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ECO/WKP(2010)39



Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

04-Jun-2010

English - Or. English

ECONOMICS DEPARTMENT

ECO/WKP(2010)39
Unclassified

ISRAEL: MONETARY AND FISCAL POLICY

ECONOMICS DEPARTMENT WORKING PAPER No. 783

By Charlotte Moeser

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ABSTRACT/RESUME

Israel: Monetary and fiscal policy

Israel's monetary policy framework is broadly sound. Inflation targeting was introduced in the early 1990s, and low single-digit inflation was established by the end of the decade. However, fast transmission from the exchange rate to inflation means the operational challenges differ somewhat from those in many OECD countries. Also, the Bank of Israel has been intervening heavily in the foreign-exchange market, marking a departure from standard practice in inflation targeting. Past progress in fiscal consolidation has been affected by several economic shocks, including the recent downturn. The government's strategy of lowering tax rates on corporate profits and on personal income is assessed. Also, various avenues for raising revenues on other fronts are suggested. Primary civilian spending is now relatively low in international comparison, the room for savings has narrowed, and many of the necessary future structural reforms probably require initial fiscal outlays. In budgeting, which is strongly controlled by the Ministry of Finance, there is room for various process improvements. This Working Paper relates to the 2009 *OECD Economic Survey of Israel* (www.oecd.org/eco/surveys/israel).

JEL codes: E52, E58, H20, H50, H62, H63.

Keywords: OECD; Israel; macroeconomic policy; monetary policy; fiscal policy; inflation targeting; public debt; government deficit; taxation; public spending; budget rules.

Les politiques monétaire et budgétaire en Israël

Le cadre de la politique monétaire d'Israël est globalement solide. Le ciblage de l'inflation a été introduit au début des années 1990 et l'inflation s'est maintenue à un niveau nettement inférieur à 10 % dès la fin de cette même décennie. Une transmission rapide du taux de change à l'inflation signifie cependant que les problèmes opérationnels sont assez différents de ceux de la plupart des pays de l'OCDE. Par ailleurs, la Banque d'Israël intervient sur le marché des changes, rompant ainsi avec la pratique habituellement suivie pour cibler l'inflation. Les progrès réalisés dans l'assainissement des finances publiques ont été compromis par plusieurs chocs économiques, et notamment la dernière récession. Nous dressons le bilan de la stratégie du gouvernement de réduire l'impôt sur les sociétés et les tranches supérieures de l'impôt sur le revenu des personnes physiques et proposons plusieurs moyens d'augmenter les recettes sur d'autres fronts. Les dépenses civiles primaires sont désormais relativement faibles par rapport aux autres pays, les possibilités de réaliser des économies se sont réduites et beaucoup de réformes structurelles nécessaires obligeront à faire des dépenses budgétaires initiales. Enfin il y a des améliorations à apporter au processus d'élaboration du budget, qui est étroitement contrôlé par le ministère des Finances. Ce document de travail se rapporte à l'étude économique d'Israël publié par l'OCDE en 2010 (www.oecd.org/eco/surveys/israel).

Classification JEL: E52, E58, H20, H50, H62, H63.

Mots-clés: OCDE; Israël; OCDE; politique macroéconomique; politique monétaire; politique budgétaire; ciblage d'inflation; dette publique; déficit des administrations publiques; fiscalité; dépenses publiques; règles budgétaires.

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Israel: Monetary and fiscal policy¹

By
Charlotte Moeser²

Macroeconomic policy has steered the economy from crisis conditions in the mid-1980s to monetary- and fiscal-policy settings that today are comparable with those in OECD economies. Substantial reductions in the magnitudes of public spending and debt, as well as taxation, in relation to GDP have been made over this time. Yet, significant challenges remain. Monetary policy has followed an inflation-targeting approach since the early 1990s and has been largely successful in bringing price increases down to average OECD rates (and often below of late), although the framework has yet to be voted into law. However, a controversial policy of exchange-rate intervention that began in spring 2008 marked a departure from standard practice in this field of policy. This paper first examines the framework of monetary policy and then considers the policy options on the revenue front, the challenges in public spending and the avenues for improving budgeting processes.

A broadly sound monetary policy framework

An early mover on implementing inflation targeting

Israel introduced an inflation-targeting (IT) framework in 1992, the third country in the world to do so following New Zealand (1990) and Canada (1991) (Box 1). The framework is flexible in that it pays primary attention to inflation but also factors growth and employment into interest-rate decisions. Initially, the IT regime was not a “textbook” model; a dual-target regime operated until 1997, comprising an inflation target and an exchange-rate band. The new regime was successful in further lowering inflation and led to completion of the disinflation process by the end of the 1990s.³ Inflation is now well within the range of most OECD economies (Figure 1). Nevertheless, since Israel is a very open economy, it is likely that the decrease in domestic inflation was partly helped by the worldwide trend of falling inflation in the last two decades.

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1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
 2. This paper was originally written for the OECD Economic Survey of Israel (<http://www.oecd.org/eco/surveys/israel>) published in December 2009 under the authority of the Economic and Development Review Committee. The author is grateful to OECD staff members Andrew Dean, Bob Ford, Peter Jarrett and Philip Hemmings for their valuable comments, to Françoise Correia for research assistance and to Mee-Lan Frank and Maartje Michelson for editorial support. The paper has also benefitted from the many discussions with experts at the Ministry of Finance as well as with Stanley Fischer and his team at the Bank of Israel, in particular Karnit Flug, Michel Strawczynski and Adi Brender.
 3. See OECD (2010) for an overview about Israel’s recent economic history.

Box 1. Inflation targeting in Israel¹

In Israel's inflation-targeting (IT) framework the target is determined by the government (on the advice of the Bank of Israel). During the disinflation in the 1990s, the inflation target was variously defined as a point and as a range (Figure 1). Since 2003 the inflation-target range has been 1-3%, broadly similar to ranges in most developed economies.

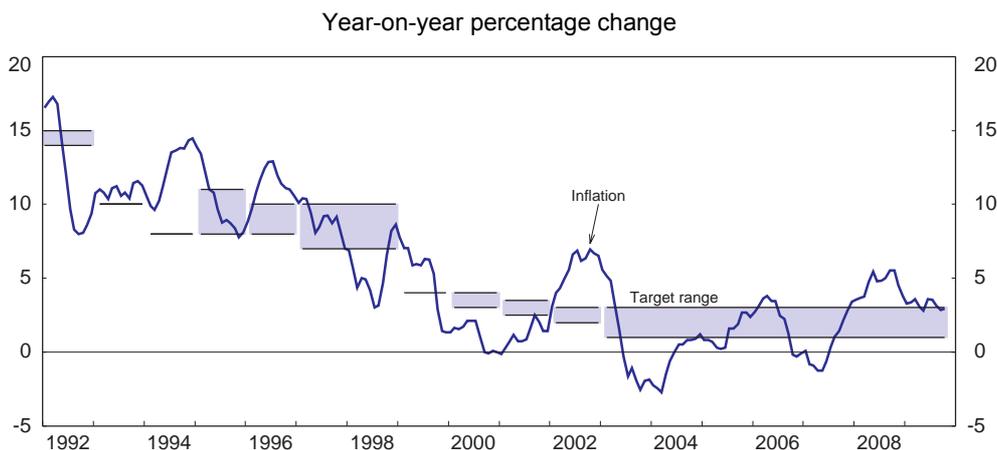
The target is set in terms of the general consumer price index without any exclusions. Currently there is no precisely defined time horizon for reaching the target; the current draft legislation for the Bank aims to rectify this (see main text). Communication with markets and the public at large is conducted through quarterly inflation reports and other regular studies on economic developments. For example, the inflation reports include an in-depth discussion on why the inflation target has been or has not been achieved. Since 2006 the Bank has also published the minutes of the meetings that precede the monthly interest-rate decisions.

Technically, the central bank sets the level of short-term interest rates on its loans to the banks and the deposits from them, and thus, *via* the financial markets, affects the money supply. Liquidity is provided *via* monetary auctions, in which the banks bid for fixed maturities (a day or a week). Liquidity in the banking system is further managed through an overnight loan-deposit window. Liquidity injections or withdrawals with the financial sector at large are made using auctions of repurchase agreements and of special short-term securities (Makam) issued by the Bank of Israel.² Commercial banks are required to deposit 6% of the public's domestic-currency cash deposits and 3% of deposits with maturity of one week to one year with the Bank of Israel. Foreign-exchange deposits are subject to the same reserve requirements.

The Bank often attaches considerable weight to a measure of inflation expectations of market participants based on Israel's well-developed indexed bond market; the market is deep and dates back to the high-inflation period. One-year expectations are computed based on the difference between the yield to maturity on non-indexed bonds one year from maturity and that on the equivalent indexed bonds (Elkayam and Ilek, 2007). Recently, the Bank of Israel has put more weight on inflation forecasts derived from its internal DSGE model (Argov *et al.*, 2007).

1. Binyamini *et al.* (2008) and Fischer (2006) provide overviews of inflation targeting in Israel.
2. Makam were initially introduced in 1987. Today, they are the main tool of monetary policy to absorb or inject liquidity into the financial markets.

Figure 1. **Consumer-price inflation and inflation targets**



Source: Central Bureau of Statistics.

A late mover on modernising bank legislation

Despite being operational for more than 15 years, the IT regime has yet to be enshrined in legislation. Thus, from a legal point of view, price stability is not yet established as the primary objective of monetary policy. Indeed the current legislation, which dates back to 1954, still cites the exchange rate as an objective of monetary policy, which potentially adds undesirable leverage to pressure groups seeking intervention (see below). The only revision has been to the “Non-Printing Law”, which was amended as part of the 1985 Stabilisation Programme to stop the practice of financing the government debt *via* the central bank.

The role of the governor also differs from practice common in most OECD economies. While in most central banks interest-rate decisions are made by a monetary committee, in Israel (as in New Zealand) the governor has the sole responsibility for setting the interest rate. In addition, the legislation specifies that the governor acts as economic advisor to the government, and the Bank has taken a very public approach to this role. Its Annual Reports analyse and comment on fiscal and structural policy far more deeply than is typical in the equivalent central-bank publications elsewhere. By contrast, an official advisory role for the governor has become less common in OECD economies.

