wide income gaps even within Israel's middle class

Income disparity between what could ostensibly be considered upper middle class and lower middle class is higher in Israel than in any of the other developed countries. Incomes of individuals at the 75th income percentile are 2.81 times higher than the incomes of individuals at the 25th income percentile.

This income gap is 12% greater than in the number two country, the United States (with a 2.50 ratio), and almost a quarter more than in Australia, the country with the third highest middle-class income gap (2.28).

### RATIOS OF DISPOSABLE INCOME PERCENTILES, 75/25\*

22 OECD countries, mid-2000s



\* Percentiles calculated according to National Insurance Institute method. Israel includes East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study



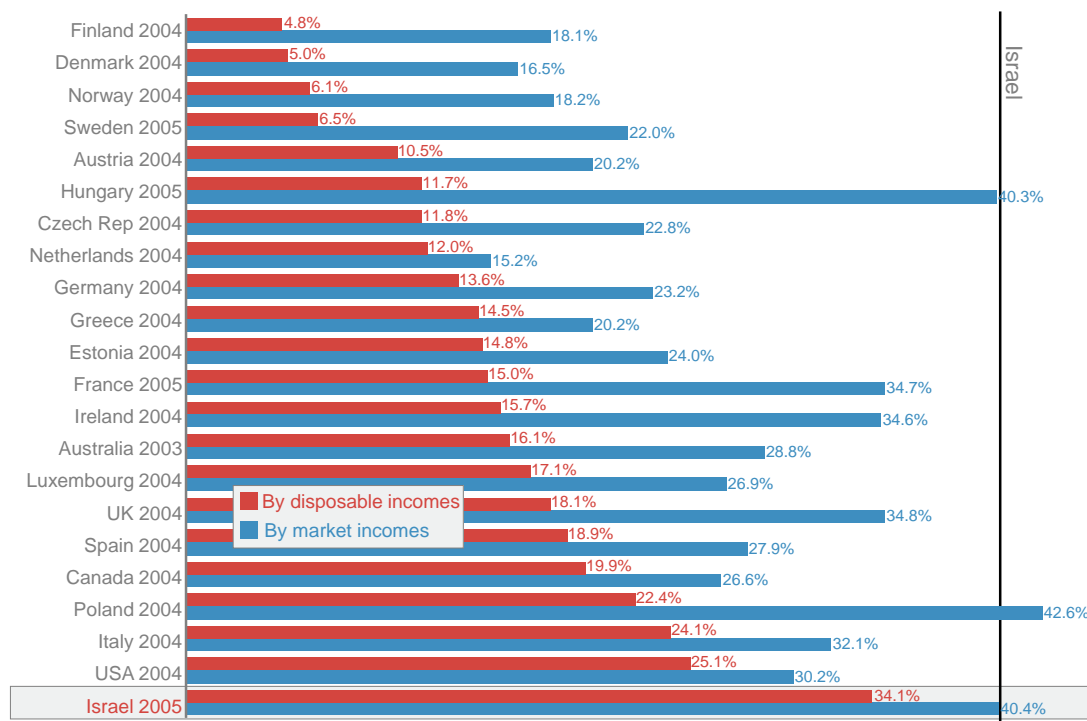
## Share of Israeli children under the poverty line among the highest in the OECD

Some 40% of Israel's children lived under the poverty line according to market incomes (i.e., prior to receipt of welfare benefits and payment of taxes). In the developed world, only Poland has higher market income poverty rates among children.

After the effects of the welfare and tax systems are taken into account, disposable income poverty among Israeli children is the highest in the West and increased by 61% between 1992 and 2011.

### PERCENT OF CHILDREN UNDER THE POVERTY LINE\*

22 OECD countries, mid-2000s



\* Calculations by individuals according to National Insurance Institute method. Israel includes East Jerusalem.

Source: Dan Ben-David and Haim Bleikh, Taub Center

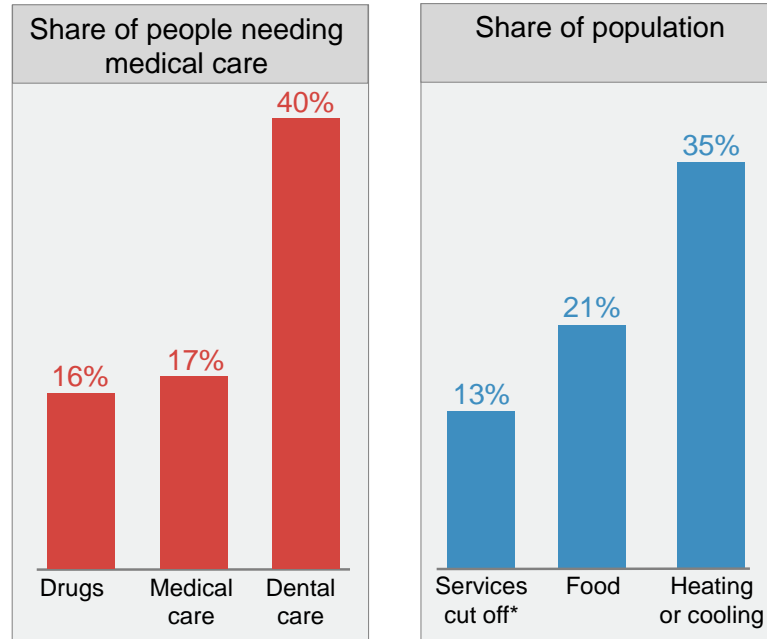
Data: Luxembourg Income Study

## Large shares of population forgoing basic necessities

Poverty in Israel takes on a new meaning when it is translated into forgoing basic necessities. About one-fifth of the population claim that financial constraints reduce their ability to purchase food while over one-third feel compelled to live with little or no heating or cooling during the relevant periods of the year.

For Israelis in need of medical care, one-sixth skimp on drugs and medical care, while 40% report going without necessary dental care.

PERCENT FORGOING BASIC NECESSITIES, 2007



\* Telephone and/or electricity

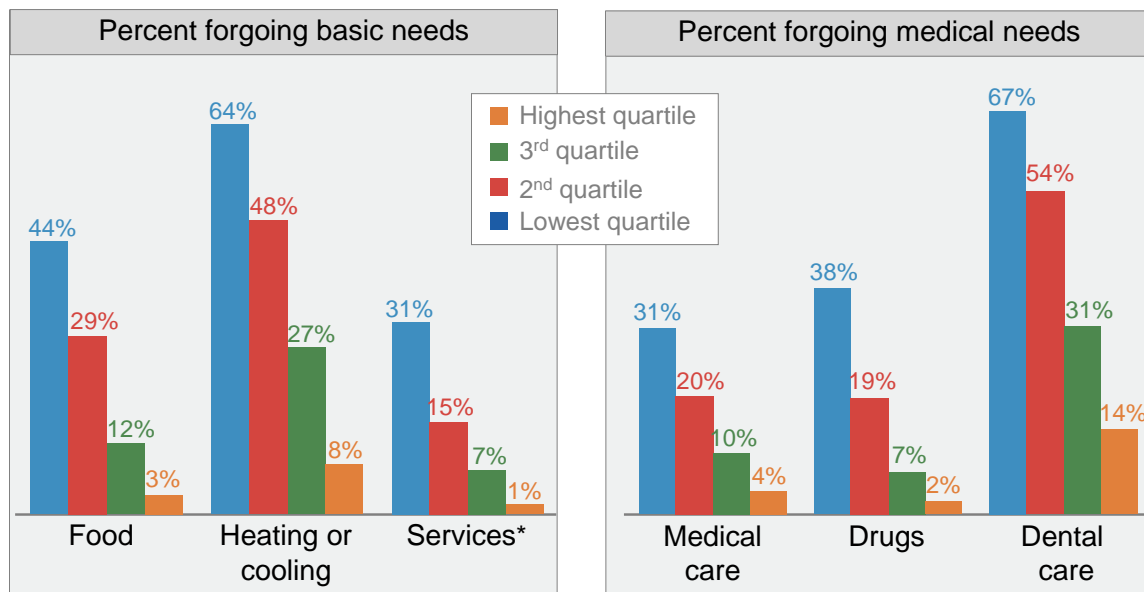
Source: Haya Stier and Alisa Lewin, Taub Center

Data: Central Bureau of Statistics, *Social Survey 2007*

## Middle class forgoing basic needs

The share of the population forgoing basic necessities and medical needs is clearly related to incomes. The lower the income, the greater is the share of those experiencing material hardship. While these shares are very high in the lowest income quartile, they are also relatively high in the second quartile and, in some cases, also in the third quartile. This means that a large part of Israel's middle class feels compelled to reduce their consumption of basic needs and their purchase of medical goods and services.

PERCENT FORGOING BASIC NEEDS BY PER CAPITA INCOME QUARTILES, 2007



\* Telephone and/or electricity

Source: Haya Stier and Alisa Lewin, Taub Center

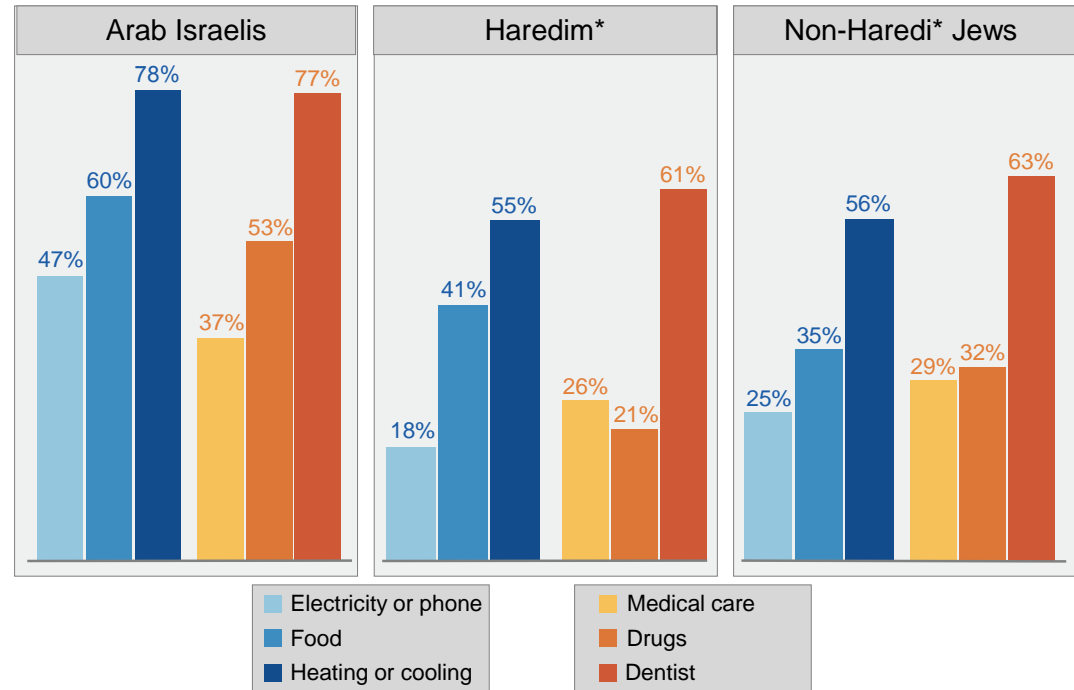
Data: Central Bureau of Statistics, *Social Survey 2007*

## Arab Israelis stand out among the poor in terms of material hardship

Not all poor people forgo basic needs to the same extent. Among Israelis in the bottom income quartile, Arab Israelis experience the greatest material hardship. The share of poor Haredim who forgo basic needs is roughly the same as the share of poor non-Haredi Jews in most of the categories and considerably lower than the share of poor Arab Israelis forgoing basic needs.

### PERCENT FORGOING BASIC NEEDS AMONG THE LOWEST INCOME QUARTILE, 2007

by population group



\* Haredi/m are ultra-Orthodox Jews

Source: Haya Stier and Alisa Lewin, Taub Center

Data: Central Bureau of Statistics, *Social Survey 2007*

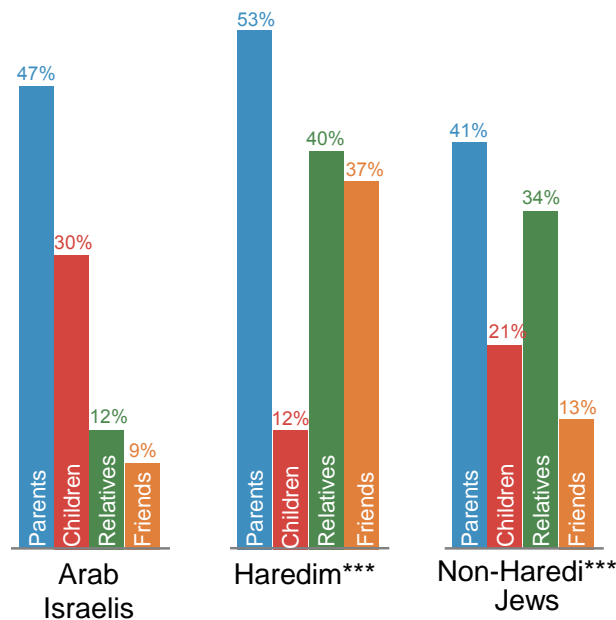
## Different groups rely on different support networks

While all three groups (Arab Israelis, Haredim and non-Haredi Jews) turn primarily to parents in times of hardship, poor Arab Israelis turn much more to their children. For Haredim, the share of poor who turn to their children is by far the lowest. This may be due to the fact that younger Haredim tend to have lower levels of education than their parents – a unique situation that makes them less able to offer support.

