A Macro Perspective of Israel's Society and Economy

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Abstract

This was not an easy year for the Western countries, including Israel. However, Israel entered the recession in a relatively good economic state and appears to also be coming out of the crisis relatively quickly. Israel is returning to long term paths that have characterized the country for decades, paths that are not sustainable in the long run. Rapid demographic processes are at work within Israel, reflected in a steadily growing part of Israeli society that is not equipped with either the tools or the conditions to cope successfully in a modern economy. This chapter highlights the Israeli anomaly in terms of prospects and risks and proposes a strategic plan for systemic reform that can produce a turnaround.

1. *Public Policy and Economic Growth*

The recent crisis facing the world economy had several similarities to the Great Depression – particularly during its first year. One of the major policy lessons from the Great Depression pertained to international trade. Countries that had suffered substantial and rapid increases in

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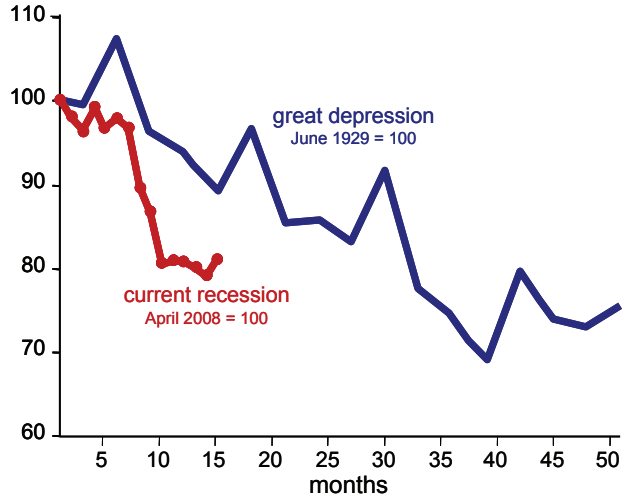
unemployment adopted a policies of closing borders to imports, seeking to protect their workers – and in so doing, harming employment in other countries. Trade wars ensued, which significantly reduced world trade and further aggravated an already problematic situation. As shown in Figure 1, during the first three years of the Great Depression, world trade declined by about 30 percent.

In the current crisis, Western economies worked together to minimize the damage – including cooperation between governments and consultations between central banks. Nonetheless, the decline in trade during the first year of the recent recession was even sharper than during the Great Depression. During the first year of the Great Depression, world trade declined by less than nine percent (Eichengreen and O'Rourke, 2010), whereas during the first year of the current crisis there was a drop of about 15 percent. During the second half of 2009 and the first quarter of 2010, the decline in world trade was reversed.

Figure 1

Volume of World Trade – Then and Now

Index: 1929, 2008=100



Source: Eichengreen and O'Rourke, 2010.

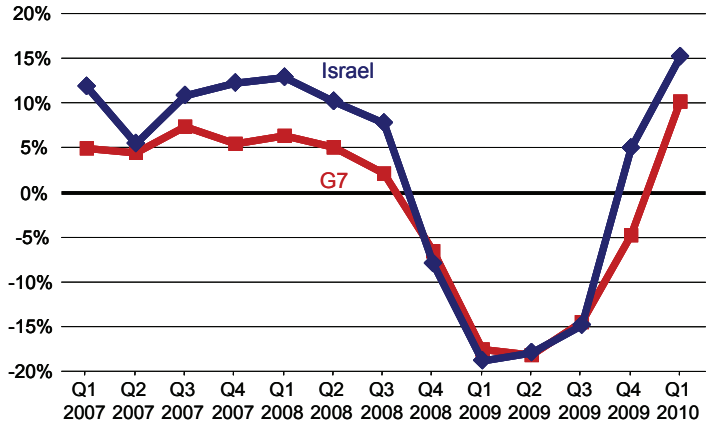
Direct comparison between Israel and the G7 countries (United States, Canada, Japan, United Kingdom, France, Germany, and Italy) reflects a similar dynamic in exports, with slightly larger improvements in Israeli exports up to the fall of 2008 and almost identical declines of about 30 percent during the first half of 2009 (Figure 2). The implications of a sharp drop in the exports for a small country like Israel can be much more severe than those of a similar decline in the exports of a large country, because small countries are much more dependent on the economies of scale afforded by access to global markets.

In 2007, exports of goods and services were about one-eighth of total United States production, while their share in France and in the United Kingdom was one-quarter of total production. For Israel, however, where the local population is too small for the profitable production of many products, dependence on foreign markets caused exports to reach 43 percent of gross domestic product (GDP) in 2007. Consequently, the

Figure 2

Changes in Exports: G7 and Israel

exports in each quarter relative to exports in same quarter a year earlier



Source: Taub Center for Social Policy Studies in Israel.
Data: OECD, Central Bureau of Statistics (CBS).

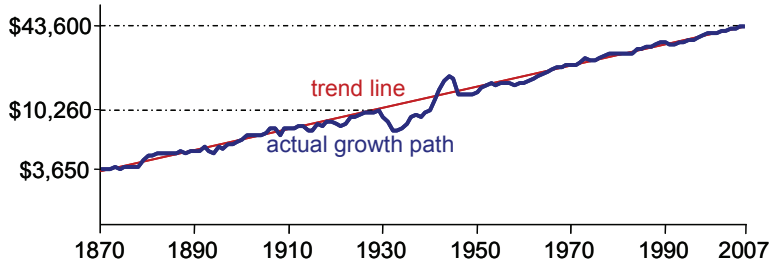
large changes in Israel's exports have considerable implications for total production in the economy and for the level of employment in Israel. Towards the end of 2009 and the beginning of 2010, there was a sharp improvement in both Israeli and G7 exports.

The world's leading economies and Israel appear to be coming out of this severe crisis and – if not soon, then eventually – they will return to their long run growth paths. One of the "stylized facts" characterizing steady state growth paths in many countries is the stability of the economic growth process over time. A classic example of this is the American economic growth path over the past 140 years (Figure 3). Despite the Great Depression – which is clearly visible in the figure – and the exceptional upturn that followed, the U.S. economy eventually reverted to its long term path as if the crisis had never happened.

Figure 3

United States' Growth Path

GDP per capita, 1870-2007*



* 2005 prices, logarithmic scale.

Source: Dan Ben-David, Taub Center and Tel-Aviv University. Data: The Maddison, the BEA.

