

# Public Expenditures

## A Look at Israel's National Priorities<sup>1</sup>

---

Dan Ben-David\*

### *Abstract*

---

*Even after deducting Israel's very high defense spending from its total public expenditures, the remaining civilian expenditures have been higher than average OECD civilian expenditures between the mid-1980s and the mid-2000s. But the relatively higher civilian expenditures did not prevent rates of poverty and income inequality from rising higher than is common in most Western countries. Where did the money go? In contrast to the common practice, this chapter shows Israel's budgetary allocations by areas of expenditure rather than by government ministries. This makes it possible to see Israel's actual national priorities rather than its declared ones.*

---

---

<sup>1</sup> Complete tables can be found in the appendix to this chapter.

\* This chapter could not have been written without Yulia Cogan. For years, she has been compiling, organizing and preparing the government's budget tables for the Taub Center with dedication and meticulousness. I would like to thank Yulia very much for her considerable assistance and comments. Thanks also to Haim Bleikh, Sagit Azary and Kyrill Shraberman for assembling and updating data and preparation of graphs, and to Nachum Blass, Professor Johnny Gal, Dalit Nachshon-Sharon and Professor Ayal Kimhi for their comments and suggestions.

## *1. Public Expenditures – Then and Now*

Why are Israel's rates of poverty and disparity so high and what has caused them to rise over the past several decades? How is it that, despite population groups within Israel that innovate at the frontiers of human knowledge, the country's steady state rates of productivity and economic growth consistently lag behind those of the G7 countries that lead the Western world (see opening chapter "A Macro Perspective")? Has Israel's defense budget over the years been so large that the remaining civilian public expenditures were simply insufficient for coping with the country's primary social and economic problems in the realms of education, employment, health and welfare? (See more on these problems in the relevant chapters.)

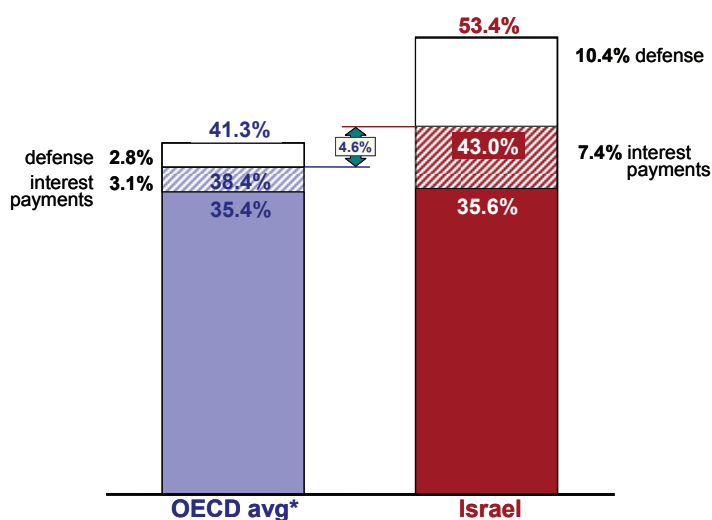
This chapter focuses on Israel's public expenditures and their allocation. It examines how these expenditures developed over time, their overall levels and composition today and in the past – and how the expenditures and the national priorities underlying these outlays compare with those of other developed countries.

In seven of the eleven years between the 1973 Yom Kippur War and 1984, when the peak inflation rate reached 445 percent, Israel's public expenditure exceeded 70 percent of the country's Gross Domestic Product (GDP). After implementation of the Economic Stabilization Program for dealing with hyperinflation, the country's public expenditure fell to an average of 53.4 percent during the two decades spanning the years 1985-2004, which is still relatively high compared to other Western countries. The conventional wisdom in Israel has been that although total expenditures are higher in Israel, the civilian portion of public expenditures is lower than the Western average because of the much higher defense expenditures in Israel.

Figure 1 compares Israel's public spending to that of the OECD countries. The average Israeli expenditure of 53.4 percent of GDP over the years 1985-2004 was indeed higher than the OECD's 41.3 percent of GDP during that same time period. Also, Israel's average defense

spending, 10.4 percent, was substantially higher than the OECD's 2.8 percent. After subtracting defense spending from overall expenditures in both Israel and the OECD, Israel's civilian expenditure (43.0 percent of GDP) was still 4.6 GDP percentage points higher than the OECD's (38.4 percent of GDP).

Figure 1  
**Total Public Expenditure, 1985-2004**  
as a percentage of GDP



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** CBS, Bank of Israel, OECD.

To illustrate how much Israel's civilian expenditure exceeded the OECD's over these two decades, it is possible to estimate the cumulative value of Israel's surplus civilian expenditure compared to that of the OECD by multiplying Israel's output by the difference between civilian

expenditure in Israel and in the OECD during each of the years. When tallied up, Israel's surplus civilian expenditure relative to the OECD average for the 1985-2004 period equaled NIS 363.9 billion in 2008 prices. This amount is half of Israel's entire 2008 GDP of NIS 725.1 billion. In other words, Israel's long run trends of low growth and high poverty and income inequality relative to the OECD in recent decades did not result from lower civilian expenditures than the OECD, but from different priorities in the utilization of the civilian budgets.

The high level of public expenditures, which were not completely funded by taxes and other revenues, resulted in annual budget deficits. The financing of these deficits meant that Israel had to borrow and subsequently return not only the principal on the loans, but also had to pay the interest on them. Interest payments represent a "fine" of sorts that is placed on Israel's inability or reluctance to live within its means. Debt is justified when the loan is used for building infrastructure that would also benefit the next generation – which makes it reasonable to expect that the next generation should also participate in paying for it.

But when it comes to infrastructure projects over this period, Israel lagged far behind the OECD countries. For instance, in the area of transportation infrastructure, traffic congestion in Israel reached three times the OECD average, even though the country only had half the number of vehicles per capita as the OECD (Ben-David, 2003). The act of borrowing to pay for expenditures that do not pertain to infrastructure investments means rolling over to the next generation bills for expenditures that they will not benefit from.

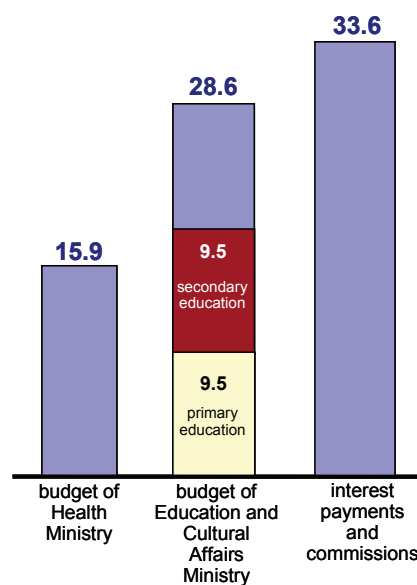
The fact that Israel's annual interest payments as a share of GDP have been more than twice the OECD average is a serious enough problem. When this is combined with the fact that Israel's physical infrastructure has been seriously neglected over these two decades, the problem becomes even more acute. Israel's interest payments reached NIS 33.3 billion in 2008 (Figure 2), more than the Ministry of Education's overall budget that year, which reached NIS 28.6 billion. In fact, interest payments were nearly double the budget of all the primary and secondary

education in Israel and of the Ministry of Health's entire budget. This is one practical implication of rolling the debt over to the next generation.

However, even after subtracting from public expenditure not only the defense spending but also interest payments, Israel's civilian public expenditure over the two decades (35.6 percent of GDP) was almost identical to that of the OECD (35.4 percent of GDP). This relative equality in civilian spending between Israel and the OECD seriously undermines the conventional wisdom that Israel's civilian expenditure was too low to allow a root-cause treatment to alleviate the country's high (in comparison to the OECD) rates of poverty and income inequality and relatively low rates of economic growth.

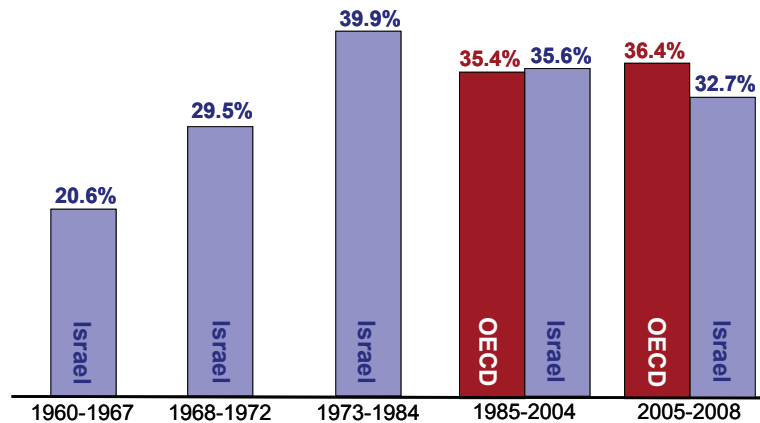
It is interesting to compare Israel's public expenditure not only to other countries but also to other time periods in its own history. Figure 3 presents a comparison of recent years with the past, while continuing to exclude defense spending and interest payments. In the 1960s, during the years preceding the Six Day War and in the shadow of existential national security threats, Israel absorbed massive waves of immigration, built roads, towns, schools and research universities – infrastructure projects that are key for generating economic growth.

Figure 2  
**Government Budget, 2008**  
NIS billions



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
Data: Ministry of Finance.

Figure 3  
**Total Public Expenditure, 1960-2008**  
 excluding defense expenditures and interest payments,  
 as percent of GDP



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** CBS, Bank of Israel, OECD.

During this period, Israel was characterized by substantially higher economic growth than all other countries that began the period with similar income levels (see Figure 9, in the chapter “A Macro Perspective”), while income disparities within Israel were very low compared to most Western countries. The infrastructure investments in the 1960s were made when Israel’s civilian expenditures (excluding defense and interest expenses) were 20.6 percent of GDP, slightly more than half the country’s average public expenditures over the years 1985-2004 (also excluding defense and interest expenses).

Israel’s public expenditures, excluding defense spending and interest expenses, grew considerably between the Six Day War and the Yom Kippur War. The ratio of expenditures to GDP rose by almost one half, from 20.6 percent of GDP before the Six Day War to 29.5 percent of GDP in the years 1968-1972. After the Yom Kippur War in 1973 and

until 1984, the record inflation year, and before the Economic Stabilization Program, public expenditures (net of defense and interest payments) rose by an additional 10 percent of GDP, reaching 39.9 percent of GDP.