Various proposals to replace the current legislation have been put forward over the years, and it is welcome that the latest proposal looks set to make it into the statute books. As early as 1998, an attempt to remove the disparity between *de jure* and *de facto* independence was made by the Levin Committee through recommendations for a new law.⁴ Since then, the Bank of Israel and the Ministry of Finance have worked on various formulations. As of December 2009 both parties had reached agreement on a draft, which was then approved by the government and then submitted to parliament for discussion. The draft sets price stability as the primary objective of monetary policy and defines a precise two-year policy horizon.⁵ This precision regarding the horizon should not be interpreted too strictly in operational decisions, given the volatility of Israel’s inflation outcomes. The draft also proposes a monetary committee with vote-based decisions on monetary policy settings and an administrative board of directors to manage the Bank. In the past, agreement has often foundered on disagreement over the degree of independence that the Bank should have in staff remuneration and its role in financial supervision. But these issues have reportedly been resolved in the latest round of discussions. Under the present proposal, the advisory capacity of the Bank would remain. Albeit somewhat unusual, this arrangement appears to work well in the Israeli context. Nevertheless, maintaining an official advisory role to government in parallel with inflation targeting is risky, and success depends heavily on the Bank retaining integrity, including an apolitical stance, in its analysis.

Receding operational challenges from dollar indexation

Although the IT regime has been broadly successful, *ex post*, inflation has often fallen outside the target range. In fact, over the past decade, the inflation targets were over- or undershot three quarters of the

4. The Levin Committee was appointed in 1998 to submit recommendations for a new Bank of Israel law. See Cukierman (2007) for a discussion about *de jure*, *de facto* and desired independence of the Bank of Israel.

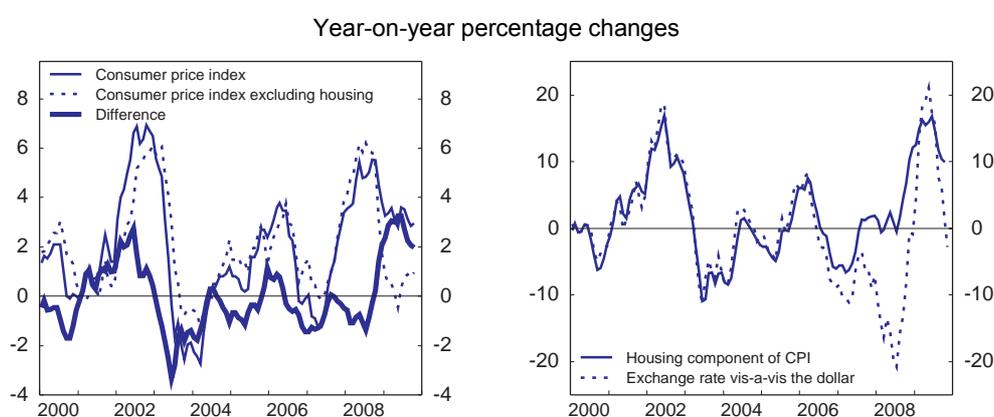
5. An unofficial translation of the latest draft Bank of Israel law can be found at the Bank’s website. Policy objectives in the draft law are defined as follows: i) to maintain price stability as its primary objective; to support other objectives of the Government's economic policy, especially growth and employment, provided that, in the Committee's opinion, this support shall not impair achieving price stability over the course of time; ii) to support the stability of the financial system and its orderly activity. The price stability range shall be determined by the Government in consultation with the Governor. The draft legislation precisely defines “price stability over course of time” as “a situation in which, on the basis of the monetary policy established by the Committee, it is expected by the Committee that within no more than two years, the inflation rate will be within the price stability range”.

time. Indeed, inflation volatility has remained relatively high compared with OECD countries, despite the substantial reduction in its level. Between 1999 and 2008 the standard deviation of quarterly CPI inflation was 2.5 percentage points, a similar level to that in several small open OECD economies; for the majority of OECD countries, however, the standard deviation lies between 0.5 and 1.5 percentage points. Domestic shocks from the geopolitical situation and external shocks partly account for the missed targets and much of the volatility in inflation.

However, indexation to the US dollar, which emerged in the period of high inflation, has also played a role in inflation outcomes by linking exchange-rate movements directly to prices. Indexation has taken two forms:

- Some private-sector goods and services are typically priced in US dollars. Most prominently, the vast majority of housing rental contracts were, until recently, priced this way (Eckstein and Soffer, 2008). Given the weight of housing in the consumer price index (CPI) (around 21%), this “dollar pricing” has had a profound effect on inflation outcomes (Figure 2). Dollar pricing has also been common in construction, professional services (for example, lawyers’ and accountants’ fees), catering, leisure activities and travel tickets.
- There are also remnants of once extensive price regulations. Some of these comprise formulae linking prices to the dollar; notably, electricity and fuel prices are set by this means. As a broad principle, such regulations on pricing should be reduced to a minimum, though abolishing some might be feasible only in conjunction with other structural reforms.

Figure 2. **The housing component of inflation and changes in the exchange rate**



Source: Central Bureau of Statistics and Bank of Israel.

This strong immediate transmission from exchange-rate movements to prices has weakened somewhat because dollar pricing in the rental market has diminished considerably. Sharp appreciation of the shekel against the dollar between mid-2007 and spring 2008 prompted a large shift towards shekel-denominated rental leases. As of mid-2009, the share of dollar-denominated leases was around 15%, compared with around 85% in early 2007. Thus far, this appears to be a permanent shift in behaviour, and similar processes may well be underway in other markets. Changes in rental prices practically govern the housing component of the CPI because they are also used to estimate the price of owner-occupied housing

services.⁶ When the rental market was predominantly denominated in dollars, the connection between exchange-rate movements and the housing component of inflation was incredibly strong, but it has clearly lessened since (Figure 2). Recent analysis by the Bank of Israel confirms this but also underscores that the exchange rate nevertheless remains the dominant influence on the housing component of the CPI.⁷

Assessing the recent foreign-exchange intervention

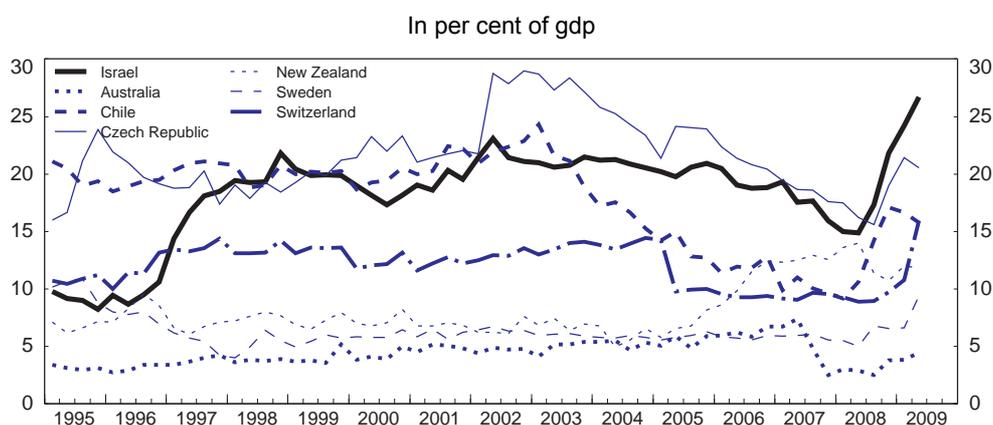
In March 2008, the central bank began intervening in the foreign exchange market – for the first time since 1997 – stating that its goal was to increase international reserves up to 100% of short-term debt, as prescribed by the “Greenspan-Guidotti Rule”.⁸ At the time, foreign reserves (USD 29.4 billion) stood at 81% of external short-term debt. There was an initial unannounced intervention, which was followed by announcement of a schedule of foreign-currency purchases. At first, the bank purchased the equivalent of USD 25 million per day with a view to raising reserves to a value of USD 35-40 billion. In July 2008 the daily purchase was increased to USD 100 million, and in November the reserve target was raised to USD 40-44 billion. By March 2009, foreign exchange reserves had increased to USD 40.6 billion, nearly 100% of external short-term debt; and, relative to GDP, reserves had reached a very high level compared with other small open economies and with historical Israeli values (Figure 3).⁹ Nevertheless, the Bank announced that it would continue the intervention, and its press releases increasingly referred to concerns about the level of the exchange rate, rather than reserve levels. Regular intervention was finally stopped in August 2009, but a week prior to this the Bank announced a new policy of *discretionary* intervention. The Bank does reveal how much it purchases in monthly data on foreign-exchange reserves, and these confirm that intervention has continued. Markets now consider the Bank to have a “dirty float” policy on the exchange rate and speculate as to what its intervention price is. For instance, some observers believe this to be around 3.8 shekels to the US dollar.

This build-up of international reserves usefully attenuated external vulnerabilities when concerns about the downturn were at their greatest.¹⁰ Some OECD countries (e.g. Switzerland) have been following

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6. The housing component of the CPI comprises services for owner-occupied housing (77%), rent (19.5%) and other housing expenditure (3.5%). Since 1999 the services for owner-occupied housing have been measured through the data on new and renewed rental contracts.
 7. A press release by the Bank of Israel on 4 October 2009 shows that the coefficient on a simple regression between percentage changes in the dollar exchange rate and the housing component of the CPI index has fallen considerably, although correlation remains high, indicating that the exchange rate nevertheless still explains much of the variation in the housing component. The Bank also finds a fall in pass-through is confirmed in more sophisticated econometric analysis. See Bank of Israel website: www.bankisrael.gov.il/.
 8. The “Greenspan-Guidotti Rule” states that reserves should ideally fully cover total short-term external debt. It is premised on the idea that reserves help countries deal with a sudden stop in short-term external financing (Jeanne and Rancière, 2006).
 9. Changes in foreign currency reserves not only reflect intervention (Neely, 2000). *First*, the dollar value of foreign exchange reserves is subject to changes in valuation from: *i*) changes in the value of non-dollar foreign currency holdings due to exchange-rate movements against the dollar; *ii*) interest income, or coupon payments; and *iii*) changes in the value of the underlying asset. *Second*, reserves often are used for transactions other than intervention. Ordinary government purchases from abroad, or government payment of debt denominated in a foreign currency, can change reserves, but are not intervention.
 10. Obstfeld *et al.* (2009) show that the size of international reserves is linked to a central bank’s desire to prevent a bank run combined with capital flight. In this context, they argue, it is important for the banks to consider not only external competitiveness and trade or short-term debt as motivations for reserve holdings, but also the size of the banking system (M2). The authors claim that a country’s reserve holdings (relative to short-term debt and M2) before the current economic crisis can predict exchange-rate movements of both emerging and advanced countries in 2008. They find that currencies of countries with large reserve

a similar strategy. Reserves have been increased at a time when most useful, and the intervention will have tempered any upward pressure on the exchange rate, thus helping maintain external demand. Moreover, since interest rates (and the spreads between them) are currently unusually low, the fiscal costs of intervention have been contained.¹¹

Figure 3. Trends in foreign reserves minus gold



Source: International Financial Statistics.

