

# ECONOMY

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## ECONOMY

After having enjoyed for many years one of the fastest GDP growth rates among world economies, Israel is continuing the economic recovery it began in 2003, after a two-year distinct slowdown in almost all economic activities. This trend continued in 2007, according to all economic parameters. In the years 2006-2007, Israel's gross domestic product (GDP) continued its rapid growth, reaching 5.1 percent in 2006, in spite of the Second Lebanon War, which caused a temporary loss of 0.7% of the GNP. The speedy recovery and the continuation of the rapid growth were again led by the business sector, which expanded by 6.4 percent, resulting in a \$20,138 per capita GDP in 2006.

עובד אדמתו ישבע לחם... (משלי י"ב: י"א)

He who tills the land shall be satisfied with bread...

(Proverbs 12:11)

In 2006-2007 Israel continued to achieve its main macroeconomic objectives: a very low, sometimes even negative rate of inflation, a very low budget deficit, and a limited increase in public expenditure. At the same time, Israel continued to attract foreign investments as well as enjoying a rapid growth in exports and a positive trade balance for the first time. These trends continued in the first half of 2007 and the forecast for the whole year was of continued economic growth with no inflation, a low budget deficit, and economic stability on all fronts. With a population of more than 7 million, Israel has been internationally acclaimed throughout the years, in particular for its extraordinary achievements in agriculture and agrotechnology, irrigation, solar energy, and in many hi-tech industries and start-ups. Based on intensive R & D, even in traditional industries, Israel today is not only the land of milk and honey but also the land of hi-tech, including software, communications, biotechnology, pharmaceuticals, and nanotechnology.

Free-trade agreements reached over the past three decades with the United States, the European Union and several countries in Latin America have facilitated Israel's expanding exports of goods and services – more than \$60 billion in 2006 – as well as its participation in international business enterprises that contributed to the country's accelerated growth.

## CHALLENGES AND ACHIEVEMENTS

### Recent achievements

- The year 2000 was the first ever in the country's economic history with both a zero inflation rate and a significant decrease of the balance of trade deficit, the latter declining further to \$0.7 billion by 2005 and turning the trend into a surplus of \$0.9 billion in 2006.
- Israel absorbed almost 1.2 million immigrants in a decade, augmenting the country's civilian labor force, from 1.65 million in 1990 to 2.8 million in 2006.
- Inflation was defeated, from an annual rate of 445% in 1984 to 21% in 1989, 0% in 2000 - rising only to 2.4 percent in 2005 and to less than zero - 0.1% in 2006.
- Foreign debt was eliminated, from being 1.6 times the GDP in 1985, still 25% of the GDP in 1995, declining to less than 3% in 2001, and down to zero by 2003 - with Israel since then becoming a creditor (i.e., the world economy owes it much more than Israel owes the world).
- Foreign investments rose steadily, encouraging the GDP and accelerating growth of exports from \$175 million in 1987 to \$5.8 billion in 1997, to \$10.7 billion in 2005, and \$25.2 billion in 2006.
- Industrial exports grew almost six-fold in the past two decades, from \$6 billion in 1985 to \$35.6 billion in 2005 and \$38.1 billion in 2006.

## Historical challenges

Israel's most striking economic achievement is the rate at which it has developed while simultaneously dealing with the following enormously expensive challenges:

- **Maintaining national security:** Israel now spends around 8 percent (as against over 25% in the 1970s and 23% in 1980) of its GDP on defense. Even in eras of relative calm, Israel must retain a strong deterrent capability.
- **Absorbing large numbers of immigrants:** The "ingathering of the exiles" is practically the *raison d'être* of the Jewish state. Since its inception, Israel has absorbed more than 3 million immigrants, more than five times the number of Jews living in the country when it attained independence in 1948. In its first four years alone, Israel's population more than doubled as 700,000 immigrants, mostly refugees from postwar Europe and Arab states, poured into the country. Since 1990 another wave of 1.2 million immigrants (940,000 from the former Soviet Union alone), required enormous outlays for their physical and social absorption. However, much faster than the previous waves of immigration, these newcomers soon contributed to accelerating the GDP growth - though also temporarily increasing unemployment to an 11.2 percent high in 1992. This was gradually reduced to 7.6 percent at the end of 2006.

- Establishing a modern economic infrastructure: Although basic networks of roads, transportation, port facilities, water, electricity, and communications existed in 1948, they were far from adequate, requiring enormous outlays for their development and expansion. Without this huge investment in communications and transportation, much of the expedited growth of the economy could have never occurred.
- Providing a high level of public services (health, education, welfare, etc.): As Israel is committed to ensuring the well-being of its population (with special concern for the weaker elements in the society) a continuously growing proportion of its resources had been devoted to meet these obligations. Although recent urgent economic policies necessitated a curtailment of this appropriation, the 2006 and 2007 government budgets assured the beginning of a corrective trend here.