Haredi and non-Haredi Jews turn much more readily to their relatives for support than do Arab Israelis. Haredim turn more often to their friends for support than do the others.

### POTENTIAL SOURCES OF URGENT FINANCIAL SUPPORT\*, 2009

share of poor population\*\*



\* Possible sources to immediately raise NIS 5,000

\*\* Lowest income quartile

\*\*\* Haredi/m are ultra-Orthodox Jews

Source: Haya Stier and Alisa Lewin, Taub Center

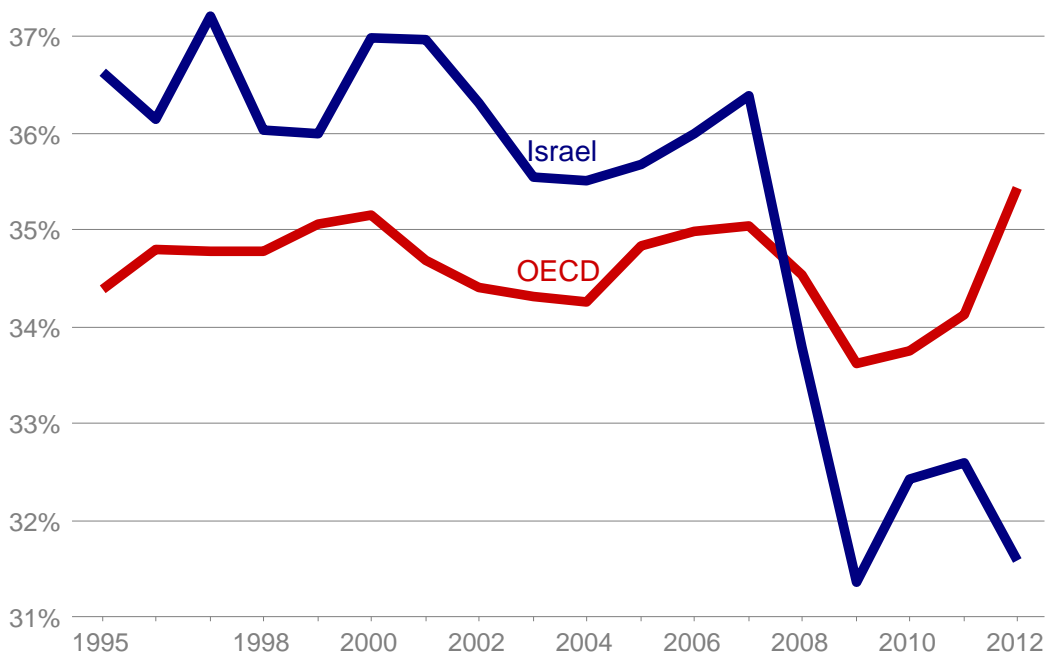
Data: Central Bureau of Statistics, *Social Survey 2007*

## Israel's high tax burden dropping in recent years

The tax burden in Israel – measured by the share of government tax revenues out of GDP – was considerably higher in Israel than the OECD average.

In recent years, tax policies have changed and this burden declined to levels below the OECD average.

TAX BURDEN AS A PERCENT OF GDP, 1995-2012



Source: Dan Ben-David, Taub Center and Tel Aviv University  
Data: OECD

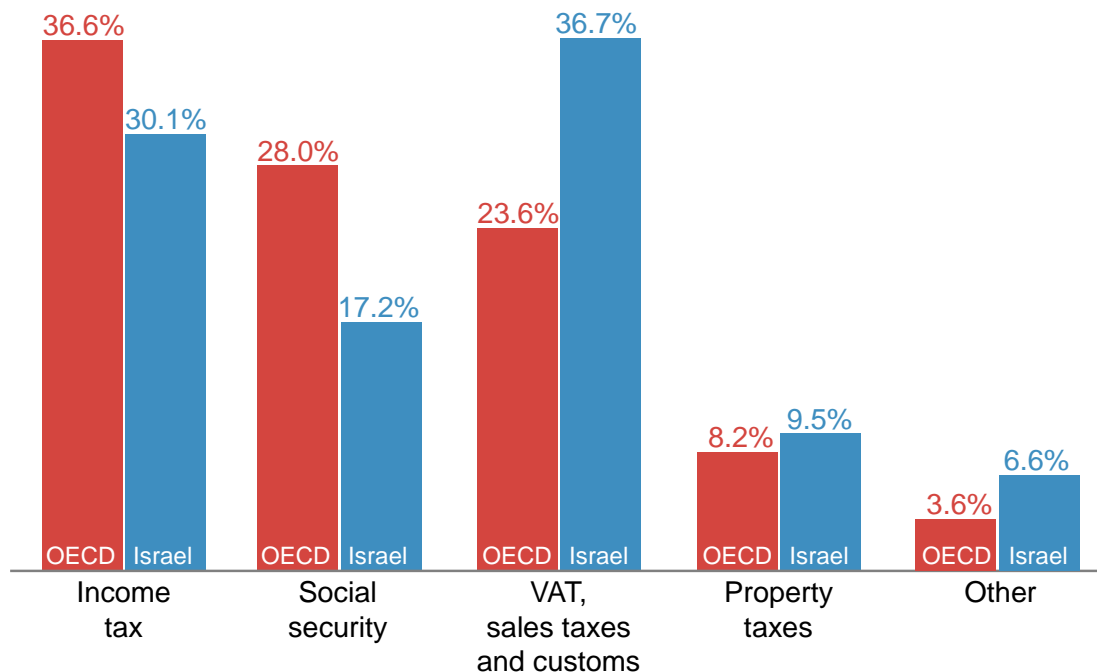
## Differing sources of tax revenues in Israel and OECD

The composition of Israel's tax revenues differs from the OECD average, with a greater emphasis placed on indirect taxes (value added tax, sales taxes and customs) than on direct income taxes.

Indirect taxes are considered a more regressive form of taxation since poorer individuals tend to spend a greater share of their income on consumption. Consequently, their indirect tax expenditures tend to constitute a greater share of their income.

The lower revenues from social security taxes in Israel are the result of low contributions from Israeli employers (1.5% of GDP in Israel compared to 4.8% of GDP in the OECD in 2011). On the other hand, social security taxes paid by Israeli wage earners are 3.8% of GDP, compared with 3.1% of GDP in the OECD.

DISTRIBUTION OF TOTAL NATIONAL TAX REVENUES  
by tax type, 2011



Source: Ministry of Finance

Data: State Revenue Division, Ministry of Finance

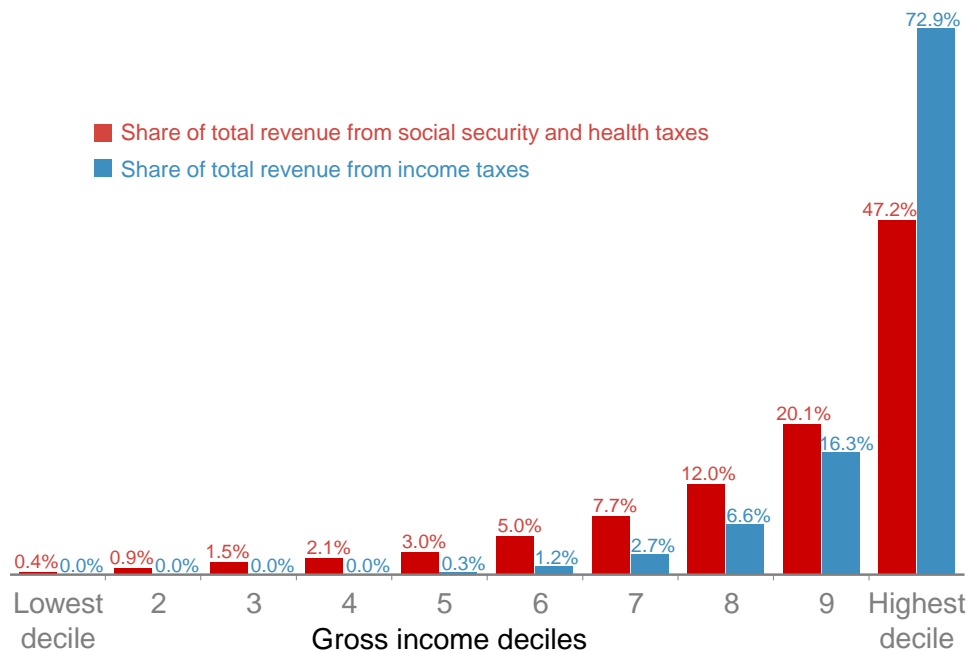
## Half of Israelis pay no income tax

The income tax burden in Israel is relatively low for most of the country's income deciles, with 49.7% of individuals not paying any income tax in 2011. The shares not paying any income tax were even higher in 2010 and 2012: 51.2% and 52.3%, respectively.

The income tax burden spikes sharply in the higher deciles: the top income decile contributes nearly three-quarters of the country's total income tax revenues while the top two income deciles account for almost 90% of all income tax revenues. The highest marginal income tax rate in Israel in 2012 was 48%, ranked 7th highest among the 34 OECD countries – rising to 50% in 2013.

Revenues from social security and health taxes are more evenly distributed among income deciles.

SHARE OF NATIONAL REVENUE FROM DIRECT TAXES FROM EACH INCOME DECILE, 2011



Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Ministry of Finance



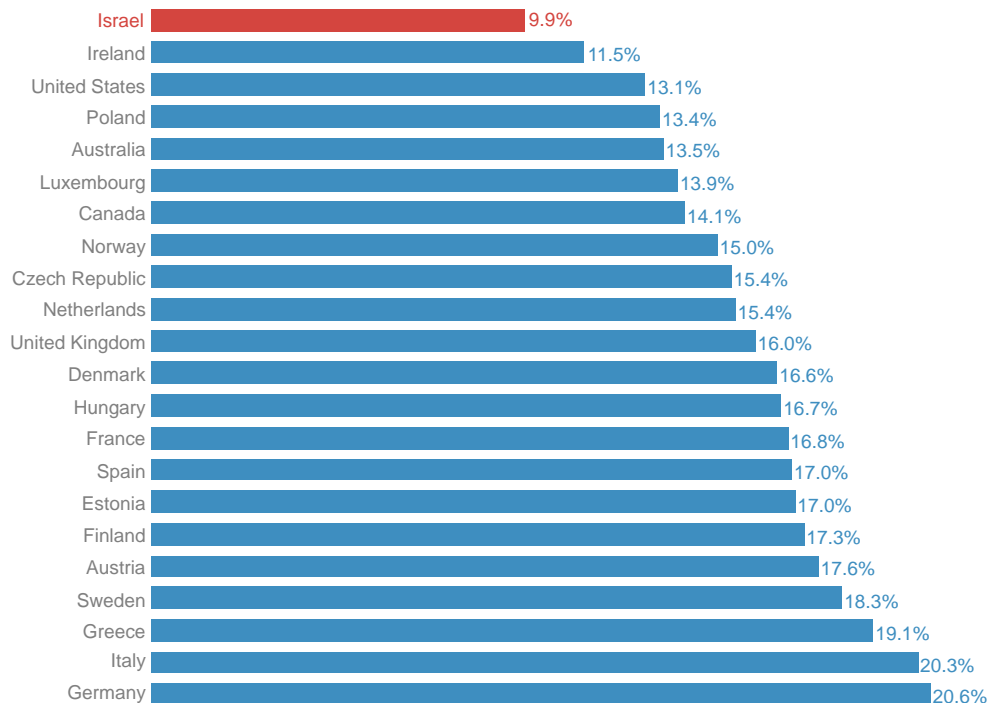
# THE ELDERLY – POVERTY AND EMPLOYMENT

The share of Israel's elderly population living under the poverty line according to their market incomes is the lowest in the developed world. At the same time, when calculated using their disposable incomes (i.e., after welfare and taxes), the share of Israel's elderly living under the poverty line is the highest in the developed world. The reason for the former is that more retirement-age Israelis work, more have pensions and the pensions pay out relatively higher shares of the lifetime wages than the OECD average. Despite this and the fact that Israel is a relatively young country with a smaller share of elderly in the population, welfare benefits to Israel's elderly are so low that while other developed countries nearly eliminate poverty among the elderly, Israel's elderly poverty levels move to the top of the developed world.