Nevertheless, a “clean float” should be re-adopted as soon as possible. With the pick-up in economic activity, continued discretionary interventions could bring undesirable inflationary pressures that work in opposition to any monetary tightening, a process that has begun in recent months. There are several other arguments against sustained intervention. *First*, if the intervention aims to provide a floor (or ceiling) to the currency, this can easily be thwarted by global markets. *Second*, intervention damages transparency and credibility in monetary policy and exposes the central bank to pressure from business-sector lobby groups. Systematic purchases of foreign currency excessively distort the economy towards the production of tradable goods and services. And it can prompt international criticism (even retaliation) because of its “beggar thy neighbour” implications (though this is admittedly less likely for small economies). *Third*, intervention can become expensive. Costs arising from the interest differential between the borrowing rate and the rate of return on the foreign-currency assets purchased can become significant. Also, interventions are hard to disguise in the marketplace so that the monetary authorities can end up paying over the odds for currency; and, there is a risk of incurring capital losses on the additional reserves if at some point the shekel appreciates.

holdings did not depreciate and in some cases even appreciated. On the other hand, those with insufficient reserves were likely to have depreciated.

11. OECD estimates find the implied annual carrying costs of foreign-exchange reserves to have been, on average, 0.3% of GDP during March 2008 and August 2009 (calculated as the spread between domestic and the US one-year Treasury bonds multiplied by the reserve-to-GDP ratio). During the early 1990s, when interest rate spreads were relatively high for emerging economies, costs of intervention amounted to up to 0.5% of GDP (Khan and Reinhardt, 1994). In recent years, narrowing interest spreads have lowered the costs of intervention (Mohanty and Turner, 2006).

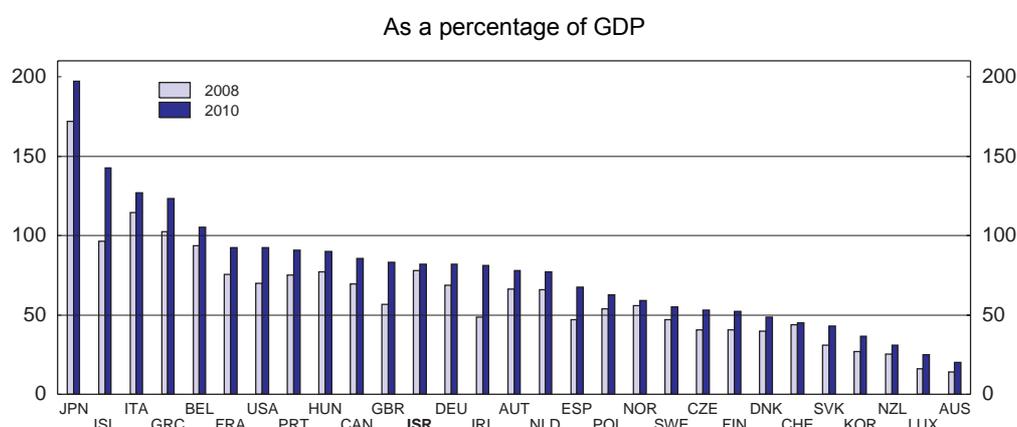
Fiscal outcomes and policy settings

Acute trade-offs in fiscal policy

While the new era of policymaking since the mid-1980s has brought inflation down to healthy single-digit levels, success in fiscal policy has been rather more mixed, and tough challenges remain. There has been a broadly welcome reduction from the very high shares of government spending and revenue in GDP, reflecting the wider shift to a more market-based economy. Indeed, the ratio of primary *civilian* public spending to GDP (*i.e.* excluding interest payments and spending on defence) is now low compared with many OECD countries; in 2008 it was 33% of GDP, compared with an OECD average of 41%.

However, public debt has yet to be brought within comfortable bounds. There has been considerable progress; the debt-to-GDP ratio was pulled down from extreme levels fairly quickly during the late 1980s and saw further declines during the 1990s. But, there has been little sustained reduction since then. The ratio bottomed out at around 85% in 2000, bounced back to 100% in the following downturn and reached 78% in 2008. The current downturn is expected to see it increase to nearly 82% in 2010 (Figure 4). Recognising the public-debt problem, the authorities have set their sights on getting the debt-to-GDP ratio down to 60%. Sustained reduction in the burden of public debt would bring two principal payoffs. Most directly, a pronounced and continuous decline in the ratio would help free up capital (*i.e.* by reducing “crowding out”) and reduce debt-servicing costs. Less easily measurable, but also important for an open economy, are reductions in the risk of the economy sliding into unpleasant macroeconomic configurations, such as loss of confidence in sovereign debt and consequent currency devaluation and inflation. Reductions in such possibilities are also likely to cut debt-servicing costs further due to reductions in risk premia.

Figure 4. **Israel's public debt in international comparison**



Source: OECD Economic Outlook 86 database and OECD estimates for Israel.

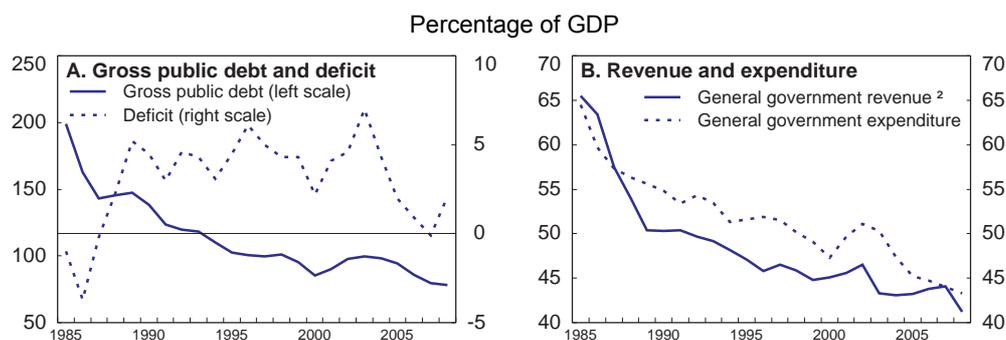
In some respects, Israeli policymakers have a harder job than their counterparts in many OECD countries in bringing debt down. Spending on defence is relatively high, which adds an additional fiscal burden. Furthermore, because civilian public spending has already been whittled down, low-hanging fruit in terms of efficiency gains or cuts in services and transfers has probably already been picked. In fact, in some areas savings may have “overshot”, and additional spending may be needed to achieve goals in structural policy. Finally, room for manoeuvre in taxation is also limited, and taxes that closely affect businesses, such as corporate income tax, should preferably be lowered in light of the important role played by internationally mobile businesses in the economy. However, additional fiscal burdens due to population ageing look set to be significantly milder than in many OECD countries. Youthful

demographics are helping: the old-age dependency ratio is 19% compared with an OECD average of 24%. Population ageing will accelerate soon but less vigorously than the OECD average.

Slower progress in fiscal consolidation in recent years

Much of today's public debt burden has its origins in the "lost decade", when expansionary fiscal policy pushed debt to almost 300% of GDP and public spending to around 70% of GDP by the mid-1980s. The 1985 Stabilisation Programme marked a turning point, with measures to combat both inflation and fiscal profligacy. In the initial years following the Programme the deficit was reduced substantially, and debt and public spending were brought to manageable, though far from ideal, levels (Figure 5). Since the initial success of the Programme, progress on fiscal consolidation has slowed (Fischer and Flug, 2007). The broad strategy has remained largely unchanged, namely an over-arching goal of "smaller government" through privatisation, savings in public spending, lower tax burdens and debt reduction. Israel's wide fluctuations in GDP growth, and hence revenues, have brought contrasting periods of fiscal largesse and thrift that have influenced fiscal priorities and progress in consolidation. There have also been significant shocks on the spending side.

Figure 5. Long-term fiscal trends ¹



1. Commonly used national definitions of the government's deficit do not take account of the implied indexing costs from indexed government bonds. The ratio of debt-to-GDP is the same in the national and the internationally comparable definitions.
2. Including Bank of Israel profits. For 1995, including an expenditure of 1.5% of GNP due to the State Health Law.

Source: Bank of Israel (2009), Annual Report 2008, Statistical Appendix.

The 1990s began with a major shock to fiscal balances from the costs of providing immediate welfare and other support for the massive wave of immigration from the former Soviet Union. This halted the decline in the ratio of public spending to GDP and increased the budget deficit substantially. An economic slowdown saw the deficit peak again in 1996. This prompted a period of reinforced fiscal discipline, which, combined with improving economic conditions, saw spending as a share of GDP fall by several percentage points between 1996 (52%) and 2000 (48%). Over the decade as a whole, the level of public debt as a share of GDP fell substantially, reaching 85% in 2000. Receipts from the privatisation of public companies and robust nominal GDP growth more than offset the impact of persistent deficits and hence growth in outstanding debt.

The outbreak of the Intifada in 2000 and the bursting of the dot.com bubble in 2001 pushed up budget deficits and public debt levels once more. Events during this twin shock illustrate the potential fragility of Israel's fiscal position. In 2001 the general-government deficit rose sharply, triggered by falling tax revenues and a fiscal expansion. Failure to reduce the deficit significantly in 2002, together with the continuing Intifada, led to a ratings downgrade on Israel's sovereign debt, pressure on the exchange rate and concerns about financial stability. As a result, government borrowing costs rose dramatically, and

in 2003 the general-government deficit rose to 6.8% of GDP (including Bank of Israel profits, see Figure 5 and Box 2) and debt back to 100% of GDP. As a result, the authorities were forced into a programme of severe fiscal consolidation – often referred to as the Netanyahu Reforms.¹² Indeed, the fiscal crisis was so great as to prompt the United States to provide additional aid and debt guarantees to help markets to regain confidence in Israel’s sovereign debt.

In contrast, the economic boom between 2004 and 2008 resulted in such rapid growth in tax revenues that the authorities could accommodate a programme of cuts in tax rates and some slackening of the reins on public spending and yet still deliver deficit reductions. Spending increases were particularly notable in the public-sector wage bill, transfer payments and defence expenditure.¹³ Furthermore, the combination of strong growth and reduced deficits made a significant dent in the debt-to-GDP ratio; by 2008 it had fallen to 78%. Up until autumn 2008 when the global financial turmoil became a crisis, the previous government’s broad objective of reaching a debt ratio of 60% by the mid-2010s looked entirely feasible.