## MAJOR REFORMS

### **Foreign Currency Liberalization**

The New Israeli Shekel (NIS) is now a "hard" currency, traded freely on all international money markets. This is a comparatively recent development after decades of currency control, which was essential - as in many countries after World War II - for the survival and growth of the economy.

The severe shortage of foreign currency in the first years of the state was due mainly to its imports being so much larger than its exports. This called for the "rationing" of foreign currency - allocating it only for very basic requirements (such as food, fuel, and defense equipment). Production machinery and raw materials were added to the list only later on, followed by a meager \$10 allocation per person for travel abroad.

By the end of the 1950s, import of many "luxury" goods was allowed, and Israelis were allocated \$100 per voyage abroad. The 1960s saw a further relaxation of import restrictions, and they were liberalized completely in the 1970s (transferring the onus of restricting imports to the "Chinese walls" of exorbitant customs duties). These, too, were lowered considerably, due to the free trade agreements with the European Union and the United States; and in the 1980s were coupled with a gradual rise

in personal foreign exchange allocations for traveling abroad, from \$500 to \$3,000. The first permits for holding foreign bank accounts and investments followed suit, and in the second half of the 1990s the last bastions of foreign currency control were removed.

### **The Rate of Exchange**

The rate of exchange of the shekel is now, after removal of all foreign currency restrictions, determined by the international money market. This was not always the case. As in all post-WWII economies, Israel's currency exchange rate was a fixed one, changed (devalued) by government decision from time to time.

In 1948 the Israeli lira was equal to one pound sterling (then \$4 US); it was devalued to \$2.80 in 1949 together with the pound. Since then Israel's currency has been devalued many times (e.g., to 1.80 lira per \$ in 1954, IL3 per \$ in 1962, IL4.20 in 1971 and IL6 in 1974). This, in accordance with the economic policy, aimed at narrowing the gap between the smaller exports and imports, and actually compensating foreign trade for the accumulated local inflation rate since the previous devaluation.

In 1975 Israel followed the change of trend in the OECD and embarked on a "creeping devaluation" (allowing up to 2% devaluation per month). This system lasted two years, until the first step of liberalization was carried out. Since

then, the rate of exchange has been determined daily by the Bank of Israel, in accordance with market fluctuations. In 1980 IL10 were converted to 1 shekel and in 1985 1,000 shekels became a New Israeli Shekel (NIS). In July 2007 the NIS rate of exchange averaged \$0.24.

### **Restraining the National Budget**

The unusual circumstances of Israel's economic growth, most of which had to be instigated by the government during the first decade or two of statehood, placed it high on the list of countries with a large national budget compared to their GDP. There were instances when the budget was even higher than the GDP, but it was reduced to 95 percent in 1980, to 64 percent in 1990, to 49 percent in 2005, and around 40% in 2006. Also, whereas in the early years a budget deficit (the part not financed by taxation and local loans) was allowed only for "development" (i.e., investment) purposes, later on, with the growing burden of defense, "ordinary" budget deficits became a matter of routine.

During the 1990s emphasis was put on curtailing these deficits. The target was to bring down the deficit/GDP ratio to the rate prevailing in Western developed economies, a policy that was indeed successful in reducing it down to a quarter of what it was at the beginning of the decade. After it rose considerably in 2001, it was brought down to 6 percent in 2003, 5 percent in 2004, 3.2 percent in 2005, and 1.8% in 2006.

The economic reform program embarked on by the government in 2003 continues to reduce the budget (as well as taxes) further and streamline the economy.

### **Privatization**

Whereas the government is still obligated to encouraging economic initiatives, its policy succeeded - since the 1990s - in reducing its direct involvement in the economy. Thus, apart from almost eliminating subsidies supporting the prices of basic commodities and trimming down the entitlement for those directed at encouraging foreign investments and exports, it embarked on a major privatization campaign of selling the ownership of hundreds of public companies.

While during the first decade of this policy many smaller concerns were privatized, the process has been enhanced in the last couple of years, fetching an income of \$3 billion from the sale of much larger enterprises like banks, El Al Israel Airlines, Zim (navigation), and Bezeq (communications), with the oil industry being next on the agenda. The government also intends to transfer certain of its services to the private sector.

## 'AN ECONOMIC MIRACLE'



In its first 25 years, the Israeli economy achieved a striking average GDP growth rate of close to about 10 percent annually, while at the same time absorbing waves of mass immigration, building a modern infrastructure and economy almost from scratch, fighting four wars, and maintaining security. This was considered to be 'an economic miracle.' In actual fact, it should

be ascribed largely to the resourceful use of substantial capital imports over the years - first and foremost, the mass investment in means of production - coupled with the country's success in rapidly and productively absorbing immigrants.