These high levels of expenditure, together with extraordinary outlays on defense and interest payments, created an enormous debt. In 1984, when average public debt in the OECD was 53 percent of GDP, Israel's debt-GDP ratio reached 248 percent (according to OECD and Bank of Israel data, respectively). As shown later in this chapter, Israel's very high debt required annual interest payments equivalent to the country's combined public expenditure on education, health, welfare and housing.

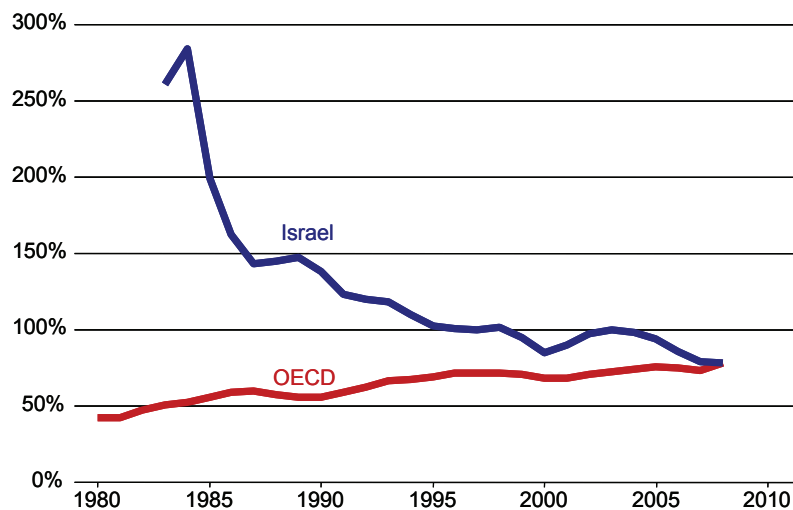
The substantial increase in civilian public expenditures reflected a major change in Israel's national priorities. Although the overall total was higher than it had been in the past, the era of large investments in basic infrastructures for the development of a modern economy came to an end, making way for new priorities that reflected much less of a national perspective and considerably more sectoral, local and/or personal considerations. Consequently, the rate of economic growth declined significantly.

This slowdown was not necessarily unique for Israel. Like many Western countries that entered a period of recession and economic slowdown following the 1973 Yom Kippur War and the subsequent Arab oil embargo, Israel also experienced a steep decline in economic growth (Ben-David and Papell, 1998). But, as shown in Ben-David and Papell, the Israeli growth slowdown was the sharpest and most extensive as the country moved from one of the highest growth rates in the West to one of the lowest. The subsequent slow Israeli growth path has remained remarkably steady since the 1970s (see "A Macro Perspective" chapter). The implication of this has been that instead of continuing to close the income gap between itself and leading Western countries, as had been the case until 1973, Israel's average level of income along the new growth path has since fallen farther and farther behind in relative terms.

The government budget was reduced in the years following the wave of terrorism and deep recession at the turn of this century. In 2005-2008, Israel's public expenditure net of defense and interest payments declined to 32.7 percent of GDP, while the OECD countries slightly raised their expenditures to an average of 36.4 percent of GDP.

Consequently, Israel's debt declined in 2008 to its lowest level in decades: 78 percent of GDP, identical to the OECD ratio that year (Figure 4). The severe global recession that hit many OECD countries in recent years led to increases in debt-to-GDP ratios that are expected to rise and possibly reach 104 percent in 2011. This worldwide recession had a lesser impact on Israel, and the country's debt ratio in the next two years is expected to show only a moderate increase and be lower than the OECD's.

Figure 4  
**Debt-GDP Ratio, 1980-2008**  
as percent of GDP

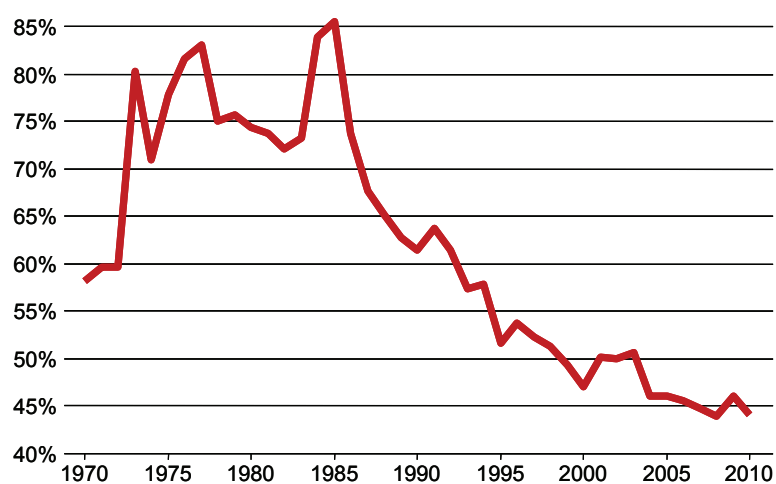


**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Bank of Israel, OECD.

## 2. The Government Budget

The primary component of Israel's public expenditure is the government budget. The ratio of the government budget to the country's GDP is illustrated in Figure 5.<sup>2</sup> Following the Yom Kippur War and the subsequent doubling of Israel's defense expenditures between 1972 and 1973, the government budget jumped to 80 percent of GDP. Defense expenditures alone reached 37 percent of GDP.

Figure 5  
**Government Budget, 1970-2010**  
as percent of GDP



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

<sup>2</sup> The analysis in this chapter refers to effective expenditures.

The government budget remained very high over the years. Despite fluctuations in its share of the GDP during the decade following the war, the budget reached 83 percent of GDP in 1977 and 85 percent of GDP in 1985. The picture changed with the implementation of the Economic Stabilization Program, and the government budget's share of GDP dropped to roughly 45 percent by the end of the following two decades.

The allocation of the government budget to its different components reflects the national priorities of the State of Israel. The Taub Center, since its establishment in the early 1980s, has been analyzing the government budget by major areas of expenditure, which do not necessarily overlap the budgets of specific government ministries.<sup>3</sup> Thus, for example, education expenditures include not only the Ministry of Education budget, but also expenditures for education by other ministries, such as the Ministry of Industry, Trade and Labor's expenditures for vocational training.

The Taub Center compiles Ministry of Finance's data on actual – i.e. implemented – budget expenditures for the various years (Ministry of Finance, *Report of the Accountant General*) and supplements this with the approved bi-annual budget in its most recent form for the years 2009 and 2010. The different time series presented in this chapter – which start as early as 1970 – show components of the current budget and the development budget in nominal and real prices (i.e., after adjustment for inflation) relative to GDP and to population.

Israel's national priorities from 1970 to 2010 are reflected in Figure 6. Throughout most of the 1970s, after the Yom Kippur War, defense spending was over one-quarter of Israel's entire domestic output. In the early 1980s, defense spending reverted to pre-Yom Kippur War levels of roughly one-fifth of GDP. The share of defense spending out of GDP began to steadily decline after the Economic Stabilization Program was introduced in the mid-1980s, flattening out and stabilizing in the 2000s.

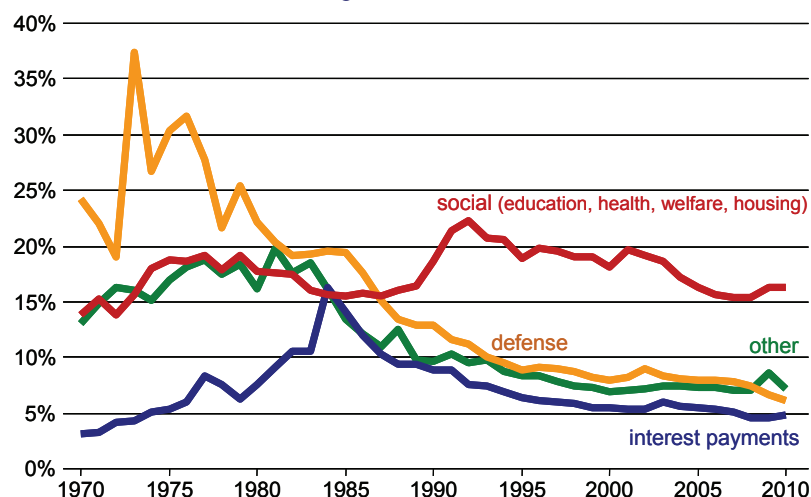
---

<sup>3</sup> The Taub Center structure follows the U.N.'s COFOG (Classification of the Functions of Government).

The budget for the years 2009 and 2010 reflects an additional decline in this ratio.

The government's very high expenditures in the 1970s and 1980s were not financed entirely from government revenues and required extensive borrowing – with interest payments that reflect this. In 1984, for example, interest payments alone reached 16.2 percent of GDP, equaling the government's total expenditure on education, health, welfare and housing. Since the mid-1980s, a sharp decline in defense spending and in other ministries' budgets, excluding education, health, welfare and housing, enabled a reduction in the overall budget and in interest payments. When the big immigration wave from the former Soviet Union reached Israel in the early 1990s, increasing Israel's resident population by almost one-fifth, these budget reductions made it possible to substantially increase the country's social expenditures.

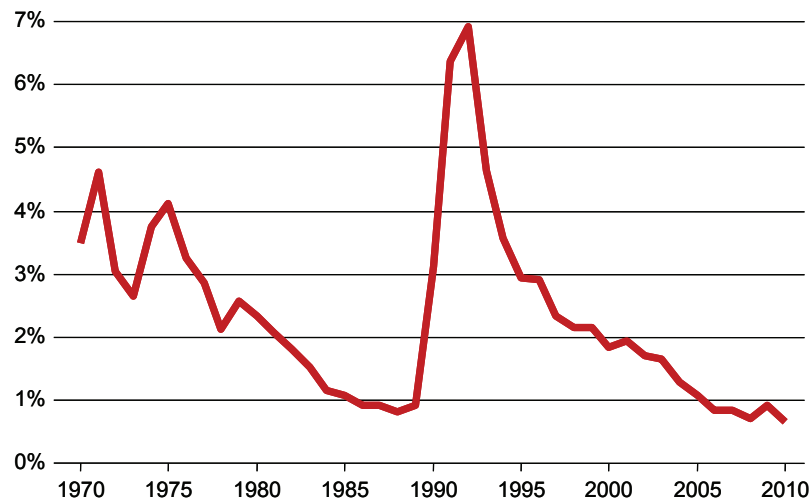
Figure 6  
**Allocation of Government Budget, 1970-2010**  
as percent of GDP



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

In the 1970s, the bulk of the growth in social expenditure went to immigrant absorption in the form of direct assistance and as housing subsidies (Figure 7). After nearly two decades of constant decline in these expenditures, from four to one percent of GDP between the early 1970s and the late 1980s, the large immigration of the 1990s pushed expenditures on absorption and housing up to nearly seven percent of GDP by 1992. In the absence of additional immigration at these levels in subsequent years, absorption and housing budgets over the past two years returned to levels from two decades ago.