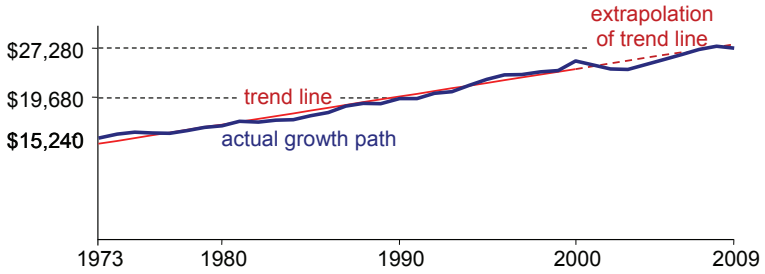
Israel's economic growth trajectory is also characterized by fairly steady growth (Figure 4). Despite wars, three-digit inflation and immigration on the magnitude of one-fifth of the country's population within the span of just a few years – each an extraordinary event that

most countries rarely, if ever, experience – it is clearly visible that these were not the key factors determining Israel's growth path. What does determine steady state growth? Is it good fortune, like the presence of natural resources within the country, or is it policy?

Figure 4

Israel's Growth Path

GDP per capita, 1973-2009*



* 2005 prices, logarithmic scale.

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

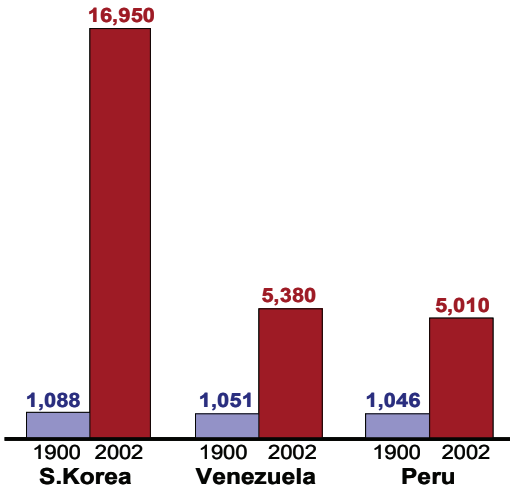
A few examples can illustrate the importance of policy, which reflects national priorities over good fortune and natural resources in determining a country's standard of living and growth rates. Figure 5 shows three countries, which began the 20th century with nearly identical standards of living, a little over $1,000 per capita (in 2002 U.S. dollars) in each country in 1900. During the subsequent century, the effect of oil on GDP per capita in Venezuela was hardly noticeable, compared to oil-less Peru. Both countries ended up entering the 21st century with very similar standards of living.

By contrast, South Korea – oil-less and with a problematic security situation that consumes a higher portion of its national budget than is common in most other Western countries – reached a standard of living nearly three times that achieved by Peru and Venezuela. (Incidentally, the standard of living in Israel, which had been 422 percent higher than Korea's in 1965, was only 15 percent higher than Korea's in 2004.)

Figure 5

Living Standards in 1900 and 2002

output per capita (in 2002 dollars)*



* According to purchasing power parity.

Source: Dan Ben-David, Taub Center and Tel-Aviv University.
Data: Maddison (1995) and the World Bank.

Canada and Argentina are two examples of countries that began the 20th century under fairly similar conditions. With their vast natural expanses and immigrant populations, these were two of the wealthiest countries in the early 20th century (Figure 6). A century later, Canada's standard of living reached a level nearly three times that of Argentina's – and only one of them is considered among the world's wealthiest countries today.

This is not just an issue of differences between countries and cultures. The adoption of policies reflecting important changes in national priorities can allow a country to shift from one long run path to another. An important example is the post-World War II initiative of six countries

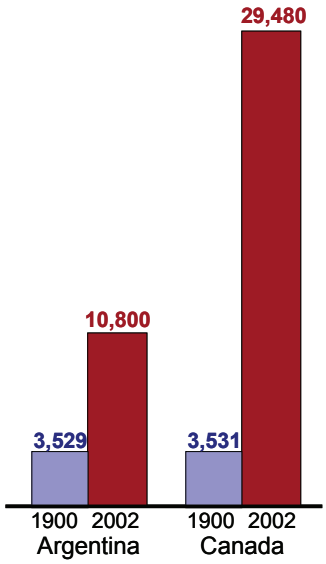
to create the European Economic Community (EEC) – which in time expanded considerably and became today's European Union.

Figure 7 illustrates the growth in one of those countries, Belgium. (For additional examples, see Ben-David and Loewy, 1998.) Belgium is a relatively small country, with a population that grew from 5 million in 1870 to 7.5 million people on the eve of World War I, to 10.6 million in 2007. The figure begins in 1870 and shows a fairly steady growth path during the decades preceding the outbreak of World War I. A substantial part of Belgium's economy was destroyed during the war, with GDP per capita declining by one-third from 1913 through 1918. Belgium recovered after World War I and, as shown in the figure, reverted back to the same growth path that had it followed between 1870 to 1913 – as if there had never been a war.

Figure 6

Living Standards in 1900 and 2002

output per capita (in 2002 dollars)*



* According to purchasing power parity.

Source: Dan Ben-David, Taub Center and Tel-Aviv University.
Data: Maddison (1995) and the World Bank.

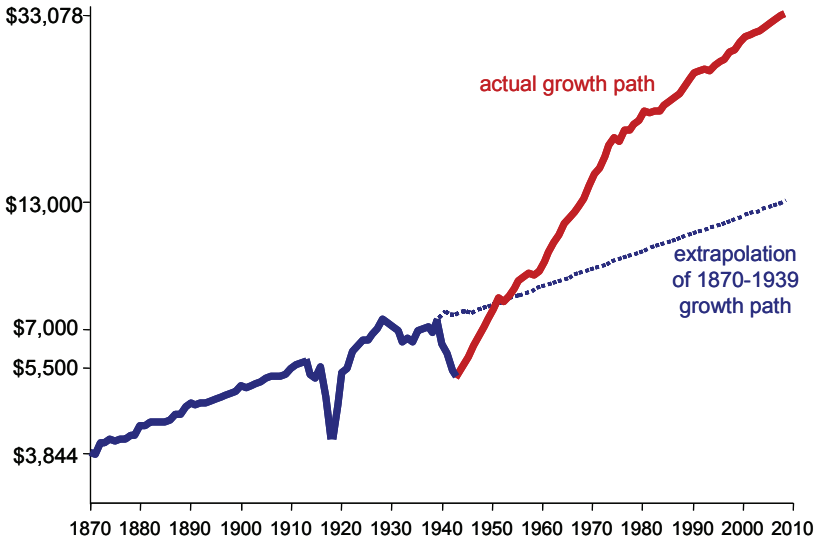
After 70 years of steady state growth, including fluctuations around the trend – some sharp, especially during World War I – Belgian per capita GDP sharply fell again in 1940, with the outbreak of World War II. The dotted line in Figure 7 reflects an extrapolation of the 1870-1939 steady state growth path. Had Belgium returned to the growth trajectory

that it had followed during the 70 years preceding World War II, its actual growth would have reflected a return to the dotted line after the war. But that is not what happened in post-war Belgium.

Figure 7

Belgium's Growth Path

GDP per capita, 1870-2007*



* 2005 prices, logarithmic scale.

Source: Dan Ben-David and Michael Loewy, 1998 (updated).