During the following six years, however, between 1973 and 1979, the growth rate decreased (as in most industrialized countries, partly due to the oil crises of 1973/4 and 1979/80) to a yearly average of 3.8 percent. In the 1980s, it dwindled further to 3.1 percent. Then, the 1990s saw an average annual growth rate of more than 5 percent in the GDP (even reaching 7.7 percent in 2000) and back to 5.2 percent in 2005 and a similar rate in 2006.

The GDP per capita grew by more than 60% in the course of the last decade of the 20th century, reaching an annual

level of close to \$18,700 in 2005 and \$ 20,138 in 2006.

The economic growth rate in Israel in 2006 was relatively high compared with the growth rate in other developed countries. The average growth of the GDP in the 30 OECD countries totaled 3.2% in 2006 and was 1.9% lower than the growth rate in Israel.

## THE NATIONAL ECONOMY SCENE

### **Balance of Payments**

The perennial problem of the trade deficit has been, until recently, the high price Israel has had to pay for the miracle of attaining rapid growth while successfully meeting other national challenges. This yearly gap between a high level of imports and a significantly smaller scale of exports indicated economic dependence on foreign resources. Thus, a primary policy goal - eventually reached recently - of every government was to achieve "economic independence," the point where exports will finance all imports and this deficit will disappear.

Over the first 48 years of Israel's existence, this deficit grew continuously, 45-fold (in current prices): from \$222 million in 1949 to \$10.1 billion in 1996. However, in relative terms, the deficit steadily decreased during that period, indicating that the problem was gradually being solved: whereas in 1950 exports financed only 14 percent of imports, in 1960 this ratio was 51 percent, and in 1996 it stood at 79 percent. Since then the actual deficit began declining, down to \$4.7 billion in 2001 and to a mere \$0.7 billion in 2005 with exports of goods and services thus financing all imports, with some surplus funds remaining.

**Balance of Payments:\* 1949-2005**  
**(in millions of current US dollars)**

Year	Imports	Exports	Deficit
1949	263	41	220
1955	443	139	304
1960	694	352	342
1965	1,269	749	520
1970	2,657	1,374	1,283
1975	8,038	4,022	4,016
1980	13,382	10,099	3,733
1985	15,138	11,223	3,915
1990	24,217	18,868	5,349
1996	37,576	29,386	8,190
2000	46,514	45,179	1,335
2005	57,384	56,623	761
2006	61,600	62,600	1,000

\* The current account, including goods and services

Over the past 59 years, Israel has required around \$US 176 billion (in current figures) to cover all its annual trade deficits. Almost two thirds of this accumulated deficit was covered by unilateral transfers, such as funds brought in by immigrants, foreign pensions, donations from Jewish fund-raising organizations abroad to institutions of health, education, and social services, and grants from foreign governments, especially from the United States. The rest was financed by loans from individuals, banks,

**Net External Debt:  
1954-2005 (in millions  
of current US dollars)**

Year	Total Net External Debt
1954	356
1960	543
1970	2,223
1975	6,286
1980	11,344
1985	18,051
1990	15,122
1995	20,788
2000	7,353
2002	0
2005	-23,173
2006	- 31,480

and foreign governments, which Israel has been repaying since its early years.

That is why the national external debt increased every year until 1985, when, for the first time, less was borrowed than was paid back. This positive trend reverted for a few years until the net national external debt reached a new high of \$20.8 billion in 1995. During the past decade it diminished considerably, down to zero, and since 2002 it is becoming growingly positive - namely, Israel is a creditor - with "the world" owing it more than Israel owes the world, over \$31 billion in 2006.

**Foreign Trade**

With its small economy and relatively limited domestic market, Israel's growth depends mainly upon expanding exports.

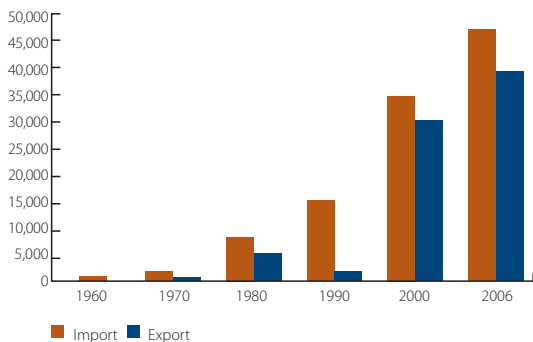
Much of the country's creative resources have been devoted to building its industrial exports. The value of these has grown almost 3,000-fold (in current prices) - over 56 years - from \$13 million in 1950 to \$52 million in 1955, to \$1.4 billion in 1975, to \$5.6 billion in 1985, to \$30.8 billion in 2000, and to \$ 39.4 in 2006 - an increase of 7.5% over 2005.