Figure 7  
**Housing and Immigrant Absorption Budgets, 1970-2010**  
 as percent of GDP

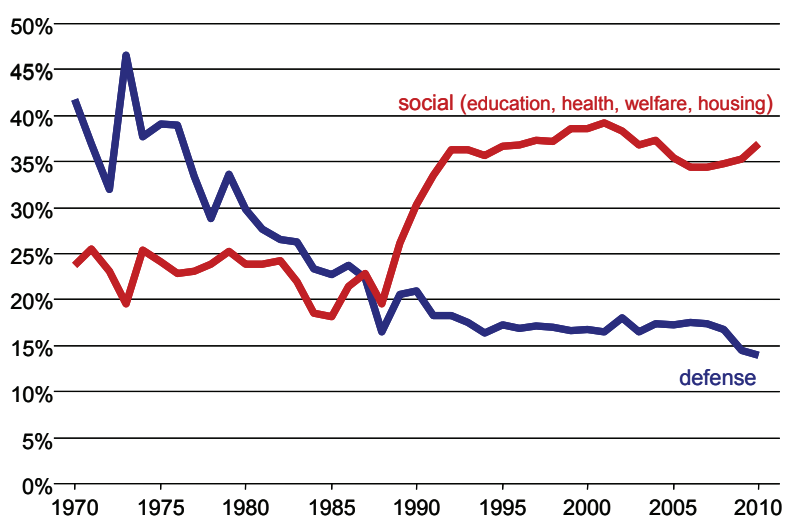


**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

While the government budget's share of GDP declined steadily in recent decades, its internal composition also underwent substantial changes. Defense expenditures (Figure 8), which reached 47 percent of

the budget in 1973, fell to 17 percent of the budget by 1993. They remained relatively stable at this level for one and a half decades, until 2008 (though the budget grew by 43 percent in real terms during this period). For the 2009 and 2010 budget years, defense expenditures are expected to decline to 14 percent of the budget as a result of decreases in defense spending and budget increases.<sup>4</sup>

Figure 8  
**Defense and Social Budgets, 1970-2010**  
as percent of total budget



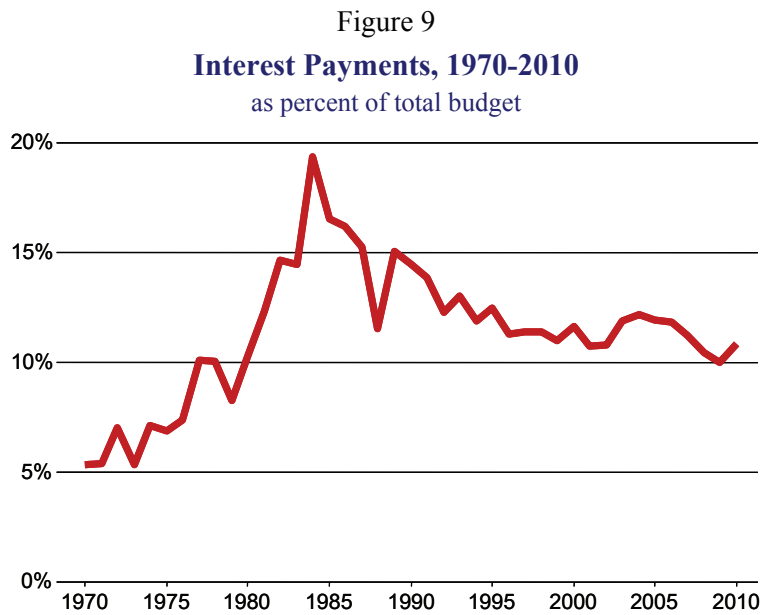
**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance.

As noted, the ongoing reduction in the share of defense spending in GDP (Figure 6) allowed not only the reduction of the overall budget, it also enabled an increase in the budget's social component from the mid-

<sup>4</sup> Since the annual defense budget varies from actual expenses (about 85 percent of the general reserves – roughly NIS 5 billion in 2008 – is earmarked for the country's secret services and permanent transfers), it is possible that the planned reduction of the defense budget will not materialize.

1980s onwards (Figure 8). The social part of the budget fluctuated between 23 and 25 percent of the budget in most years between 1970 and 1982, with a drop to 18 percent of the budget in 1985. Since then, money released from defense cuts facilitated an increase in social spending, raising it to 39 percent of the budget by the years 1999-2001. After the wave of terrorism and deep recession early in the first decade of the 21st century, the social component of the budget declined below 35 percent. A change in trend began with increases in the 2008 budget.

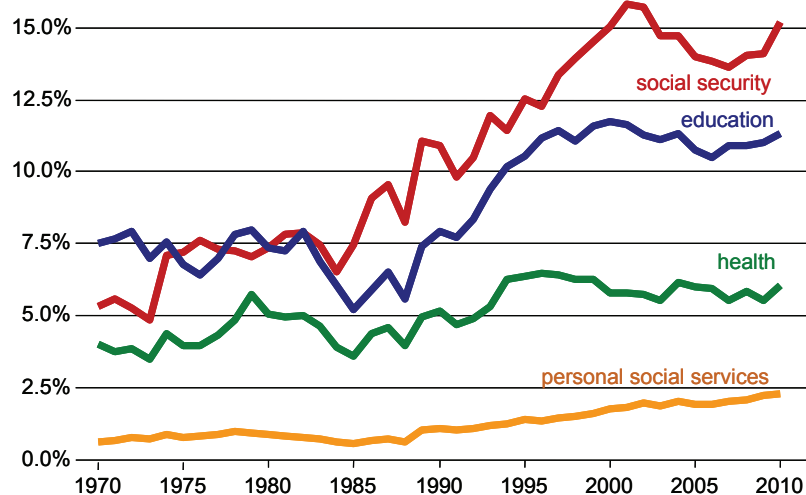
Interest payments represented 5.3 percent of the budget in 1970 (Figure 9). After the Yom Kippur War the interest payment component in the budget rose steadily and in 1984 reached nearly one-fifth (19.4 percent) of the State of Israel's overall budget. Since then, interest payments declined to about one-tenth of the current budget – still more than double the 1970 level.



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance.

The distribution of the social budget to its key components is illustrated in Figure 10. The two largest budget items, social security and education, lead in size in all the years, but have swapped positions.<sup>5</sup>

Figure 10  
**Social Expenditures, 1970-2010**  
as percent of total budget



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance.

<sup>5</sup> Under the heading “social security,” Taub Center includes the National Insurance Institute payments (excluding payments for service in the military reserves and provisions included in other welfare areas) and the Compensation for Victims of Nazi Persecution.

The share of expenditures for education was roughly 7.5 percent of the government budget from 1970 until the early 1980s. Social security expenditures represented slightly more than five percent of the budget in the early 1970s. After the Yom Kippur War and until the early 1980s, a level change in social security expenditures raised their share of the budget to about 7.5 percent, close to education expenditures.

During the peak inflation years leading up to 1985, the share of education dropped to 5.2 percent of the budget. Later, however, the part of the budget channeled to education kept growing and more than doubled, reaching 11.8 percent in 2000. During those years, social security's share of the budget – which was close to that of education for about a decade – did not decline at the same rate as education in the mid-1980s. The social security component in the budget then exceeded education and steadily rose from 6.5 percent of the budget in 1984 to 15.8 percent of the budget in 2001. Following the budget cuts in the early 2000s, the social security component dropped to 13.7 percent of the budget by 2007. Since then, though, it has been steadily rising.

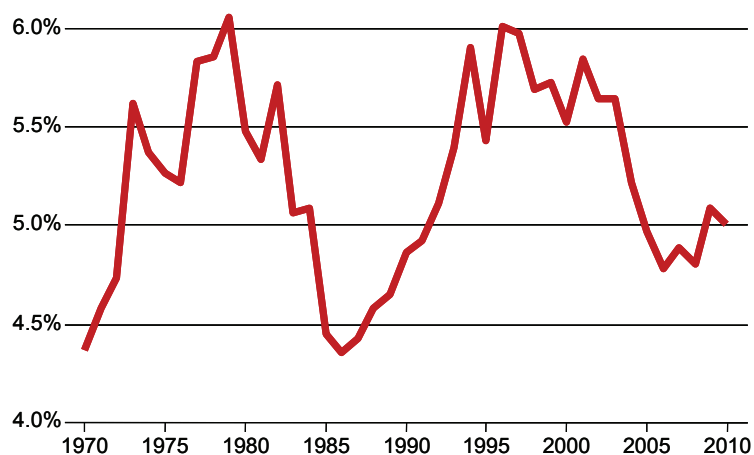
In the years 1970-1990 there were large fluctuations in the healthcare component of the budget, with healthcare in 1970 representing 4.0 percent of the budget. This share declined to 3.5 percent in 1973, rose to 5.7 percent in 1979, dropped again to 3.6 percent during the 1985 inflation crisis, and returned to 5.2 percent in 1990. The introduction of the National Health Insurance Law in the mid-1990s caused a level change, pushing healthcare up to 6.5 percent in 1996. Since then, however, government healthcare expenditures fell slightly, with the share of healthcare in the budget declining to 5.5 in 2003 and 2007.

Among the four main social budget items, personal social services are the smallest expenditure item. They represented 0.6 percent of the budget in 1970 and 1985, followed by a slight increase to 1.0 percent in 1978. In the 25 years since 1985 the share of personal social services in the budget has grown steadily and is expected to reach 2.3 percent in 2010.

### 3. Education

All the major components of Israel's education budget underwent substantial changes over the past four decades. Education expenditures, representing 4.4 percent of GDP in the early 1970s, reached 6.1 percent of GDP by the end of the decade (1979). This means that within the span of just one decade, the budget share of GDP going to education increased by over one-third (Figure 11). This rise did not continue and in 1986, the share of education expenditures in the budget dropped back to 4.4 percent of GDP. In the following decade, during the second half of the 1980s and the first half of the 1990s, education's share of the budget rose steadily, reaching 6.0 percent in 1996.