## Share of elderly in Israel is low compared to the OECD

Israel is a relatively young country. The share of elderly in its population is the lowest among developed countries.

PERCENT OF 65+ YEAR-OLDS IN THE POPULATION, 2010



Source: Dan Ben-David, Taub Center and Tel Aviv University

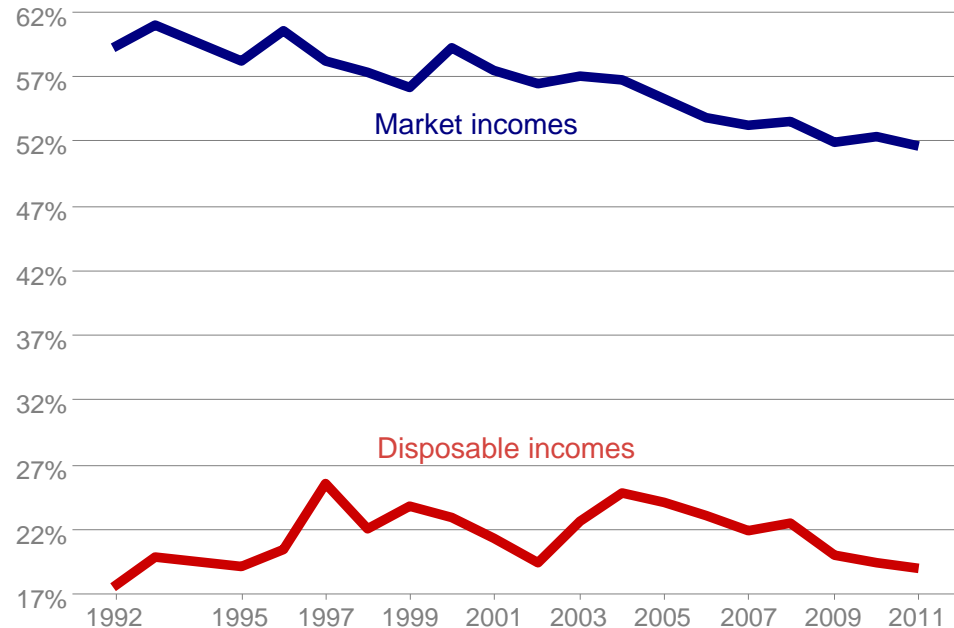
Data: OECD

## Falling market income poverty rates among Israel's elderly

Market income poverty rates (i.e., prior to receipt of welfare benefits and payment of taxes) among Israel's elderly have been steadily declining for the past two decades. Even so, just over half of the elderly would have lived under the poverty line in 2011 had they not received assistance.

After such assistance is given, poverty rates are much lower – at around one-fifth of the elderly population – although they have fluctuated considerably over the past two decades.

PERCENT OF RETIREMENT AGE INDIVIDUALS UNDER THE POVERTY LINE\*, 1992-2011



\* Age 60 and over for women and 65 and over for men. Data for 1992-1996 and 2000-2001 do not include East Jerusalem. No data available for 1994.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Central Bureau of Statistics

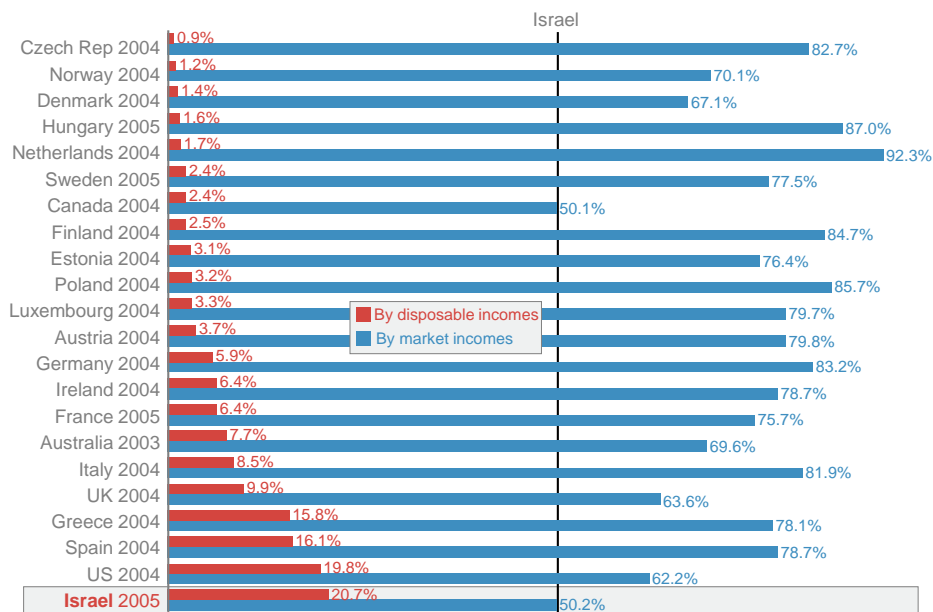
## Market income poverty rates among Israel's elderly are lowest in developed world; disposable income poverty rates are the highest

The percentage of Israel's elderly living under the poverty line according to market incomes is the lowest in the developed world, alongside Canada. In the majority of countries the market incomes of over 75% of the elderly place them under the poverty line – compared to 50% in Israel.\*\*

Despite relatively large elderly populations in other countries, their welfare assistance is substantially more effective in reducing poverty. All but 2 of the 22 countries – the U.S. and Israel – are able to reduce elderly poverty rates by some 80%. The U.S. reduced poverty among the elderly by 68%. Israel, with the smallest share of elderly and the lowest market income poverty rates among them, only reduced elderly poverty rates by 59%. The share of elderly Israelis still under the poverty line after taxes and welfare is 21%, the highest in the developed world.

### PERCENT OF ELDERLY UNDER THE POVERTY LINE\*

22 OECD countries, mid-2000s



\* Calculations by individuals according to National Insurance Institute method. Israel includes East Jerusalem.

\*\*The domestic time series for Israel and the cross-country comparisons come from different data sources. Hence the outcomes, while very similar, are not identical.

Source: Dan Ben-David and Haim Bleikh, Taub Center

Data: Luxembourg Income Study

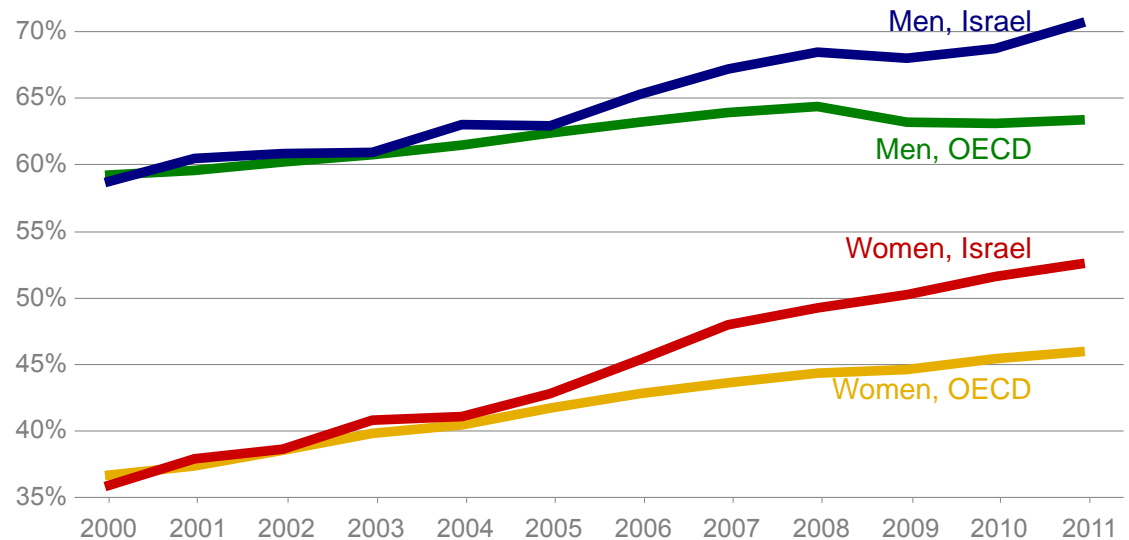
## As Israelis approach retirement, they work more than in OECD

Employment rates among Israeli women and men aged 55-64 were identical to those of the OECD during the first part of the last decade – both in their levels and in the rates of increase.

Towards the middle part of the decade, Israeli employment rates rose faster than those of the OECD, creating an employment gap of over 6 percentage points in Israel's favor among both older women and men.

### EMPLOYMENT RATES, AGES 55-64

Israel and the OECD, 2000-2011



Source: Ayal Kimhi and Kyrill Shraberman, Taub Center

Data: OECD

## Retirement-age men work more than in OECD; women work less

During the first decade of what is generally considered retirement, ages 65-75, employment rates among Israeli men have been growing faster and are higher than the OECD average since 2004.

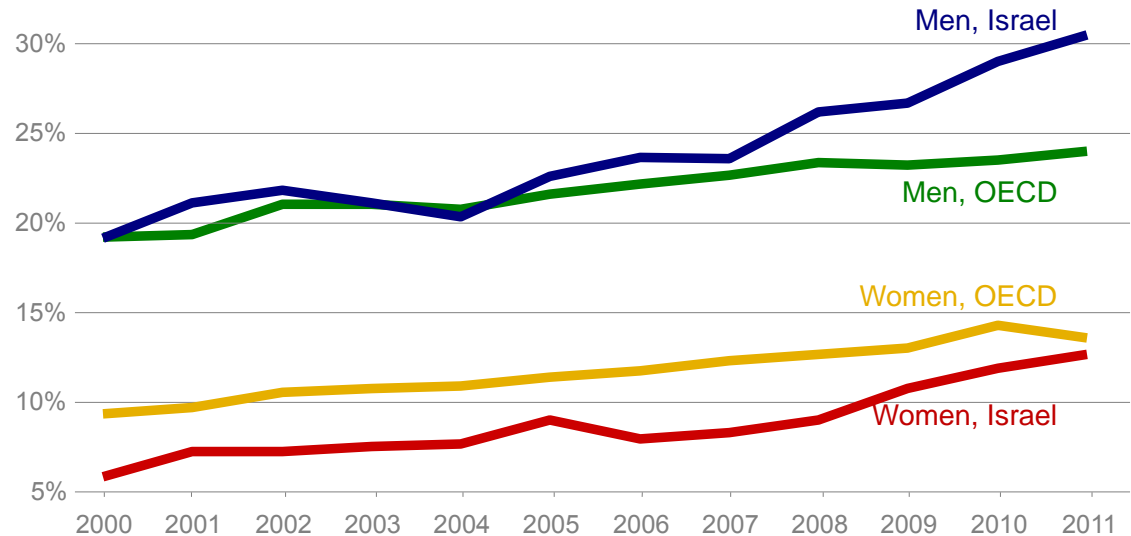
Employment rates for Israeli women are lower than in the OECD, although they have been rising more quickly and the gap has fallen in recent years.

In both cases, the increase in Israeli employment in this age group has been primarily in the Jewish population.

From the age of 75 and up, employment rates among both male and female Israelis are below the OECD average – although these rates are very low, in the single digits, in the OECD and in Israel.