In recent years, over 85 percent of all imports of goods - amounting to \$47.2 billion in 2006 - have been production inputs and fuel; 54 percent of these arrived from Europe, with the Americas providing 17 percent, Asia 16 percent, and the remaining 13 percent from other countries. In the same year, 33 percent of Israel's exports of goods - amounting to \$36.6 billion - were directed to Europe, 40 percent to the United States, 19 percent to Asia, and the remaining 8 percent to other countries. During most of the 1990s Israel's industrial exports to the U.S. exceeded its imports from there, and since 2000 this is true even when excluding the export of diamonds.

Joining the General Agreement on Tariffs and Trade (GATT), as well as instituting a free trade area for industrial products with the European Community (1975) and for all products with the United States (1985) has enhanced the competitiveness of Israel's exports. Hence, Israeli goods can enter - duty free - both the European Union (EU) and the United States. This enables local Israeli producers to aim for a market almost 110 times larger than the domestic one and attracts investors who wish to export their products to Europe without paying duty. Israeli investors also forged joint ventures with Jordanian and Egyptian businesses in special industrial zones that enable the export of products duty-free to the US and the EU.

To maximize chances of success, local Israeli enterprises have sought to identify segments of international trade where they can carve out specialized niches for themselves. The establishment of joint ventures with foreign industrial firms has often utilized a blend of local innovations and large-scale foreign production and market penetration. Joint projects have been undertaken in areas such as electronics, software, medical equipment, printing, and computerized graphics. Many of these joint projects are assisted in recruiting capital for joint ventures through frameworks such as the following six binational development research cooperation foundations, supported by the governments concerned: with the US (BIRD); with Canada (CIIRDF); with Singapore (SIIRD); with Britain (BRITECH); with Korea (KORIL-RDF) and with Victoria/Australia (VISTECH).

### Export and Import of Goods (excluding diamonds)



## THE ECONOMIC PICTURE

### Checking Inflation

From its inception and until 2000, Israel's economy suffered from rising prices - though a linkage mechanism helped individuals somewhat to live with the consequences. All financial commitments, salaries, rents, savings accounts, life insurance policies, income tax brackets, and the like were linked to a steadier value (such as foreign currency or the consumer price index), thereby taking the sting out of inflation. Thus, Israelis managed to raise their standard of living whether the annual inflation rate was one digit (from the mid-1950s to the end of the 1960s), two digits (1970s) or three digits (first half of the 1980s). Obviously, the economy suffered from the inflation (e.g., decline in the propensity to invest), much of which was fueled by these linkages, until the situation came to a head in the mid-1980s.

In the summer of 1985, after inflation had soared from 191 percent in 1983 to 445 percent in 1984 and threatened to reach four digits in 1985, the national unity government headed by Shimon Peres of Labor, with Yitzhak Moda'i of the Likud as minister of finance, implemented a radical emergency stabilization program in cooperation with the Histadrut, the umbrella organization of the unions, and with the Employers' Coordination Committee. The inflation rate fell to 185 percent in 1985 and to 21 percent

**The shekel**, Israel's unit of currency (valued at \$0.24 in July 2007), was known as early as the second millennium BCE as a unit of weight for means of payment in gold and silver. It is recorded in the Bible that Abraham negotiated the purchase of a field "and a cave that was therein," at Machpela (in Hebron) saying: "I will give thee money for the field; take it of me, and I will bury my dead there. Ephron, the land-owner, replied: the land is worth four hundred shekels of silver... and Abraham weighed to Ephron four hundred shekels of silver, current money with the merchant." (Genesis 23:13, 15-17)

in 1989. It has since fallen further, to 7 percent in 1997 and - for the first time ever - to zero in 2000. Another first ever was an actual fall of prices in 2003, with a negative inflation of -1.9 percent. In 2005 inflation was 2.4 percent and in 2006 again a negative rate of 0.1%.

### **The Public Sector**

The high level of public consumption, in particular the resulting large deficit in the government's budget, was always a primary cause of Israel's high inflation rate. All the resources the government could recruit to finance the budget (domestic and foreign sources, loans from the public, direct and indirect taxes) were not sufficient to cover the amount spent, and the government found itself repeatedly compelled to resort to inflationary financing. This heavy burden of the public sector was due mainly to the tremendous defense expenditure and the need to repay internal and external debts, two items which only in the last few years

have come down from two thirds to less than a half of the government budget.