Figure 11  
**Total Education Expenditures by Central Government**  
as percent of GDP, 1970-2010



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

In fact, the ratio of education expenditure to GDP from 1993 to 2003 fluctuated significantly, followed by a substantial decline in the years 2004-2006. Only in the past few years has this decline come to a halt, with education's share of the 2009-2010 budget designated to rise. Throughout all this time, despite the large changes and fluctuations of past decades, the ratio of public education expenditures to GDP in Israel has been high relative to other countries. One important reason for this is the fact that the Israeli population is relatively young and the percentage of pupils out of the population is higher than in other Western countries. (The chapter "Israel's Education System – An International Perspective" provides an extensive international comparison of Israel's educational system.)

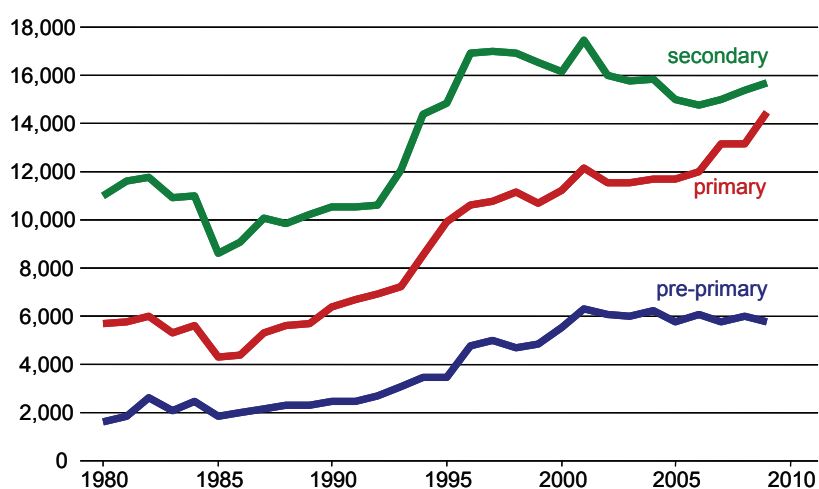
Hence, a more relevant measure for comparing education expenditures over time and between countries must take into account the number of pupils in each country each year. Education expenditures per pupil (i.e., total expenditure divided by the total number of pupils) is such a measure. Figure 12 shows expenditures per pupil from 1980 to 2009, in 2008 prices – i.e., in real terms, after netting out price inflation. The lowest expenditure per pupil is at the pre-primary school level. As the level of education rises, so does spending per pupil: in 1980, expenditures per pupil in pre-primary schools were about NIS 1,600 (in 2008 prices), in primary schools, about NIS 5,700, and in secondary education, expenditures per pupil reached about NIS 11,000.

Pre-primary school expenditures per pupil were stable in the 1980s, rising substantially during the 1990s following the addition of kindergarten in the Compulsory Education Law. This legislative change caused an increase in government expenditure and a decrease in private expenditure. In the 2000s, expenditures per pupil stabilized at around NIS 6,000 – more than three times the 1980 level.

Other than a 25 percent decline in primary school expenditures, to NIS 4,300 (in 2008 prices) in the first half of the 1980s, there has been a steady increase in these expenditures for over two decades. In 2009 the expenditure per primary school pupil reached about NIS 14,500 (in 2008

prices), 3.4 times the 1985 level of spending. The mid-1990s increase in the education budget resulted primarily from a wage agreement signed after a large teachers' strike. Also, there was a substantial escalation in special education expenditures, which were included in the primary education budget.

Figure 12  
**Education Expenditure Per Pupil, 1980-2009**  
 NIS, 2008 prices



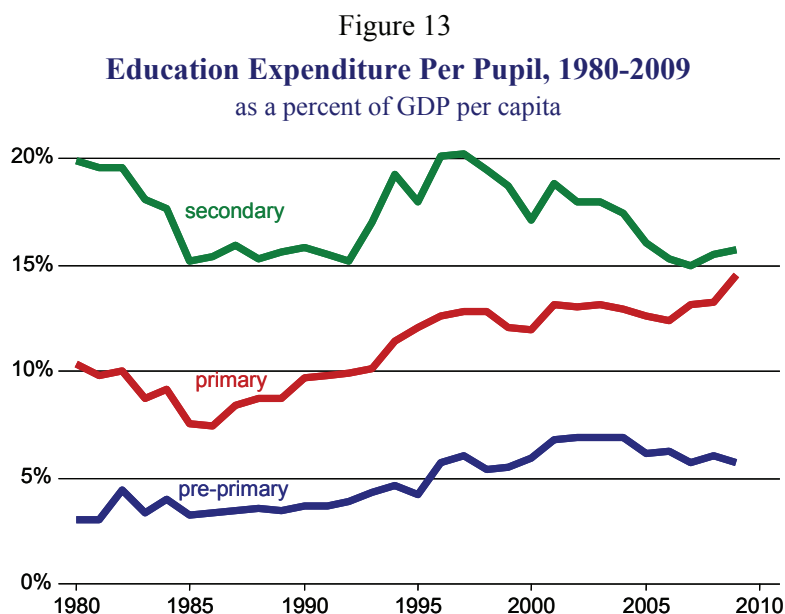
**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

The secondary education budget underwent two difficult periods. As in the case of primary education, expenditures per pupil declined by 22 percent from 1980 and 1985. Most of this budget cut was reinstated over the years 1986-1992. Between 1993 and 1996, expenditures per pupil in secondary education rose by 60 percent, reaching NIS 17,000. After a slight decline in 1999-2000, expenditures per pupil in secondary schools jumped to a peak of NIS 17,400 in 2001. Secondary school expenditures decreased sharply, by 15 percent, in 2002-2006, falling to NIS 14,773 per

pupil – still substantially higher than the expenditures per pupil prior to 1993. Over the past three years, secondary school expenditures per pupil rebounded somewhat, rising by 6.3 percent to NIS 15,700 in 2010, which is 82.5 percent higher than the 1985 bottom, but 10 percent less than the 2001 peak.

This is a common way of examining expenditures per pupil, but it has some drawbacks. As Israel's standard of living rises in real terms – i.e., after discounting price inflation – there is a tendency for employee wages to rise as well. Since wages constitute a substantial share of the education budget (89 percent of Israel's education budget in 2007), then when wages rise without a parallel change in expenditures per pupil, the result is a decrease in overall educational inputs that students receive. Furthermore, dividing GDP by population – that is, calculating GDP per capita – reflects the standard of living of the average Israeli citizen. What share of that standard of living was spent for educating an average pupil in 1980, and what share of the current standard of living does the State of Israel spend today educating a pupil?

To address these issues, Figure 13 shows the relationship between expenditures per pupil at different levels of education and GDP per capita. This provides a more accurate reflection of Israel's national priorities in the area of education – and of the changes in these priorities over the past three decades. In early childhood education, the ratio of expenditures per pupil to GDP per capita in 2009 was almost double that of 1980, even though this ratio has dropped 6.6 percent since 2006. In primary schools, the share of GDP per capita directed to education expenditure per student increased by 43.7 percent since 1980. But compared to the trough in expenditures in 1985, the 2009 level reflects an increase of 95.4 percent – including a 19.7 percent rise in 2006-2009 alone.



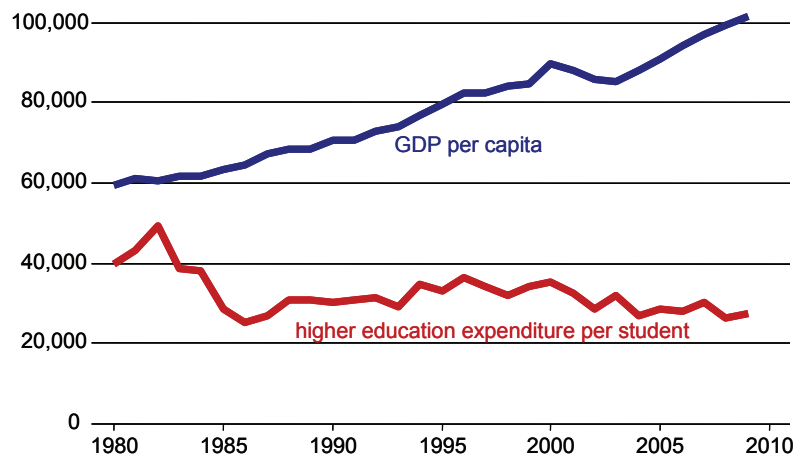
**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
Data: Ministry of Finance, CBS.

The picture in secondary education is completely different. In 1980, expenditure per secondary school pupil reached 20 percent of GDP per capita, but after three decades, it is approximately one-fifth less: 16 percent of GDP per capita in 2009. The additional funding given to secondary education in the early to mid-1990s returned the system to the 1980 expenditure levels. However, the combination of falling real expenditures per pupil and rising standards of living culminated in an erosion in expenditures per pupil relative to Israel's standard of living between 1997 and 2007, taking the secondary education system back to the low expenditure levels of 1985-1992. In the past two years, there was a 7 percent increase in this ratio. The chapter "Israel's Education System – An International Perspective" shows the ratio of spending per secondary school pupil to GDP per capita is currently below the OECD average.

#### 4. Higher Education

While spending per pupil in pre-primary, primary and secondary education is higher today in real terms – albeit, not with regard to secondary education spending relative to GDP per capita – this is not the case in higher education, where expenditure per student in 2009 was 31 percent lower than it was in 1980, and 45 percent lower than at its peak in 1982 (Figure 14).