Box 2. Coverage and international comparability issues in government accounts

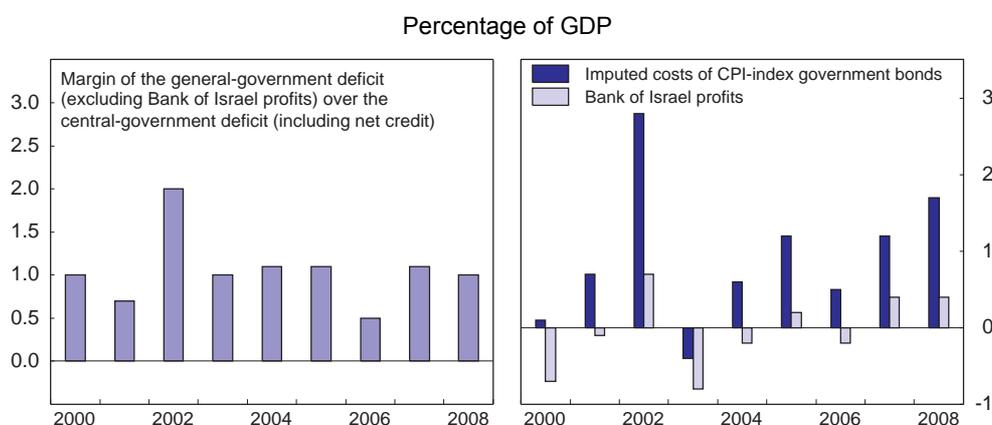
The central-government account is cash-based and is the focus of the annual budgeting round. Hence, the deficit goals and the spending rule refer to this account. Specifically the deficit goals are expressed in terms of balances excluding net credit. The general-government accounts are produced by the Central Bureau of Statistics (CBS) based on the international System of National Accounts (SNA) standards and are therefore accrual-based accounts incorporating budgets outside central government. In Israel’s case these additional budgets include those of local authorities, the National Insurance Institute, health funds and state-run universities and colleges, plus what are called the “National Institutions” (the Jewish Agency, the Jewish National Fund and the World Zionist Organisation) (Bank of Israel, 2009). The general-government deficit has typically been around 1 percentage point higher than that for the central-government in recent years (see Figure 6 below).

The CBS’s general-government account is not ideal for analytical purposes and international comparison for two reasons. *First*, the profits of the Bank of Israel are included. This item fluctuates and mainly reflects changes in the inflation rate, the exchange rate and global interest rates. Also, the profit is not actually transferred to the government; and elsewhere it is customary to only include transferred profits, even though this technically does not follow accrual accounting principles. (Bank of Israel, 2009). The paper refers, where possible to figures that make this adjustment. Hence, for example the general-government deficit for 2008 is given as 2.4% and not 2% as reported in CBS data. However, Figure 4 is an exception because long time series that exclude Bank of Israel profits are not available.

Second, an additional adjustment for indexing costs on government debt ought ideally to be made for the accounts to be internationally comparable. Contrary to standard practice under accrual accounting, the CBS general-government account does not include the implied indexing costs of bonds whose returns are linked to the consumer-price index. These costs are not trivial. According to estimates by the Bank of Israel, they have varied between 2.8 and -0.4% of GDP since 2000 (see Figure 6 below) and for instance would imply a deficit of 4.1% of GDP in 2008. The omission of indexing costs in total expenditure, however, does not affect public debt because these are incorporated *via* revaluation of the debt components. Thus, the ratio of gross public debt to GDP is internationally comparable.

12. The severe fiscal and financial situation was worsened by the difficulty of assessing the duration of the Intifada. Eckstein and Tsiddon (2004) describe the significant decrease in consumption, investment and per capita output during this time.
13. Fiscal policy is characterised by pro-cyclicality (Strawczynski and Zeira, 2007). A simple rule of thumb is that each percentage point increase in business-sector product has led to an upturn of slightly less than half a percent in public expenditure. Moreover, statutory tax rates were also adjusted pro-cyclically, with rates being reduced during high-growth periods.

Figure 6. Technical items in government accounts



Source: Bank of Israel, Annual Report 2008.

Efforts to limit the deficit increase in the 2009-10 budget

Economic developments since 2008 have forced a re-think about achievable fiscal goals. A substantial fall off in revenues made a large increase in the deficit inevitable. Fiscal planning was complicated by the fact that no budget was initially approved for 2009. When the new government came into office in late March 2009, it sensibly decided to formulate a combined budget for both 2009 and 2010 (Box 3). Accordingly, a budget was approved by the Knesset in July, which aimed to contain the deficits for 2009 and 2010 to within 6% and 5.5% of GDP, respectively. Informally, policymakers now typically discuss strategies for reaching a debt-to-GDP ratio of 60% by 2020.

Box 3. The 2009-10 “two-year” budget

The collapse of the previous government’s mandate in September 2008 meant that a budget for 2009 was never approved by the outgoing Knesset. As a result, budgeting during the first months of 2009 was based on legislation specifying that in such circumstances spending has to proceed on a monthly basis and cannot exceed one twelfth of the previous year’s budget allocation, plus an indexation adjustment. When applied, the rule can limit spending quite severely. Oddly, this spending limit includes interest payments and principal payment on debt, which makes little sense since the government has little control over such outlays over the shorter term – a change to this aspect of the legislation might be considered.

The new government was not operational until late March 2009, and it quickly decided to exceptionally develop a combined budget for both 2009 and 2010. This made practical sense in that running two budget processes in the remaining months of the year would have been cumbersome. A permanent shift to a two-year budget would probably not work well. While there are conceivably some advantages, there is an overriding difficulty that incumbent governments would pass only two budgets even if in office for the full four-year term (which has been rare in Israel), thus limiting room to implement reform.

Spending allocations made in the 2009-10 budget include prior commitments on public-sector wages, notably in connection with a reform in primary and secondary education (the New Horizon Programme; see OECD, 2010) and expenses incurred during the military operation in the Gaza Strip that began at the end of 2008. Also, a number of measures have been taken in light of the economic downturn, though in

aggregate they do not constitute a large fiscal stimulus, since the impact on the budget was minimal. Finally, an increase in universal child allowances was also scheduled in the budget, reflecting a promise made by the largest coalition party to minority coalition members.

On the revenue side, the government tempered corporate and personal-income tax cuts that were due to go ahead in 2010, incorporating the new rates into legislation that schedules further cuts from 2011 to 2016. This was combined with several revenue-increasing measures. Most notably:

- The budget included permanent increases in taxes on gasoline (by 12.5% to NIS 2.696 per litre) and tobacco (by 13% to NIS 1.25 per pack). A new schedule of purchase taxes on cars has also been introduced that increases the rates on many types of vehicles.
- There were temporary increases in the VAT rate (from 15.5 to 16.5%), in charges on water consumption (labelled as a “drought charge”) and in the ceiling on contributions to national insurance. All of these are due to terminate at the end of 2010.

To its credit, the 2009-10 budget managed to keep (more or less) to the legislated spending rule (see below), and the brightening economic outlook suggests the deficits will be less than those estimated in the budget. Indeed, the debt-to-GDP ratio is projected to rise by only around four percentage points to 82% by 2011, a relatively small increase compared with those foreseen in many OECD countries. But the decision to go ahead with cuts in headline tax rates in 2010 and the heavy use of temporary tax measures were questionable; the latter in particular will make keeping to fiscal goals in 2011 difficult. The following section discusses the relative merits of tax cuts and suggests ways of sustainably increasing revenues by other means.

Assessment of revenue policies

Fiscal policy by successive governments since the 1980s has put a high priority on lowering the tax burden. In fact, Israel’s tax share of GDP is now close to the OECD average (Figure 7). In terms of composition, the total revenue share from all forms of direct taxation (wages, non-wage incomes, profits, etc.) is also similar to the OECD average; in both cases it was around 37% in 2007, according to the sum of the sub-components shown in Figure 8.¹⁴ However, social-insurance contributions account for a much lower share of revenues (in 2007, 15.6% compared with 25.9%). Thus, overall, Israel relies to a larger extent on VAT and other taxes on goods and services; in 2007 these totalled 45.4% of revenues, compared with 36.1% for the OECD average. Favouring indirect taxation is an understandable strategy, especially for small open economies, and the arguments below suggest this might be pursued a little further.

The returns and risks in lowering corporate and personal income tax rates

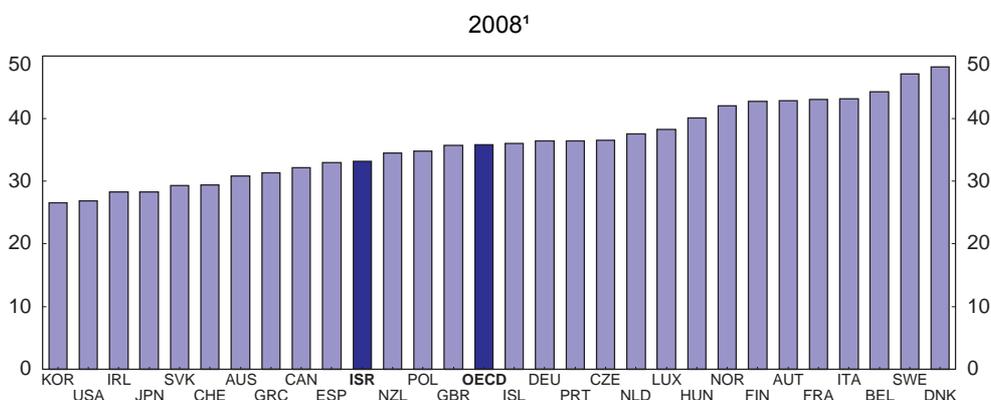
Commitment to cutting the headline corporate-income and personal-income tax rates has been a central theme of policy for some years. The latest round of cuts follows on a previous schedule that began in 2003:

- The corporate tax rate has been brought down from 36% in 2003 to 26% currently. The latest schedule cuts the rate by one percentage point each year to 2015 with a two percentage-point cut in 2016, which will bring the rate to 18%.

14. The sub-components of direct taxation shown in Figure 2.7 are not fully comparable because the available Israeli data do not completely conform to the OECD tax classification used for the figure. Importantly, for Israel the sub-component of taxation on individuals includes only taxes on wage income and the incomes of the self employed. Hence, other taxes collected from individuals (*e.g.* dividend tax) are included in the “not allocated” category, which is therefore relatively large (4.6% of revenues for Israel, compared with 1.5% for the OECD average).

- Cuts in rates of personal taxation have focussed on reducing the middle and upper rates. In 2003 the six tax rates ranged from 10% to 50% and by 2009 from 10% to 46%. According to the latest schedule of cuts the range will be 10% to 39% by 2016.¹⁵

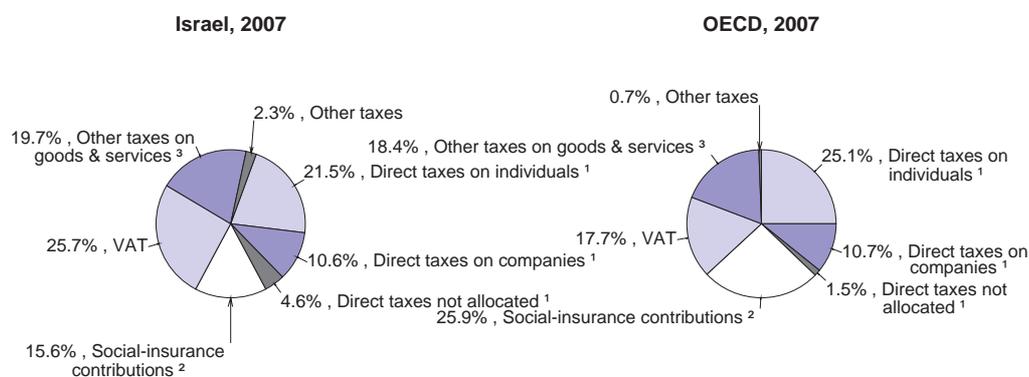
Figure 7. Tax revenue and social security contributions as a share of GDP



1. Or latest available year.

Source: OECD Tax Revenue Statistic database and Central Bureau of Statistics.