One key lesson from the Great Depression was an internalization of the importance of free trade between countries. When the United States offered assistance through the Marshall Plan to European countries after World War II, aid was conditional on substantive changes regarding trade between the recipient countries. The transition of European countries to free trade required the creation of unprecedented physical and human

capital infrastructures. Such infrastructure changes contributed to the significant change in Belgium's postwar growth path.

Belgium shifted to a steeper growth trajectory – reflecting a higher annual economic growth rate – and its standard of living today is much higher than it would have been otherwise. Rather than reaching a GDP per capita of $13,000 by continuing along its seven decade-long pre-World War II growth path, Belgium reached a GDP per capita of $33,078 (prices in 2005 U.S. dollars adjusted by purchasing power parity (PPP)).

Belgium's GDP per capita grew at an average annual rate of 0.9 percent between 1870 and 1939. In contrast, the country's growth rate since 1973 (i.e. after the postwar slowdown) has been 2.0 percent per year. Belgium's standard of living is now two and a half times higher than what it would have been without the shift in the trend, and it keeps growing at an annual rate exceeding twice the rate that characterized the country during the seven decades preceding World War II.

Substantive differences in policies may result not only in considerable differences between countries but can also create significant differences in rates of long run economic growth that may otherwise appear constant for decades on end. Given the importance of policy on living standards and growth rates, what does the Israeli growth path – depicted in Figure 4 – look like compared to other countries and from a long term historical perspective?

2. *Economic Growth in Israel*

Upon its establishment on May 14, 1948, the State of Israel numbered 805,600 citizens. The massive immigration of refugees from the Holocaust and from Arab countries that followed led to some extremely difficult economic times, including the rationing of basic commodities. By the end of 1960, the population reached 2,150,400, including 971,000 immigrants – many destitute – who arrived during the dozen years since Israel's Declaration of Independence. By the end of 1971, another

414,700 immigrants arrived as the country's population crossed the three million mark.

Israel allocated substantial shares of its very limited resources to the creation of physical and human capital infrastructures. The country not only built towns and roads, but also universities. Within two and a half decades of its founding, Israel had seven research universities, which, in some fields, had by then reached the frontiers of human knowledge.

Israel's national priorities over the first 25 years of its existence produced exceptional economic growth. Between 1950 and 1972, the country's GDP per capita grew at a 5.5 percent average annual rate, more than twice the typical growth rate in Western countries during the same period. American living standards in 1950 were 128 percent higher than in Israel. By 1973, the gap between the two countries had fallen to 39 percent.[1]

For countries close to the technological frontier, the main route to raising living standards is through innovation. Since it is easier to imitate than to innovate, the growth potential of less technologically advanced countries could be higher than that of cutting edge countries – assuming they possess the institutional and infrastructural foundations allowing their inhabitants to assimilate and implement existing knowledge. But such conditions are not guaranteed. In fact, poor countries do not usually grow faster than rich countries.

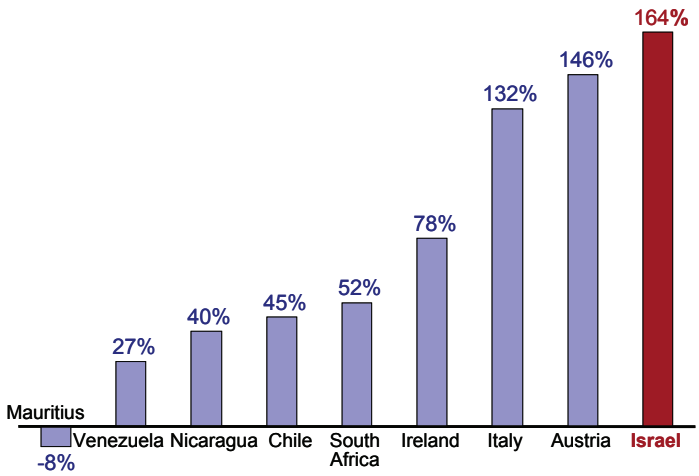
Figure 8 illustrates the degree to which Israel's economic growth between 1955 and 1972 was unique. The figure compares Israel to all other countries with similar standards of living in 1955 – that is, the comparison includes all countries with a GDP per capita in the range of 20 percent above or below Israel's in 1955. By 1972, Israel's standard of living had risen by more (164 percent) than in any other country that was similar to it at the beginning of the period.

[1] On the basis of data from Penn World Tables (Heston et al., 2006).

Figure 8

Cumulative Economic Growth in GDP Per Capita, 1955-1972

comparison of countries with GDP per capita similar to Israel's in 1955*



* Real GDP per capita in chained real ppp-adjusted dollars for countries within 20% of Israel's GDP per capita in 1955.

Source: Dan Ben-David, Taub Center and Tel-Aviv University. Data: Penn World Tables, OECD and CBS.

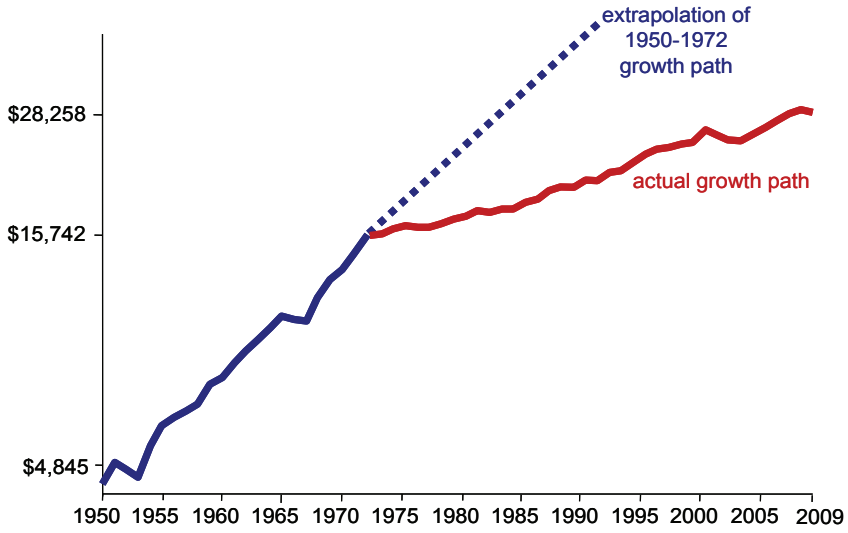
The statistically significant turning point in Israel's growth process occurred in 1973 (Figure 9).[2] Until then, Israel was on its way to rapidly closing the gap between it and the leading Western countries. Since then, the country's growth path has been very different. Israel's growth trajectory since 1973 has been much flatter, reflecting a slower annual growth rate of 1.7 percent in GDP per capita through 2008.

[2] Ben-David and Papell (1998).

Figure 9

Israel's Long Run Growth Path

GDP per capita*, 1950-2009



* 2008 prices, logarithmic scale.