Figure 14  
**Higher Education Expenditure Per Student vs. GDP Per Capita**  
in 2008 NIS, 1980-2009



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

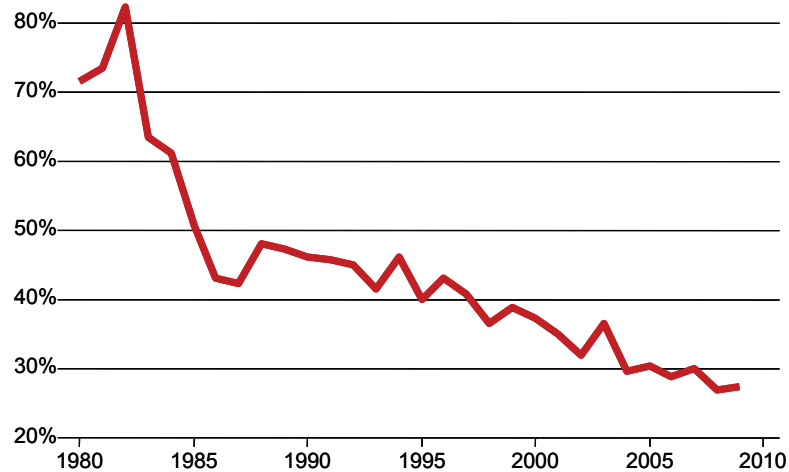
The sharpest decline in higher education expenditures per student took place between 1982 and 1986, when they dropped from NIS 49,357 (2008 prices) to NIS 25,344. Over the subsequent decade, from 1987 to 1996, there was somewhat of a recovery as expenditure per student increased to NIS 36,425 shekels. Since 1996, higher education budget per

student has been trending downwards, with a drop of 25 percent, and is currently 8 percent above the trough in 1986. Part of the explanation for this decline in expenditure per student may be due to the emergence of non-research academic colleges, where spending per student is lower than in universities.

But this is not the entire picture. Figure 14 also depicts the changes in Israel's standard of living, expressed in terms of real GDP per capita. While the costs of higher education services rose substantially in real terms, expenditures per student fell in relative terms. The degree of erosion in budgeting for higher education can be seen in Figure 15. While in 1982 expenditures per student reached 82 percent of GDP per capita, by 2009 they had fallen to only 28 percent of GDP per capita – with all that this entails regarding the universities' ability to function. Public expenditure per higher education student in Israel today, normalized by standard of living, is not only lower compared to the past but is substantially lower relative to OECD countries. (See details in the chapter "Israel's Education System – An International Perspective.")

The decrease in spending per student relative to standards of living coincided with a large reduction in the number of senior faculty positions. As shown in earlier research (Ben-David, 2008), the turnaround took place in the mid-1970s. While Israel's population has doubled since 1973, the number of senior faculty positions at universities grew only 12 percent, and in higher education in general (including colleges) the increase was only 30 percent. The overall result has been a sharp decline in the number of senior faculty per capita in Israel over the past three and a half decades.

Figure 15  
**Higher Education Expenditure Per Student, 1980-2009**  
 as percent of GDP per capita



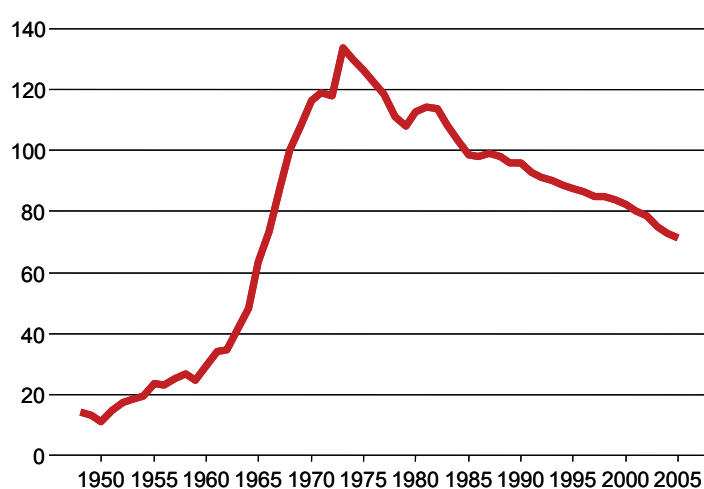
**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

Figure 16 shows that the State of Israel increased the number of faculty positions per capita until 1973, despite being a much poorer country than today and with fewer resources at its disposal to allocate – while after 1973, a much wealthier State of Israel changed direction, steadily reducing the number of senior faculty positions per capita over the past several decades. Previous research (Ben-David, 2008) shows that the Technion's (Israel's leading institute of technology) senior faculty grew by just a single position since 1973 while in Israel's two flagship universities, the Hebrew University and Tel-Aviv University, the number of senior positions declined by 14 and 21 percent, respectively.

An entire generation had trouble finding senior research positions in Israel while the senior faculty was aging. According to the Council for

Higher Education, about half of the senior faculty members today are 55 or older. While the relatively small number of faculty positions is not the only reason for the academic brain drain from Israel, it is certainly one of the major causes for an academic emigration that is unparalleled in the Western world (Ben-David, 2008).

Figure 16  
**Senior Research Faculty in Israel\*, 1948-2006**  
per 100,000 people



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

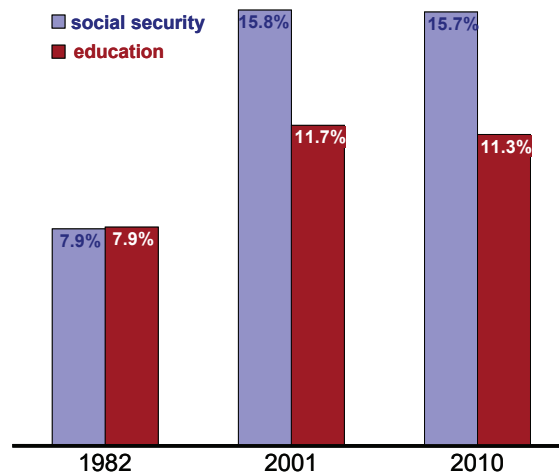
**Source:** Dan Ben-David, "Brain Drained" (2008).

Data: CBS, the Council for Higher Education's Planning and Budgeting Committee.

## 5. Social Security

From the mid-1970s and for nearly a decade, the State of Israel's education and social security budgets were roughly equivalent (Figure 10). Since then, their respective shares in the overall budget exhibited substantial increases. While in 1982, the education and social security components each accounted for 7.9 percent of the government budget, two decades later, by 2001, education's share of the budget increased by half (to nearly 12 percent) while the social security share of the budget doubled (Figure 17). Since the peaks of the early 2000s, there was a slight decline in the education share (to 11.3 percent of the overall budget) and in the social security share (to 15.7 percent of the overall budget).

Figure 17  
**Social Security and Education Budgets, 1970-2010**  
as percent of total budget



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance.

The opening chapter of this book, which provides a macro perspective of Israel's society and economy, shows the expansion of poverty and inequality in terms of gross incomes from 1979 to 2008, but only relatively small changes in poverty and inequality in terms of net incomes (i.e., after transfer payments and taxes). A core treatment of the poverty and inequality problems would have reduced those rates in gross income, and consequently, also in net income. A symptomatic treatment, by definition, is not targeted at reducing gross income poverty and inequality but only at their reduction in net incomes – that is, after they have already been created.

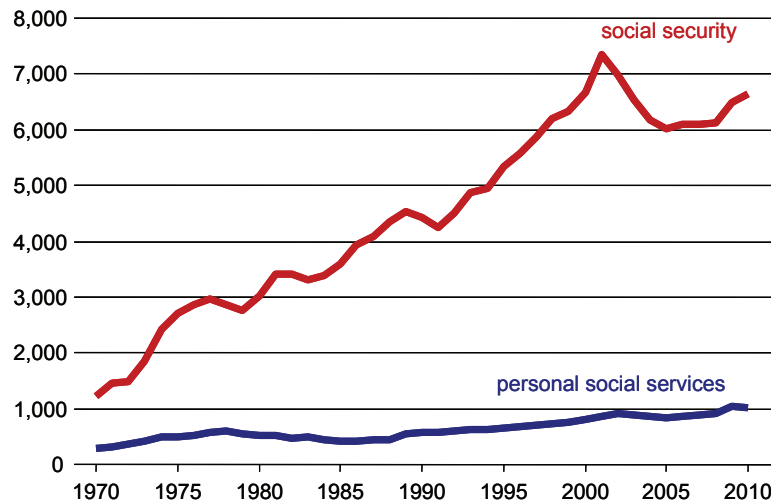
When the core treatment is insufficient and gross income inequality and poverty continue to rise, it becomes necessary to deploy a steadily growing social safety net to prevent the increase in poverty and inequality from being reflected in net incomes. Social security is a major part of the social safety net, designed to reduce net income poverty and inequality – or at least, to prevent them from continuing to grow.

One might speculate that if the State of Israel had made better use of its educational budget during past decades, the picture reflected in Figure 17 would have been different – perhaps with a better balance between education and social security, as was the case in 1982. This is not a trivial issue, considering the social security expenditures that had to be made as a result of the increase in gross income poverty and inequality, expenditures that perhaps could have been smaller had there been adequate treatment of these problems at their core.

Three million people lived in Israel in 1970. By the end of 2009, the country's population had risen by 150 percent, reaching 7.5 million people. Despite the large increase in population, Figure 18 shows that the increase in social security expenditures was much greater. The average social security expenditure per capita – measured in 2008 prices – peaked in 2001 at NIS 7,344, and then fell in subsequent years. That said, the

average expenditure per person is expected to reach NIS 6,652 in 2010, compared to NIS 1,222 in 1970 (in 2008 prices).<sup>6</sup>

Figure 18  
**Social Security and Personal Welfare Services, 1970-2010**  
 expenditures per capita in 2008 NIS



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

Personal social services, in-kind services for the weakest and most vulnerable segments in society, are provided to at-risk youth, battered women, families in crisis, individuals with physical and/or mental

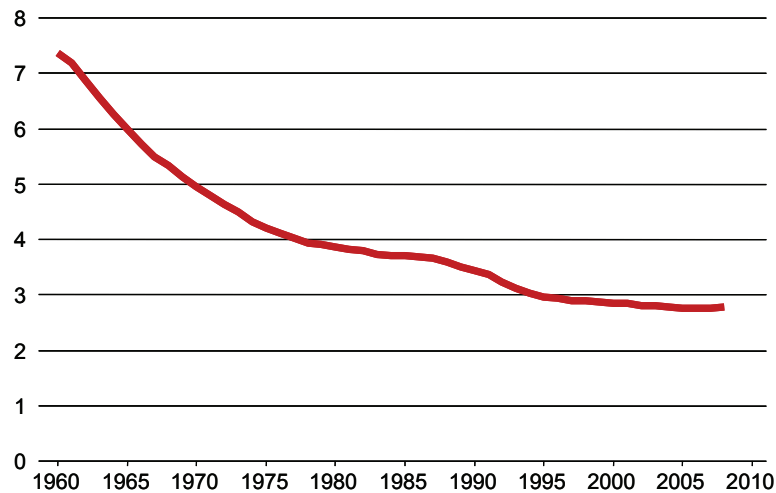
<sup>6</sup> It is important to note that Israel's social security spending – which is low compared to most OECD countries (OECD, 2009) – is not only directed at dealing with poverty and inequality, but also with other issues and areas. On the other hand, additional funds targeted at reducing net income poverty are disbursed as subsidies and aid to segments of Israeli society via other government budgets and are not included in social security spending.

handicaps, etc. Per capita governmental expenditure on personal social services (in NIS 2008) was NIS 283 in 1970 and is expected to reach NIS 1,016 in 2010 – 3.6 times the 1970 expenditure. From 1970 to 2010, real per capita social security spending grew by a factor of 5.4. By comparison, Israel's standard of living as reflected in GDP per capita grew 2.25 times over these same years.