The pursuit of economic viability also called for checking

inflation, reducing the balance-of-payments deficit, and maintaining rapid economic growth, all of which required curtailing the high public expenditure that has taken place in recent years. The high ratio of public expenditure to the GDP has been halved compared to what it was 25 years ago, from 95 percent to 49 percent of the GDP between 1980 and 2006 (when the government budget amounted to some \$60 billion). In 2006 there was a surplus in the balance of payments and the budget deficit was reduced to 0.9% of the GDP.

Although the government still encourages private economic initiatives, its policy succeeded in reducing actual involvement in business concerns through their privatization which in 2005 yielded an income of almost \$3 billion.

### **The Tax System**

The financing of Israel's massive public expenditure required heavy taxation, which its citizens had to bear, for years. This was one of the highest tax burdens in the world. During the first decade of statehood, taxes equaled one eighth of the GNP; in the 1960s, they reached one quarter; they wavered between 30 and 40 percent in the 1970s and 1980s; in the 1990s they averaged less than 40 percent, and were 40.3% in the year 2000. By 2003 Israel's total tax burden decreased to 39.3% of the GDP, going further down to 38 percent in 2006 - almost

at the level of the OECD countries' 2004 average, which was 37.4 percent.

Indirect taxes consist primarily of a 15.5% Value Added Tax (VAT). In addition, a purchase tax is levied on cars, fuel, and cigarettes. Imports from the European Union and the United States are duty free, whereas customs are applied on imports from other countries.

Direct taxes on income and property amounted to less than one quarter of all tax revenues until the late 1950s, climbed to around one third by the early 1970s, then to about one half in the early 1980s, and reached 45 percent in 1986. Since then the weight of direct taxes decreased to 39 percent in 1995 and has fluctuated between that and 42 percent in 2006.

In recent years, further changes to the tax system were adopted to integrate Israel more firmly into the global economy. As part of this policy, custom duties and purchase taxes on imports continue to decline, the corporate tax rate fell gradually to 30% by the end of the year 2007 and is to fall to 25% in 2010. The marginal rate of income tax is also being gradually reduced to 44% in 2010.

### **Private Consumption and Savings**

Private consumption has risen, almost without a break, since 1950. Its annual growth averaged 6 percent since

1960 (although it declined from 9.6 percent per capita in 1994 to 6.6 percent in 2000 and further to 4.9 percent in 2006).

Notwithstanding, private savings were consistently substantial. Until the late 1950s, the average ratio of private savings to private disposable income never fell below 29 percent; in the early 1960s, it dropped to 21 percent but rose again in 1972 to 38 percent, as it was in 1981. Since then it has fallen, almost steadily, to 28.8 percent in 2006.



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### **Investment**

The high rate of savings was never sufficient to support the immense investments made by a rapidly growing economy (generally 20-30 percent of all the resources available to the economy). As a result, a large proportion had to be financed by the transfer of public and private capital from abroad and directly by the public sector, mainly the government. During the past decade, overall investments grew from \$17 billion to \$22.8 billion between 1995 and 2000, and then declined for three consecutive years before rising again and reaching \$22.1 billion by 2005 (49 percent of which, \$10.8 billion, were made from abroad by non-Israeli residents).

The beginning of 2006 saw an outstanding leap of foreign investments by parties totally new to the Israeli scene, evidentially owing to a growing interest and confidence in the economy. In 2006 the investments made from abroad by non-Israeli residents reached \$24,386 billion and the growth continued in 2007.

**The Histadrut** - General Federation of Labor was established in 1920 as a federation of trade unions to represent the country's workers and to set up industries to provide jobs for its members. In time, it became one of Israel's largest employers and played an important role in the development of the country.

Today, the New Histadrut, with 700,000 members, unites 78 trade unions that are concerned with the local organization of labor, signing collective agreements, and seeing to

Many private investments, of both domestic and foreign origin, were also made as a result of government initiative and encouragement. This is reflected in the various versions, over the years, of the Law for the Encouragement of Capital Investment. Through this law, the government attracted investors with subsidized long-term loans (with reduced interest rates), direct grants as a percentage of the total investment, as well as R&D financing.

Tax relief and tax rebates were also offered for this purpose, allocated in accordance with the weight of the contribution by the specific investment to the implementation of economic policies, such as population dispersion, promotion of exports, and the like. This assistance may have accounted for the accumulation, during the 1980s, of

capital stock (production capacity) at a rate exceeding the growth of the GDP. In some sectors, this surplus production capacity facilitated the rapid takeoff in the 1990s.