Source: Dan Ben-David, *Israel Economic Quarterly*, 2003 (updated). Data: CBS.

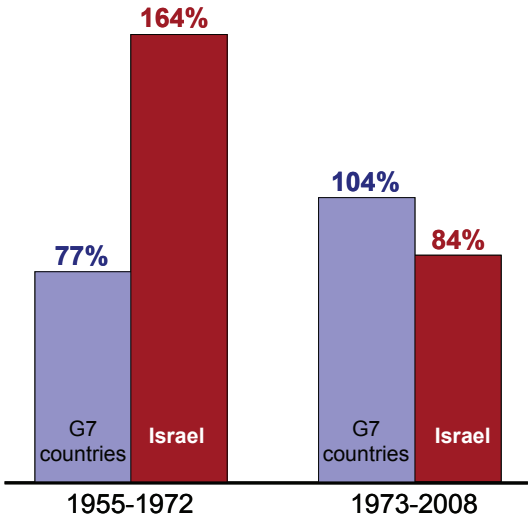
Although Israel's standard of living has risen in absolute terms since 1973, it has declined in relative terms, compared to that of the leading countries in the world. This phenomenon has increasingly negative consequences, not only on the likelihood that people from those countries would choose to immigrate to Israel, but also on the chances that Israeli citizens in high-demand professions might choose to leave the country. As the gap in earning potential between countries increases, it crosses the stay-leave thresholds of more and more individuals. The issue of the brain drain from Israel, already unparalleled in the West (Ben-David, 2008), will become increasingly difficult to resolve as long as Israel continues to fall farther and farther behind in relative terms.

Figure 10 illustrates the differences in growth rates between Israel and the G7 countries. In the years prior to 1973, Israel had not only grown faster than countries similar to itself, it grew faster than most countries in the world. Compared to the seven leading Western economies, Israel's growth in the years 1955-1972 was more than twice the G7 countries' average growth rate. Since then, the standard of living in those countries more than doubled, while Israel's standard of living rose by only 84 percent.

Figure 10

Economic Growth in Israel and G7 Countries

cumulative growth in GDP per capita*



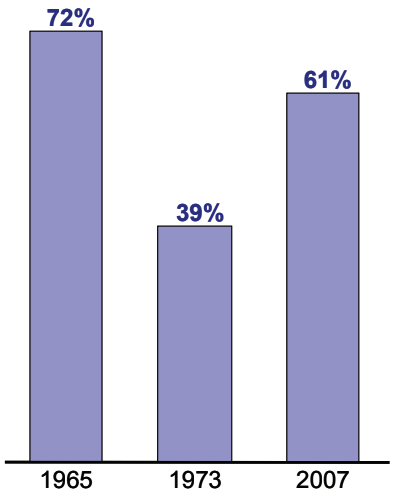
* Real GDP per capita in chained real ppp-adjusted dollars.

Source: Dan Ben-David, Taub Center and Tel-Aviv University. Data: Penn World Tables, OECD and CBS.

As shown in Figure 11, the gap in living standards between the United States and Israel, which had contracted considerably by the 1970s, has been growing in the subsequent decades. While U.S. living standards in 1973 were 39 percent higher than Israel's, the gap between the two had increased back to 61 percent by 2007.

Figure 11

Gap in Living Standards Between U.S. and Israel*



* Percent differences between GDP per capita in U.S. and Israel – real GDP per capita in chained real ppp-adjusted dollars.

Source: Dan Ben-David, Taub Center and Tel-Aviv University. Data: Penn World Tables, OECD, CBS.

3. *The Irony*

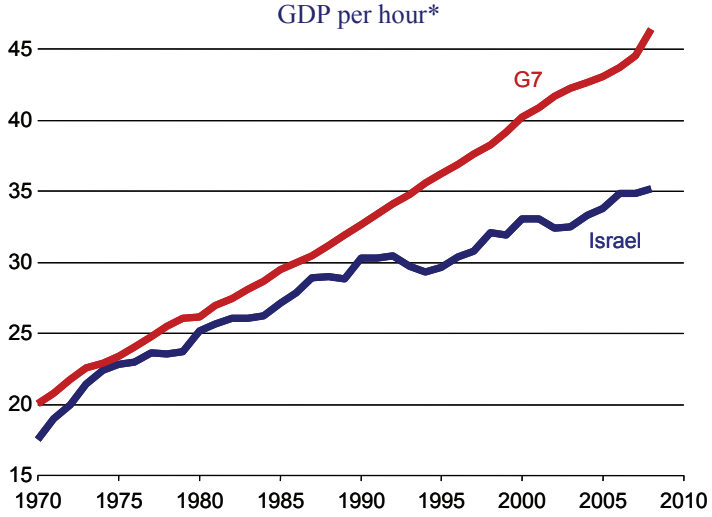
A primary factor underlying steady state growth in GDP per capita is productivity. One common measure of productivity is output per hour worked, or "labor productivity." By 1974, labor productivity in Israel approached that of the G7 countries, where the average worker produced only 2.3 percent more per hour than the Israeli worker. Since then (Figure 12), labor productivity in the G7 steadily outpaced labor productivity in Israel, and by 2008, it was higher by 32 percent. That same year, the American worker produced 49 percent more than the Israeli worker. When each worker – on average – produces more each hour, then it should not come as a surprise that GDP per capita also tends to be higher.

The relatively slower growth in Israeli labor productivity contrasts another reality – Israel's leadership position in inventions and innovations. Israel invests a good deal in research and development (R&D). Compared

Figure 12

Labor Productivity, 1970-2008

GDP per hour*



* 2005 prices, according to purchasing power parity.

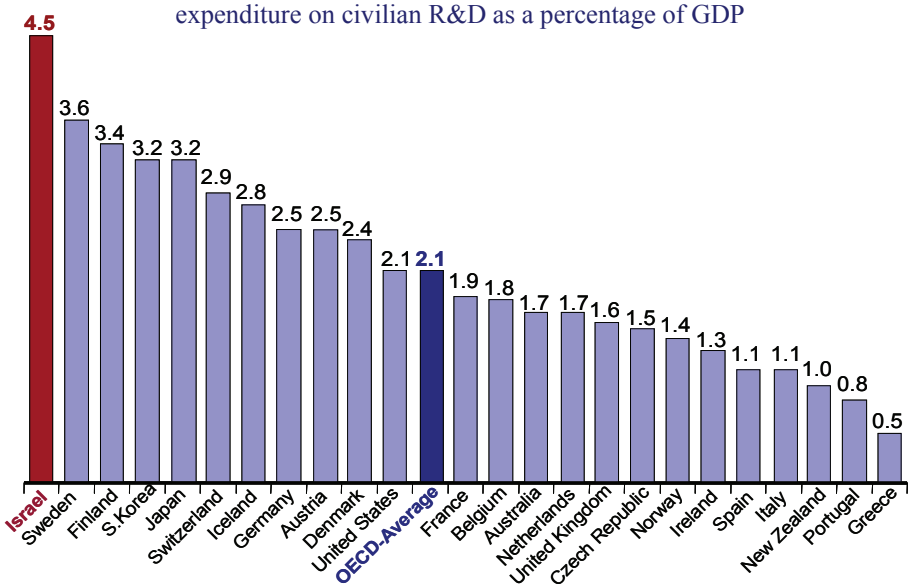
Source: Dan Ben-David, Taub Center and Tel-Aviv University. Data: OECD, Bank of Israel, CBS.

to an average of 2.1 percent of GDP spent by OECD countries on civilian research and development, Israel invests 4.5 percent per year. This rate is higher than that of each of the OECD countries (Figure 13), more than twice the OECD average, and about 25 percent more than in Sweden, the OECD country with the greatest share of research and development investments.

