

Poverty, Growth and Education

Titled "Not making the grade" by Ha'aretz

If Israel does not allocate resources to educate its young generation properly – especially in the basic subjects – it will find it difficult to compete with the industrialized West

By Dan Ben-David

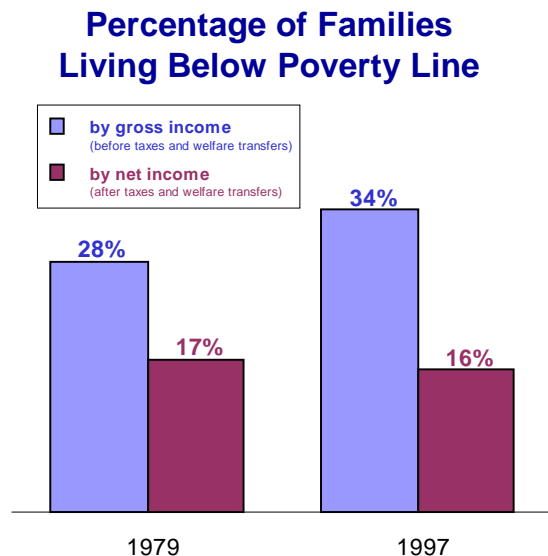
The main emphasis of the new government will be to attend to the burning defense issues facing Israel. As in the past, the importance of these issues casts aside any serious discussion of other major issues that determine the inner strengths of the nation. But while we invest most of our efforts toward defending the country from external danger, we are at risk of losing the domestic battle of building the future character of the country.

Poverty levels are high and growth rates are low in present-day Israel. When examining the extent of poverty, it is necessary to distinguish between relative poverty and poverty in absolute terms. Poverty here, as in other Western countries, is determined by a relative index. The poverty line in Israel is defined as half the median family income.

In an economy characterized by growth, income levels increase and pull the poverty line upward. However, based on a comparison of gross incomes (that is, before taxes and social-welfare payments), the number of families that have descended below the poverty line has increased in recent decades. In 1979, slightly over one-quarter of Israeli families (28 percent) lived below the poverty line. By 1997, that percentage had risen to over one-third (34 percent).

While the income of Israel's poorer citizens has declined in relation to the income of its wealthier citizens – there has been an increase in the degree of income "inequality" over time – the income of the poor (as measured by their purchasing power) in real terms has increased.

Data accumulated by the Central Bureau of Statistics indicates a strong positive relationship between the average standard of living in Israel (as calculated by



per capita gross domestic product, or GDP) and the average income of families in the bottom quintile (20 percent) between 1967 and 1998. Just as there is a high correlation over time between improved standards of living among the poor and improved standards of living among the general populace in Israel, there is a similarly high correlation across countries.

A study by David Dollar and Aart Kraay, released several months ago by the World Bank, shows that the standard of living of the poor in poor countries is lower than the standard of living of the poor in wealthier countries.

For us, this means that as the rate of economic growth in Israel continues to stagnate, not only the wealthy but also the poor will be hurt. From the 1950s through 1972, Israel experienced growth at a rate which, had it persisted, would have brought the country to American standards of living by the 1990s. However, the situation since 1973 has been completely different: We have gone from annual per capita GDP growth of 5.6 percent during the 1950-1972 period to average annual growth rates of 1.6 percent between 1973 and 2000.

Instead of closing the income gap with the countries that represent the technological cutting edge – such as the G7, which were wealthier than us in 1973 – Israel has retreated in relative terms, experiencing lower growth rates than those enjoyed by each of the G7 countries since 1973.

Social safety net

How can we simultaneously battle the two-headed, decades-old phenomenon of rising poverty and lower growth rates? Israel offers its poor a wide social-welfare "safety net" that distributes financial assistance through progressive taxation and transfer payments, thereby greatly reducing the extent of inequality and poverty in the country. The percentage of families living below the poverty line – after taxes and social-welfare payments – was 17 percent in 1979 and 16 percent in 1997.