### **Wages and Working Conditions**

Wages in Israel are determined mostly through negotiations conducted between three parties: the government (still the country's largest employer), whose wage scale has strong implications, influencing all segments of the economy, the Histadrut (General Federation of Labor), and the organization of private sector employers. The agreements reached constitute a framework of wage scales for the different sectors of the economy and, with occasional changes, also provide for automatic payment of a cost-of-living allowance as compensation for inflation. Thus, the wage situation is rather inflexible - especially at the lower end. Waves of unemployment in Israel did not significantly reduce wages, although in times of labor shortages wages rise with greater elasticity where the demand for workers is more acute. In June 2006 the average monthly wage was NIS 7,759 (about \$1,843).

their implementation. Most branches of employment in the Israeli economy are represented: food, textiles, hotels and tourism industries, government and public sectors workers, clerks, practical engineers, nurses, pensioners, and more. Some professions are represented by independent unions: engineers, medical doctors, academics, teachers, and journalists.

The Histadrut is not as strong as it used to be, as workers are increasingly being employed through sub-contractors or by personal contracts.

Conditions for workers in the country's various economic sectors are set forth in work agreements negotiated between employers and employees. Minimum requirements, however, are anchored in law and include a maximum 47-hour work week (with the actual 2006 average in the business sector being under 40 hours a week), minimum wages (NIS 3,585; approximately \$780) in 2006 scheduled to rise to NIS 3,785 at the beginning of 2008), compensation for overtime, severance payments, and paid vacation and sick leave.

## SECTORS OF THE ECONOMY

### **Industry**

Israel is today an industrialized country with most of its manufacturing, including many traditional fields, based on intensive and sophisticated research & development and hi-tech processes, tools, and machinery. This is the outcome of very rapid and intensive development.

Today's dynamic, widely diversified industrial sector was developed from small workshops, originally established since the end of the 19th century to manufacture farm implements and process agricultural products. Two incentives brought about the initial transformation of these workshops into more modern factories – the immigration of entrepreneurs and experienced engineers from Germany in the 1930s and the increasing demand for industrial products during World War II (1939-45) as the Allied forces in the region required various commodities, especially clothing and canned foods, and the region needed products that could not be imported from Europe because of the war.

Until the 1970s, traditional industries - such as food processing, textiles and fashion, furniture, fertilizers, pesticides, pharmaceuticals, chemicals, rubber, plastic, and metal products - provided most of the country's industrial output. In that period most resources were

directed toward developing agriculture, food production and processing, laying infrastructure, and providing quick employment of many unskilled immigrants.

The next phase of industrialization concentrated on developing and manufacturing arms needed for the defense of the country. It was accelerated because of arms embargoes that endangered the nascent state. The vast investment in aviation and armament industries created new technologies that became the base for Israel's unique hi-tech industries, such as medical devices, electronics, computer software and hardware, telecommunications, etc. In the 1980s, Israelis who worked in the Silicon Valley returned to Israel, opening development centers of multinational companies such as Intel, Microsoft, IBM, and others. In the 1990s a highly skilled immigration of scientists, engineers, technicians, and medical workers from the former Soviet Union enabled the upgrading of Israel's industry to its current level of sophistication, with its array of export products.

Due to its lack of natural resources and raw materials, Israel's one advantage is its highly qualified labor force, scientific institutes, and R&D centers. Today Israeli industry concentrates mostly on manufacturing products with high added value, by developing products based on Israel's own scientific creativity and technological innovation.

Unlike most developed economies, in which the number of persons employed in industry remained stable or diminished during the early 1990s, their number in Israel continues to grow. Israel's industrial growth rate in 2006 was the second highest among the developed economies, after South Korea.

In the past two decades, industrial output has made international-level strides in the fields of medical electronics, agro-technology, telecommunications, fine chemicals, computer hardware and software, as well as diamond cutting and polishing. In 2005, the manufacturing industry employed 413,000 persons (among them, the rate of those with higher education was second only to that of the work forces of the US and Holland). In 2004 there were almost 13,000 industrial plants that produced an output of over \$58 billion - more than half of which was exported.

### Major Indicators by Economic Branch (2006) (in percentage)

Branch	GNP	Labor Force	Exports	Investment
Industry	21.6	18	74	35
Agriculture	2.5	1.7	3	3
Construction	7.1	5	1	3
Transportation & Communications	10.2	6.8	8	32
Commercial				
Financial & Personal Services	31.1	35	24	13
Public Services	25	34	-	14

Source: Central Bureau of Statistics

### Hi-Tech Industries

The fastest growth rates (averaging 8 percent annually in recent years) are to be found in the hi-tech sectors, which are skill and capital intensive and require sophisticated production techniques, as well as considerable investment in research and development, on which 4.4 percent of Israel's GDP is spent - by far one of the highest rate in the world). The quality of this R&D in Israel is ranked, according to U.N. experts, among the first 10 in the world. A successful contribution to all these is due to academic research institutes, which provide much of the basic R&D and venture capital.

