The program and the political aims of the Ministry of Construction and Housing

The declared aim of the Ministry of Construction and Housing is to ensure that households have 'appropriate housing,' or, as formulated in the 2003 budget proposal, "The purpose of the activity of the Ministry of Construction and Housing is to create the conditions that will enable the general population to find a housing solution at a reasonable price, while focusing on the weaker segments of the population." The above analysis indicates that the Sharansky Program was not consistent with these aims (in contrast with the ministry's permanent aid programs).

6. Commerce and services

The deepening of the recession against the backdrop of the Intifada and global economic slowdown impacted on the commerce and services industry. The industry's product contracted by 2.8 percent in 2002, after remaining stable in 2001. The industry's nondiamond exports, which account for a third of total exports, fell by 15.7 percent in volume terms.

The deepening recession in 2002, against the backdrop of the Intifada and global slowdown, impacted on the commerce and services industry. The industry's product contracted by 2.8 percent in 2002 (Table 1.33), after remaining stable in 2001. The contraction was slightly less than that of the business sector in general, so that the share of the commerce and services industry in business-sector product—51.1 percent—rose slightly. The number of persons employed in the industry also remained virtually unchanged, after rising consistently in the previous 11 years, while in the business sector in general employment declined more steeply. The industry's exports, which account for about a third of total nondiamond exports, fell by 15.7 percent in volume terms.

Services product dipped by 2.8 percent, and by 1.5 percent without start-ups. The short-term factors which account for the decline include the Intifada and the global slump, primarily in the high-tech industry.

The product of the services industry (hotels and catering, business and financial services, education and health businesses, etc.) declined by 2.8 percent in 2002, and by 1.5 percent without start-ups. The rate at which the services industry declined is more moderate than that of business-sector product (both excluding start-ups). Short-term factors behind the decline in services include the Intifada and the global slump, especially in high-tech, which caused the product of computer and R&D services (including start-ups) to fall, and the increase in demand for security guard services. The long-term growth of the services industry's product is led by the rise in the standard of living, and with it the demand for services. The reduction of government involvement in the provision of health and welfare services, etc. has also led to an increase in the demand for the supply of these services by businesses, as was also the case in 2002.[50] There was no marked change in the share of privately financed education, however.[51] Another

[50] The share of the business sector in national health expenditure rose from 23 percent in 1990 to 28 percent in 2001. Welfare services were privatized partially by the government and the local councils; see J. Katan (2001), "The Partial Privatization of Personal Welfare Services: Dilemmas and Principal Problems," in J. Kop (ed.), *The Allocation of Resources to Social Services in 2001*, Center for the Study of Social Policy in Israel (Hebrew).

[51] See Box 3.5 in Chapter 3.

Table 1.32

Selected and Relative Construction Prices,[a] 1986–2002

(change over previous period, percent)

	Apartment prices							
	Prices	Relati to CI		elative to change rate	Rent relative to CPI	Input prices[c]	Output prices	Product prices
1986–89 (annual average)	24.1	–1.1		9.9	–0.2	27.2	29.9	22.4
1990–95 (annual average)	22.8	8.1		13.8	15.5	12.0	14.1	12.7
1996–2001 (annual average)	3.9	–1.5		–1.7	1.6	4.9	5.5	4.3
1995	15.1	4.6		15.2	–5.4	11.3	23.4	20.1
1996	16.0	4.2		9.3	–0.2	8.0	8.3	5.0
1997	9.2	0.2		0.7	2.7	8.0	10.0	8.0
1998	3.8	–1.6		–5.4	4.9	5.3	6.2	5.0
1999	4.2	–1.0	–0.7	–4.4	2.9	4.9	3.6	5.0
2000	–4.8	–5.9	–6.9	–3.4	–3.0	2.2	2.4	1.7
2001	–3.5	–4.6	–4.8	–6.4	2.3	1.3	2.9	1.0
2002	5.2	–0.4	0.7	–6.5	5.6	4.5	3.5	5.0

[a] Changes in apartment prices are derived from the Apartment Prices Survey (since January 1999 they are not part of the CPI).
[b] The method of calculating the CPI and the Input Price Index for Residential Construction is based on the calculation of the indices in different survey periods; for each survey period an average index is calculated.
Since January 1999 the CBS has used a new formulation of the CPI. The main changes are an update of the weights of the goods and services included in the ‘basket,’ and changes in the method of calculating the housing component of the overall index. In the new format, changes in rent (only in renewed contracts) are used as estimates of changes in the value of use made by the owner-occupier of his apartment.
[c] Using the Price Index of Construction Inputs.
SOURCE: Central Bureau of Statistics.

Table 1.33
Commerce and Services, Main Indicators, 1995–2002

(annual change, percent)

	1995–98	1998	1999	2000	2001	2002
Product	7.7	11.6	6.4	14.6	0.5	–2.8
Product excluding start-ups	7.4	11.0	6.8	10.9	2.2	–1.5
of which Commerce	5.7	6.0	7.9	10.5	–0.7	–2.8
Services	8.6	14.0	6.4	16.3	0.9	–2.8
Labor input	5.2	4.2	6.4	9.7	0.1	1.0
Capital stock[a]	19.6	11.8	10.1	8.5	6.1	3.4
Labor productivity	2.4	7.0	0.4	4.5	0.4	–3.8
Total factor productivity	–3.1	4.0	–0.9	1.6	–0.1	–3.5
Real wage	2.1	0.8	6.3	9.3	2.6	–7.3
Real labor cost[b]	2.6	0.8	–0.6	3.1	0.6	–4.1
Relative price[c]	–0.5	–1.5	1.0	5.6	2.2	–0.2
Exports[d]	9.3	17.2	24.3	37.2	–19.3	–15.7
Investment	6.1	–4.5	–1.1	–3.3	–12.8	–18.6

[a] At beginning of year.
[b] Deflated by output prices.
[c] Relative to business-sector prices.
[d] Business services exports deflated by services exports index.
For source and definitions see Appendix Table 1.A.40.