One can argue whether the safety net is wide enough or is cast too wide, but there is no argument concerning the fact that a serious social safety net for a nation's needy is one of the most important cornerstones of any enlightened society. At the same time, it is critical that we distinguish between treating the roots of the problem and treating its symptoms.

Instituting transfer payments is akin to treating a malignant disease with aspirin. In the beginning, the treatment is inexpensive and may slightly alleviate the pain. But as the disease spreads, the pain worsens and more expensive and stronger medications must be prescribed. There is no doubt that "pain-relievers" are critical for stemming big declines in standards of living, but it is clear what the final result will be when only the symptoms are treated, while the source of the problem is ignored.

As the percentage of families living below the gross-income poverty line increases, while the percentage of families living below the net-income poverty line remains low and stable, the economic burden of higher taxes and social-welfare payments increases. The problem is that this increasing financial burden contributes nothing toward reducing the dimensions of poverty based on gross incomes – and these are the incomes that represent the true ability of families to survive economically without assistance. Moreover, the increasing financial burden is a heavy millstone around the neck of economic growth, and this in turn impairs the country's ability to help its poor.

It is possible to simultaneously fight the source of Israel's poverty problems and stagnant growth by beefing up one of the main factors contributing to both problems: education. This does not mean that we should indiscriminately channel more funding into the education system. The problem is not one of finance but one of emphasis and efficiency. The portion of Israel's GDP allocated to education is among the highest in the world – even when the high proportion of pupils in Israel's population is accounted for. Nevertheless, our country is characterized by an income disparity that is among the highest in the West, and by growth that is among the lowest in the West. What's going on here?

In a study appearing in the December 2000 issue of one of the leading economics journals, the American Economic Review, Eric Hanushek demonstrates that while placing a greater emphasis on education spurs economic growth (a finding confirmed by numerous earlier studies), it is education in basic subjects like mathematics and science that provides the biggest spur for increasing income levels.

Data published by Hanushek shows that the math scores of Israeli children in 1963-64 were higher than those of all 12 of the industrialized countries that also took the test – this in spite of the financial difficulties and large-scale immigrant absorption the country was experiencing at the time. But this was when Israel's growth rates were among the highest in the world.

Math Achievements

13 year-olds, 1963-64

1	Israel	675
2	Japan	673
3	Belgium	635
4	Finland	552
5	Germany	531
	Average	500
6	England	497
7	Scotland	466
8	Netherlands	447
9	France	439
10	Australia	395
11	United States	372
12	Sweden	320

SOURCE: Hanushek (2000), based on standardized IEA exam

Like a developing country

Recently released results from the TIMSS (Third International Mathematics and Science Study) conducted in 1999 reveal an altogether different situation for modern-day Israel. The results of the math and science tests hint not only at an important source of its poverty and low growth

rates – but also at the problematic future awaiting graduates of the Israeli school system when they enter the labor market.

Averages scores on both tests for each country are displayed in the table. As the evidence indicates, Israel's schoolchildren placed 27th out of the 38 countries examined, below every industrialized country participating in the study and below other countries much poorer than Israel, including Thailand and Romania from which we import laborers (and which have per capita GDPs that are one-third of Israel's). Even the children of Malaysia, a country so poor that its textile workers are willing to work for minuscule wages that no Israeli would be willing to accept, have better grades than us.

Although per capita GDP in these countries is much lower than Israel's is today, their younger generation is receiving an education that will yield better individual job-related basic skills and enhance their relative ability to compete in the future global job market.

As if it weren't enough that Israel's low scores indicate low overall knowledge of basic math and science skills, the disparity between average scores within the country (as measured by the standard deviation) foreshadows even more pronounced income disparity between populations in the country in the future. The disparity in scores among Israeli children is greater than in 34 out of the 38 countries in the sample – greater than every other industrialized nation, and greater than most of the developing nations.