The significance of hi-tech industries' growth may be illustrated by their having accounted for only 37 percent of the industrial product in 1965, a rate that grew to 58 percent in 1985 and around 70 percent in 2006.

Almost 80% of hi-tech products are exported, while the more traditional, low-tech firms export only close to 40 percent of their product. Hi-tech exports quadrupled from \$3 billion in 1991 to \$12.3 billion in 2000 and to \$29 billion in 2006 (plus another \$5.9 billion of hi-tech services exported). After the 2001-2 economic slowdown, the hi-tech industry was the first to shrug off the depression with a positive growth already in 2003. In 2006 the product of ICT (information and communications technology, a major part of hi-tech industry) amounted to \$24 billion. Contributing 17 percent of the business sector GDP, it employed 185,000 persons, its expenditure on civilian R&D exceeded \$3.3 billion, and its exports were close to \$16 billion.

Over 90 percent of the public budgets for R&D (\$7 billion in 2006) are allocated to hi-tech industries, much of which is channeled via joint venture capital funds.

In recent years, the government has been collecting fair dividends on its shares in these funds, over and above repayment of loans granted to successful start-up companies. In addition to the six binational foundations

mentioned earlier, Israel has agreements for joint funding of R&D projects with the US, Canada, Italy, Belgium, Austria, France, Sweden, Germany, Holland, Ireland, Portugal, Spain, Hong Kong, India, Turkey and China.

The age of information technology (the Internet, electronic commerce, etc.) placed Israel's economy, and particularly its hi-tech industries, in the forefront of world development in these fields. A number of internationally recognized Israeli companies have been bought by top business conglomerates in multi-billion dollar transactions. The number of new start-ups is very high due to the extraordinary innovative talent in Israel, coupled with the availability of highly skilled manpower. The growing presence of Israeli firms on Wall Street and the European stock exchanges is yet another manifestation of the respect with which Israel's hi-tech industry is regarded.

### **Israel's Diamond Industry**

Israel is a leading world diamond manufacturing and trading center. The main reason is that the Israeli diamond industry is as multi-faceted as its diamonds. The Israeli diamond is synonymous with trust and reliability, and it is guaranteed to be conflict-free and genuine.

In addition, the Israeli diamond industry is a world leader in both cutting-edge technologies and craftsmanship, thus ensuring the best yield of polished diamonds from

the rough. The large inventory of local production as well as tax-free rough and polished imports ensure competitive prices. The Israel Diamond Exchange is the largest diamond trading floor in the world, housing all of the operational functions and needs of every diamond buyer under one roof.

In 2006 diamond exports amounted to \$13 billion, the US being their main (63 percent) purchaser, followed by Hong Kong (14 percent), and Switzerland (11 percent). Israel produces most of the world's output of small polished stones, which are used in jewelry settings. It is also responsible for 40 percent of the polishing of diamonds of all sizes and shapes, making Israel the world's leading diamond-polishing center in terms of both production and marketing.

### **Agriculture**

Israel's agricultural sector is characterized by an intensive system of production stemming from the need to overcome the scarcity in natural resources, particularly water and arable land. The constant growth in agricultural production is due to the close cooperation between researchers, farmers, and agriculture-related industries. Together they develop and apply new methods in all agricultural branches. The result is modern agriculture in a country more than half of whose area is desert.

As Israeli farmers and scientists have had to contend with a difficult environment and limited water resources, their experience is especially relevant to the developing world. Its success lies in the determination and ingenuity of farmers and scientists who have dedicated themselves to developing a flourishing agriculture, demonstrating to the world that the real value of land is a function of how it is utilized. The close cooperation between R&D and industry led to the development of a market-oriented agri-business that exports agro-technology solutions - particularly water solutions - world wide.

Agriculture in Israel is the success story of a long, hard struggle against adverse conditions and of making maximum use of arable land and scarce water (including from modern desalinization plants, the know-how of which is a winning export story). When Jews began resettling their historic homeland in the late 19th century, their first efforts were directed - mostly for ideological reasons - to turning barren land into fertile fields. The secret of Israel's present agricultural success lies in the close interaction between farmers and government-sponsored researchers, who cooperate in developing and applying sophisticated methods in all agricultural branches, as well as technological advancement, new irrigation techniques, and innovative agro-mechanical equipment.

Since Israel attained independence in 1948, the total

area under cultivation has increased by a factor of 2.6, to approximately 1.1 million acres. The irrigated land area increased by a factor of 8, to about 0.6 million acres until the mid 1980s; however, owing to the growing shortage of water, coupled with intensive urbanization, this is now less than half a million acres. During the past half century the number of agricultural settlements grew from 400 to 750, but the share of the population living in them has fallen from 12 percent to less than 5 percent.