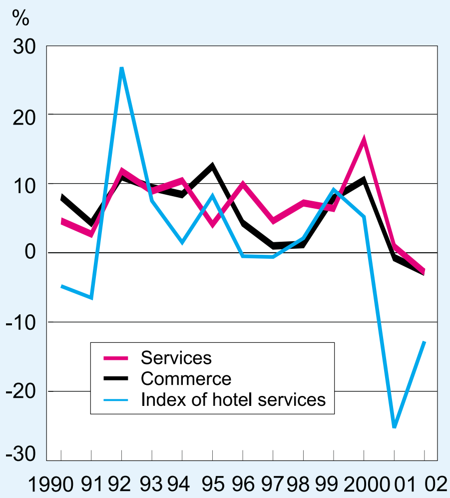
long-term trend is expressed in the outsourcing of activities by firms, and while this may be growing as a result of the recession for reasons of efficiency, it reflects mainly a recording rather than a real difference.

The product of the services industry contracted by more than the decline in the number of persons employed in it (1 percent), because of the increase in the number of persons employed in industries where the product/worker ratio is low, such as security guard services and welfare businesses, and the fall in the number of persons employed in industries with a high product/worker ratio, such as computer and R&D services.

The product of commerce, which relies mainly on private consumption, declined more steeply in 2002 due to internalization of the depth and protracted nature of the recession.

The decline in the product of commerce, most of which stems from private consumption, intensified in 2002 due to the internalization of the depth and length of the recession as a result of the Intifada. There were 4.1 percent fewer businesses in 2002 than in 2001 (Table 1.35). Nevertheless, the number of persons employed in the commerce industry rose by 5.4 percent. In periods

Figure 1.41
Real Increase in the Index of Commerce and Services, 1990–2002



SOURCE: Appendix Table 1.A.41.

Table 1.34
Business Services Revenue, 1996–2002

(percent)

	Share in GDP				Real rise in revenue					
	1996	2000	2001	2002	1997	1998	1999	2000	2001	2002
Computer services and R&D[a]	17.2	32.3	30.4	27.8	6.1	33.0	24.3	64.1	–8.2	–12.9
Employment services	9.2	9.0	9.0	8.1	0.9	17.9	11.8	12.6	–2.4	–13.9
Security and cleaning	7.9	7.0	7.9	8.8	17.3	5.2	–3.3	13.3	11.0	5.3
Other business services[b]	47.7	35.4	36.3	37.1	–4.7	17.6	–7.4	9.7	0.1	–2.7
Real estate and equipment rental	17.9	16.4	16.4	18.2	–1.2	25.5	6.7	6.3	–2.8	5.9
Total	100	100	100	100	0.0	20.7	3.7	22.7	–2.5	–4.8

[a] Including software companies and start-ups.
[b] Including legal, accountancy, market research, engineering, architecture, advertising and public relations, photography, and other services.
SOURCE: Central Bureau of Statistics.

of recession there is a transition to employment in less organized industries—commerce and services—by workers who have been dismissed from more organized ones. Although posts in less organized industries are less desirable, in a recession workers are more prepared to accept these positions.[52] Thus, in 1997–98, when there was a recession, the number of employees in commerce and services continued to rise in line with their trend before the recession, in contrast with the decline in the business sector as a whole. Another explanation is that commerce revenues are smoothed,[53] as a result of consumption smoothing by consumers.[54] In the long term, the change in consumption is similar to that in business-sector product and commerce revenues, but in a recession consumers tend to refrain as far as possible from drastically lowering their consumption by reducing saving. Hence, the shocks that have given rise to the recession of the last two years have affected commerce less than other industries.

The contraction of activity was also expressed in the fall in the number of active businesses. The balance of active businesses—the number of businesses that have opened *less* the number of those that have closed—became negative in 2002.

The contraction of economic activity was also expressed in the number of active businesses in the last two years. The balance of active businesses—the number of businesses opening *less* the number closing—became negative in 2002.[55] The considerations for closing a company are long-term ones, and hence in 2001 only a few businesses closed down, while in 2002, as the dimension of the recession was internalized, many were. The recession impacted less severely on health, welfare, and social services. In the US there are indications that the health services are counter-cyclical.[56]

[52] See W.C. Goodman (2001), "Employment in Services Industries Affected by Recessions and Expansions," *Monthly Labor Review*, October, 124(10), 3–1.

[53] See previous note.

[54] The change in consumption can explain the development of changes in commerce. The serial correlation between rates of change of commerce revenues and the rate of change of consumption in 1989–2002 is 0.89—slightly above the serial correlation between the rate of change of consumption and that of business-sector product.

[55] Excluding 'other business activities,' in which the balance of businesses is positive because of a change in the statutory tax rate encouraging the incorporation of individuals with high salaries as a company.

[56] See W.C. Goodman, *op cit*.

Table 1.35
Number of Businesses, 1999–2002[a]

(percent change from previous year)

	1999–2000	2001	2002	2002 No. of businesses
Commerce, vehicle and other repairs	–0.3	–0.3	–4.1	80,673
Hotel and catering services	–0.1	1.4	–5.5	14,511
Real estate, machine, equipment and goods hire	0.9	0.1	0.6	19,952
Computer services and R&D	5.7	9.7	0.7	7,510
Manpower agencies, security and cleaning	–1.8	0.8	–2.3	4,156
Education	4.0	1.4	–1.4	9,281
Health and welfare services	4.5	4.2	3.9	26,418
Personal and other services	3.7	2.8	1.4	22,874
Entertainment, leisure, culture and sports	3.0	3.1	2.4	13,486

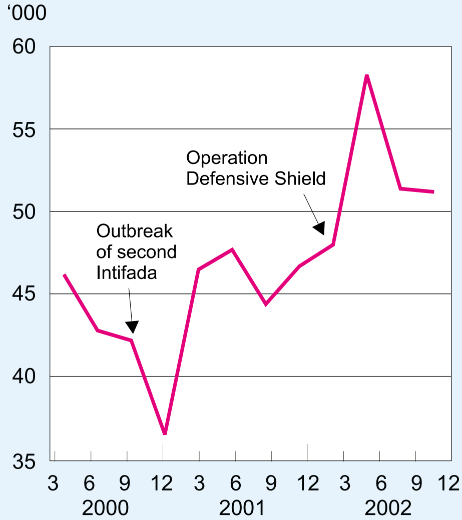
[a] Active business excluding non-profit organizations and financial institutions.
SOURCE: The Central Bureau of Statistics VAT file.

The number of employees in the security guard and cleaning services rose by more than 6,000 as an annual average—up by 13 percent over 2001. This development reflects the deterioration in the security situation and the response to it in 2002:II. As Figure 1.42 shows, in 2002:II, as the security situation deteriorated, the number of employees in the security guard industry soared. Revenues in the industry rose by an annual rate of 5 percent.