Figure 8. Structure of tax and social insurance revenues
Percentage of total taxation



Note: Both pie charts are based on the OECD's tax classification. For Israel, available data published by the Central Bureau of Statistics have been used to approximate this. The OECD shares are unweighted averages of the shares of member countries.

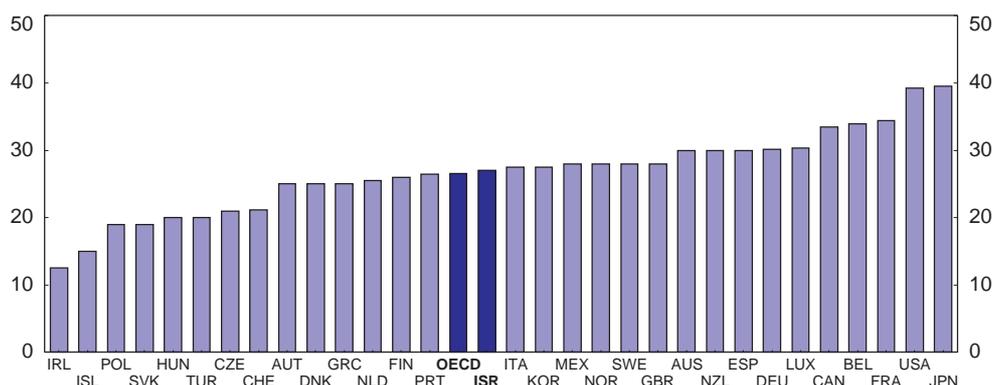
1. Direct taxation includes taxes on wage income, self-employed income, profits, dividends, etc. The share of direct taxation attributed to individuals in the Israeli data includes only that on wages and the income of the self employed.
2. The share of Social-insurance contributions in revenues also includes payroll taxes. These exist in a relatively few OECD countries and typically account for only a small share of revenues.
3. The category "Other taxes on goods and services", for instance, includes sales taxes and customs and excise duties.

Source: Central Bureau of Statistics and OECD, Tax Revenue Statistic Database.

15. In 2003, the six personal-income tax rates were: 10%, 18%, 26%, 27%, 45% and 50%. In 2009, they were 10%, 15%, 23%, 30%, 34% and 46%. According to the schedule outlined by the government, tax rates in 2016 will be 10%, 14%, 18%, 24%, 27% and 39%.

Corporate- and personal-income taxes are undoubtedly influential in governing firms' investment decisions, including those of international businesses, and affect the location decisions of the internationally mobile segments of the labour force. Although the headline corporate tax rate is now close to the OECD average, it is clearly a good deal higher than in many countries: for example, several east European countries and Ireland have headline rates below 20% (Figure 9). Once the latest round of cuts is implemented, Israel's corporate tax rate will almost certainly be "competitive".

Figure 9. Corporate-income tax rate in international comparison



Source: OECD (2010), Tax expenditures in OECD countries can2010.

Although such tax cuts have beneficial effects, they need to be put into context, and a degree of caution is required in pursuing them. *First*, tax issues are not the only driver of investment and location decisions. For example, the quality of transport networks and other infrastructure as well of housing, health and education can make a difference, especially if these have a bearing on the living standards of senior staff.

Second, even within taxation the headline rate is only part of the story. In corporate taxation, various factors such as allowances, capital depreciation rules and so on mean the effective rate is typically much lower than the headline rate. In fact, some experts claim Israel's effective rate is already competitive in international comparison.¹⁶ As regards effective rates of personal taxation, a system of wastable (*i.e.* non-refundable) credits lowers average tax rates substantially, and an earned-income tax credit is now operating in some areas of the country (Table 1). In addition, social contributions are smaller than in many OECD countries. In sum, although the marginal rates of taxation appear somewhat dissuasive (Figure 10, Panel A), the *average* effective tax rate is quite low in international comparison once social contributions are included (Figure 10, Panel B). According to OECD calculations, for a single person earning the average wage the rate is 19% which is 7 percentage points below the OECD average. Reflecting Israel's relatively progressive schedule, this gap is wider if earnings are below the average. Strong progressivity also means the gap narrows for earnings above the average. However, according to calculations made by the Bank of Israel, the average effective tax rate compares favourably with the OECD average up to quite high levels of earnings and even at extremely high earnings is only slightly above it.¹⁷

16. There are no widely recognised international comparisons of effective tax rates on business similar to those calculated for households using micro-simulations. Business taxation is typically more complex, and it is harder to define representative scenarios than is the case for households.

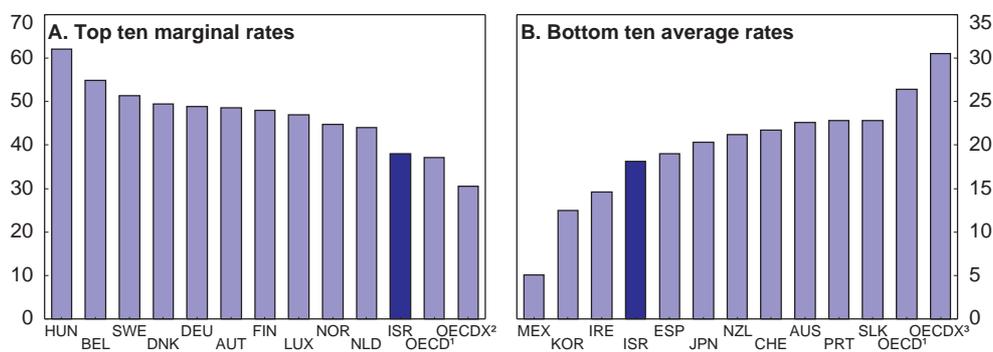
17. According to Bank of Israel (2009, p. 256) the average effective tax rate for a single person earning *ten times* the value of GDP per capita is 42.5% in Israel compared an OECD average of 41.5%.

Table 1. **Key features of taxation for individuals and corporations**

Personal income tax	<p>Personal-income tax rates are fairly progressive. In 2009 these range between 10 and 46%. Couples are taxed separately.</p> <p>“Wasteable” credits are higher for women, and child credits can only be claimed by women. A “non-wasteable” tax credit (the earned-income tax credit) for low earnings has been introduced in certain areas of the country (see Hemmings, 2010b).</p> <p>Payments into the “advanced training funds” (at 7.5% of gross earnings with a cap of NIS 196 000) are tax exempt.</p> <p>There are tax breaks on contribution, accumulation and payout phases of pension-type products.</p>
Employees’ social contributions	<p>Contributions are progressive; there are two rates of 3.5% and 12% of gross earnings, the latter applying on earnings above 60% of average gross earnings. There are several itemised components, including health coverage. Contribution ceilings apply at relatively high income levels.</p> <p>The above does not include mandatory contributions to second-pillar pensions (which are in the process of becoming compulsory for most workers).</p>
Capital gains and other capital-income tax	<p>Gains on the sale of shares and dividend income are taxed at 20% for individuals, unless the individuals are significant shareholders – then the tax rate is 25%. For companies, the tax rate for capital gains is 25%. The profit from the sale of housing can be tax-exempt, subject to certain conditions.</p>
Corporate tax	<p>The current corporate tax rate is 26% and is scheduled to fall to 25% in January 2010.</p> <p>The most notable allowances against corporate income are for spending on research and development (fully deductible, on condition that the deduction is not more than 40% of taxable income). There are some sectoral allowances as well, for example on oil exploration and the entertainment industry. There are also wide exemptions for national priority zones, typically defined according to the geographical location of the investment and encouraging investments in the periphery (Investment Subsidy Law).</p>
Employers’ social contributions	<p>The same two-rate system as for employees applies with rates of 4.14% and 5.68% on gross earnings.</p>
VAT	<p>The VAT rate has been temporarily (until the end of 2010) increased from 15.5% to 16.5%. Various items are exempt: exports, purchases and services in the tourist town of Eilat, hotel accommodation and various services to tourists, air freight or sea freight to and from Israel, sale of unprocessed fruit and vegetables and renting premises for residential purposes.</p>
Other indirect taxes	<p>Additional purchase taxes are levied on cars, alcohol, cigarettes and luxury goods.</p>
Other local taxes	<p>Local authorities impose taxes on residential and business properties, which vary widely depending on the region and type of property involved. Taxes are collected according to the area (in square metres) of the house or business.</p>

Figure 10. International comparison of effective marginal and average tax rates

Single person who earns the average wage, including income tax and social security contribution



1. Unweighted average.
2. OECD average excluding top 10.
3. OECD average excluding bottom 10.

Source: OECD, Taxing wages database.

Third, cuts in headline rates generally reduce tax revenues, at least in the short run. International evidence suggests cuts in headline rates are not typically self-financing through “Laffer curve” effects.¹⁸ Hence, cuts in headline rates have an opportunity cost: deficits could be smaller or spending higher. Furthermore, the immediate negative impact on revenue is reasonably certain, while the magnitude and timing of positive second-round effects in terms of revenue and economic growth are much less so. Thus, even though the latest round of tax cuts is somewhat milder than that originally envisaged, the decision to pass such legislation at a time of extreme economic uncertainty and rising government deficits was somewhat surprising. Although the improved economic prospects of recent months have lessened the downside risks of the cuts, they should nevertheless be adjusted accordingly if progress in deficit and debt reduction is weak or if other priorities should take precedence. Similar to some other countries, some streamlining of tax breaks and subsidies for businesses could help fund cuts in the headline rate and make it easier to benchmark Israeli as a place to invest.