### EMPLOYMENT RATES, AGES 65-74

Israel and the OECD, 2000-2011



Source: Ayal Kimhi and Kyrill Shraberman, Taub Center

Data: OECD

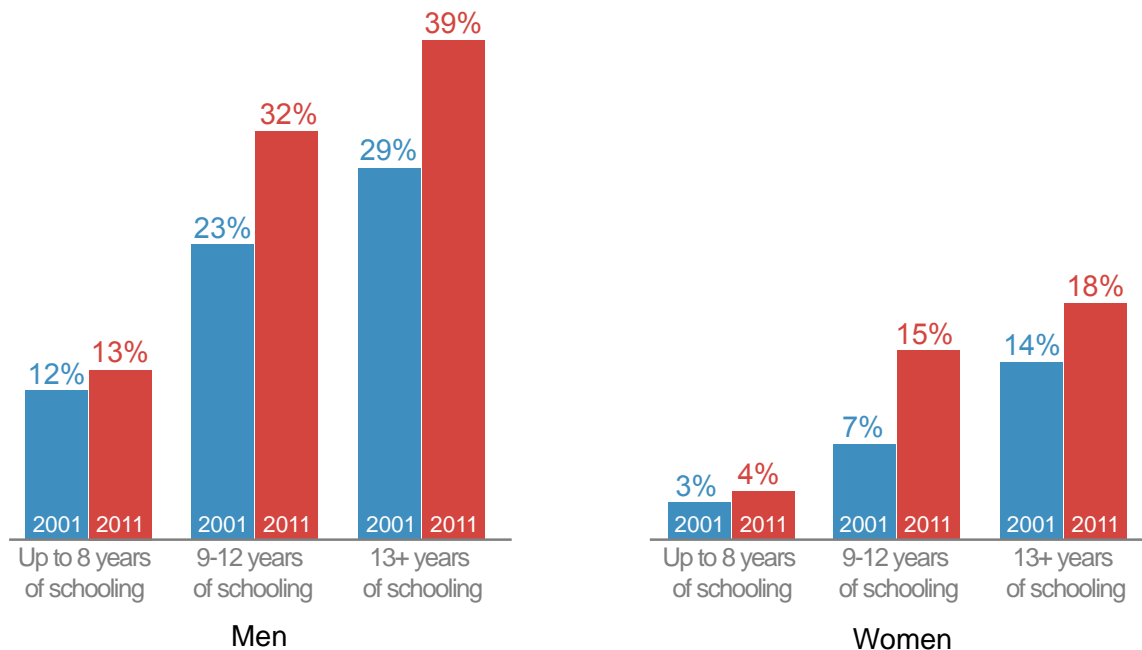
## Education a major factor in elderly employment

Education plays a major role in the employment of Israelis aged 65-74, with substantial differences in employment rates across educational groups.

In addition, while employment rates among Israeli men aged 65-74 have risen over the past decade by roughly 10 percentage points at each level of education, these increases were larger among higher education groups.

### EMPLOYMENT RATES, AGES 65-74

by gender and years of schooling

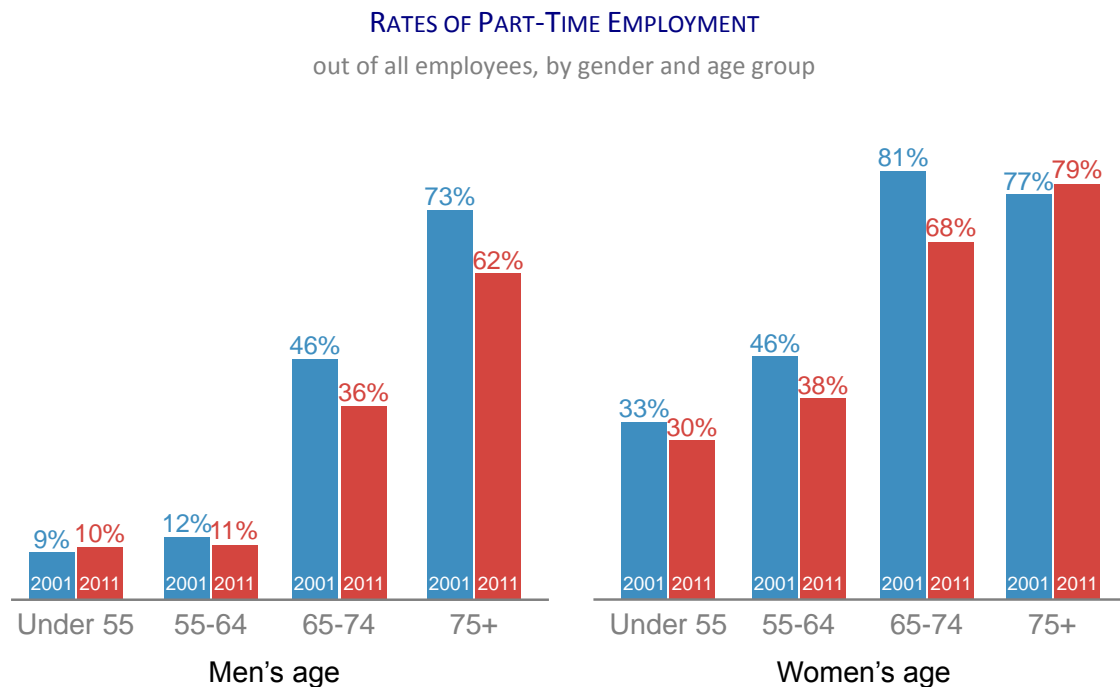


Source: Ayal Kimhi and Kyrill Shraberman, Taub Center

Data: Central Bureau of Statistics, *Labor Force Surveys*

## Greater share of elderly are working full-time than a decade ago

Over the past decade, there has been a marked decline in the share of those employed in part-time jobs among all employed men aged 65 and over and all employed women aged 55-74. The shift to full-time work could be assumed to have a positive effect on the incomes of workers in these age groups.



Source: Ayal Kimhi and Kyrill Shraberman, Taub Center  
Data: Central Bureau of Statistics, *Labor Force Surveys*

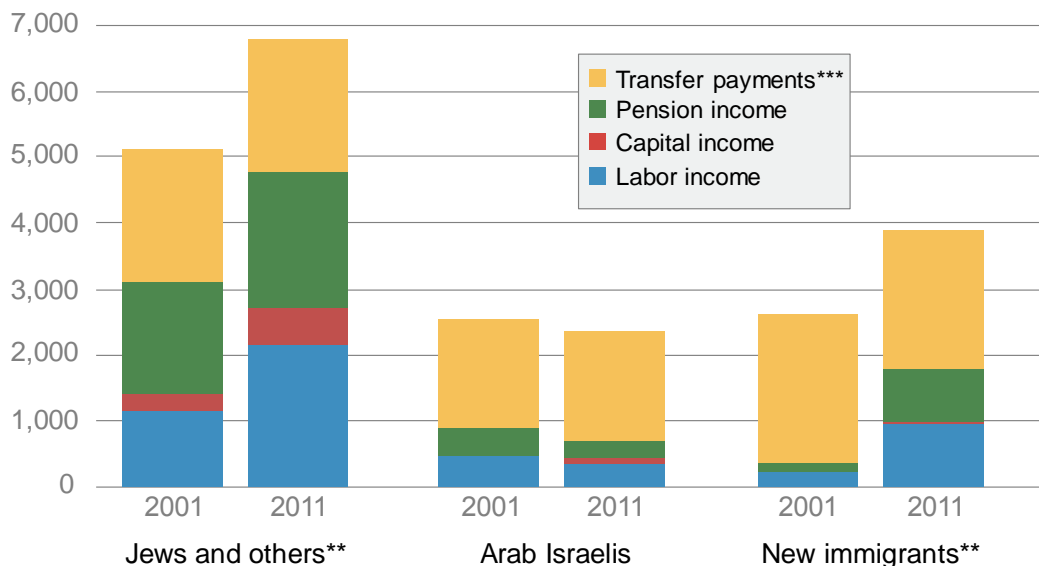


## Higher income gaps between Jewish and Arab Israelis aged 65-74

In households headed by a person aged 65-74, per capita income rose among Jews and new immigrants over the past decade primarily due to an increase in labor income. Immigrants' income from pensions rose as this age group had another decade of work in Israel to increase their pensions. There was a noticeable increase in capital income for non-immigrant Jewish households.

The increase in per capita incomes in Jewish households, which had been double the incomes of Arab Israeli households in 2001, was accompanied by a slight decline in incomes in the latter group – yielding a substantial increase in the income gap between the older Jewish and Arab Israelis. While income from capital began to contribute to Arab Israeli household income by 2011, pension income declined substantially from 2001 to levels far below those of the other groups.

PER CAPITA GROSS HOUSEHOLD INCOME\*, HEAD OF HOUSEHOLD AGED 65-74  
in 2011 shekels



\* Average per capita gross household monthly income

\*\* "Jews and others" includes those with a classification of "other" for religion; "new immigrants" are those who immigrated to Israel since 1990

\*\*\* Welfare assistance and other government benefits

Source: Ayal Kimhi and Kyrill Shraberman, Taub Center

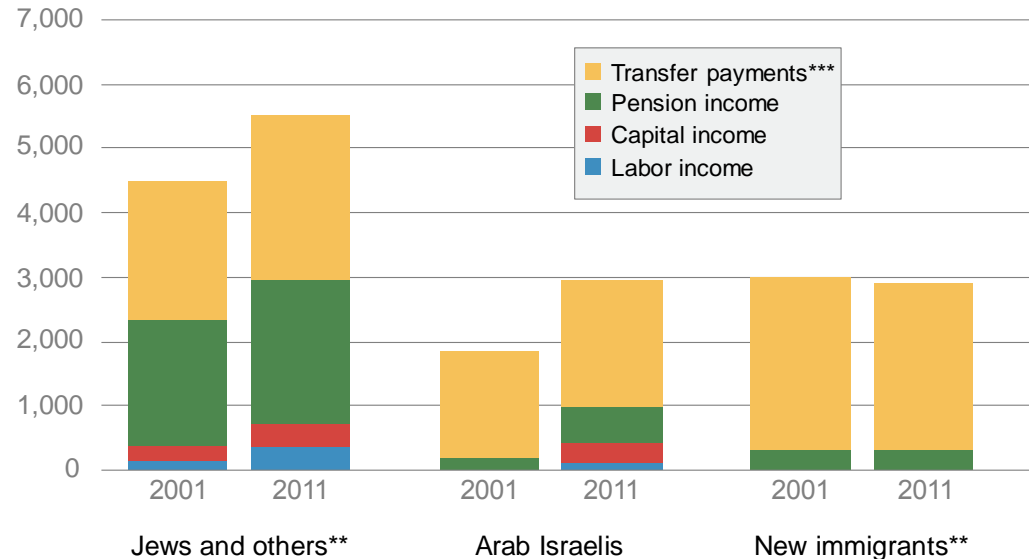
Data: Central Bureau of Statistics, *Income Surveys*

## Lower income gaps between Jewish and Arab Israelis aged 75 and up

In households headed by those aged 75 and over, the primary difference in incomes results from pensions. Non-immigrant Jews have considerably higher pension incomes. In addition, they also have some income from labor, which rose a bit since 2001, although it is still quite small.

Arab Israeli incomes in the same age group grew primarily from an increase in pension income and income from capital – which was about the same level as the Jewish population's in 2011. The more rapid increase in Arab Israeli income led to a decline in the relative income gap between Jewish and Arab Israelis aged 75 and up.

PER CAPITA GROSS HOUSEHOLD INCOME\*, HEAD OF HOUSEHOLD AGED 75+  
in 2011 prices



\* Average per capita gross household monthly income

\*\* "Jews and others" includes those with a classification of "other" for religion; "new immigrants" are those who immigrated to Israel since 1990

\*\*\*Welfare assistance and other government benefits

Source: Ayal Kimhi and Kyrill Shraberman, Taub Center

Data: Central Bureau of Statistics, *Income Surveys*

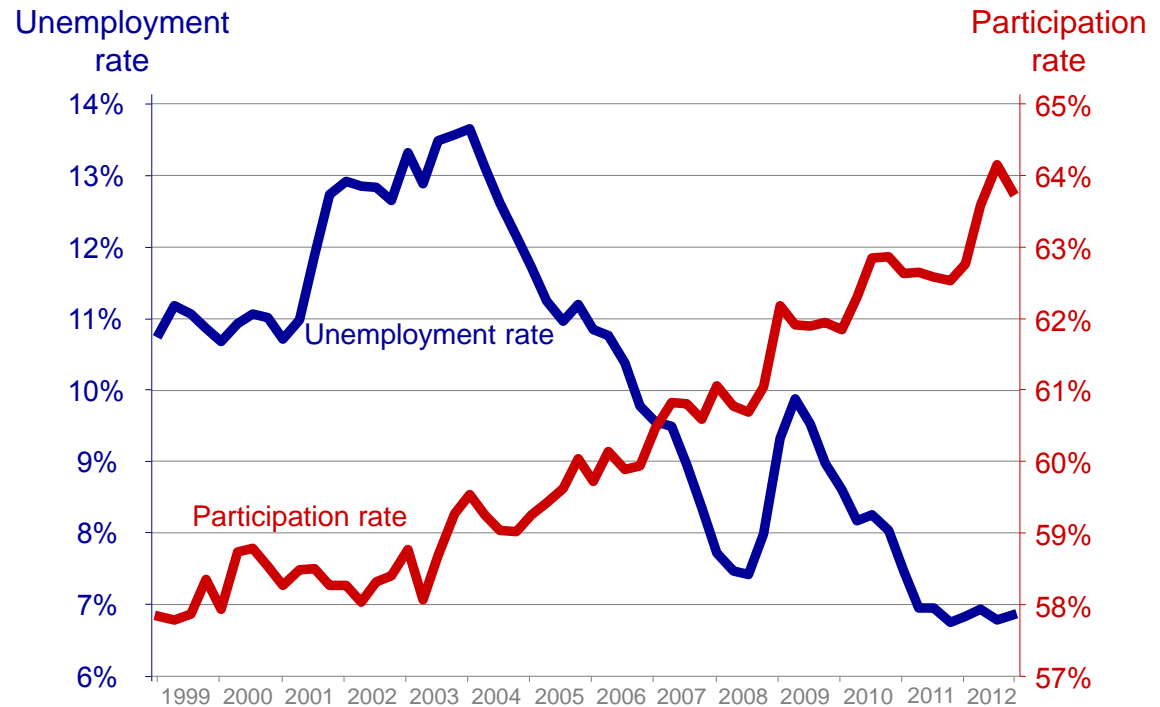
# EMPLOYMENT

The employment picture in Israel has improved significantly over the past decade, as Israel emerged from its worst recession since the 1970s. However, the long-run employment picture for men is a problematic one, with a much steeper downward trend since 1970 than that exhibited by men in the G7 countries. At the same time, Israelis who are employed work considerably more hours than do workers in other developed countries.