The shocks which beset the economy sharply reduced investment in the industry.

As regards investment in commerce and services, the shocks that affected the economy reduced investment in the industry by a considerable 19 percent, most of it expressed in the steep drop in investment in equipment, continuing the trend that had begun in 2001. The industry's investment in equipment fell by 22 percent, compared with a 10 percent decline in the business sector. Investment in commerce and services may be more sensitive to uncertainty than other business-sector industries because of the large number of small businesses.

Figure 1.42
Employment in the Security Guard Industry[a], 2000–2002



[a] Including the change in the number of employees in cleaning services, which appears to have stayed stable over this period.

SOURCE: Central Bureau of Statistics.

Government subsidies to commerce and services (excluding computers, R&D, and tourism)

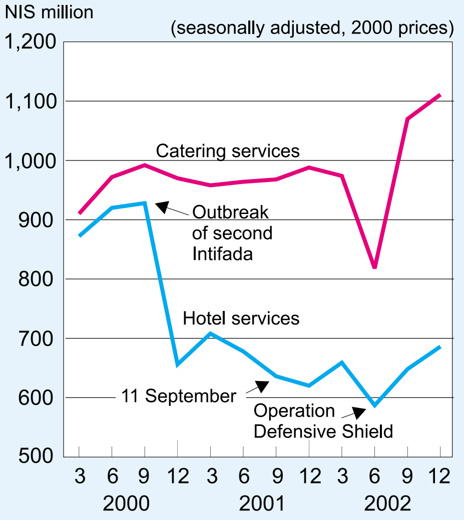
1. *The Small Businesses Authority*: this functions within the framework of the Ministry of Industry and Commerce and

The government subsidizes commerce and the services (excluding computer and R&D services and tourism services) via the Small Business Authority, a working capital fund.

its aim is to give individual aid to entrepreneurs, with emphasis on the periphery.[57] The Authority provides managerial and operational aid via centers for small and medium businesses. The aid applies to all the problems encountered by small businesses, and includes instruction and the provision of information. The Authority mediates between small businesses and various funds which extend credit, helps to obtain government guarantees for loans of up to NIS 500,000,[58] and provides aid centers for small and new exporters. In 2001 the Authority handled some 25,000 applications, and in 2002 its annual budget was NIS 22.5 million—including a nonrecurring budget of NIS 10 million—for the second year in succession. Only about a quarter of the money is from the national budget, the rest deriving from various funds and the Jewish Agency. To the best of our knowledge, no comprehensive study has ever been undertaken anywhere to assess whether this kind of activity (centers for aiding and promoting small and medium businesses and extending loan guarantees) embodies any added value.[59] Relative to the size of the economy, the budget of the Authority is commensurate with that of its counterpart in the US.

2. *Working capital fund*: in 2002 a working capital fund of NIS 100 million was set up to provide government loans for small businesses experiencing cash flow problems due to the protracted recession, which is extraneous to the usual business cycle. The fund's annual budget is NIS 15 million, so that the extent of non-repayment of loans is 15 percent at the most. The extent of failure to repay loans and the desire to utilize the fund to the full are taken into account in determining the minimum requirements. In 2002 the utilization of the fund was low, only about 3 percent, partly because of the high minimum requirements and partly because it only began to function in the middle of the year. The minimum requirements regarding equity have recently been reduced, and the fund will continue to function in 2003.

Figure 1.43
Gross Quarterly Product of Hotels and Catering Services, 2000–2002



SOURCE: Central Bureau of Statistics.

Hotel and catering services

2002 was even worse than 2001 for the hotel and catering services. The industry's

[57] See D. Gottlieb, O. Peled, and N. Kasir (Kaliner) (2002), "A Policy to Encourage Employment," Bank of Israel *Policy Recommendations*, 2003–2008 (Hebrew).

[58] The average loan was NIS 70,000 in 2000.

[59] The subject is a controversial one, and there is little literature on it. A. Glynn (1998), "Small Businesses: the Other Side of the Coin," Sapir Development Center (Hebrew) states that medium-sized manufacturing firms function better than small ones, whose incremental employment is negligible.

Although 2001 was a bad year for the hotel and catering services industry, 2002 was even worse, and its product fell by 0.3 percent, so that employment also continued to contract.

product dipped by 0.3 percent because of the deterioration in the security and economic situation, which impacted on both incoming tourism and domestic demand for these services. The effect was especially bad in 2002:II, because of the further exacerbation of the security situation. Employment continued to contract in 2002, by 8.9 percent. Some 4,213 businesses were closed, while 3,362 were opened. The industry's debts to the banks rose by 5 percent in real terms, and loan-loss provision grew. For an analysis of the loss of GDP due to the decline in tourism services exports as a result of the Intifada, see Box 1.11.

Table 1.36

Commerce and Services by Type: Product, Employment and Wages, 1995–2002

(annual change, percent)

				Services					
	Total	Commerce	Services	Hotel and catering	Business services	Insurance and financial institutions[a]	Health	Education	Personal and other
Share in GDP									
1995	100	30.8	69.2	5.9	29.8	19.2	4.5	2.8	7.0
1999	100	29.4	70.6	5.1	31.9	20.0	4.1	2.5	6.9
2000	100	28.4	71.6	4.6	34.2	20.2	4.0	2.4	6.2
2001	100	28.1	71.9	4.1	33.2	21.6	4.3	2.4	6.5
2002	100	28.1	71.9	4.2	32.5	21.8	4.6	2.3	6.7
Output									
1996–1998	7.7	5.7	8.6	2.9	11.4	10.0	5.6	1.9	1.4
1999	6.8	7.9	6.4	6.3	3.7	4.4	4.7	13.1	27.4
2000	14.6	10.5	16.3	3.9	22.7	16.0	10.7	6.9	3.7
2001	0.5	–0.7	0.9	–11.7	–2.5	7.1	7.5	0.9	5.0
2002	–2.8	–2.8	–2.8	–0.3	–4.8	–1.8	3.7	–5.4	–0.8
Labor input[b]									
1999	6.4	3.9	7.7	8.4	9.5	5.0	3.4	4.8	4.0
2000	9.7	5.0	12.0	15.6	18.4	–1.4	1.4	–1.2	–0.3
2001	0.1	–0.2	0.2	–9.2	3.2	1.4	2.1	2.3	8.5
2002	1.0	5.4	–1.0	–10.8	–2.1	–1.6	4.3	4.0	3.8
Real wage[b, c]									
1999	6.3	3.4	7.7	5.1	14.3	8.0	3.6	2.9	1.5
2000	9.3	7.2	10.2	5.1	15.5	13.3	4.5	5.2	6.2
2001	2.6	1.8	2.9	–0.5	3.2	1.2	1.4	2.9	1.2
2002	–7.3	–7.3	–7.4	–8.2	–9.6	–6.4	–6.3	–1.3	–5.2
Relative price[d]									
1999	1.0	1.0	1.0	1.9	3.2	7.6	1.5	–0.8	–17.6
2000	5.6	1.0	7.6	4.7	7.4	9.6	1.9	3.9	8.8
2001	2.2	1.0	2.7	–1.0	1.4	6.9	2.0	2.5	3.1
2002	–0.2	1.0	–0.7	–1.8	–2.9	1.2	0.1	–0.7	–0.4