Independent of the question of whether the 1970 expenditures were high enough or whether they are sufficient or excessive today, it is important to point out that such increases that have occurred over the past four decades will not be possible to replicate over the next four decades. If the causes of poverty and income inequality are not adequately dealt with at their core, then the inability to continue increasing social security expenditure per capita at past rates over the coming decades will invariably result in even higher rates of poverty and income inequality – which are already very high in comparison with other Western countries – with all that this implies for the future of Israeli society.

Table 1 in the chapter “The Social Security System in Israel” shows the major changes that occurred in the allocation of social security spending over the past two decades. These changes reflect a combination of demographic changes in Israeli society and changes in the level of benefits per recipient. Although Israel's birth rates are much higher than is common in OECD countries (Figure 6 in the chapter “Israel's Labor Market”), Israeli society is aging. Figure 19 shows the relationship between the 0-14 age group and the 65+ age group in Israel. In 1960, there were 7.4 times more children aged 0-14 than elderly aged 65 and over in Israel. This ratio declined greatly over the years and in 2008 reached 2.8. This is still a relatively high ratio compared to OECD countries (12 countries already have a ratio below 1, i.e., their 65+ age group is larger than their 0-14 age group), but nevertheless, Israeli society is also undergoing a notable aging process – with distributional implications for the social security expenditure, from old age and survivor benefits through general disability benefits to child benefits.

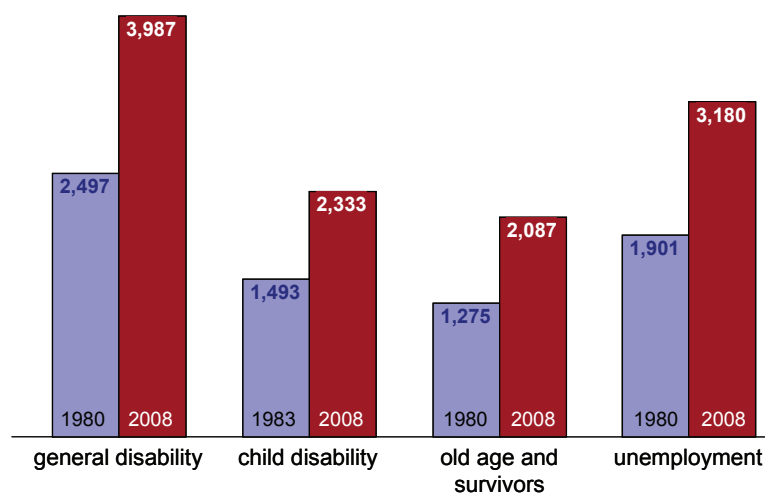
Figure 19  
**The Aging of Israel's Population, 1960-2008**  
ratio of 0-14 age group to 65+ age group



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** CBS.

In addition to the effect of demographic changes on the components of social security expenditure, there were also changes in the average allowance per recipient in various classifications. Some of the changes that occurred over the past three decades appear in Figure 20. In the early 1980s, allowances per recipient differed considerably by social security classification. However, the real increase (i.e., adjusted for inflation) in all four types of allowances was very similar: 60 percent for general disability, 56 percent for children with disabilities, 64 percent for old age and survivors benefits, and 67 percent for unemployment benefits. What were the main causes of changes in the average allowance per recipient?

Figure 20  
**Average Benefits Per Recipient, 1980-2008**  
 monthly benefits, NIS, 2008 prices

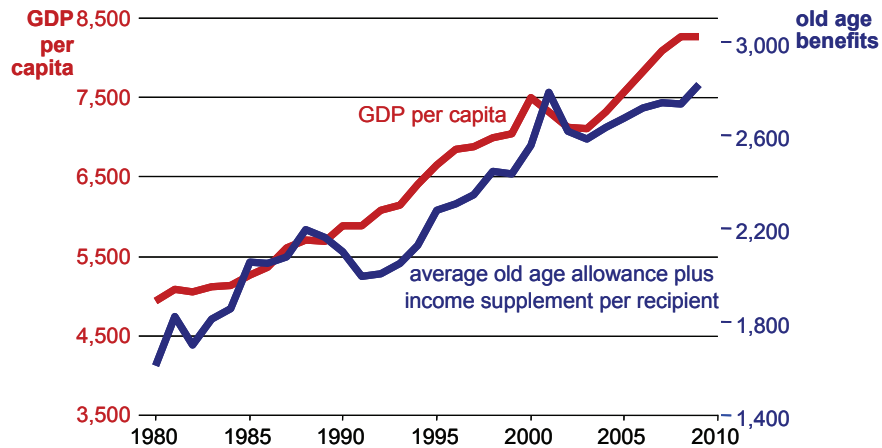


**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** National Insurance Institute.

### 5.A. *Old Age Benefits*

Over the past three decades, from 1980 to 2009, Israel's standard of living – as reflected in GDP per capita – rose by 67 percent. During the same period, average universal old age allowances per recipient increased 71 percent while the average income supplements paid to poor elderly recipients rose by 81 percent. The average total allowance for elderly people receiving both old age allowances and income supplements rose by 75 percent. However, as shown in Figure 21 (measuring GDP per capita on the left vertical axis and measuring old age benefits on the right vertical axis), the picture is not uniform over the entire period.

Figure 21  
**Old Age Benefits Per Recipient Relative to GDP Per Capita**  
 monthly amounts in 2008 NIS, 1980-2009



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
 Data: National Insurance Institute.

From 1980 to 1985, before implementation of the Economic Stabilization Program, the average total allowance for the elderly (old age allowance plus income supplements) increased by 27 percent, compared with an increase of a mere 7 percent in GDP per capita. From the mid-1980s until the end of that decade (1985-1989) the rates of change in the total allowance (5 percent) and in the standard of living (8 percent) were similar. From 1989 to 1991, with the great immigration wave from the former Soviet Union, average total allowance per recipient fell by 8 percent while GDP per capita kept growing (by 3 percent).

From 1991 to 2000, average total allowance per elderly recipient and GDP per capita grew along parallel tracks, increasing by 28 percent and 27 percent, respectively. The sharp increase was followed by a sharp drop in both benefits and GDP with the severe wave of terrorism and the deep recession that followed in the early 2000s. Since then, there has been a substantial erosion in the value of old age allowances, including income

supplements, compared to changes in living standards. From 2004 to 2008, GDP per capita grew by 13 percent while average total allowances for the elderly rose by only 4 percent. In 2009, this erosion was slightly offset by a 3 percent rise in average total allowances and a slight decline in GDP per capita.

The primary reason for the gap between the changes in living standards and changes in old age allowances (including income supplements) is the transition from past indexing of supplements to average monthly wages to their current indexing to the consumer price index (CPI). Indexing of allowances to the average wage had provided compensation to the elderly for increases in the country's standard of living while indexing to the CPI compensates only for cost of living increases.

When benefits are not adjusted to changes in average monthly wages, then those who depend on old age allowances and income supplements for their livelihood are destined, in their final years, to fall farther and farther behind most of Israeli society. This is clearly shown in Figure 21 for the past decade. On the other hand, as society ages (Figure 19), it becomes increasingly difficult to finance old age allowances according to changes in living standards for all relevant ages.

At the heart of this issue is society's need to decide whether to view benefits to the elderly as insurance for old age in the case of insolvency, or as a form of pension for which anyone who made social security payments during their working years should be eligible. Since the first generation to receive social security benefits – in all countries with such a system – received benefits without paying in at a younger age (simply because, by definition, social security did not exist when they were young), then from the outset, social security systems have not operated as pension funds paying back according to cumulative contributions. In the State of Israel, this issue was compounded by the huge influx of immigrants over the years, many of them older immigrants whose working years were spent abroad and who did not make social security payments in Israel as workers – but who became eligible for social

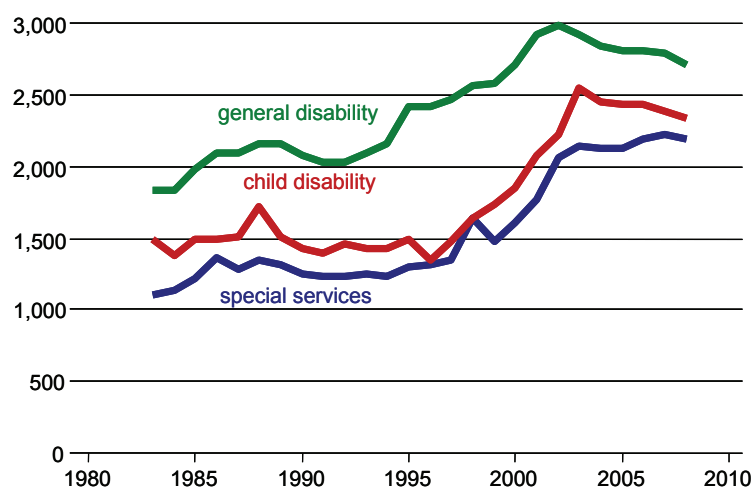
security benefits from Israel nonetheless upon reaching retirement age after arriving in the country.

Beyond universal old age allowances and income supplements paid out to elderly with no income, Israel's social security system has additional layers of assistance for the elderly including occupational pension and savings arrangements for old age. As stated in the chapter "The Social Security System in Israel," while average assistance for the elderly is similar in Israel and the OECD, its overall cost as a percentage of GDP is lower in Israel, which still has a relatively young population, compared to other developed countries. But as a country ages (any country, not only Israel), the burden on working age people increases to enable the system to finance benefits for the elderly – who had made their own social security payments when they were younger to facilitate the financing of benefits for the older generation of their time. Like other Western countries, Israeli society will have to decide at some point whether to (a) increase the burden on the young; (b) reduce the support for the elderly; or (c) begin to regard social security as insurance for times of trouble rather than as a pension that is universally available to all.