Revenue-raising options in indirect taxation

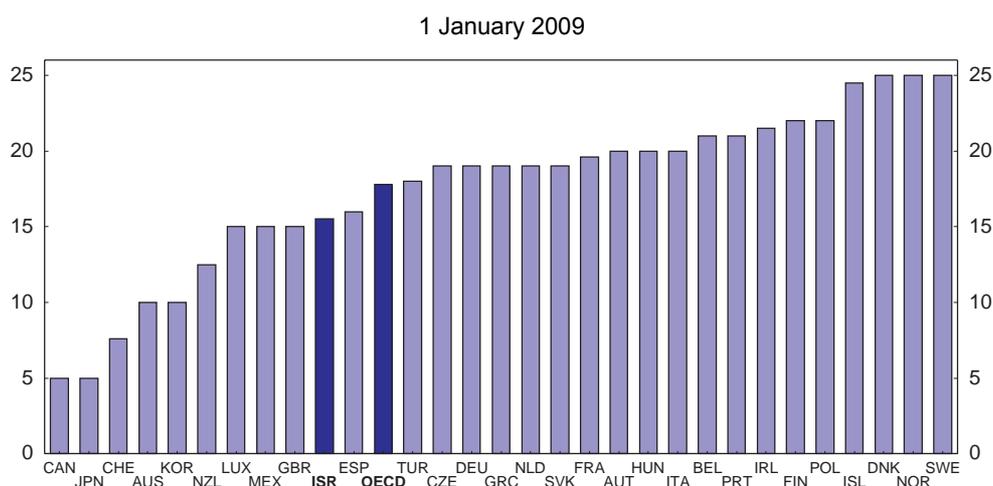
Though indirect taxation already plays a substantial role in revenues, there is room for a degree of expansion. The temporary increase in the rate of VAT to 16.5% could be made permanent, and even increased a little further, as a relatively non-distortionary way of easing budgetary pressures (OECD, 2008). A fairly large number of OECD countries impose standard VAT rates substantially higher than this, suggesting that there is leeway for further rises in the Israeli rate (Figure 11), especially as a large number of additional purchase taxes on “white goods” (household appliances) were removed in 2007.¹⁹ This said, unlike many other countries, Israel has no “preferential” VAT rates and few exemptions in its

18. The Laffer curve describes a theoretical relationship between the optimal tax level and the maximum tax revenue, that proposes an inverted U-shape relationship between tax rates and tax revenues. If the tax rate is on the right side of the peak in the Laffer curve, this implies lowering taxes will increase tax revenue. For example, Trabandt and Uhlig (2006) show that both the United States and the EU15 area are located on the left side of their labour and capital tax Laffer curves, but the EU15 economies are closer to the peak of the Laffer curve. Hence, they find that tax cuts in the EU15 area are much more self-financing than in the United States.
19. The removal of purchase taxes on white goods did not have an obvious impact on revenues. Indeed, according to figures from the Central Bureau of Statistics, total revenue from purchase taxes increased by 7.3% in 2007 and 10.7% in 2008.

VAT base, and this needs to be taken into account in establishing how far the rate could be increased.²⁰ Any increase in the rate should certainly not involve sacrifices in coverage. Indeed, the authorities should revisit outstanding exemptions, notably those for the tourist resort of Eilat and on some tourist services countrywide as well as those on fruit and vegetables. Proposals to remove these were made in the initial rounds of the 2009-10 budget negotiations, but were unfortunately not included in the final budget.

At the same time, the continued imposition of high purchase taxes on cars should be reconsidered, even though these now have an environmental twist. In July 2009 the purchase tax on new cars (which is in addition to VAT) was increased from 75% to 90%, which is very high in international comparison (Reich, 2007). The rate on hybrid cars remains at 30%, while a rate of 10% on electric vehicles has been introduced. The taxes are softened by rebates of up to NIS 15 000, depending on the vehicle's emission characteristics. Despite the tax's new environmental component, the case for such heavy taxation of car purchase is rather weak. Such taxes are attractive revenue-raisers, and justifying them can entail a generous interpretation of their environmental returns.²¹ Unless transport alternatives are easily available, high taxes are unlikely to induce many to abandon car ownership altogether. And they probably encourage many to replace cars less frequently, slowing the introduction of newer, more environmentally friendly, models. Furthermore, in broad terms it makes more sense to target car use, for instance through more recourse to gasoline taxes, road tolls, congestion charges and parking fees. In late 2009 there were welcome signs of a shift in stance on the car purchase tax with the approval of proposals by the Ministry of Finance that include lowering the standard rate from 90% to 83%.²²

Figure 11. Standard rates of VAT in international comparison



Source: Bank of Israel(2009), Statistical Annex of the Bank of Israel Annual Report (2008) and OECD tax database.

20. Calculations of the VAT revenue ratio (VRR) confirm that Israel's VAT has a broad base and high compliance. The VRR is defined as the ratio between the actual VAT revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption. For Israel the ratio is 0.7 which is relatively high, the OECD average is 0.6 (OECD, 2008)
21. Some claim that a substantial share of car taxes is borne by the distributors. If this is indeed the case, it suggests that competition at the retail level may be rather weak. Under the standard model of competitive markets the distributors would not absorb any of the tax because costs are already driven to a minimum efficient level.
22. However, the Ministry of Finance's proposals also include abolition of a tax break on cars with electronic stability systems, which would, to some extent, offset the cut in the purchase tax. The Ministry's proposals also included alteration in the tax treatment of company cars. In late-November 2009, the Ministry's proposals were approved by the Knesset Finance Committee.

The benefits of a general review on tax expenditures

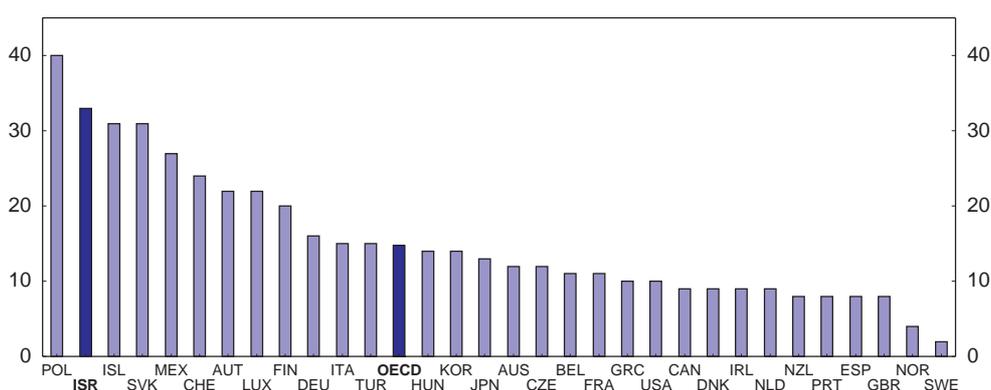
A review of tax exemptions (and other tax expenditures) with a view to streamlining should be made so as to broaden and secure the tax base. Exemptions often accumulate in a somewhat haphazard way over time, each one prompted by specific economic or political considerations. Their continued existence does not always make sense, either because of changes in the economic environment, or because, in combination with other exemptions, they create excessive complexity or distortions. The following features came to and there are probably more:

- Tax support for the “advanced training funds” (Kranot Hishtalmut), which encourage medium-term saving, makes little sense, especially as, despite the name, the savings can be used for a wide variety of purposes (e.g. car purchase). Attempts have been made to remove this exemption in the past but have so far failed.
- Following the agreement on mandatory second-pillar pension savings, the impact of tax incentives *via* credits on contributions is at least partially redundant.
- Tax advantages often form part of targeted support mechanisms for business. As mentioned above some reduction in these could, for example, usefully help fund cuts in regular corporate taxation.

Simplifying tax procedures

Finally, there appears to be room for simplifying tax procedures, and this should be exploited. For instance, a statistic compiled by PricewaterhouseCoopers (2008) shows that the number of tax payments is very high in Israel (Figure 12). Albeit measuring only a single dimension of red tape relating to taxation, the measure is probably indicative of broader complexities. Out of the 33 tax payments, only two are in the field of corporate-income taxation. However, paying corporate-income taxes appears anyway to be a lengthy procedure: Israel ranks poorly in terms of “time to comply”. Labour-income taxes amount to 12 payments and other taxes to 19 payments. Current attempts to simplify tax procedures are welcome; an online income tax reporting system is in effect, and one for VAT receipts is planned for 2010-12.

Figure 12. Number of tax payments in international comparison ¹



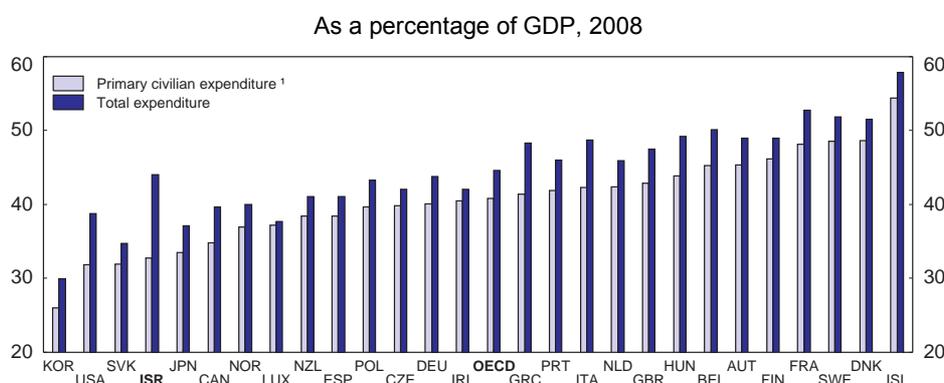
1. The tax payments indicator reflects the total number of taxes and contributions paid, the method of payment, the frequency of payment and the number of agencies involved for this standardised case during the second year of its operation.

Source: The World Bank, PricewaterhouseCoopers, Paying Taxes 2009.

An overview of the challenges in public spending

Interest payments and commitments on defence spending mean there is a sharp contrast between total government spending and that available for civilian public services and transfers. Since the mid-1980s, general government expenditure as a share of GDP has fallen substantially; for example, it was around 70% of GDP in 1985, but 44% of GDP in 2008 – close to the OECD average (Figure 13).²³ However, in the latest available internationally comparable breakdown of public spending, defence accounted for 17% of total spending, which is similar to that on education and higher than that on health (Figure 14). Combined with interest payments on public debt, this implies that primary civilian spending is low compared with OECD countries. As of 2008 it was 33% of GDP, which at that time was lower than the vast majority of OECD countries (Figure 13). Following the recent downturn, Israel’s relative position in international comparison is probably even lower than shown in the chart because, unlike many OECD countries, the policy response to the crisis has not comprised a substantial stimulus in public spending.

Figure 13. Primary civilian and overall government expenditure

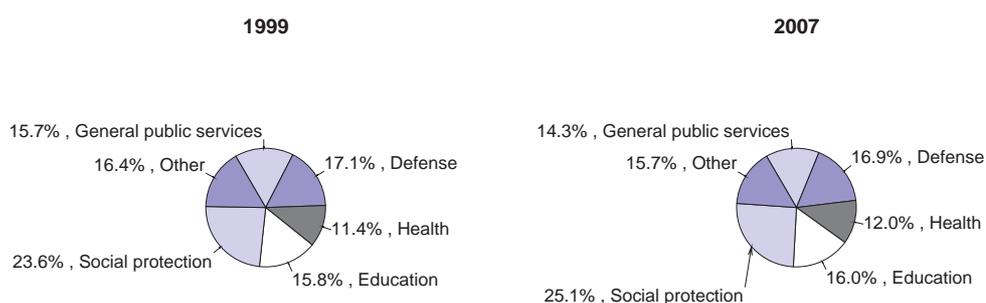


1. Excluding defence and interest payments. Calculation of the primary civilian spending uses an estimate of defence spending for that year

Source: OECD Economic Outlook 86 database.