## Labor situation improving in past decade

Israel has been steadily emerging from the deep recession and severe terror wave of the beginning of the past decade. This has been accompanied by rising labor market participation rates and sharply falling unemployment rates.

RATES OF UNEMPLOYMENT AND LABOR FORCE PARTICIPATION, 1999-2012

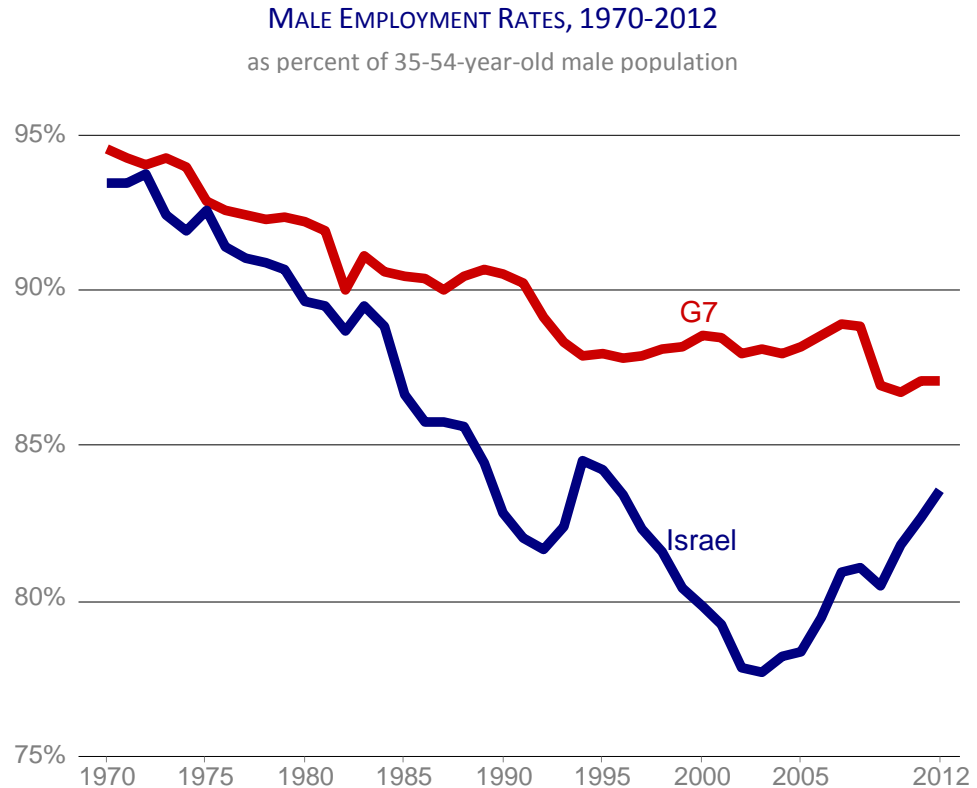


Source: Eran Yashiv and Daniel Premisler, Taub Center

Data: Central Bureau of Statistics, Bank of Israel calculations

## Long-run employment picture among Israeli men is problematic

Despite the substantial improvements over the past decade, the long-run employment trend for prime working-age Israeli males is characterized by a multi-decade decline that has been steeper than in the G7 countries. Consequently, while employment rates were nearly identical between the G7 and Israel nearly four decades ago, the employment gap between the two has grown to 3.5 percentage points. This is despite the fact that the G7 countries have not yet fully emerged from the recession of 2008, the deepest recession since the 1930s.



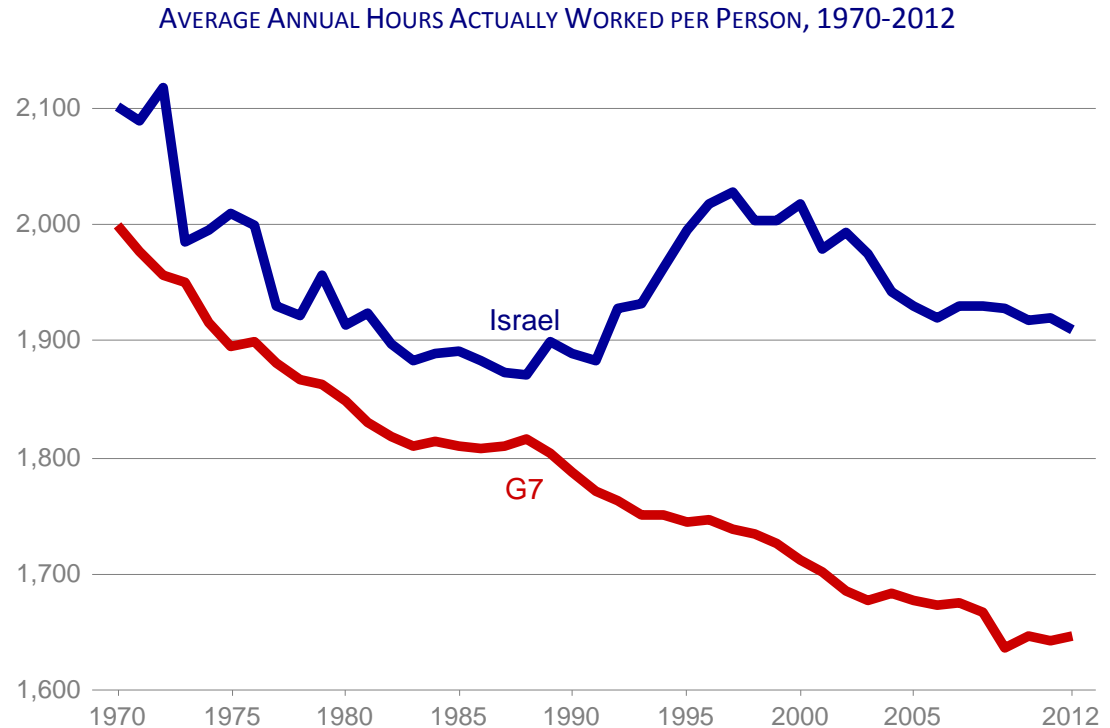
Source: Dan Ben-David and Eitan Regev, Taub Center  
Data: Central Bureau of Statistics, OECD

## Israelis who are employed work many more hours

While fewer prime working-age Israelis are employed, those who are employed work considerably more hours than their counterparts in the G7 countries.

The number of annual hours worked per employee in the G7 has been falling steadily since 1970 while in Israel, the number of annual hours per employed person in 2012 roughly equaled the number of hours worked over three decades earlier, in 1980.

Although Israelis worked 3% to 5% more hours than workers in the G7 countries from the mid-1970s through to the end of the 1980s, the two paths diverged sharply in the 1990s. Since 2000, the gap in work-hours per employee has fluctuated – with Israelis working between 15% and 18% more hours each year.



Source: Dan Ben-David, Taub Center and Tel Aviv University

Data: Central Bureau of Statistics, OECD

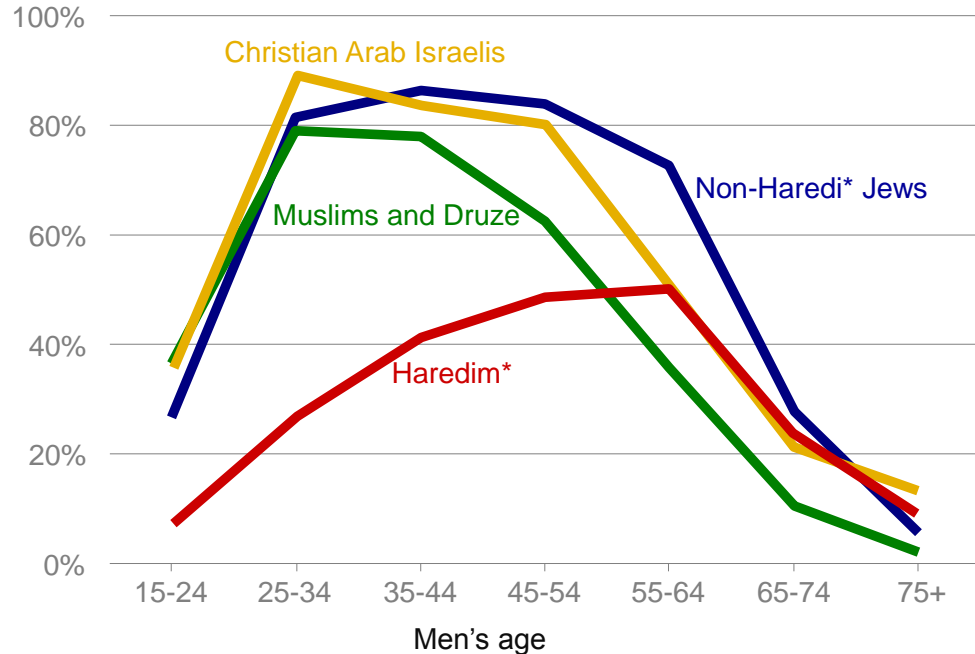
## Male employment rises quickly with age, except for Haredi men

For Muslim and Druze men, the peak of around 80% employment lasts until the ages of 35-44 and then drops sharply. Many of these men are relatively uneducated and unskilled and do physically demanding occupations that they are unable to work in past middle age. Christian Arabs are characterized by a similar employment pattern, albeit at higher employment rates. For non-Haredi Jewish men, employment stays relatively stable until middle age.

Employment among Haredi men is different; they engage in religious studies rather than work when they are young. For Haredi men in their 20s and 30s, employment rates are very low, rising slowly until they peak in their late 50s or early 60s. They are lower at almost all ages than employment rates among non-Haredi Jews.

### MALE EMPLOYMENT RATES, 2008

by religion and age group



\* Haredi/m are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

# WOMEN IN THE LABOR FORCE

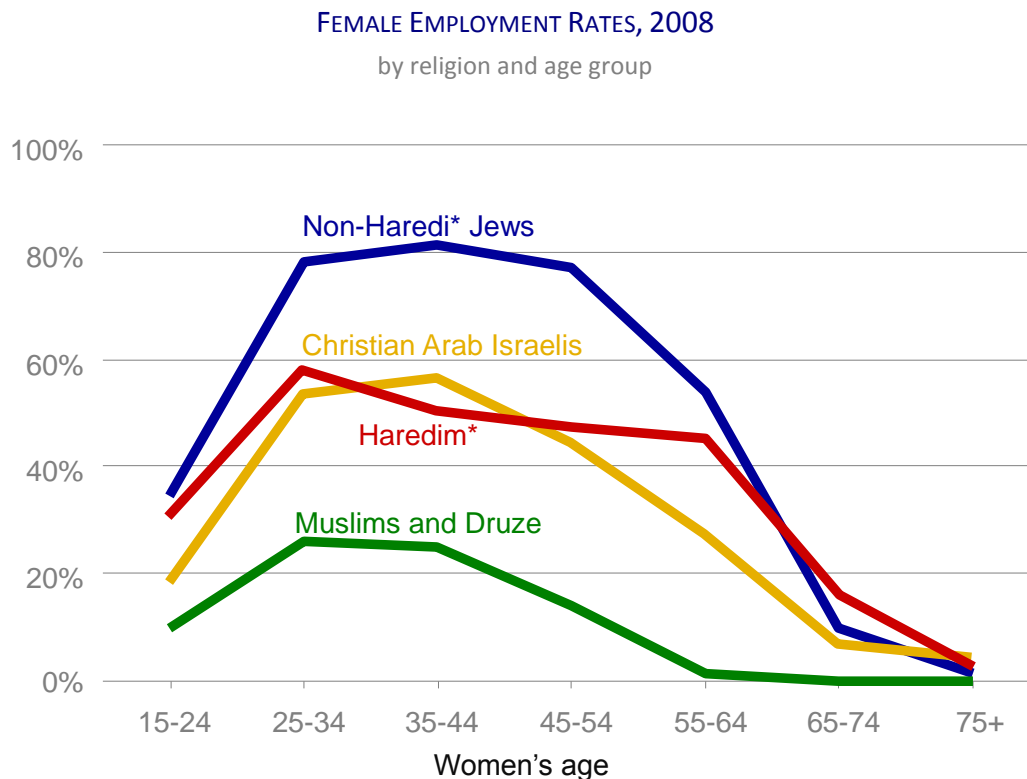
While the long-run employment situation among men is problematic, the situation among Israeli women is considerably better. Labor participation rates among women have been steadily increasing over the years, with education playing a major role in this transformation. The impact of education can be readily seen on women with children, with substantial increases in labor force participation rates within this group over the past three decades.