Figure 13

R&D Investment, Israel and OECD, 2006

expenditure on civilian R&D as a percentage of GDP



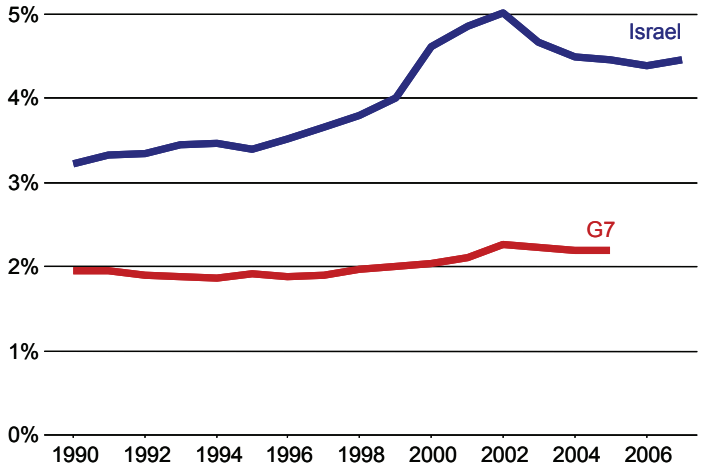
* Average of 30 OECD countries.

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

In comparison to the G7 countries, whose standards of living and labor productivity are pulling farther and farther away from the corresponding levels in Israel, the percentage of GDP directed to civilian research and development in the G7 countries has remained relatively constant, around 2 percent since 1990 (Figure 14). This contrasts with Israeli investments as a percentage of GDP that were two-thirds greater than the G7 average in 1990 and more than double the G7 average by 2002.

Figure 14

Civilian R&D as a Percent of GDP, 1990-2007



Source: Dan Ben-David, Taub Center and Tel-Aviv University.
Data: National Science Board, OECD.

During this period, most of the funding for civilian research and development in Israel shifted to the business sector. In 1993, according to the country's Central Bureau of Statistics (CBS), 36 percent of Israeli research and development was funded by the business sector. In 1997, the business sector's share rose to 56 percent, and reached 76 percent of the

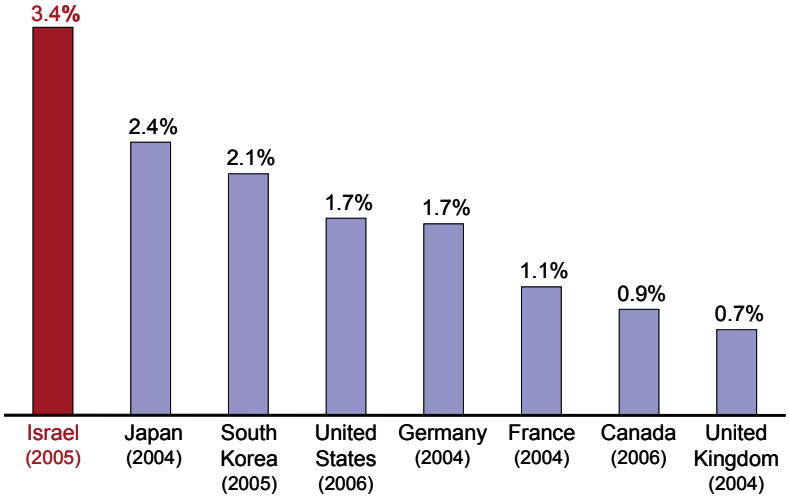
funding in 2005. These figures are relatively high in comparison with other countries.

As shown in Figure 15, research and development funded by the business sector in the United Kingdom is less than one percent of GDP. In France and Canada it is about one percent, while in Germany and the United States the ratio of business sector R&D to GDP is close to 1.7 percent. In two of the Asian countries with the highest levels of research and development, South Korea and Japan, business sector R&D reached 2.1 and 2.4 percent of GDP, respectively. In contrast, research and development financing by Israel's business sector amounts to 3.4 percent of GDP. This is 42 percent higher than in Japan, which ranks second among the countries investing generously in research and development.

Figure 15

R&D Financed by Business Sector

as a percent of GDP



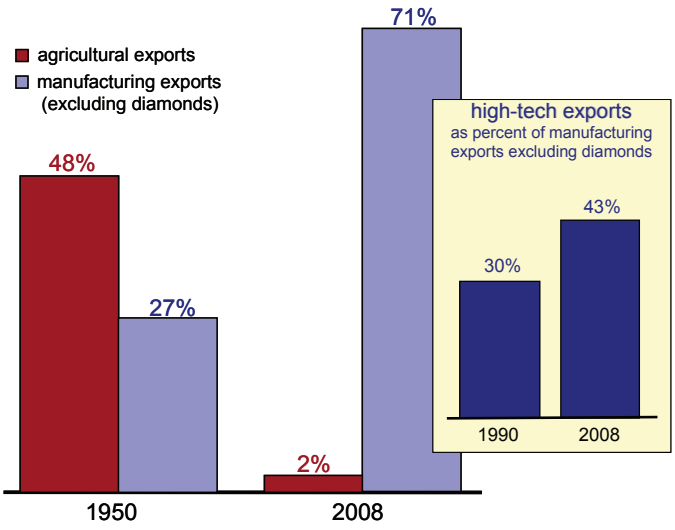
Source: Dan Ben-David, Taub Center and Tel-Aviv University.
Data: CBS, National Science Board, OECD.

The investments in research and development reflect some of the extensive changes in the structure of Israel's economy since its establishment. In 1950, agricultural exports constituted nearly half of the country's exports (Figure 16). Since then, agricultural exports exhibited a nine-fold increase in real terms, but their share of total Israeli exports fell to just 2 percent. This is the natural evolution, albeit somewhat accelerated, of the modern growth process. Poorer countries focus more on agriculture. As they grow, there is a structural shift to lighter industries – such as textiles – and as countries move up the growth ladder, they move on to heavier industries, services and higher technology production. The inset to Figure 16 gives an indication of the speed with which changes have occurred in the Israeli economy, in its move from agriculture to industry, and the marked change in the mix of industrial exports towards high-tech over the past two decades.