Math and Science Achievements

8th Grade, 1999

	Mean Grade of Each Country	Average Grade Dispersion Within Country (Standard Deviation)		
1	Singapore	586	South Africa	121
2	Taiwan	577	Philippines	109
3	Korea	568	Jordan	103
4	Japan	565	Israel	101
5	Hong Kong	556	Taiwan	97
6	Belgium (Flemish)	547	Morocco	97
7	Netherlands	543	Macedonia	95
8	Hungary	542	Romania	95
9	Slovak Republic	535	Indonesia	93
10	Australia	533	United States	93
11	Canada	532	New Zealand	91
12	Slovenia	532	Moldova	90
13	Czech Republic	530	Bulgaria	90
14	Finland	528	Russia	90
15	Russia	528	Singapore	88
16	England	517	England	87
17	Bulgaria	515	Italy	87
18	United States	509	Chile	87
19	Malaysia	506	Average	86
20	Latvia	504	Hungary	85
21	New Zealand	501	Australia	84
	Average	487	Iran	84
22	Italy	486	Slovenia	84
23	Lithuania	485	Cyprus	83
24	Thailand	475	Turkey	83
25	Romania	472	Korea	82
26	Cyprus	468	Malaysia	82
27	Israel	467	Lithuania	81
28	Moldova	464	Czech Republic	80
29	Macedonia	453	Thailand	79
30	Jordan	439	Japan	78
31	Tunisia	439	Latvia	78
32	Iran	435	Slovak Republic	77
33	Turkey	431	Canada	76
34	Indonesia	419	Netherlands	75
35	Chile	406	Belgium (Flemish)	73
36	Philippines	345	Finland	72
37	Morocco	330	Hong Kong	72
38	South Africa	259	Tunisia	66

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

The gaps between us are greater than among American schoolchildren – in spite of the large degree of heterogeneity in the population of that country. And speaking of the poorer countries of Romania, Thailand and Malaysia – not only do their students score higher in the basic scholastic subjects, but the gaps between their students are narrower, as well.

To dispel any remaining doubts regarding the dimension of Israel's failure to teach two of the subjects that have the most influence on the future earning potential of Israeli workers, it is possible to compare achievements of the best Israeli pupils with those of the best pupils in other countries. In the comparison between the 5 percent of children who achieved the highest test scores in each of the countries, the top Israeli pupils ranked 23rd – below the average best scores of all other countries, and below each of the best scores of the industrialized countries. This is the group that will produce our future professors, CEOs and policy makers.

At present, Israeli universities and high-tech companies – led by past graduates of a school system that has known better days – are among the world leaders. It doesn't take a lot of imagination to describe the kind of future that we will be facing if current trends continue.

Comparison of the lowest 5 percent of pupils in every country may well turn on the brightest warning light of all, in terms of the future social implications: The weakest Israeli pupils placed 31st out of 38 countries. Ranked above us were not only the weakest pupils in the United States, Malaysia, Thailand and Romania, but also the weakest students in Iran, Turkey, Tunisia and Cyprus.

It should be pointed out that the situation in Israel is even worse than these grades indicate, since unlike other countries, the local sample omitted entire segments of the population: ultra-Orthodox children, whose math and science skills are even lower than the rest of the Israeli populace.

One market for all

The low economic growth experienced here during the past few decades is not accidental, just as the growth in poverty and inequality over the past few decades is not accidental. And if the present worries you, then it is time to devote some thought to the future awaiting our children, of which you have now been given a glimpse.

Many groups in Israel demand an education that reflects their particular lifestyles and worldviews, and these are the facts of life that we have to live with. Yet this desire does not contradict the fact that all of us must live and work in the same economic marketplace – and the

tools needed to succeed in this marketplace are identical for every one of us and for every citizen of the countries competing with us.

It is time to come to our senses: Somebody has to take charge and insist that our schools provide a substantially better and significantly more equalized level of education in the basic subjects, in all of the country's educational systems, in every neighborhood and town.

We owe it to our children.

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