[a] Including banks.
[b] Including Palestinians and foreign workers (reported and unreported).
[c] Per employee post deflated by the CPI.
[d] Deflated by business-sector-product price.
SOURCE: Central Bureau of Statistics.

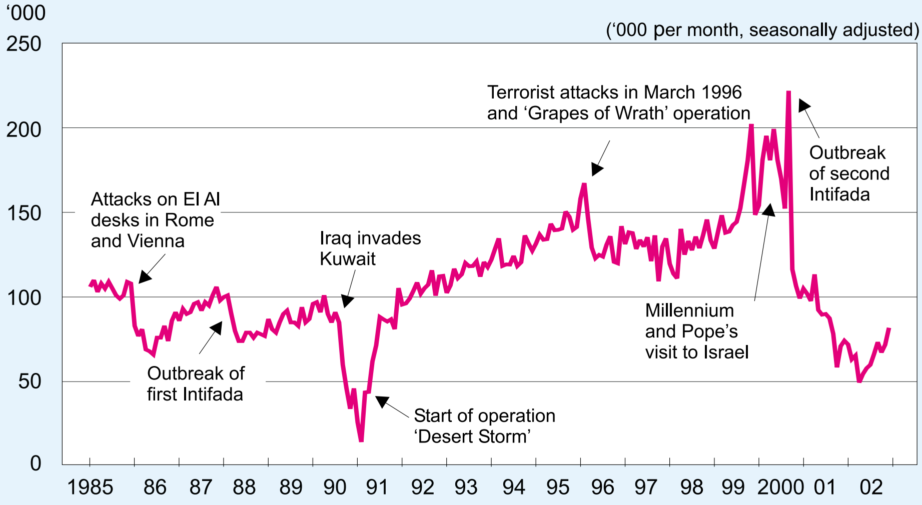
Box 1.11
The Effect of the Intifada on Tourism Services Exports in 2002

In 1998, even before the onset of the millennium year which caused incoming tourism to soar (subsequently plunging because of the Intifada), Israel's exports of tourism services amounted to $ 2.4 billion—about 7 percent of total goods and services exports. The tourism industry (both incoming and internal) had 80,000 employees, over 4 percent of all business-sector employment.

The tourism industry is especially sensitive to the security situation, both in Israel and in the rest of the world, and is the first to be affected if it deteriorates. In the wake of terrorist attacks there is a steep and sudden drop in incoming tourism which generally persists for six months with a peak in the second month, and the process of recovery is slow.[1] As soon as the Intifada erupted, at the end of September 2000, the number of tourists coming to Israel by air plummeted from 180,000 in 2000:III to 107,000 in 2000:IV (both figures seasonally adjusted), continuing to fall subsequently, as the security incidents persisted (Figure 1). Cruise tourism ceased almost entirely.

Below we attempt to estimate the damage to tourism services exports in 2002 resulting from the Intifada. The estimate must take developments in

Figure 1
Tourist Arrivals by Air, 1985–2002



SOURCE: Central Bureau of Statistics.

[1] S. Krakover, "Estimating the Effect of Atrocious Events on the Flow of Tourism to Israel," in G. Ashworth and R. Hartmann (eds.), *Tourism, War, and the Commemoration of Atrocity*, Cognizant Communication Corp., N.Y., N.Y. (forthcoming).

world tourism into account; these include the slump in the west, which led to the slowing of tourism to and from it, and the contraction of tourism in general, the events of September 11, 2001 in the US and additional terrorist attacks, which caused activity to contract temporarily, particularly in North America and other areas perceived since then as dangerous, and the reduction in international long-distance flights. International tourism increased slightly in 2002.

The base year for estimating the number of tourists who would have come to Israel in 2002 had it not been for the Intifada is 1998—the last year before the influx of pilgrims and other millennium-associated tourism. In 1998 the effect of the terrorist attacks of April 1996 and the Grapes of Wrath campaign in southern Lebanon were still in evidence, so that some upward adjustment is required. The forecast development of tourism to Israel from the base year and until 2002 is based on its development in southern Europe (mainly Italy, Spain, Greece, and Portugal), the characteristics of tourism to which are similar to Israel's.[2] In 1999–2002 tourism to those countries grew by a cumulative 18 percent, with some slowing in the last two years. According to this calculation, the number of tourist entries which Israel should have had in 2002 was 2.4 million, whereas there were only 862,000 actual tourist entries.

Surveys undertaken by the Ministry of Tourism indicate that incoming tourism for touring, pilgrimage, and congress purposes was particularly hard hit, while the impact on entries by businesspeople was less severe, and visits by relatives even rose. Since those segments of incoming tourism which declined steeply are those where daily expenditure is relatively high, the impact on the industry's income was worse still. Per diem expenditure declined, so that the average expenditure per tourist visit to Israel declined relative to the period prior to the Intifada, despite the longer average stay. Expenditure per diem on food and drink (outside hotels) and shopping plummeted, in line with the assessment that the fear of terrorist attacks kept tourists away from shopping centers. The drop in tourists' daily expenditure, most of which derived from the decline in the number of bed-nights, was boosted by the slight reduction of prices by some hotels because of the slowdown in the industry. Thus, the shift in the composition of tourists coming to Israel and in their spending patterns further aggravated the damage to the industry's income due to the drop in incoming tourism.

[2] Tourism to Israel and to Greece were found to be substitutes, so that a terrorist attack in one of them leads to a rise in tourism to the other, see K. Drakos and A.A. Kutan (2001), "Regional Effects of Terrorism on Tourism: Evidence from Three Mediterranean Countries," Center for European Integration Studies, *Working Paper* B26.