## Some 80% of prime working-age non-Haredi Jewish women are employed

While employment rates among young Haredi women increase with age more quickly than do those of young Haredi men, they are similar to those of Christian Arab Israeli women and remain below the employment rates of non-Haredi Jewish women. The prevalence of large families at an early age is accompanied by a sharp turnaround, leading to declining employment rates when Haredi women are in their 30s and beyond.

Muslim and Druze women have the lowest employment rates. While child-rearing in large families is one reason for this, very low education levels play a major role in their low employment.



\* Haredi/m are ultra-Orthodox Jews

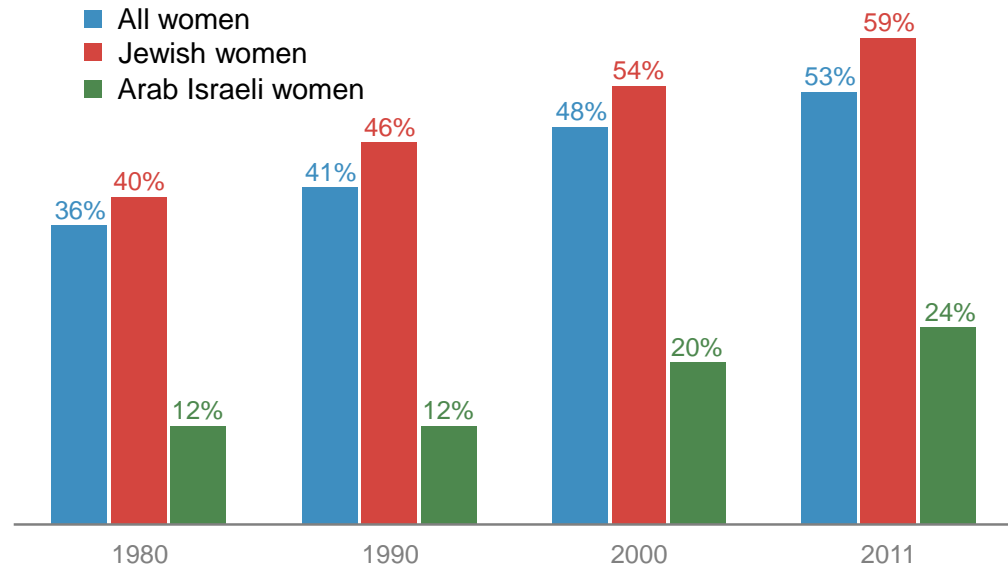
Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

## More Jewish and Arab Israeli women are working

The employment picture among women differs considerably from that of men. The labor force participation rates among Jewish women rose from 40% in 1980 to 59% in 2011. While participation rates among Arab Israeli women are very low, they doubled between 1990 and 2011.

FEMALE\* LABOR FORCE PARTICIPATION RATES BY POPULATION GROUP, 1980-2011



\* All women aged 15 and over

Source: Haya Stier and Efrat Herzberg, Taub Center

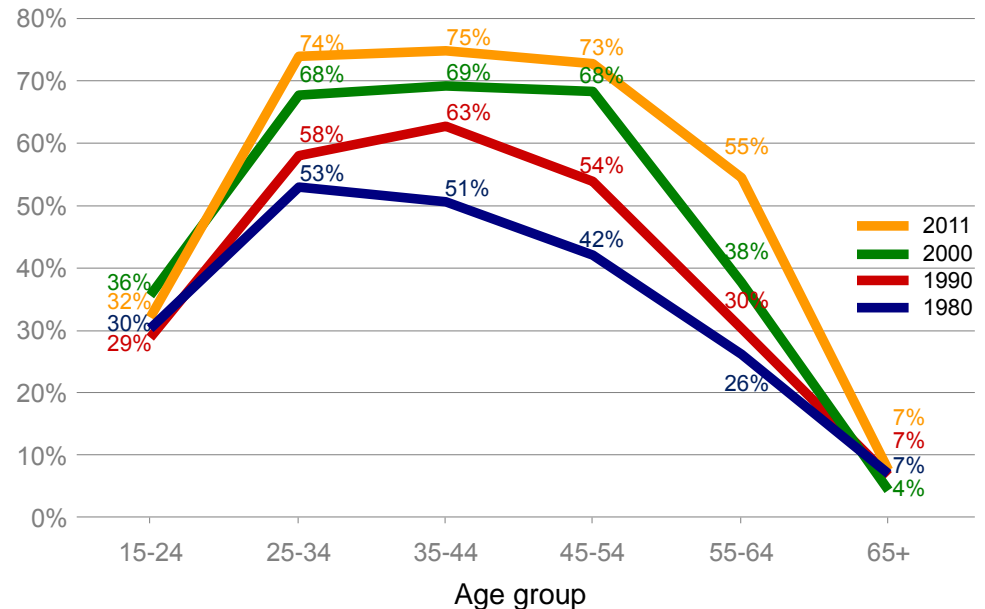
Data: Central Bureau of Statistics, *Labor Force Surveys*

## More women of all ages work

The increase in female labor force participation is across all age groups, with participation rising from one decade to the next.

Since 2000, differences in labor force participation between the various prime working-age groups have largely disappeared, indicating an increased stability in the desire to work throughout these age groups.

FEMALE LABOR FORCE PARTICIPATION RATES BY AGE, 1980-2011

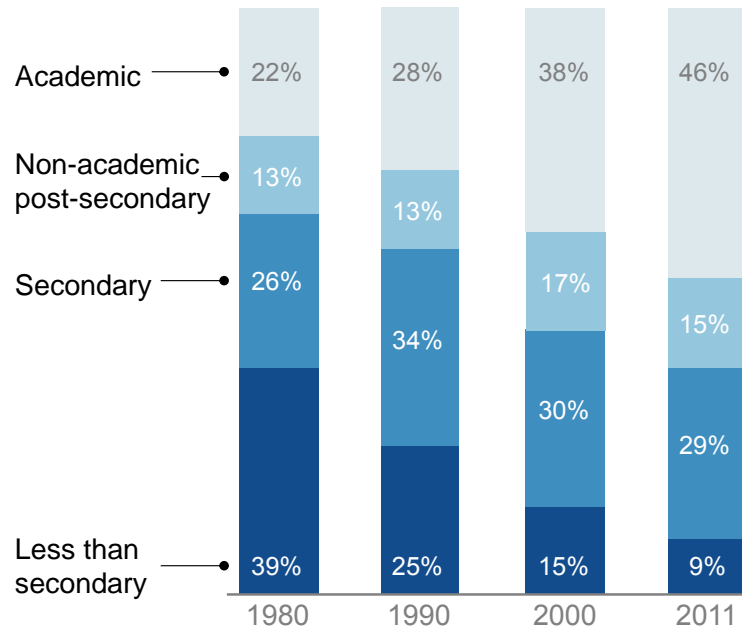


Source: Haya Stier and Efrat Herzberg, Taub Center  
Data: Central Bureau of Statistics, *Labor Force Surveys*

## Higher education increasingly prevalent among women in labor force

A major reason for the rising labor force participation rates is a substantial improvement in women's education levels. This improvement increases employment opportunities that offer potentially higher financial remuneration, increasing the incentives to enter the labor market.

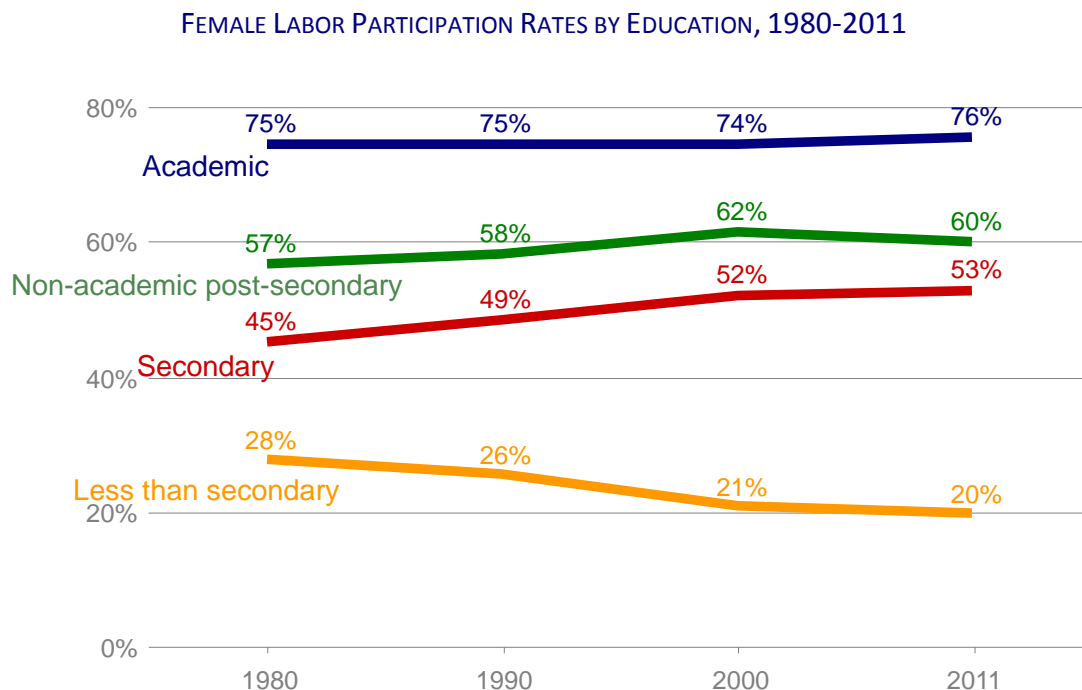
DISTRIBUTION OF FEMALE LABOR FORCE BY EDUCATION, 1980-2011



Source: Haya Stier and Efrat Herzberg, Taub Center  
Data: Central Bureau of Statistics, *Labor Force Surveys*

## Clear link between education and higher female labor force participation

The link between educational attainment and female labor force participation is clear. The higher the level of education, the higher the labor force participation rates. The fact that participation rates have been relatively steady and high among women with academic degrees, together with the fact that a greater share of women are attaining such degrees, is the primary underlying reason for the rising female labor force participation rates over time.



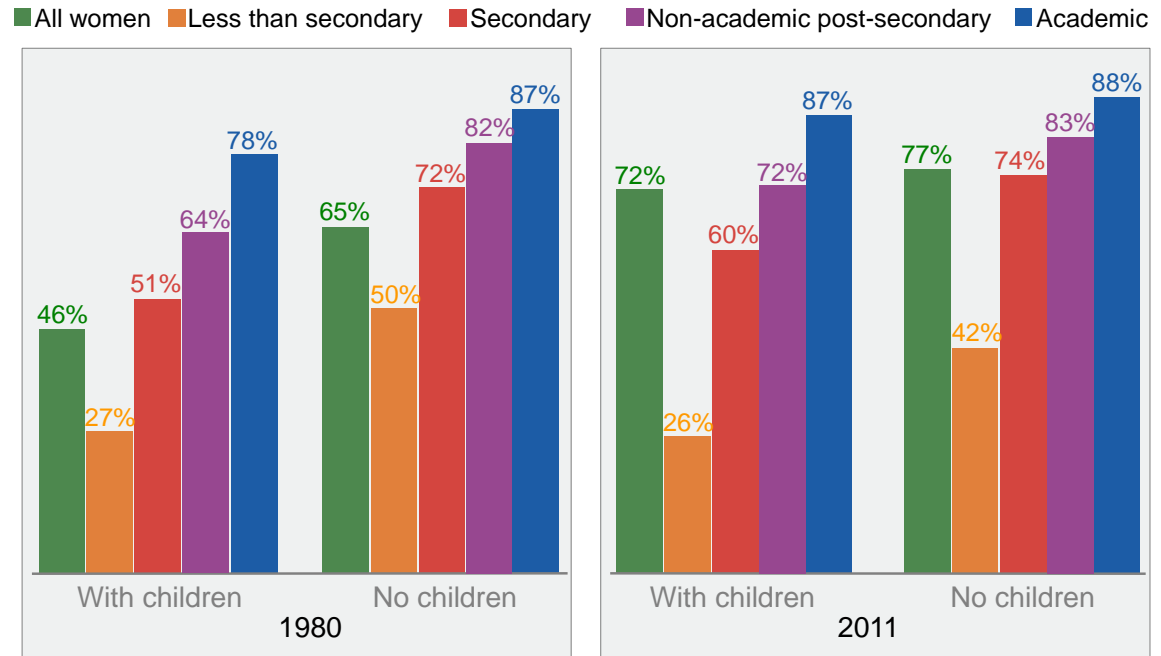
Source: Haya Stier and Efrat Herzberg, Taub Center  
Data: Central Bureau of Statistics, *Labor Force Surveys*

## Education increases labor force participation among women with children

Labor force participation rates of women aged 25-45 with no children and education levels that are secondary and higher have remained almost identical to what they were three decades ago.