Figure 16

Structure of Israel Exports Over Time

each component as percent of total exports



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

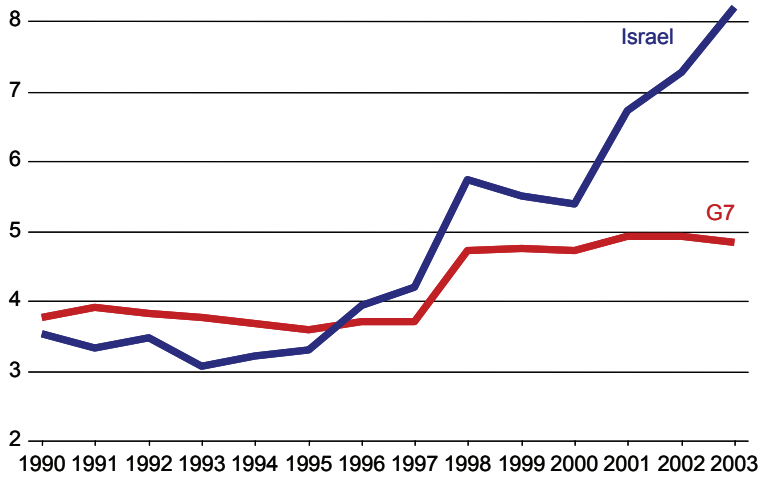
Over the years, the investments in higher education and in research and development began to bear fruit. An important measure of creativity and inventions is the number of patents registered to inventors. The United States National Science Board maintains a record of patents approved in the United States. With GDP reflecting the overall capability of a country, it is interesting to compare the number of patents granted by the United States to inventors from various countries per billion dollars of GDP in the inventors' countries of origin.

Continuing with the focus on the West's seven major economies – the G7 countries – Figure 17 shows that in 1990, the ratio of patents to GDP in Israel was 6 percent lower than the patents-to-GDP ratio in the G7 countries. During the subsequent half decade, no substantial change is

Figure 17

U.S. Patents Granted, 1990-2003

per 1 billion dollars GDP*



* By country of origin of first-named inventor, 2000 prices, according to purchasing power parity.

Source: Dan Ben-David, Taub Center and Tel-Aviv University.
Data: National Science Board and World Bank.

discernible in the patents-to-GDP ratio in either Israel or the G7 countries. In the G7 countries, this ratio exhibited a level change during the latter half of the 1990s while in Israel, from the mid-1990s, the patent-to-GDP ratio exhibited a steady increase. In 2003 (the last year for which Israel is mentioned in the American National Science Board data), the country's patent-to-GDP ratio was 69 percent greater than the G7 average.

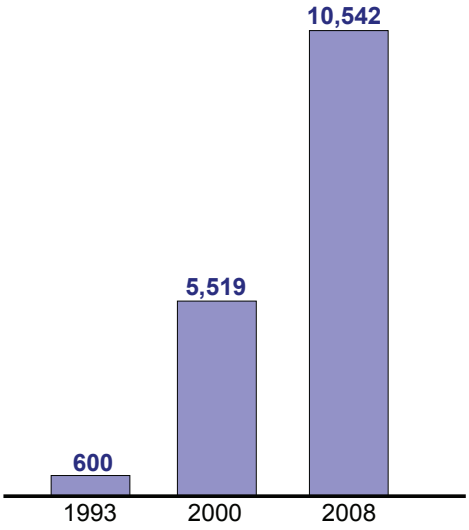
Innovation and inventions are crucial for growth, and when these exist, the money is generally not far behind. In 1993, foreign direct investment (FDI) in Israel amounted to a total of $600 million (Figure 18). Seven years later, at the height of the hi-tech bubble, FDI in Israel reached $5.5 billion. By 2008, $10.5 billion of foreign direct investment flowed into Israel.

The irony is that on the one hand, Israel invests extensively in research and development and, in certain areas, its creativity and innovation surpass those of the West's leading economies. But on the other hand, though productivity and living standards in Israel have been rising, they have been falling farther and farther behind in relative terms when compared to these same leading Western countries. What is the source of this unusual contradiction?

Figure 18

Foreign Direct Investment in Israel

millions of dollars



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

One major clue lies in the core elements underlying the growth process. For standards of living to rise – that is, for a worker's income to rise – the output that he or she produces must increase as well. This can happen when the physical and human infrastructures enable and facilitate it. Congested roads lead to higher transport costs and consequently lower productivity. Low levels of education and insufficient knowledge reduce the employee's ability to produce much – and incomes tend to reflect this. As an economy grows, the demand for skilled, educated workers and for improved physical infrastructure grows accordingly.

Hence, the question is what kind of labor supply does Israel's society generate to deal with these changing demands of the country's economy? The chapter devoted to the labor market later in this report tackles this issue at length. Inequality and poverty data indicate that Israeli society has not been very successful in meeting the modern economy's demand for a skilled and educated labor force. While demand for skilled and educated workers keeps growing, the demand for unskilled and uneducated workers is falling, in relative terms. But in Israel, the unskilled and uneducated population is very large – and growing faster than other segments of the population. As if this were not enough, Israel imports hundreds of thousands of additional unskilled workers from abroad, thus accelerating the increase in the supply of unskilled labor instead of decreasing it.

As a result, even when there are some areas in which the Israeli economy can successfully compete on a global scale, the heavy weight of the unskilled population enters the calculations of the national average. It turns out that the more advanced sectors of Israel's economy are unable, on their own, to raise the country's average standard of living to the highest Western levels. On the contrary. The large unskilled population pulls the national growth path downwards, and it is no coincidence that the previous figures indicate a lower and flatter Israeli growth path than those of the advanced Western economies.

4. *Inequality and Poverty*

Economic growth is not the only casualty of the inability of a large and growing segment of Israel's society to cope in an open and competitive economy. Human and physical infrastructures that would have better enabled the assimilation and utilization of knowledge would have been helpful not only in improving the economy's ability to develop, evolve and grow – they would have also been useful at the individual level. The inadequate state of vital infrastructures has played an important role in increasing income inequality and poverty in Israeli society.