In order to estimate the adverse effect of the Intifada on tourism services exports, we used the above forecast of what incoming tourism would have been otherwise, and the assumption that expenditure per tourist in Israel rose in 1999–2000 in step with that in southern Europe—by a cumulative 13 percent in current euros, remaining stable in 2002.[3] According to this estimate, Israel's tourism services exports (including the income of Israeli airlines) should have been between $ 3.7 and $ 3.9 billion in 2002, whereas in actual fact it was only $ 1.2 million (excluding consumption by foreign workers). Hence, we estimate that the immediate impact of the Intifada on tourism services exports in 2002 was between $ 2.5 and $ 3.0 billion. The value added of tourism services exports is estimated at no more than 80 percent, so that the loss of GDP was about 2 percent. A similar calculation for 2001 shows that the impact on tourism services exports was between $ 2.3 and $ 2.0 billion. For purposes of comparison, an examination undertaken by the CBS[4] shows that the revenues of hotels fell by $ 0.4 billion in 2001 as a result of the security events. Extrapolating from this result for all tourism services exports reveals that the overall loss was $ 1.6 billion.

The damage caused by the Intifada is also expressed in additional expenses, such as heightened security measures at airports and hotels. The erosion of profitability is further aggravated by the limited elasticity of labor and operating expenditure and the reduction of prices. Many hotels have closed down in consequence.

Chief among the victims of the contraction of incoming tourism were the businesses directly affected, such as hotels, providers of catering, hospitality, and transport services, car hire, etc. However, an examination of input-output tables of the by-industry distribution of each shekel of tourism services exports shows that the businesses that are indirectly affected—particularly in manufacturing and agriculture—also suffered considerable losses. The impact on tourism thus affects the entire economy.

The number of hotel bed-nights of Israeli tourists continued to rise at a steady pace after the outbreak of the Intifada, in spite of the terror attacks and decline in households' income (the elasticity of demand for bed-nights with respect to income is about 1.3).[5] The decline in hotel occupancy rates in the wake of the fall in incoming tourism might have been expected to lead to a significant reduction in the price of internal tourism and steep

[3] The assessment is that the price of tourism services in Israel relative to that in southern Europe remained virtually unchanged in 2002 vis-à-vis 1998.

[4] CBS (2002), "Hotels: Income, Expenditure, and Product, 1999," Appendix C, publication no. 1183 (Hebrew).

[5] A. Fleischer and S. Buccolo (2002), "War, Terror, and the Tourism Market in Israel," *Applied Economics*, Vol. 34, No.11.

increase in demand. Apprehensions of damage to hotels' reputations and the rigidity of demand on the part of Israelis for hotel bed-nights relative to their price (–0.63 as a long-term average)[6] moderated the lowering of prices, however. Thus, the expansion of internal tourism barely offset the sharp fall in revenues from incoming tourism.

[6] See previous note.

The product of the hotel industry dipped by 2.3 percent, and revenues, bed-nights, and occupancy rates contracted, reaching their lowest level for several years.

The product of the hotel industry dipped by 2.3 percent, as revenues, bed-nights, and occupancy rates declined, reaching their lowest levels for many years (Table 1.37 and Figure 1.43). The product of hotels was hardest hit in 2002:II, in the wake of the series of terror attacks which triggered the Defensive Shield operation. The number of hotel employees, who account for about one quarter of all employees of the industry, fell by 15 percent, further to the 22 percent drop in 2001. The new wage agreement reached by the hotel industry at the beginning of 2002 included wage reductions in order to help hoteliers cope with the crisis in incoming tourism. The average real wage per employee post in hotels did in fact fall sharply, by 6 percent. The number of hotel rooms rose because of investment decisions made in the past, but the number of rooms closed or converted to other uses rose even more.

In recent years there has been a marked rise in the number of hotel rooms belonging to hotel chains and a decline in those that are not. This has helped hotels cope with the current crisis, as the adverse effect on the profitability of the entire chain is less severe than it is on an individual hotel, as the hotels belonging to the chain are distributed over a wider area, including parts of the country less affected.

Income from incoming tourism (excluding consumption by foreign workers in Israel) declined by 28 percent in 2002, continuing its steep drop in 2001. Tourist entries by air

Table 1.37
Hotel Services, 1990–2002

(annual rate of change, percent)

	1990–97	1998	1999	2000	2001	2002
Tourist entries by plane	6	–1	18	7	–46	–27
Tourist bed-nights	3	–5	18	4	–60	–38
Israeli bed-nights	5	11	6	2	13	5
Total bed-nights	4	3	11	3	–23	–7
Revenue	4	2	8	6	–26	–11
Index of hotel services	4	2	9	5	–25	–10
Employment[a]	4	1	5	0	–22	–15
Labor input[a]	5	–1	6	1	–23	–17
No. of rooms[a]	2	5	6	8	2	2
No. of closed rooms		–17	–4	97	123	38
Total factor productivity	0	1	3	3	–10	–0

[a] In tourist hotels.
SOURCE: Table 1.A.43.

into Israel were down by 27 percent from 2001, reaching an unprecedented nadir. Tourist bed-nights plunged by 38 percent. The difference in the rates at which bed-nights and tourist entries declined—which began in the crisis year of 2001—is explained by the change in the composition of incoming tourism, with a relative increase in the number of tourists coming for family visits and who tend to stay less in hotels. Because of the rise in the share of family visits in incoming tourism, average expenditure per day also declined, while the number of days per visit rose sharply.

Because of the great sensitivity of tourism from abroad to the security situation, the Ministry of Tourism changed its marketing policy in 2002. Thus, this shifted from extensive marketing, which is less effective at present, to marketing focused on segments of the population which identify with Israel, who are apparently less influenced by the security situation.

The decline in tourist bed-nights was offset to some extent by the 6.1 percent rise in bed-nights of Israelis. The 6.9 percent fall in nominal prices in 2002 served to boost domestic demand only slightly, because the price elasticity of demand for bed-nights is not high. The impact on hotels varied in different parts of the country, in accordance with the location of the security incidents and the origin of tourist groups (whether from Israel or abroad). In Jerusalem and Tiberias, where tourism consists mainly of pilgrims and Jews, the number of tourist bed-nights fell by 37 percent, continuing the steep drop of 2001. In Tel Aviv, where a large proportion of tourists are businesspeople, tourist bed-nights were down by 31 percent. In Eilat and the Dead Sea, on the other hand, where most of the bed-nights are of Israelis, their number rose slightly.