### ***5.B. Disability Benefits***

Changes in disability benefits since 1983 appear in Figure 22. From 1983 to 1993, there were no great changes in the average disability benefit (a 14 percent increase), in the average child disability benefit (a 4 percent decrease) and in the special services allowance (13 percent increase). The picture changed in the following decade. The average disability benefit increased by 40 percent from 1993 to 2003 while the average child disability benefit rose by 78 percent and the special services allowance rose by 72 percent. Between 2003 and 2009, disability benefits dropped by 7 percent and average child disability benefits dropped by 8 percent. Special services allowances increased during this period by an additional 10 percent.

Figure 22  
**Disability Benefits Per Recipient, 1983-2008**  
 monthly benefits in 2008 NIS



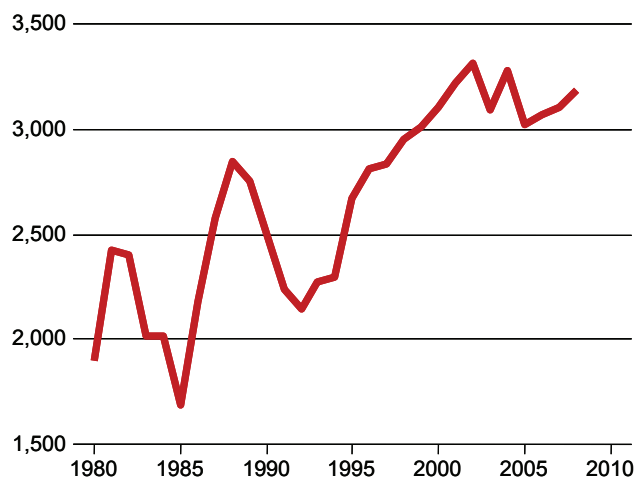
**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** National Insurance Institute.

A closer look at the general disability benefit for a person with total disability can illustrate the changes in benefits. From 1983 to 2008, the benefit for such a single person with no children rose by 36 percent, while for the disabled persons with a spouse and one child, the benefit rose 51 percent. Those disabled with a spouse and two or more children had their benefits increase by 64 percent. Additionally, the number of special services allowance recipients – primarily, adults with disabilities – increased substantially. In 1983, 6.6 percent of the disability benefit recipients also received special services allowances. This share has increased by a factor of 2.4, to 15.6 percent in 2008.

### 5.C. Unemployment Benefits

Between 1980 and 2008, average unemployment benefits per recipient rose 75 percent (Figure 23), compared with a GDP per capita increase of 67 percent. Ostensibly, this would appear to favor the unemployed. But behind this change are two key factors that present a more complex picture.

Figure 23  
**Unemployment Benefits Per Recipient, 1980-2008**  
 monthly benefits in 2008 NIS



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** National Insurance Institute.

The first factor concerns the composition of the population receiving unemployment benefits. These recipients can be classified by their income level – as a percentage of average monthly wages per salaried employee – on the eve of their becoming unemployed. In 1991 (these are the earliest published data), 76 percent of unemployment benefit recipients earned up to half of the average monthly wage, nine percent of

unemployment benefit recipients earned between 50 and 75 percent of the average monthly wage, four percent earned between 75 and 100 percent of average monthly wages and 10 percent earned the average monthly wage, or more. In 2009, the group earning up to half of the average monthly wage fell from 76 to 16 percent of all unemployment benefit recipients, while the share of the other groups increased to 34, 20 and 30 percent, respectively – meaning higher benefits for a greater share of the recipients.

The second factor affecting average unemployment benefits pertains to the share of unemployment benefit recipients in the overall number of unemployed (Figure 24). In 1980, 15 percent of the unemployed received unemployment benefits. This share increased gradually, peaking at 51 percent in 1997. Since 1997, restrictions on eligibility steadily increased (for details, see the chapter “The Social Security System in Israel”) and the share of unemployment benefit recipients declined considerably, falling to 21 percent in 2004. Since 2004, this ratio experienced a slight rebound, reaching 27 percent of the unemployed.

One example of restrictions on eligibility for unemployment benefits pertains to soldiers who have completed their compulsory military service. After years of earning considerably less than the minimum wage, a discharged soldier receives a discharge allowance and a lump sum deposit, which represents only partial repayment for loss of potential earnings during military service. The veteran is then obligated to make social security payments from the day after discharge – regardless of employment status – but is not entitled to receive unemployment benefits even though these are explicitly designed to help those in transition between one occupation and another.

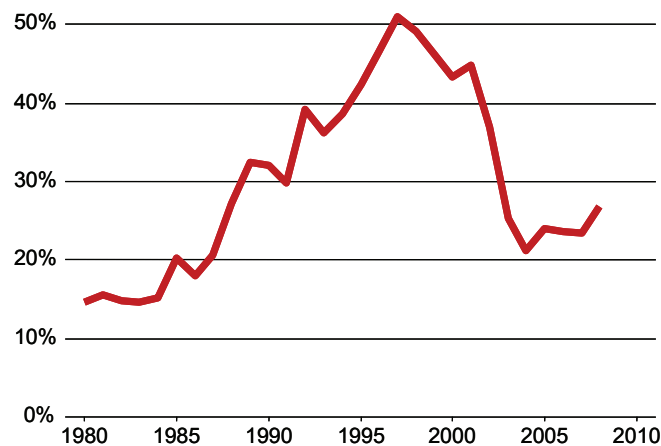
In addition to increasing the eligibility restrictions for unemployment benefits, a ceiling was introduced for the maximum unemployment allowance. Since 1999, the maximum monthly unemployment benefit during the first five months of unemployment may not exceed the average monthly wage and cannot exceed two-thirds of the average monthly wage

from the sixth month onwards. As of 2002, the size of the benefit and its duration were restricted for repeat unemployment applicants.

Since the amount of unemployment benefits depends on income level before becoming unemployed – albeit on a sliding scale – the more a person earns, the higher unemployment benefit he receives. Over the years, harsher restrictions on unemployment benefits eligibility led to a crowding out of those with lower wages who often fail to work for sufficiently continuous periods to qualify for unemployment benefits. Consequently, unemployment benefits per recipient rose, leading to the introduction of the ceiling on maximum unemployment benefits that one can receive.

Figure 24

**Ratio of Recipients of Unemployment Benefits  
to the Number of Unemployed People, 1980-2008**



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** National Insurance Institute.

## 6. *Healthcare*

Healthcare in Israel underwent systemic changes in the aftermath of a comprehensive reform that led to the 1995 implementation of the National Health Insurance Law. While a thorough review of changes in recent years can be found in the chapter “The Healthcare System,” the focus here is on the long run perspective with a look at healthcare expenditures before and after the reform.

The substantial population growth in Israel since 1970 requires an examination of changes in healthcare expenditures relative to changes in the population. Furthermore, Israel's population is aging and healthcare expenditures for the average elderly person tend to be higher than healthcare expenditures for 35-year-olds. Thus, when changes in healthcare expenditures are examined, it is important to take into account not only population growth but also its composition.

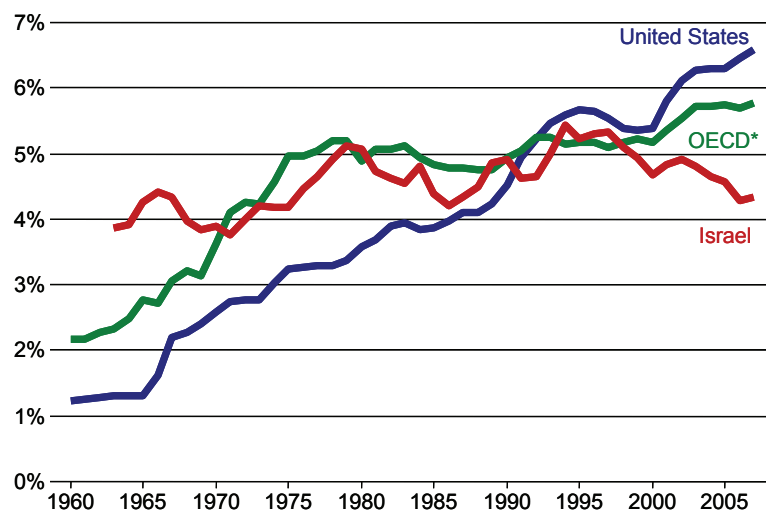
Israel adopted a capitation formula designed to take into account the composition of the population by assigning different weights to different age groups according to their healthcare needs. For example, an 85-year-old is assigned a weight which is 4.06 times the standard person in Israel, whereas a 50-year-old is assigned a weight of 1.07 times, and the weight of a 20-year-old is only 0.40. Similarly, medical expenses for small children, especially infants, are higher. Consequently, the weight assigned to a one-year-old is 0.96 and an infant just a few months old is assigned a weight of 1.55.

The use of these weights makes it possible to standardize the populations of Israel and of other countries over time, and then to calculate the public healthcare expenditure per standardized person in each country each year. How much has public healthcare expenditure per standardized person changed compared with changes in living standards as reflected in GDP per capita? In other words, how has the ratio of public healthcare expenditure to GDP changed, after accounting for

normalization by the ratio of total standardized persons to the total population?<sup>7</sup>

Figure 25 compares the ratio of public expenditure for healthcare to GDP in Israel, in the United States and the OECD average (OECD excluding the U.S.), after correcting for population growth in each country.

Figure 25  
**Public Expenditure on Health, 1960-2007**  
Israel, OECD\* and USA, as percent of GDP\*\*



\* Excluding USA.

\*\* Normalized by ratio of standardized population to total population.

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

**Data:** Ministry of Finance, CBS, OECD.

<sup>7</sup> The ratio of public healthcare expenditure ( $E$ ) to GDP ( $Y$ ), after normalization by the ratio of standard persons ( $S$ ) to population ( $N$ ), equals the ratio between public healthcare expenditures per standardized person ( $E/S$ ) to GDP per capita ( $Y/N$ ), i.e.  $(E/Y)/(S/N) = (E/S)/(Y/N)$ .

In 1963, the ratio of American healthcare expenditure to GDP was 1.3 percent, while in the OECD this ratio reached 2.3 percent. That same year, the ratio of public healthcare expenditure to GDP in Israel was 3.9 percent – higher by two-thirds than the OECD average and three times higher than in the U.S.