The big change in labor force participation has been for educated women with children. The higher wages that accompany higher education levels make it increasingly possible to afford the costs of domestic help and childcare and make entering the work force more economically feasible and attractive.

FEMALE LABOR FORCE PARTICIPATION RATES BY PRESENCE OF CHILDREN IN THE HOME\* AND EDUCATION  
as a percent of women aged 25-44, 1980 and 2011



\* Children under the age of 4 in the home; women aged 25-44

Source: Haya Stier and Efrat Herzberg, Taub Center

Data: Central Bureau of Statistics, *Labor Force Surveys*

# HAREDI EMPLOYMENT

The impact of education on Haredi (ultra-Orthodox Jews) employment and wages is substantial – both for women and men. This is particularly important to note as the share of younger Haredim with an academic education is in decline relative to their parents' generation.

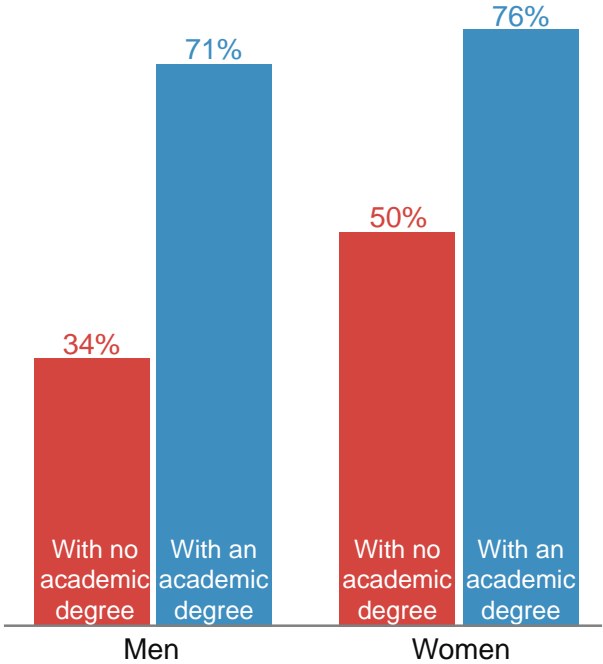
While there is considerable anecdotal evidence of a change in the mindset of the Haredim in recent years with regard to employment and even adult education, as long as Haredi children continue to be deprived of a basic education that can adequately prepare them for a good academic follow-up and a robust skillset, they will be unprepared to enter a rapidly evolving competitive job market. What is more, it will become increasingly more difficult, and eventually impossible, for the rest of the country to contend with these underlying deficiencies and to continue to support a growing uneducated and unemployed Haredi share of the total population.

# Haredim with an academic education work more

A higher education increases the likelihood of employment among Haredim – as is the case for all other Israeli population groups.

HAREDI\* EMPLOYMENT RATES BY EDUCATION LEVEL, 2008

ages 25-64



\* Haredi are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

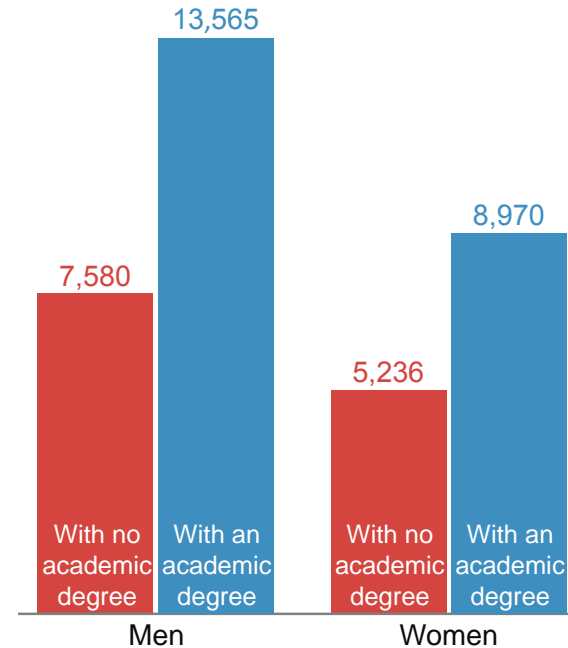


## Higher wages for Haredim with higher education

A large wage gap exists between Haredim with an academic education and those without one. Haredi women with an academic degree earn wages that are 71% higher while Haredi men with a degree earn wages that are 79% greater than those who do not have an academic degree.

### GROSS MONTHLY WAGE BY EDUCATION LEVEL, 2008

Haredim\* in full-time employment, ages 25-64, in shekels



\* Haredi are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

Data: Central Bureau of Statistics, *Population Census Data*

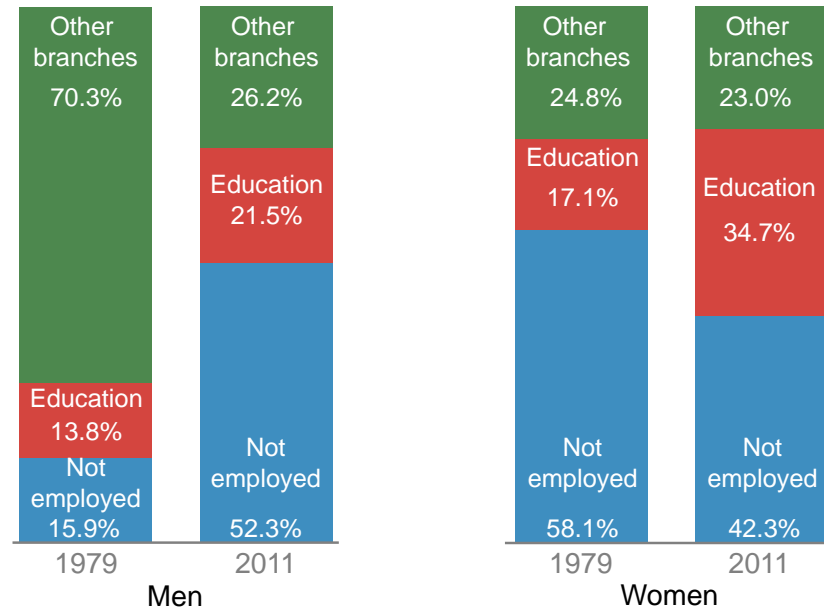
## Higher rates of non-employment among Haredi men than 35 years ago; lower rates among Haredi women

The biggest change in employment among prime working-age Haredi males is the sharp drop in employment in sectors other than education – from 70% in 1979 to just 26% in 2011. Rates of non-employment rose from 16% to 52% during this period.

Among Haredi women, employment outside of education has actually been quite steady and low over the past several decades – with little change from the 25% employment rate in 1979 to the 23% employment rate in 2011.

The share of women employed in education has doubled while the share of men employed in education has increased by half.

DISTRIBUTION OF HAREDI\* POPULATION  
by occupation type, ages 35-54, 1979 and 2011



\* Haredi are ultra-Orthodox Jews

Source: Eitan Regev, Taub Center for Social Policy Studies in Israel

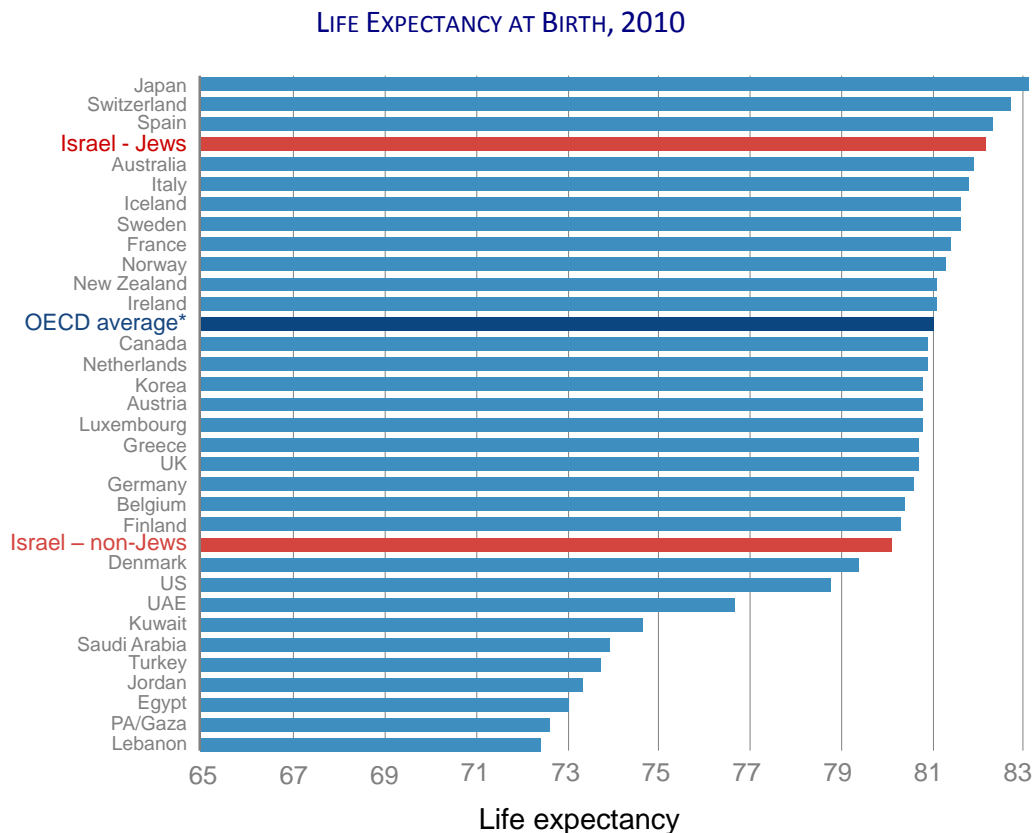
Data: Central Bureau of Statistics, *Population Census Data*

# HEALTH AND HEALTHCARE

Israelis are living longer and infant mortality in the country has fallen to developed country levels. Despite impressive health statistics, the overall strategic picture of the healthcare system is problematic. The country is training fewer physicians and nurses per capita than the developed world – with downward trends in Israel compared to rising trends in other Western countries.

## Israelis living longer

Life expectancy among Jewish and non-Jewish Israelis alike has risen considerably in recent decades. Jewish Israelis are expected to live longer than the citizens of nearly every other country. Although life expectancy among non-Jewish Israelis is below the OECD average, its steady rise has lifted it above the life expectancy of Americans and Danes.



\* Average of the 23 most developed OECD countries (excluding the U.S.)

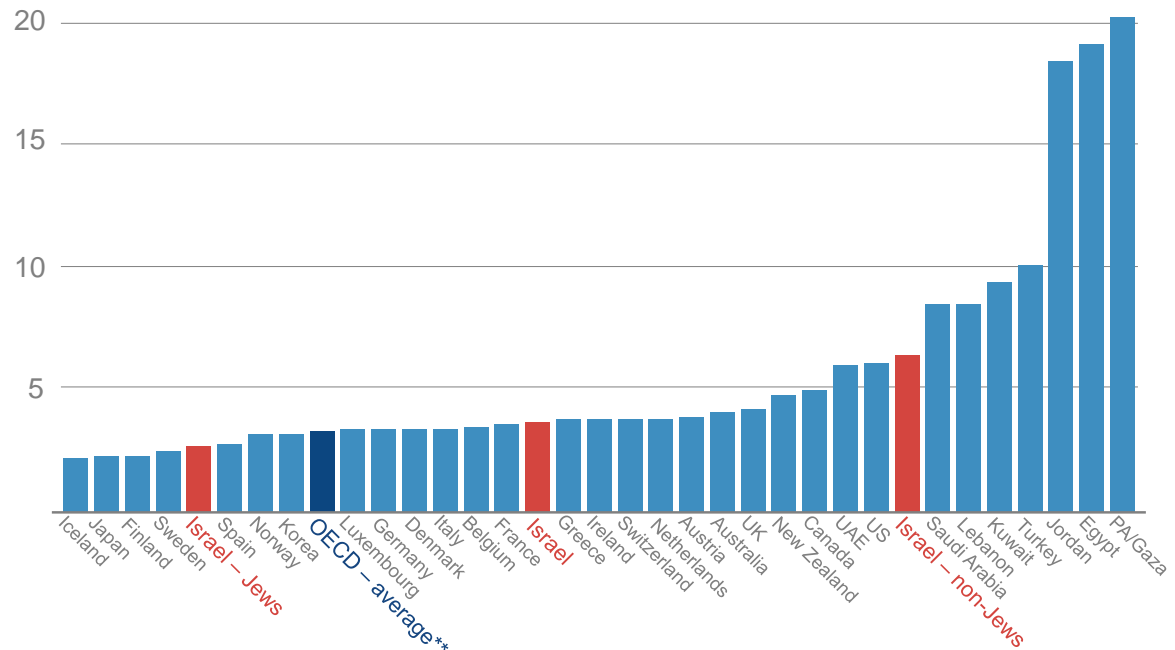
Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD

## Infant mortality similar to OECD

Infant mortality has been steadily declining in recent decades, placing the country close to the middle of the developed world. Nevertheless, there are still considerable differences between Jewish and non-Jewish Israelis in this area.