Figure 14. Government expenditure by functions

As a percentage of total expenditure



Source: OECD, Annual National Accounts database.

The long-term sustainability of public finances is helped by the prospect of a relatively small additional fiscal burden from population ageing. Demographics are favourable and state pension payouts modest. However, aggregate fiscal planning needs to accommodate the costs of sound structural reform

23. See Strawczynski and Zeira (1999) on the process of reducing the relative size of government in Israel.

rather more than in the past. There is little doubt that the drive towards lowering the share of public spending in GDP has begun to excessively compromise infrastructure development, the quality of public services and efforts to tackle relatively high rates of poverty. Indeed, policies to alleviate key structural problems generally involve some “up-front” budgetary costs (albeit with rewards in fiscal savings over the longer term), such as the deal struck with one of the teaching unions (New Horizon), the Lights to Employment (or “Wisconsin”) programme and the new earned-income tax credit.

Innovative approaches to public financing and services should continue to be pursued. Strategies to economise on public spending that are familiar to many OECD countries are already being used quite extensively. Efficiency gains in public administration are being sought through e-government. Income tax declarations and social-security applications can now be made on line, and the public employment service is posting job vacancies on the Internet, for example. Compared with other countries, progress on this front has been reasonably good; Israel ranks 17th out of 70 countries in the United Nations e-government Readiness Index (UN e-government Survey, 2008). In pensions policy, the government’s backing of a recent agreement between unions and employers making second-pillar pension saving compulsory reflects a strategy of trying to limit the fiscal burden of population ageing (OECD 2010). Also, public-private partnerships are being used in some areas, notably for road construction and maintenance. The evident willingness to try new approaches to limit public spending can only be applauded; but innovative mechanisms do require close monitoring and adjustment.

Inefficiencies should be rooted out and dealt with. There is no doubt room for further efficiency gains and cutbacks in public services and transfers, though much of the low-hanging fruit has probably been picked in past economy drives. All avenues should be explored, not simply opportunities for slicing spending but also improvements to operational systems. As of late 2009, the Ministry of Finance was reportedly exploring possibilities for economies in several areas, including staffing levels in government ministries. Also, remuneration and promotion mechanisms in the civil service and in much of the wider public sector emerged as an area that could benefit from reform. Throughout the public sector, systems of allowances are an important component of pay but are often so complex that they obscure the full value of remuneration. In many areas, despite efforts at reform, wage setting and promotion mechanisms remain excessively centralised and too strongly based on seniority. For example, in the education sector progress towards greater flexibility in the teaching profession remains partial and a recent attempt to gain more flexibility in salaries at tertiary institutions by the Shochat Committee failed (OECD, 2010).

Overall, these considerations underscore the importance of making aggregate public-spending and budgetary allocations tie up closely with feasible savings and appropriately prioritised structural reforms. There are indications that such coherence is weak in Israel. There is unusual stability in the composition of expenditure; it has hardly changed since the late 1990s (Figure 14). This suggests a tendency to spread fiscal tightening (or loosening) evenly across ministries. While this may be politically expedient, it is likely to be sub-optimal economically because the marginal costs (or benefits) of changes in the budget undoubtedly differ across the different areas of spending and taxation. As in other countries, there is also an issue of prioritisation between wage and non-wage costs. Cutting jobs in the public sector can be politically difficult, even where the room for cuts is readily apparent. As a result, there is heavy reliance on periodic wage freezes, which make immediate savings but typically involve payback in the future. Such “cycles” in public-sector pay then profoundly influence the pace of other expenditure, such as infrastructure development.

Political realities mean the “across-the-board” approach to public spending is to some extent unavoidable. But it can be ameliorated by expert input and opinion. There are some mechanisms in place already. Notably, the Bank of Israel comments on a range of public-spending issues, as does the State Comptroller’s office. A budgeting system that sets appropriate aggregate outlays and encourages economically sensible structural spending plans can also play a key role.

Avenues for structural improvement in the budget process

Reform of the budget process in the mid-1980s magnified the Ministry of Finance's ability to steer aggregate public spending and heightened its overall influence in policymaking. The Ministry's strong powers are in particular attributable to:

- *A primary role in the central-government budgeting process.* The Ministry, along with the Prime Minister's office, plays a dominant role in defining government positions and in budget preparation. Specifically, the Ministry sets the nominal expenditure envelope at the beginning of the annual budgeting process based on a ceiling for real growth in spending (see below).
- *Tightly defined and controlled budgets for spending ministries.* In fact, the chief accountant's position in each line ministry is staffed by the Ministry of Finance. In addition, there are around 9 000 budget lines, and re-allocation of resources among them, even within a ministry, has to be approved by the Ministry of Finance (Ben-Bassat and Dahan, 2007). Also, the Ministry is able to control spending during the fiscal year by accelerating or holding back the approval process. If approval for reallocation is made towards the end of the budget year, ministries do not always have sufficient time to spend the released resources. This has contributed to "overbudgeting" (or "underspending") in recent years.
- *Limited non-central budgets.* The only significant accounts outside the umbrella of central government are the local-authority accounts, which are subject to strict rules on deficits (Box 4).

Strong "top down" fiscal guidance through deficit targets and a spending rule

Reducing the debt-to-GDP ratio to 60% has been only a discretionary government objective. Reference to this figure started in the early 2000s, and an aim of keeping the deficit below 3% of GDP is also sometimes quoted alongside it. Both figures are clearly an implicit reference to the Maastricht convergence criteria.²⁴ More concrete top/down spending discipline is exercised by multi-year targets on the central-government deficit and, more significantly, by a legislated ceiling on real expenditure growth in the central-government budget. According to the Ministry of Finance, under the assumption of 3.5% real growth starting in 2011, given the current fiscal rules the public debt-to-GDP ratio will converge to 60% by 2019.

Box 4. Local authority financing

There are 229 municipalities in Israel comprising 73 cities, 107 local councils, 47 regional councils and 2 industrial local authorities. Local authorities' responsibilities include: upper-secondary schools, local health care, water and waste management, road maintenance, parks and recreation, and emergency services. Legislation, national regulation and the earmarking of transfers mean that for some services local authorities have only limited discretionary powers.

The Ministry of the Interior is the primary government institution in charge of relations with the local authorities. In co-operation with the Ministry of Finance, the Ministry approves the local authorities' budget and audits their accounts. Authorities that fail to meet certain budgetary performance criteria are put under administration (under a so-called "fiscal recuperation" programme) and are, in effect, run by a state accountant. There are currently 30 local authorities – mostly municipalities with predominantly Arab populations – in this position.

Local authorities derive their income from two sources: own revenue (65%) and intergovernmental transfers (35%) in the form of grants from line ministries (24%) and from the Ministry of the Interior (11%). Property taxes and fees are the main sources of locally generated income. Transfers include earmarked transfers and general grants

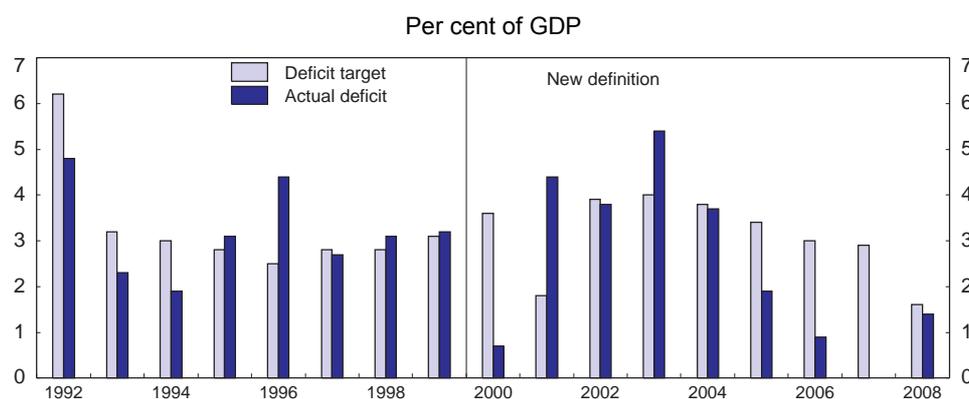
24. Successive governments have endorsed the guidelines of the Maastricht criteria as principles for monetary and fiscal policy in Israel (Barkai and Liviatan, 2007).

made by the Ministry of Interior and other line ministries. Most of the earmarked transfers originate from the Ministry of Welfare and the Ministry of Education and account for about half of the budget of local authorities. In addition, the Ministry of Interior provides three types of general grants to local authorities: balancing grants, development grants and fiscal recuperation grants. Balancing grants are a fiscal equalisation tool aimed at enabling every local authority to provide basic services, whereas development grants are meant for specific local projects. Fiscal recuperation grants are given to local authorities that have accumulated deficits exceeding 17.5% of the budget and are engaged in a fiscal recuperation programme. Municipalities can borrow for investment (this is typically for infrastructure), but total outstanding loans are not allowed to exceed 75% of own revenue (including grants) in any fiscal year.

Since 2001, local authorities that fulfil certain performance standards related to fiscal stability have been granted more independence from central authorities. These standards are evaluated based on a series of indicators. In particular, they have been exempted from obtaining Ministry of the Interior approval with respect to wages, hiring, bank loans, enactment of municipal by-laws and other regular operations. By 2008, 62 local authorities had been granted this status.

The deficit targets originate from the 1992 Deficit Reduction Law that was prompted by the strong fiscal pressures from immigration described above (Brender, 2007). The original law required that the targeted budget deficit, as a percentage of GDP, decrease each year during the period 1993 through 1997 and was quite effective. Although the law has been updated, the mechanism has become a somewhat less powerful disciplining device. New governments revise the targets when coming into office and publish them as part of their overall policy programme but can, and often do, revise them later. In fact, all of the multi-year deficit target plans adopted by the Knesset have been replaced before reaching the end of the planning horizon, and four out of five revisions have loosened the targets (Figure 15).

Figure 15. **Actual budget deficit and deficit target of the central government**¹



1. Excluding net credit.

Source: Stanley Fischer and Karnit Flug (2007), *The Role of Rules in Fiscal Consolidation: Fiscal Rules in Israel since the 1990's*.

In comparison, the ceiling on real growth in budgeted central-government spending is quite stringent. It was legislated in 2004 and initially set at 1.0% and then increased to 1.7% from 2006 onwards. The latter figure was apparently chosen because it roughly equals expected population growth, thus implying the rule maintains a constant real level of public spending per capita. Importantly, the ceiling is used to set the envelope for total spending early on in the annual budgeting process, making it a fairly powerful tool for maintaining fiscal discipline.