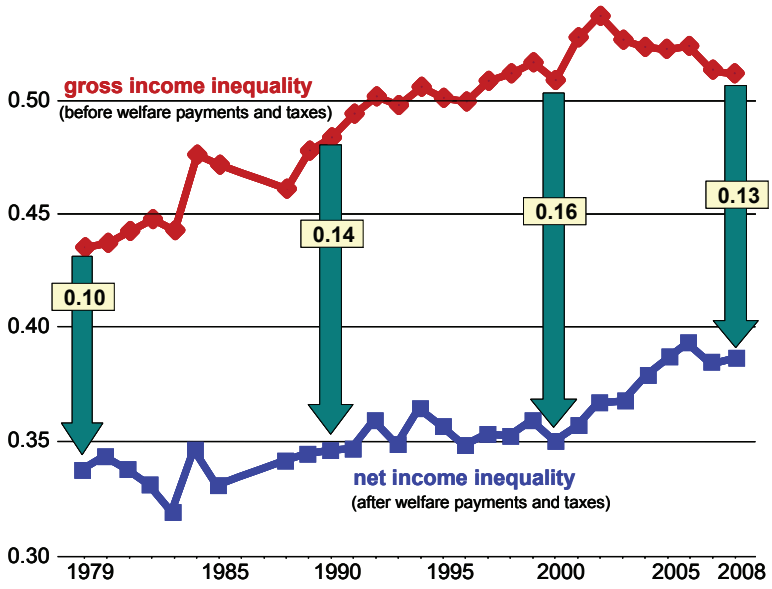
Public discourse on inequality and poverty usually focuses on net incomes – that is, after taking into account transfer payments and taxes. The debate tends to revolve around the desired size and composition of the national social safety net. Such a debate is important, and though a substantial part of this report focuses on the safety net, it is important to understand that this debate on dealing with the symptoms misses the heart of the problem – the true inequality and poverty picture emanating from the actual capabilities of the Israeli society, in terms of gross incomes, before deployment of the transfer payments and taxes safety net.

Figure 19 shows the steady increase in gross income inequality in Israel since the late 1970s. While there has been a slight decline in recent years, it still too early to tell whether this decline is an indication that the multi-decade rise in income inequality has come to a halt – possibly even reversing its trend – or merely represents another fluctuation around a rising multi-decade trend.

Figure 19

Inequality in Israel, 1979-2008*

Gini Coefficient



* Old series until 1997 adjusted to new series that includes non-salary workers (including East Jerusalem).

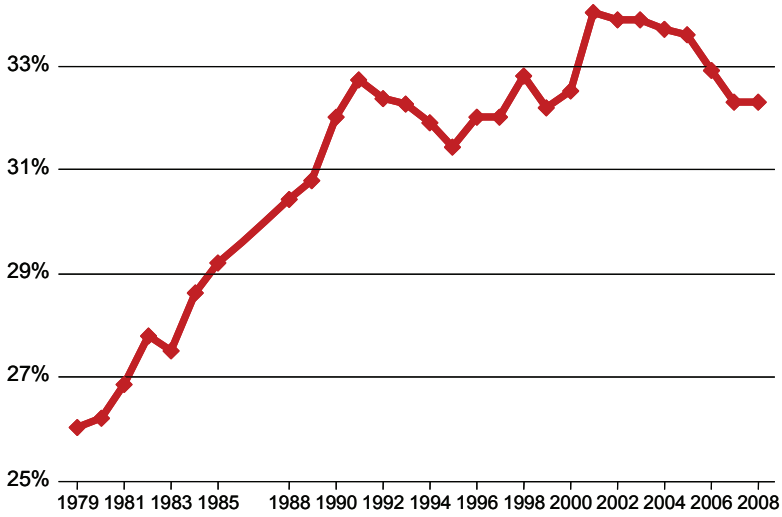
Source: Dan Ben-David, 2003 (updated).
Data: National Insurance Institute.

The poverty picture is similar (Figure 20). In the late 1970s, the percentage of families who would have lived below the poverty line, were it not for the welfare and tax systems, was a little more than a quarter. In recent years, this number has increased to around one-third of Israel's families. As in the case of income inequality, the poverty picture has also shown some improvement in recent years, though here too, this could indicate a change in trend, but it may also be a simple correction, to be followed by a return to the earlier increasing trend.

Figure 20

Percent of Families Living under Poverty Line, 1979-2008*

according to gross incomes (before welfare transfers and direct taxes)



* Old series until 1997 adjusted to new series that includes non-salary workers (including East Jerusalem).

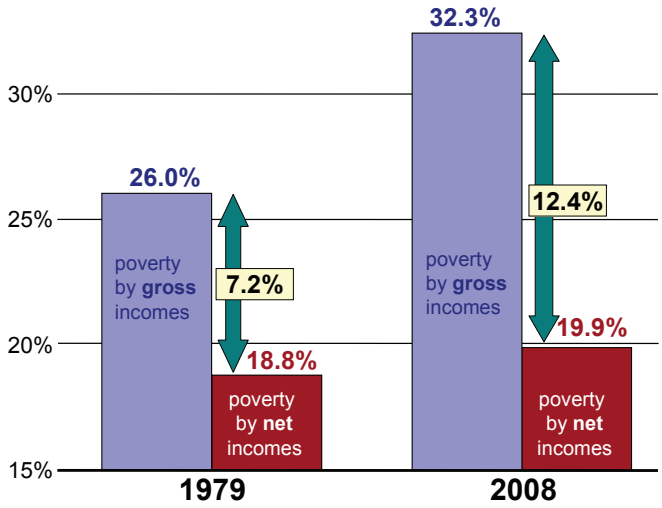
Source: Dan Ben-David, 2003 (updated).
Data: National Insurance Institute.

When rates of gross income inequality and poverty increase, it becomes necessary to transfer increasing amounts to poor families – not to reduce net income inequality and poverty, but to prevent the existing rise (in gross income inequality and poverty) from being reflected in a concurrent increase in net income inequality and poverty. Figure 21 shows poverty rates in gross and net incomes in 1979 and in 2008. While rates of poverty in gross incomes rose from 26 percent in 1979 to 32 percent in 2008, the tax and transfer payments systems were successful in substantially reducing the extent of poverty in net incomes. Not only were poverty rates in net incomes lower – though they are still among the

highest in the Western world – their rate of increase was much lower than the increase in poverty in gross incomes.

Figure 21

Percent of Families Living under Poverty Line*



* Old series until 1997 adjusted to new series that includes non-salary workers (including East Jerusalem).

Source: Dan Ben-David, 2003 (updated).
Data: National Insurance Institute.

This phenomenon of rising poverty in gross incomes combined with much smaller poverty increases in net income (similar to the illustration in Figure 20 on changes in gross income inequality versus net income inequality) reflects two types of burden that have been rising steadily since the 1970s. One is a very heavy social burden. While only seven percent of Israeli families were dependant on government assistance to remain above the poverty line in 1979, 12 percent required assistance in 2008 to stay above the poverty line. This growing dependence on public

assistance to prevent increases in net income poverty leads to rising frustration and resentment as well.

The other burden is economic. Gradually increasing transfer payments become necessary, not for reducing poverty rates, but for preventing the increase in gross income poverty from translating into net income poverty. In the long run, this situation is unsustainable – and signs of this have become visible in recent years.