INFANT MORTALITY ACROSS COUNTRIES\*, 2010



\* Infant mortality up until age 1 per 1,000 live births

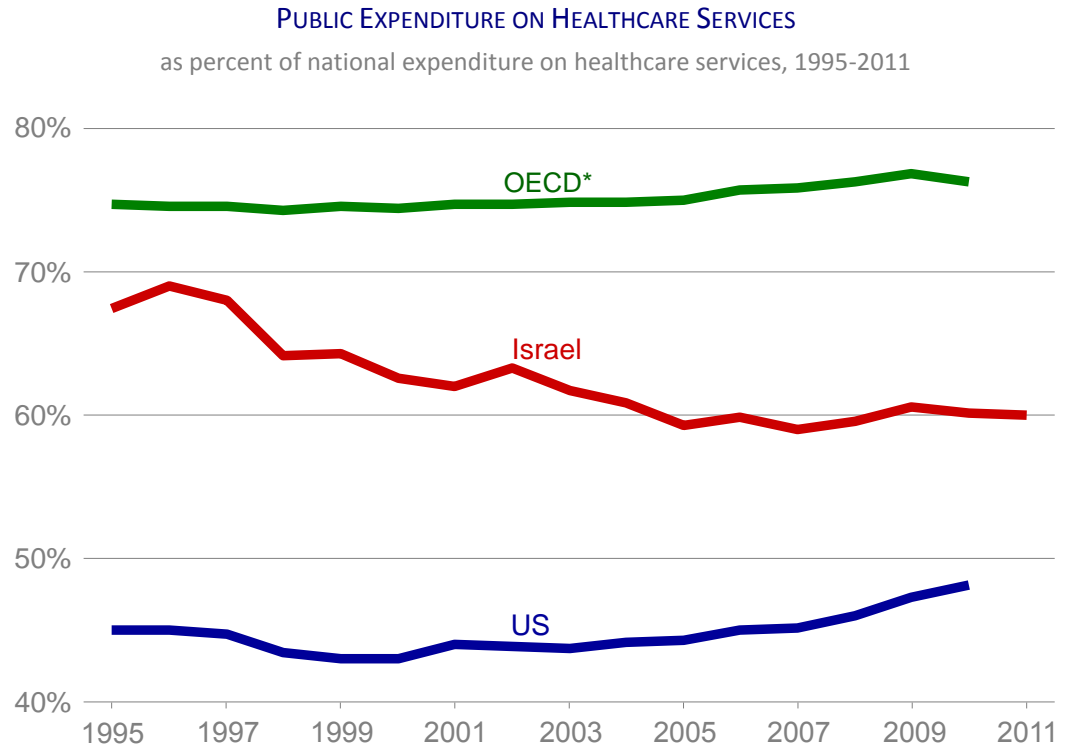
\*\*Average of the 23 most developed OECD countries (excluding the U.S.)

Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD

## Declining public share of national health spending

The share of public funding in Israel's total national healthcare expenditure has been steadily declining since the country's comprehensive healthcare reform was instituted in 1995. This stands in contrast to the increase in the public funding share seen in the OECD. Consequently, Israel has been progressively moving from a situation that had been similar to the OECD towards a public healthcare funding share that is increasingly similar to the American one.



\* Average of the 23 most developed OECD countries (excluding the U.S.)

Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD

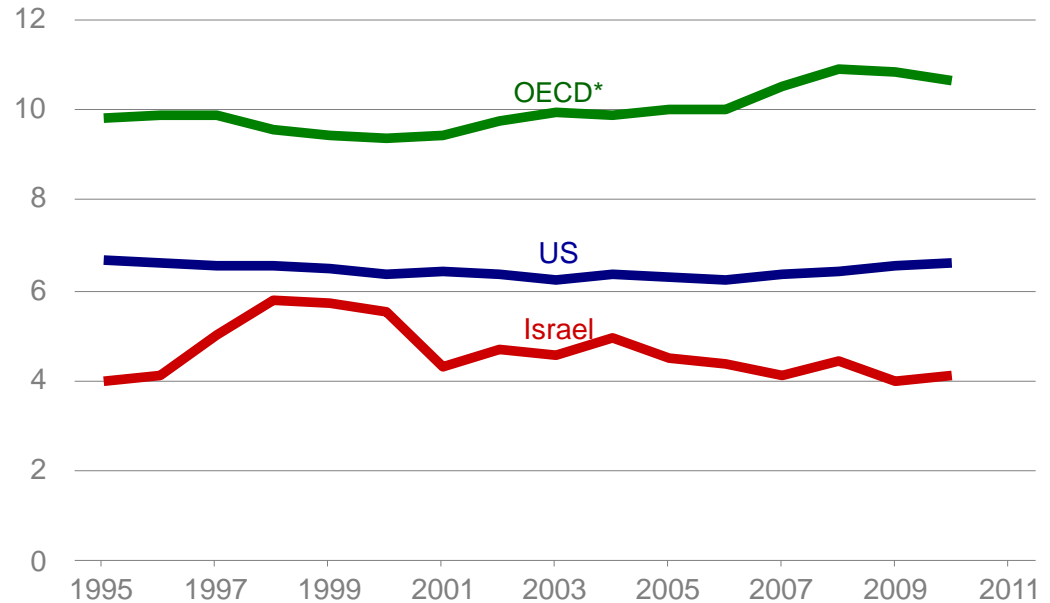
## Fewer Israeli physicians in the pipeline than in the developed world

While the number of physicians in Israel is high relative to the population – largely due to the mass immigration from the former Soviet Union of the 1990s – it has been declining steadily and approaching the OECD average.

The annual share of medical school graduates in the population provides a glimpse of the future. This number is considerably less than that in the U.S. and the OECD and has been in decline for more than a decade – in marked contrast to the steady increase in the OECD.

There have been efforts to reverse this negative trend with the opening of a new medical school in Safed and the easing of requirements for the attainment of a medical degree.

MEDICAL SCHOOL GRADUATES PER YEAR  
per 100,000 population, 1995-2010



\* Average of the 23 most developed OECD countries (excluding the U.S.)

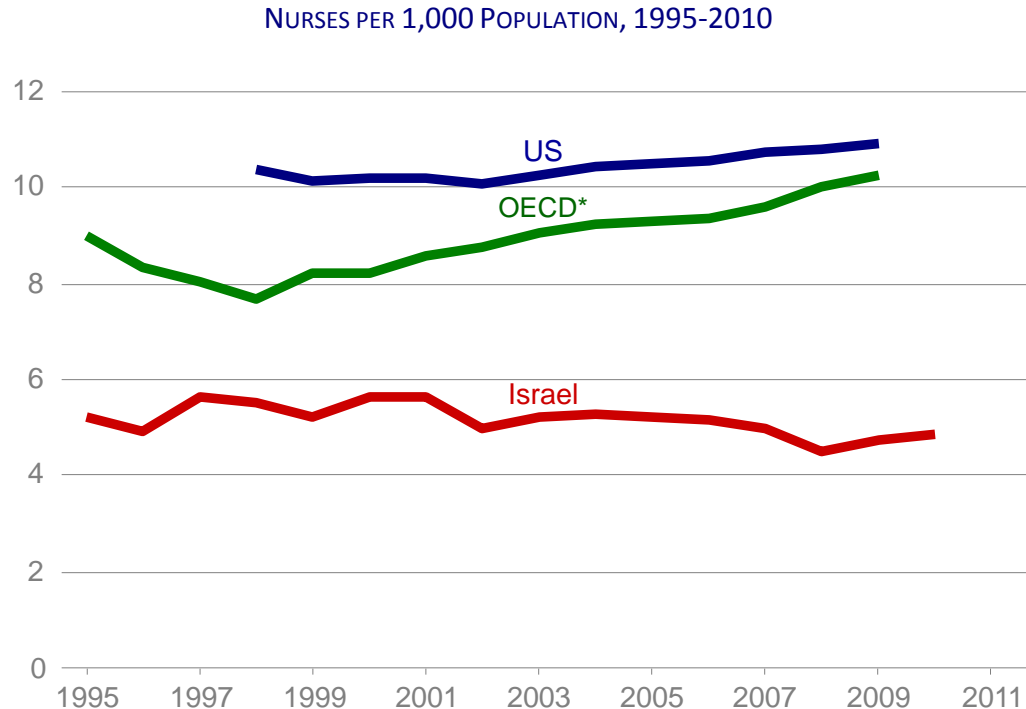
Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD

## Fewer Israeli nurses per capita than in the developed world

While the current relatively large stock of physicians per capita has bought time for Israel to reverse the trends in medical school graduates, the situation among nurses is considerably more problematic.

Israel has less than half the nurses per capita of the OECD and the United States – and while this share is rising in the West, it is in the midst of a long and steady decline in Israel.



\* Average of the 23 most developed OECD countries (excluding the U.S.)

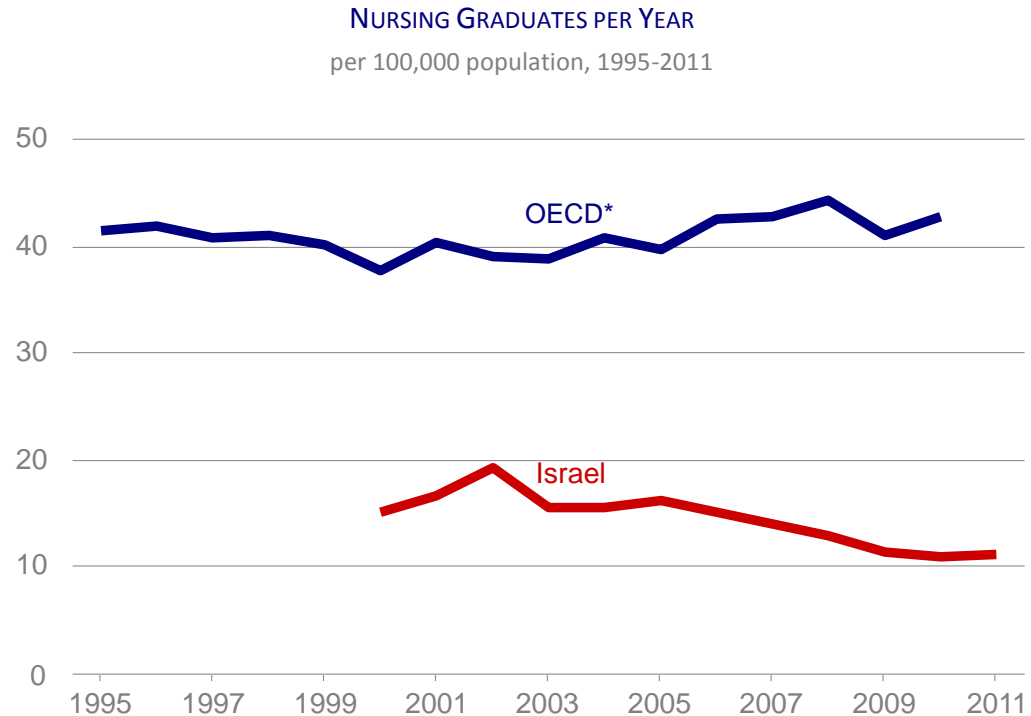
Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD



## Fewer Israeli nurses in the pipeline than in the developed world

Exacerbating the decline in the number of nurses per capita in Israel is the very low – and decreasing – number of nursing graduates per capita each year. The number of graduates has reached levels that are only one-fourth of those in the OECD.



\* Average of the 23 most developed OECD countries (excluding the U.S.)

Source: Dov Chernichovsky and Eitan Regev, Taub Center

Data: Central Bureau of Statistics, OECD

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