The decline in tourist bed-nights was offset to some extent by the rise in bed-nights of Israelis.

The Ministry of Tourism's approach to the crisis in the industry

1. The program of reducing municipal rates for hotels in the worst affected areas continued in 2002, although the extent of the reduction was lowered from 60 to 50 percent. The annual cost of the program is NIS 50–60 million.

2. A state-financed, partly-guaranteed subsidized loan fund of NIS 400 million was set up. The extent of loans given in 2002 was very low, only 5 percent, because of procedural problems involving the banks and the Ministry of Finance. These issues have recently been resolved, and by February 2003 another 20 percent of the principal had been extended.

3. A marketing fund for hotels and an incentive fund for organizers of incoming tourism were set up, refunding expenses. These funds comprise NIS 30 million and NIS 11 million respectively.

The Ministry of Tourism's approach to the crisis in the industry involved a program of reducing municipal rates for hotels, and funds extending subsidized loans, providing marketing for hotels, and offering incentives to organizers of incoming tourism.

The 2002 assistance program constitutes the continuation of the one provided in 2001 in the wake of the shock of the Intifada. The aid should be short term, to prevent a protracted delay in the essential process of adjusting the extent of activity in the industry—including the number of employees—to demand.

The product of catering services rose by 2.4 percent in 2002, continuing its increase in 2001. The growth of the industry has been led for several years by a rise in the standard of living, and with it demand for catering services. The worst period was 2002:II (during the Defensive Shield operation), while some recovery was apparent in the rest of the year.

The product of catering services rose by 2.4 percent in 2002, further to its rise in 2001.

The computer and R&D services industry continued to suffer as a result of the global slowdown led by the high-tech sector, the contraction in the value of high-tech firms, the crisis in the financial markets, which gave rise to difficulties in raising capital, and the recession in Israel.

Computer and R&D services, including start-ups

The computer and R&D services industry continued to suffer as a result of the global slump, led by the high-tech sector, the fall in the value of high-tech companies, the crisis in the financial markets, which created problems in raising capital, and the recession in Israel. The product of the industry as a whole (including start-ups) was down by 13 percent from 2001 (Table 1.38), continuing its decline in 2001. Its product without start-ups remained unchanged, compared with its rapid growth in 1997–2000. The product of start-ups plunged by 38 percent in 2002, further to its steep drop in 2001. The industry's exports (including start-ups) rose by 10 percent at constant prices. In current dollar terms, exports fell by 7.5 percent, because of the marked decline in prices. Export prices in local currency fell in spite of the steep depreciation. Employment plummeted by 13 percent, compared with its steady rise in previous years, but was only 1 percent lower than in 2000. Labor costs fell.

Table 1.38
Computer Services and R&D, Including Start-Ups,[a] 1998–2002

(annual rate of change, percent)

	1998	1999	2000	2001	2002
Product	33.0	24.3	64.1	–8.2	–12.9
Product of start-ups	72.8	40.9	220.4	–32.1	–38.4
Share in business-sector product	3.4	4.1	6.2	5.8	5.2
Employment	17.9	19.5	27.0	8.9	–13.1
Exports[b]	46.1	6.9	95.7	–18.5	10.4

[a] Excluding biotechnology companies.
[b] Current exports in dollar terms fell by about 7.5 percent in 2002 due to the steep decline in dollar prices.
SOURCE: Central Bureau of Statistics.

Box 1.12
Israel's Information and Communications Technology (ICT) Industry[1]

The ICT industry comprises manufacturing industries (communications equipment, equipment for monitoring and measuring, and electronic components) and services industries (communications, computers and R&D services, including start-ups). The industry is characterized by highly-educated manpower and a high level of labor productivity per worker, and is assuming a prominent position in Israel's economy. ICT production, both manufacturing and services, grew substantially in 1995–2000, and its share of GDP rose rapidly. As regards uses of ICT, expenditure on ICT as a share of GDP reflects the massive investment in ICT by the various industries,

[1] Based on CBS data, OECD publications, the US Bureau of Labor (BLS), and the US Bureau of Statistics (BEO); *Global Information Technology Report, Readiness for the Networked World, 2002 and 2003*; and World Bank, *World Development Indicators*, 2002.

The Components of the Information Technology Industries,[a] 1999–2002

(current prices, annual rates of change, percent)

	Share in IT product				Change in product				Share in GDP			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Total	100	100	100	100	22.3	40.4	–3.3	–10.1	10.6	13.5	13.0	11.4
Computer and R&D services	35	46	47	43	48.9	81.4	–1.1	–17.8	3.7	6.2	6.0	4.9
of which Start-ups	8	21	16	10	68.7	254.3	–26.8	–41.8	0.9	2.8	2.0	1.2
Communications (manufacturing and services)	42	31	31	33	8.5	5.2	–3.7	–3.4	4.4	4.2	4.0	3.8
Manufacturing (excluding communications)	23	23	22	24	17.6	41.5	–7.0	–3.2	2.4	3.1	2.9	2.7

[a]Excluding biotechnology companies.
SOURCE: Central Bureau of Statistics.

e.g., financial institutions and telephone companies. This expenditure is an important aspect of Israel's integration into the world economy and serves to increase productivity.

ICT production

ICT production in Israel is very large relative to other countries, and in 2000 it accounted for some 13.5 percent of GDP (at 2000 prices), compared with an average of less than 6 percent in the EU and 7.3 percent in the US. Domestic expenditure on ICT is limited, however, because Israel is small, so that exports account for a very large share of output. Production in Israel is strongly biased towards the development of new products by means of R&D services and start-ups, so that the share of start-ups in the industry's product and in GDP in general is far higher than the average abroad. Israel takes first place worldwide in subsidizing R&D (followed by Singapore, Taiwan, Canada, and Ireland, according to *Global Information Technology Report*). The industry's production is more biased towards the services than the OECD average. In other countries where ICT product accounts for a large part of GDP it is biased towards manufacturing; this is the case in Sweden, Finland, Japan, and Korea.