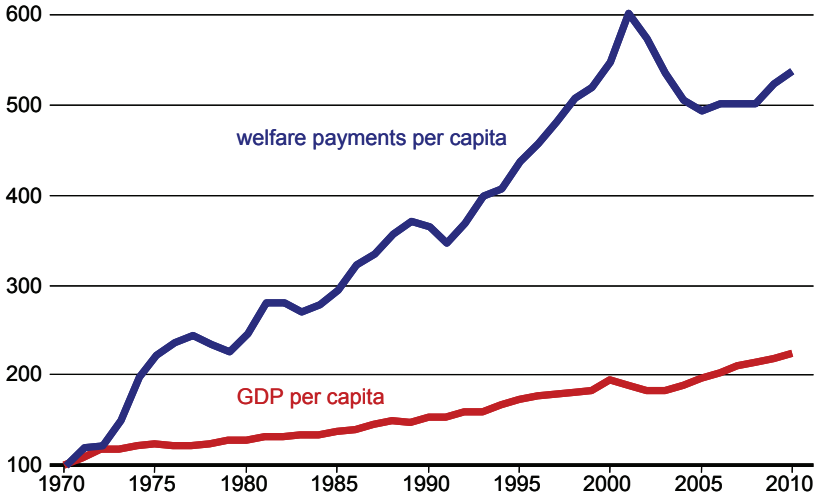
Transfer payments have increased steadily over the last four decades (Figure 22). From 1970 to 2001, while Israel's standard of living increased by 89 percent, real per capita transfer payments (i.e., after adjustment for population growth and inflation) rose by 484 percent, or 5.4 times the increase in living standards during the same period. The wave of terrorism and the deep recession at the beginning of this millennium led to substantial cuts in the transfers. While transfer payments are expected to increase somewhat in 2009 and 2010, the large cuts at the beginning of the millennium had a big effect on poverty and inequality in net incomes. As shown in Figure 20, despite a decline in gross income inequality, the reduction in transfer payments during this decade coincided with a large rise in net income inequality. The result has been that the underlying increases in gross income inequality that were hidden for decades by the substantial increases in transfer payments now began to be reflected in increases in net income inequality.

If the upward multi-decade trends in gross income inequality and poverty continue, it will become increasingly difficult to continue to perpetually increase transfer payments and prevent these increases from being reflected in net income inequality and poverty. Strengthening the social safety net, as important as it is, is not a substitute for policies aimed at dealing with the core problems underlying the high levels of gross income inequality and poverty. Such solutions require the creation of adequate human capital and physical infrastructures that would give larger segments of Israeli society the tools and conditions necessary for them to cope in a modern economy.

Figure 22

Welfare Payments and GDP Per Capita, 1970-2010

base year 1970 = 100 (in constant prices)



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

5. *Conclusion*

Three key variables characterize every society – its overall standard of living, its rates of poverty and the magnitude of its income inequality. When there exists a major problem with any one of the variables, the society is in danger of a potential crisis. When there are concurrent problems in all three variables, and when little is being done to deal with their root causes – or worse, if these problems are allowed to deteriorate for decades on end – then this society is on an unsustainable long run trajectory.

Gaps in living standards between Israel and the developed countries in the West have not declined. In fact, the opposite is true. Despite Israel's hi-tech sector, its medical sector and its institutions of higher education, which are on the cutting edge of human knowledge, the standard of living in Israel has fallen farther and farther behind, in relative terms, the leading Western countries since the 1970s – a phenomenon likely to increase emigration from Israel (Ben-David, 2008, expands on Israel's academic brain drain).

Levels of income inequality and poverty in Israel are among the highest in the West. As long as the government does not adopt a comprehensive and systemic policy to reduce inequality and poverty at their source – that is, in gross incomes – it will have no choice but to keep deploying an increasingly larger social safety net in order to help more and more families avoid falling below the poverty line. This involves ever growing budgets that will become increasingly difficult to finance.

The underlying reason for all three problems is that ever growing segments of Israeli society lack the tools and conditions needed in open, competitive and advanced economies. Furthermore, these segments of the Israeli society are growing faster than the segments of society that must finance the social safety net.

A solution dealing with the core problems should be based on three policy spheres: The first, creating incentives and providing tools; the second, creating a supportive environment; and the third, a multi-year strategic program. These are detailed in the document published by the Taub Center in May 2009 for the newly elected Knesset and Cabinet, entitled: *A Comprehensive Program for Reducing Inequality and Poverty and Increasing Economic Growth in Israel*. Following are the main points of the Program:

First policy sphere: Creating Incentives and Providing Tools

The share of working-age Israelis who are not employed is among the highest in the Western world. One primary reason for this, though not the only reason, has to do with incentives. A substantial part of the prime working age population is able to choose non-work as a way of life. Even if they want to work, many lack the basic tools for coping in a modern, competitive and open economy. It is necessary to upgrade substantially the professional skills and abilities of the working-age population by upgrading their education and vocational training.

The issue of incentives affects not only the supply of workers but also the demand for them. Employers in various fields are able to opt for non-Israeli employees and avoid having to deal with the resident Israeli population, managing to circumvent the need to produce according to the country's comparative advantage. Labor laws favoring the employment of foreign workers, combined with lax law enforcement, create an artificial profitability bubble that further encourages the preference of foreign employees over Israelis.

Low incentives for Israelis to seek employment and for employers to hire Israelis are market failures that the country must deal with so that more Israelis will be employed and so that the productivity of those employed will grow and enable higher wages.

Second policy sphere: Creating a Supportive Environment

Even if incentives are provided to work and to employ, and even when workers are provided with tools that fit the needs of a competitive economy, failures in the surrounding environment still hamper the ability of many to join the workforce. For example, in order to encourage potential workers who are also parents of children to join the workforce – especially if they are low wage earners – a high quality, accessible and affordable daycare support system is necessary.

The State of Israel also needs a transportation infrastructure that would enable workers to reach their workplaces in the larger cities

quickly and at low cost – a system of railways and roads suitable for a first-world country. Such infrastructure must be complemented by a system of services to facilitate employment and the creation and management of businesses.

Third policy sphere: Long Term Strategic Plan

While emphases in the first two spheres are on treatment of the symptoms, the third policy sphere focuses on dealing with the core issues. These include, among others, systemic reforms in education, law enforcement and governance. Substantial failures in all three areas create serious strategic obstacles that weigh heavily on Israel's society and economy. Increasing transparency in all aspects of public expenditure and public activities is an essential complementary step.

It is important to emphasize that moving for decades along stable trajectories that are not sustainable in the long run has existential implications that are not merely theoretical. Many examples in modern history have shown that public policy can build a country – but also harm it. Other countries can go bankrupt as a result of flawed policies and then rise up again economically. In Israel's case, however, the surrounding neighborhood does not provide reassurance that a socioeconomic collapse can be viable from a national security perspective – with all that this implies in terms of the urgent need for a comprehensive national program for changing the country's long run trajectories.

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