From the early 1960s through the mid-1970s, public healthcare expenditures relative to GDP in the OECD and in the U.S. exhibited very large increases, while in Israel they were relatively stable. This development led to a large degree of similarity between the OECD average and Israel during the 1970s, which was more or less maintained until the latter half of the 1990s. Public healthcare expenditures in the United States increased steadily throughout the past half century, since 1960. As a result, the ratio of public healthcare expenditures to GDP in Israel, the U.S. and the OECD in the 1990s was similar. In 1996 this ratio was about 5.6 percent in the U.S., 5.2 percent in the OECD and 5.3 percent in Israel.

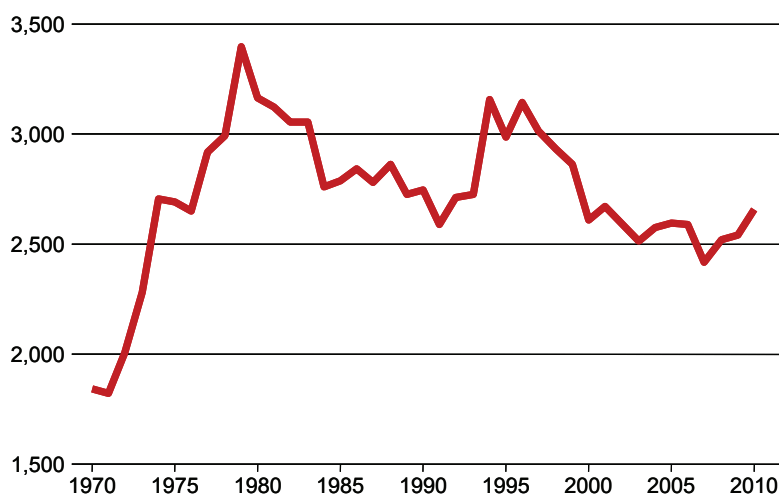
From 1997 to 2007 the three parted ways, with public healthcare expenditures to GDP in the U.S. rising to 6.6 percent in 2007. In the OECD, this ratio rose to 5.8 percent while in Israel, it fell by almost one-fifth – to 4.3 percent.

Focusing on the past half century as a whole, the rising costs of medical care since the 1960s have contributed to substantial increases in the share of GDP directed to healthcare in all Western countries – with a very different picture in Israel. Since 1963, the ratio of public healthcare expenditures to GDP in the United States increased by 405.6 percent. In the OECD, this ratio increased by 148 percent, and in Israel – just 11.5 percent. Changes in Israeli healthcare spending show a rise slightly higher than the rise in living standards, notwithstanding the worldwide hike in treatment, equipment and medication costs.

When the focus moves from total public healthcare expenditure to government healthcare expenditures in Israel, there is evidence of a change in the direction of the trend that took place in the late 1970s. Figure 26 shows the per capita government healthcare expenditure per

standardized person. From 1970 to 1979, real government expenditure for healthcare per standard person increased by 84 percent, from NIS 1,843 to NIS 3,400 per capita in 1979 (both amounts in 2008 prices). From 1979 through the early 1990s, there was a steady decline in real healthcare expenditures. This decline tapered off in the early 1990s and, in 1994, there was even a large increase of 16 percent to a level that was maintained during the early years of the healthcare reform. The year 1998 signaled the beginning of a post-reform erosion in public healthcare expenditures. By the end of the 1990s, government healthcare expenditures per standardized person were lower than they had been at the beginning of that decade. This decline continued until 2007, when healthcare expenditure reached a level 23 percent lower than the record year of 1994.

Figure 26  
**Health Budget, 1970-2010**  
 per standard person in 2008 NIS



**Source:** Dan Ben-David, Taub Center and Tel-Aviv University.  
**Data:** Ministry of Finance, CBS.

From the broader, long run perspective, government healthcare expenditures per standardized person declined steadily for three straight decades since 1979 – with the exception of the few years in which the new healthcare system reform was implemented. The fact that Israel's standard of living has been rising during this entire period means that the share of GDP per capita that the government has been allocating to healthcare has been falling even more precipitously during the past 30 years.

Over the past three years, 2008-2010, the healthcare budget per standardized person is expected to grow by 10 percent – to a higher level than in 1970, but it will nonetheless be lower than expenditures in nearly every year since 1979. In light of the upward trend in government expenditures on other social budgets over the past several decades, what has transpired in the governmental healthcare expenditures arena represents a marked departure from the other social expenditures.

## *7. Conclusion*

The State of Israel has known: (1) very heavy defense burdens and high interest payments on its debt; (2) extraordinarily high rates of inflation – in Western terms – resulting from large government expenditures that greatly exceeded tax revenues; and (3) high rates of poverty and income inequality combined with relatively slow steady state rates of economic growth compared to the West. In light of this unique and problematic past and present, it is incumbent upon Israel to be even more vigilant than other countries in following focused and efficient fiscal policies. This does not mean that it is not possible to spend more in one area than another, but it must be understood that increased spending in one area requires either reductions in other areas or an increase in the budget.

If a decision is made to increase the budget, then the need to fund this increase necessitates tax increases, which reduce incentives to work and to invest, with all of the negative implications that this has with regard to

long run economic growth rates, which – in the steady-state – are already lower in Israel than in other Western countries. Alternatively, instead of increasing the current tax burden, it is possible to increase government borrowing and subsequently increase future interest payments that will come at the expense of future defense and social expenditures. In addition, more government borrowing today means that the government must compete with the private sector – by raising the returns on government bonds – thereby limiting the private sector's ability to raise capital and further inhibiting economic growth.

A government planning its long term policy must take into account the long term effects of its decisions. Political stability can enable multi-year planning and the budgeting necessary for more efficient utilization of Israel's limited resources. Though decisions to increase the budget are made on the basis of public, rather than solely economic, considerations, it is important for the public and the policy makers to understand fully the economic and social implications of such a step. To the extent possible, the government budgeting process should begin with a strategic long run determination of national priorities, translation of these priorities into a multi-year path of expenditures while establishing a parallel long run path of tax revenues to fund the expenditures.

A government budget does not have to be balanced each and every year. Quite the contrary, in fact. For instance, tax revenues decline during recessions while expenditures rise due to the need to increase the social safety net for people losing jobs. In such periods, a budget deficit plays a stabilizing role that reduces recessionary pressures. Conversely, tax revenues rise during economic booms while the need for the social security network declines, reducing expenditures in this area. The government budget should show a surplus during boom years – as a counter to inflationary pressures, and to reduce the debt burden in anticipation of future harsher days when the government may be required to increase its expenditures and possibly move into deficit.

Hence, the balancing of the budget should not be an annual target but rather a multi-year goal, for periods that invariably must include years of

recession and expansion. Since both the population and the economy grow over time, government expenditures and revenues will also need to rise, but should do so in a manner in which each balances the other out over the longer term.

While the overall size and trajectories of total expenditures and revenues are important, it is at least as crucial to focus on how the budget is distributed. Loans should be taken out only for projects which will benefit future generations, since they will have to participate in repaying them. Over the two decades since the Economic Stabilization Program of the mid-1980s, the ratio of civilian public expenditures to GDP – i.e., excluding defense spending – was higher than the OECD equivalent. In other words, OECD countries spent less money on the implementation of civilian policies, yet poverty rates, income disparities and economic growth are more problematic in Israel. Even the deduction of Israel's high interest payments did not cause its remaining civilian expenditures to fall below the OECD average.

In recent years, including the 2009 and 2010 budgets, the level of civilian public expenditure in Israel, net of defense spending and interest payments, is lower than the OECD average. These expenditure levels further increase the need for a judicious allocation of the budget, with a revision of how the funding burden is shared that includes a marked improvement in the enforcement of Israel's tax laws.

Israel's exceptionally high rates of non-employment compared to Western countries raise the question of whether so many working-age Israelis really do not work. Is it possible that non-employment rates are in fact much lower than the official statistics indicate because many citizens do not report their full income? Such a scenario has serious negative implications on the size of government tax revenues, and on the extent of government aid to individuals who might be employed but formally appear otherwise and in need of assistance. It is difficult to assess the extent of the impact that tighter enforcement of tax laws might have on public revenues and expenditures, or on the additional degrees of freedom

that the country would have had it invested more on enforcement of its laws.

In a world that is witnessing increased competition between countries, when Israel's rates of poverty and income inequality are high and its long run economic growth path is lower and flatter than those of leading Western countries, national priorities in budget allocation play a major role. The time has come for dealing with the question of whether the government budget should focus primarily on providing core treatment of central social and economic issues from a national perspective – such as building and strengthening human and physical infrastructures – or whether the focus should be on sectoral, local and/or personal interests.

In a country that already has to bear a substantially heavier defense burden than is typical in the West, there is an even greater need for responsibility and caution when deciding how to spend what remains of the budget. Expenditures should be determined on the basis of national interests, with an emphasis on providing the tools and conditions that will enable as many people as possible to cope successfully in a modern economy while stressing a more selective social security network that maximizes the available assistance to those who truly need it.

## Sources

### Hebrew

- Bank of Israel. *Annual Report*, various years.
- *Statistical Appendixes*, various periods.
- Ben-David, D. (2003). "Israel's Transportation Infrastructure from a Socio-Economic Perspective," *Israel Quarterly Journal of Economics*, 91-104.
- Central Bureau of Statistics (CBS). *Price Statistics Monthly*, various periods.
- Ministry of Finance. *State Budget Proposal for the Fiscal Years 2009-2010*. Major Provisions of the Budget and Multi-Year Budget Plans.
- Accountant General. *Financial Statements*, 2008.
- Accountant General. *Financial Statements – Interim Reports*, 2009.
- The National Insurance Institute. *Annual Survey*, various years.
- *Statistical Journal*, various periods.
- (2009). *Operating Budget*.

### English

- Ben-David, D. and Papell, D. (1998). "Slowdowns and Meltdowns: Postwar Growth Evidence from 74 Countries". *Review of Economics and Statistics*, 80, 561-571.
- Ben-David, D. (2008). "Brain Drained". CEPR Discussion Paper No. 6717.
- OECD Economic Surveys: *Israel 2009*.
- OECD Statistical Extracts. <http://stats.oecd.org/index.aspx?r=172013>.
- United Nations Statistics Division: *Demographic Yearbook*.
- <http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm>.