Until 2000 the growth rate of global ICT services outstripped that of ICT manufacturing by far. Foreign investment in ICT constitutes a large proportion of global investment in the industry, and in the last few years there has been a switch from investment in ICT manufacturing to services (according to OECD publications). In 2001 and 2002 there was a marked slowing of investment, demand, and the number of employees in the industry; in the US private investment in ICT equipment declined by 10 percent at current prices in 2001, and dipped by a further one percent in 2002. In the OECD, on the other hand, investment rose slightly in 2001, mostly in telecommunications.

The product of the industry in Israel declined by 10 percent in 2002 (at current prices); the decline in volume terms was 11 percent, with an 8.3 percent drop in the number of employees. The contraction of the industry's product in Israel was almost certainly sharper than in the rest of the world because of the special composition of the ICT industry in Israel (as the table shows), i.e., the strong leaning towards the development of new products, generally by start-ups. The demand for new ICT products has plummeted in the last two years, because of the bursting of the high-tech bubble in the US, so that the product of Israel's start-ups plunged by 57 percent in 2000–02 (for purposes of comparison, the annual average value of the Nasdaq as an index of the value of start-ups dropped by 59 percent in 2000–02). Excluding start-ups, the product of the ICT sector in 2002 (at current prices) is the same as it was in 2000. Another possible reason for the decline in ICT product in Israel is that the demand for computer services, in which Israel has specialized, stems from firms' investment in computer systems, and this appears to have contracted sharply in 2001 and 2002. The focus on these industries, especially start-ups, illustrates the dangers of specialization: Israel benefited from the boom in this sphere in 1999 and 2000, but was particularly hard hit when the global high-tech bubble burst. According to the OECD forecast, investment in the industry, especially in the services, will increase, as these play a growing part in economic activity; this is especially the case for telecommunications services, but also for computer services.

The use of ICT

An international index for 2002–03 of the ability of 82 countries to benefit from ICT (published in *Global Information Technology Report*) ranks Israel in 12th place because of the innovative nature of its business sector and the priority accorded to ICT by the government. Correcting for GDP, Israel is in an even higher position (preceded by Finland, the US, and Singapore). The index examines the use of ICT in several respects: 1. The environment; 2. Readiness; 3. Actual use. This examination is more comprehensive than that of the share of expenditure on ICT, because it also reviews actual use of ICT.

1. The environment is the platform which the State provides for the development and use of ICT, such as the quality of manpower, ability to finance investment, government support for the sector, regulation, and infrastructure. As regards environment, Israel is ranked in fifth place by virtue of government support for the sector and the legal and regulatory environment, which encourages use of ICT, as expressed in the Electronic Signature Law, for example, and in massive support for R&D. As regards

infrastructure such as broad-band internet, however, the index ranks Israel in a relatively low position.[2] Nevertheless, use of broad-band internet rose steeply in 2002, after a delay due to regulatory problems, and Israel is currently leading in this sphere (see Figure 1.38 in the section on transport and communications).

2. Israel's readiness to develop ICT is measured by the ability of individuals, the business sector, and the government to use this technology. In this respect Israel is ranked in eighth place. The low level of readiness of individuals, relative to the advanced countries, stems from the relatively small proportion of connectivity and internet access and the relatively large share of low-skilled elements in the population.[3] The readiness of the business sector, on the other hand, as indicated by the distribution of ICT uses and investment in manpower, is relatively great. The readiness of the government in Israel is also relatively great, because the distribution of the internet in ministries is high, and many of them have their own sites, providing on-line services and information.

3. Actual use is measured by the change wrought as a result of ICT in behavior, lifestyle, and economic and non-economic factors affecting individuals and the business and government sectors. Israel's ranking in this respect is relatively low, and it occupies 18th place. Use by individuals is low because individuals' resort to, and money spent on, the internet is relatively low,[4] as a result of the low exposure of the ultra-orthodox and Arab sections of the population to the internet.[5] Use by the business sector is low because in Israel electronic trade between businesses (B2B) and between businesses and consumers (B2C) is relatively limited. The use made by individuals and the business sector of the government's ICT products is also low. The government's internet infrastructure improved considerably in 2001; by virtue of the 'Accessible Government' project it is now possible to obtain many services on-line.

[2] Apparently based on 2001 data.

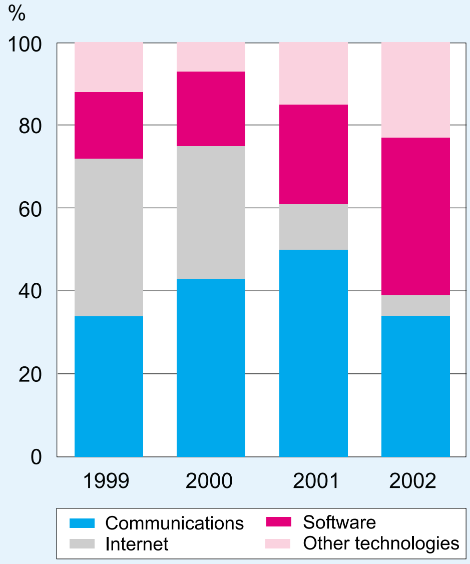
[3] In the rest of the world the proportion of the low-skilled elements in the population constitutes an index of the readiness of individuals, but in Israel it is less indicative, as in contrast with the rest of the world, most of the low-skilled population in Israel is elderly (according to World Bank data), a much smaller proportion of whom are computer-owners and internet-users than in the general population.

[4] There is a shortage of data on individuals' internet use in Israel.

[5] Based on data from the CBS survey of households.

Computer and R&D services (including start-ups) rely on raising capital from nonbanking sources. After increasing notably in 2000, the amount of capital raised declined in 2001, and continued falling in 2002. No capital was raised on foreign stock markets in 2002, and investment by venture capital funds plummeted by 43 percent (Table 1.39). This trend encompassed all industries, but was particularly severe in the sphere of the internet and communications (Figure 1.44). The sharp fall in global demand together with financing difficulties led to the closure of many start-ups.

Figure 1.44
Investment by Venture Capital Funds in ICT[a] Industries, by Industry, 1999–2002



[a] Information and Communications Technology.
SOURCE: Israeli Venture Capital Association.