Today, most of Israel's food is domestically produced and supplemented by imports, mainly of grain, oilseeds, meat, coffee, cocoa, and sugar, all of which are more than covered by agricultural exports. Farm production consists largely of dairy and poultry products. Additionally, a large variety of flowers, fruit, and vegetables is locally grown, especially in warm areas that give farmers an early advantage in European markets. During the winter months, Israel is Europe's greenhouse, exporting melons, tomatoes, cucumbers, peppers, strawberries, kiwis, mangoes, avocados, a wide variety of citrus fruits, long-stemmed roses and spray carnations.

The share of agricultural product of the GNP declined from 11 percent to 1.5 percent between 1950 and 2006, and the proportion of agricultural exports decreased from 60 percent to less than 2 percent of total exports. This, despite an absolute increase of annual exports from \$20

million in 1950 to \$1 billion in 2006 due, inter alia, to the widespread introduction of innovative farming methods, modern irrigation and water treatment technologies, and export-oriented farming.

### **Construction**

In the early years of statehood, residential building accounted for 84 percent of total construction output. Subsequently, allowing for more infrastructure construction, it fluctuated between 70-75 percent until 1991, when it leaped back to 86 percent in order to meet the demands of renewed immigration. As a result, the construction sector output also rose sharply in 1991, a year when the number of apartment-unit-starts reached an all time peak of 83,500. Since then that annual figure has dropped steadily to 29,000 in 2004. The record number of new apartments completed was 70,100 in 1992, shrinking to 31,700 in 2005. Once considered a leading branch of the economy and a barometer of the economic activity, the construction sector contributed only 5 percent to the GDP in 2006, down from 30 percent in 1950.

While at first almost all construction was the result of government initiative and investment, between 1958 and 1989 its share fell gradually, from 67 to 16 percent. At the beginning of the 1990s it rose temporarily, when the private sector could not meet the fast-rising demand created by the sudden influx of hundreds of thousands

of immigrants. In the last few years the general rise in the standard of living (together with foreign demand for property in Israel) seems to be indicated by a rather new phenomenon locally, a rise in prices of more expensive apartments simultaneously with a decline in the prices of cheaper ones.

Israeli companies are among the world leaders in the design and manufacture of building metal structures, prefabricated parts and components – such as doors, windows, sanitary equipment, plumbing components, fixtures and accessories, and more. These goods are successfully marketed worldwide and may be found at major construction sites on all continents.

### **Transport and Communications**

The importance of the transport and communications sector largely exceeds its small share in the economy's statistics, as it is an infrastructure industry serving all other branches of the economy as well as households. It is a service rather than a production sector, and is growing - as is the case in all modern economies - faster than the production industries. A remarkable growth in the aviation part of this sector took place in recent years (thanks to a parallel increase in tourism), but the growth of the communications sector has been even faster.

Transport and communications contributed 7 percent to

the GDP in 2006, constituted some 8 percent of exports of goods and services, and employed 5 percent of the country's labor force. Thirty-six percent of its product originates from land transportation, 20 percent from shipping and aviation, 39 percent from communications, and the rest from various services.

Since the early 1950s, the total gross tonnage of the merchant fleet has grown more than tenfold, while air carriers now fly more than 100 times as many passengers. During the same period, the road length was doubled, the number of buses more than tripled, and the number of trucks increased tenfold.



**Old Jaffa:**  
Stone alleys  
and a tourist  
The Ministry  
of Tourism

## Tourism

Tourists are attracted by Israel's geographical diversity, its archeological and religious sites, the almost unlimited sunshine and modern resort facilities on the Mediterranean, Lake Kinneret (Sea of Galilee), the Red Sea, and the Dead Sea. In the year 2000, the largest number of tourists ever - 2.41 million - visited the country (compared to 33,000 in 1950, 118,000 in 1960, 441,000 in 1970, 1.18 million in 1980, and 1.34 million in 1990). Owing to political conditions this figure fell to 1.2 million in 2001, rose to 1.84 million in 2006, and was expected to reach some 2.3 million by the end of 2007.

Some 57 percent of these tourists were from Europe, 32 percent from the Americas, and 8 percent from Asia.

Tourism provided foreign currency earnings of \$2.8 billion in 2006, i.e. 5 percent of the income from all exports and 16.8 percent of the export of services.

Although this industry contributes less than 3% to the GNP, it has a foreign currency added value of 85 percent (making it the added-value leader among the country's export industries) and employs some 80,000 persons. This industry's large potential is yet to be exploited, as it is a major factor in Israel's economic growth plan.



**Jerusalem:**  
A jazz band in  
the streets of the  
Nahalat Shiv'a  
quarter  
•  
The Ministry  
of Tourism