Government subsidies for start-ups

In Israel, as in the rest of the world, the government aids the establishment of start-ups by providing seed money. Since the private sector currently prefers to invest in more reliable industries, in 2001 and 2002 there was a sharp fall in the pace and amount of investment in new companies by venture capital funds (about 2 percent of their capital in 2002 compared with 18 percent in 2000). The government therefore decided to provide incentives for investment in start-ups, most of whose activity is in R&D and which play an important role in stimulating growth. For this purpose, a start-up fund was established at the end of 2002 as part of the aid package extended by the Office of the Chief Scientist. The purpose of the fund is to provide an incentive for investors by sharing in the risk at the initial stage in return for shares. The model is similar to that employed by private funds investing in start-ups, but the government fund gives the investor the option to buy the shares owned by the fund. The fund has been allocated a budget of NIS 50 million for 2003, and by February some 10 percent of this had been disbursed.

Bank services

2002 was a difficult year for the banks. The combination of the slower expansion of credit, the contraction of economic and banking activity, and the stagnation of labor

Table 1.39
Issues by High-Tech Companies, 1997–2002

($ million)

	1997	1998	1999	2000	2001	2002
Israeli and foreign venture-capital funds	430	600	1,012	3,098	1,985	1,140
Stock-exchange issues by companies backed by venture-capital funds	308	215	1,279	1,891	201	–

[a] For 1997–2000, including issues involving at least one Israeli venture capital fund; for 2001–02 including also issues without the participation of an Israeli venture-capital fund.
SOURCE: IVA (Israel Venture Association).

input led to a 0.2 percent dip in the index of banking activity,[60] further to the downward trend in the rate of expansion in 2001. Banks' profits contracted markedly in 2002, and the decline in their ability to extend credit served to hamper the expansion of the business sector.

2002 was a difficult year for the banking industry. The combination of the slower expansion of credit, decline in the volume of banking activity, and stagnation in labor input led to a 0.2 percent dip in the index of banking activity.

In real terms, the credit extended by the banks grew far more moderately than in 2001 (Table 1.40). Moreover, an analysis of credit by indexation segment indicates that most of its expansion derived from the marked local-currency depreciation. Concurrently, the extent of nonbanking financing sources raised and the value of the financial assets in the hands of the public declined. Banks' income from operating fees rose by only 4 percent, even though the index of fees (in real terms) declined by 0.7 percent and the number of debits fell.[61] Labor input remained unchanged in 2002 despite the reduction in the number of branches and wider use of electronic facilities.

Table 1.40
Development of Banking Activity, Main Indicators, 1996–2002

(annual rate of change, percent)

	1996	1997	1998	1999	2000	2001	2002
Credit to public	9	7	9	11	13	11	5
Labor input	1	1	0	–2	1	0	0
Labor costs	16	–1	1	–1	10	6	–9
Value added (adjusted)	13	7	0	8	5	–5	**–16**
Stock-market turnover	7	25	31	34	33	–8	39
Number of debits	8	7	10	2	1	1	–8
Mortgages	–16	11	–16	–13	0	8	–14
Number of branches	–1	–4	0	2	–2	–4	–1
ATMs	6	6	8	3	2	4	–2
Requests for information via internet							89
Banking transactions via internet							49
Index of banking activity[a]	6	7	7	5	6	4	0
Labor productivity	4	6	8	7	6	4	0
Total factor productivity	4	6	6	6	6	4	1

[a] Weighted average of credit to public, number of debits, labor input, total new loans, and securities turnover.
SOURCE: Table 1.A.44.

Banks' profits contracted sharply in 2002. Net interest income before loan-loss provision declined slightly, but loan-loss provision soared, greatly reducing banks' net interest income.

Banks' profits declined markedly in 2002. Net interest income before loan-loss provision dipped slightly, while loan-loss provision soared, greatly reducing banks' net interest income. One bank (Trade Bank) closed down, and another (Industry Development Bank) got into difficulties. Because of the decline in total profitability (from ordinary activities) and in wage payments, the banks' weighted value added fell by 16 percent[62] (Table 1.40).

[60] The analysis in this section treats the banking industry as part of the services industry, and does not examine all the implications of the industry's activity. For a more detailed analysis of the development of the banks, see the *Annual Report* of the Supervisor of Banks, to be published later this year.
[61] See definition in Table 1.40.
[62] It is almost certain that fees not included in the index of fees rose by more than the index.

Because of the marked decline in profits, the banks reduced their labor costs considerably. At the beginning of 2003 Bank Hapoalim embarked on a plan to cut 10 percent of its labor force, as a result of which a labor dispute erupted in the banking system.

There are fears that the decline in the supply of sources of finance, erosion of the public's assets, and undermining of the credibility and stability of the financial system will affect economic activity in 2003.

The banks had to reduce their credit to the public during the recession because they had not maintained surplus capital adequacy during the boom.

With regard to the repercussions of developments in the financial system in general and the banking system in particular on the business sector, it is feared that the decline in the supply of financing sources, erosion of assets in the hands of the public, and undermining of the credibility and stability of the financial system will impact on economic activity in 2003. The banks were obliged to reduce the extent of their credit just during a recession, because they had not maintained surplus capital adequacy[63] during a boom period (the first half of the 1990s).[64] According to the 'credit channel' approach, when the supply of bank credit is restricted, it is primarily small companies that are affected, as because they do not have access to alternative sources of finance they are dependent on banks. In 2002, however, large, established firms also had difficulty raising capital on stock markets in Israel and abroad. Thus, the financing constraints in 2002 encompassed the entire private sector, not only small firms. This is borne out by the Bank of Israel's Companies Survey, which indicates that the gravest supply constraint on the development of activity throughout the business sector was that associated with financing difficulties. There is no doubt that part of this constraint derives from the banks' credit rationing policy.

In the last decade research has been undertaken globally on the causal relation between financial development and economic growth. These studies show that the size and level of development of the financial system, the extent of credit to the private sector, and the public's financial wealth all affect economic growth via investment and consumption. Evidence of this is provided by such studies as that of Bernanke (1983), who analyzed the effect of the crisis in the financial system and banking collapse in the US in the great depression of the 1930s, showing that they help to explain the decline in GDP. Findings for more recent episodes are presented by King and Levin (1993) and Levine, Loayza, and Beck (2000),[65] who examined 80 countries for the period between 1960 and 1995, and found a causal relationship between the extent of activity of the financial system and current and future economic growth.

[63] The difference between actual risk-weighted capital and the Supervisor of Banks' regulatory requirement.

[64] Y. Fishman and D. Ruthenberg, Banking Supervision Department, Bank of Israel, press release 10.02.2003.

[65] R. Levine, N. Loayza, and T. Beck (2000), "Financial Intermediation and Growth: Causality and Causes," *Journal of Monetary Economics*.