Prima facie, the spending rule is simple and apparently allows little room for discretion – but this is not so in practice. *First*, “one-off” spending items (referred to as “boxes” by budgeting experts) have sometimes been excluded from the ceiling calculation. Because these items are still included in public spending, the increase in *total* real spending can be different from the limit. For instance in 2009 new “boxes” mean that the budgeted real spending is estimated to be 3% while the removal of these items in 2011 is expected to imply a real increase of just 0.4%. *Second*, calculation of the *nominal* spending

envelope (which is obviously necessary for budgeting purposes) is complex. It is based on a formula that uses the Ministry of Finance's consumer-price inflation projections and includes a correction mechanism (Box 5). Of particular note:

- The efficacy of the correction mechanism depends heavily on the underlying statistical properties of the Ministry of Finance's inflation projections. If they are accurate, then it implies the price index implied by the formula does not stray far from the actual CPI. If not, then the correction is just adding undesirable noise. Parenthetically, it is unlikely that this issue can ever be properly gauged. Because the projections are made only annually, there is not enough data being generated to evaluate their contemporaneous quality using formal statistical methods.
- Cost increases in public spending (*i.e.* the deflators on spending) are unlikely to coincide with CPI growth, and so the true "real" increase in public spending will generally differ from the rule. For instance, if the CPI-deflated public-sector wage bill is set to increase by more than 1.7%, then other spending is relatively squeezed and *vice versa*.
- The Ministry has room for manoeuvre: for example, it appears to have departed from strict application of the formula on a discretionary basis in 2008.

Box 5. The calculation of the budgeted spending increases from the real spending ceiling

Conversion from real expenditure growth ceiling (currently 1.7%) into a nominal increase (which is of course needed for budgeting) includes a correction mechanism as follows:

$$E(t + 1) = 1.7 + \text{CPI}(t + 1, t) + [\text{CPI}(t, t) - \text{CPI}(t, t - 1)],$$

where $E(t + 1)$ is the percentage nominal spending increase in the next budget year, and $\text{CPI}(x, y)$ is the projection of annual consumer price inflation index for year x made by the Ministry of Finance in year y .

The correction mechanism is the third component of the equation. It is the difference between the Ministry's latest projection for the current year's inflation and what it had projected in the previous year. The mechanism implicitly assumes that the latest inflation projection for the current year is better than that made one year earlier, and that it reasonably accurately predicts the outcome.

The Ministry appears to have some leeway for discretion in addition to the "boxes" described in the main text. By way of an example, for the draft 2009 budget (that did not eventually get passed by the Knesset) the Ministry's 2008 forecast projected CPI growth at 3.9 and 1.8% for 2008 and 2009, respectively, while its 2007 forecast had projected inflation for 2008 at 2.2%. According to the formula this implied a nominal increase for 2009 of $1.7 + 1.8 + (3.9 - 2.2) = 5.2\%$. However, the Ministry actually proposed a nominal increase of 3.4 on the basis of a one-off adjustment in expenditures (worth 1.4 percentage points) and used of a figure of 2.6% instead of 2.2% for the 2007 forecast of the CPI increase in 2008.

The case for changing the spending rule

The combined system of deficit targets and the expenditure rule is outwardly simple, which helps communicate the importance of fiscal consolidation to the public and facilitates political debate. Also, it is appropriately stricter on the spending side and somewhat tolerant of missed deficit targets. This allows revenues to act as an automatic stabiliser in the event of downturns, as well as upturns – as exemplified by the current recession.

Nevertheless, changes to the spending rule of a least a technical nature will be needed at some point. In its current form the rule is unsustainable in the longer term. Because the ceiling roughly equals

population growth (*i.e.* 1.7%), this means the share of spending in GDP will be driven down through trend growth in real GDP per capita. A long-term growth rate of, say, 2.5% in real GDP per capita (not implausible for Israel) implies eroding the share of spending in GDP by approximately 0.8 percentage points per year.

Arguably, the alteration of spending rule should not be limited to parametric changes. Under the present rule, the complexities and discretionary leeway in its application undermine its outward simplicity; the lack of any cyclical adjustment is less than ideal; and it is not directly anchored to a long-term fiscal goal. Various formulations have been suggested that would vary the ceiling according to performance relative to a downward sloping debt-to-GDP path. The ceiling would be lowered if the debt-to-GDP ratio is above the target path and increased if below. Such mechanisms would certainly improve on the current rule but ought to include some form of cyclical adjustment. Otherwise the rule would imply pro-cyclical bias, *i.e.* fiscal contraction during downturns and *vice versa*.

Any new rule needs to be as simple as possible, credible and politically robust. As with all such mechanisms, significant complementary political commitment to consolidation is required for it to work. If this is not the case, there are usually technical ways around even tightly legislated mechanisms, and policymakers can anyway ultimately either ignore the rule or change it. Some countries (for example, Germany and Poland) have enshrined fiscal rules in their constitutions, which does make breaking the rules more difficult but is widely regarded as excessively rigid. The best way forward is therefore to ensure that any rule is fully endorsed by key players in the political system, in the hope that reputation effects will bolster commitment to implementation.

Other avenues for improving the budget process

The evidently strong “top/down” fiscal discipline could be usefully augmented by measures that encourage better “bottom/up” budgeting (principally by improving spending proposals made by line ministries) and increase transparency. In particular, the following might be considered:

- *Reduction in the number of budget lines.* The number of budget lines seems extraordinarily high (although it has decreased from over 13 000 to 9 000 in recent years), and it is likely that at least some reduction would not cause undue loss of control by the Ministry of Finance. It should be noted that according to the Ministry of Finance, it has only limited scope for cutting the number of budget lines and that the initiative for substantial cuts would have come from the line ministries themselves.
- *Strengthening the multi-year perspective in budgeting.* At present there are only light requirements for ministries to outline strategy and spending plans beyond the next budget year. Background information on long-term budgeting plans is sometimes provided in budget submissions but is not compulsory (Table 2). More demanding rules, for instance requiring ministries to justify their spending requests for the budget year in the context of a multi-year plan, could enrich budget discussions with the Ministry of Finance and improve the quality of public spending.
- *Increased transparency.* Much of the budget material currently submitted to the spending ministries and the Knesset is highly complex. Reduction in the number of budget lines would in itself help. Also, cuts in unnecessary detail and the provision of more summary information would help civil servants and politicians comprehend and debate the budget more effectively. According to the Ministry of Finance, some steps along these lines are being taken, notably with the introduction of explanatory documents to accompany each item of the budget, more detail on

the budget publically available on the internet and greater consultation with the Knesset Finance Committee.

- *Introduction of a periodic obligatory report on the sustainability of public finances.* This would help to monitor progress on fiscal consolidation. For example, to ensure budgetary discipline member countries of the European Union submit an annual report. For Israel, such a report could be drafted by each government at the start of its term of office and describe the medium- to long-term budgetary strategy, preferably over a horizon of at least 20 years. The report could: *i)* describe and assess the impact of current policies on public finances; and *ii)* provide an analysis of how changes in the main economic assumptions would affect the long-term fiscal position.

Table 2. **The central government's budgeting process**

June	The annual budget process is initiated by the Budget Department of the Ministry of Finance, which co-ordinates budget discussions with other ministries. At this time, the Ministry publishes its annual economic projection that is used to calculate the nominal spending increase according to the real expenditure ceiling (see above).
September, October	Details of the budget are finalised within the government.
By the end of October	The budget bill, together with supporting information, must be submitted to the Knesset for its approval. When the government submits the annual budget to the Knesset, it is required by law to submit a three-year projected budget. However this is non-binding and therefore does not require Knesset approval.
No later than end of the calendar year	After discussions on the budget between the Finance Committee of the Knesset and the by ministers and officials, the annual budget law is required to be approved by the Knesset.
31 December	Fiscal year ends.

The case for (and against) devolving power from the Ministry of Finance

In principle, a system that provides the line ministries with more budgetary powers would be better, not least because it may result in policies that more closely reflect the priorities of individual ministers and therefore more closely echo the public's preferences. Technically, devolution of budgetary powers could be achieved by, for instance, by dramatic reduction in the number of budget lines, combined with relaxation of rules on re-allocation.

But there are valid counterarguments to such a proposal. *First*, there are practical reasons why devolution could not proceed quickly. The lack of executive power in line ministries has eroded in-house expertise, such that the Ministry of Finance can claim with some legitimacy that the other bodies lack the means for developing policy. Devolution of budgeting and policymaking powers might require significant re-structuring of the civil service with the transfer of substantial numbers of key Ministry of Finance staff to other ministries. *Second*, the Ministry's powers are arguably a necessary foil to the idiosyncrasies of Israel's democratic system. Minor coalition parties are often anyway relatively powerful because their Knesset seats are necessary to the government retaining office. Hence, if devolution of budgetary powers gave them more influence, this might even shift policy further away from that of majority public opinion, rather than closer to it.

A more devolved structure might be made more workable if a “fiscal council” were introduced. Several OECD countries have set up independent bodies charged with conducting surveillance on budgeting and fiscal policy. For example, in Sweden the fiscal council (Finanspolitiska rådet) is an independent agency with eight members appointed by the government for three years. The members of the council are mostly academic economists. The council typically reports to government once a year during the pre-budget discussions. It focuses on: *i*) consistency between government budget documents and long-term sustainability of public finances, the budget surplus target and the multi-annual expenditure ceiling; *ii*) alignment of policy objectives; *iii*) how well budget documents explain and justify the fiscal policy stance; and, *iv*) the quality of forecasts and the models used to generate them (*Report of the Fiscal Policy Council, 2009*). A judgement whether such a council is indeed appropriate in the Israeli context would necessarily have to include an assessment of how it could usefully dovetail with the existing bodies that monitor fiscal policy.

Box 6. Summary of recommendations on macroeconomic policy frameworks

Monetary policy

- The prospect of the latest draft legislation for the Bank of Israel making it into the statute books can only be welcomed.
- Foreign-exchange reserves are now more than adequate. A “clean float” as regards the exchange rate should be readopted as soon as possible.

Tax policy

- Although cuts in corporate- and personal income-tax rates have beneficial effects on business activity and labour supply, they need to be put into context, and a degree of caution is required in pursuing them.
- The temporary increase in the rate of VAT to 16.5% could be made permanent and even increased a little further. Abolition of VAT exemptions for the tourist resort of Eilat, fruit and vegetables and on some tourist services should be revisited.
- The continuation of high purchase taxes lacks strong justification. Environmental taxation would be better targeted on car use (for instance, through more use of road pricing) rather than ownership.
- A review of tax exemptions (and other tax expenditures) with a view to cutbacks should be made so as to broaden and secure the tax base. For instance, tax support for the “advanced training funds” makes little sense.
- There appears to be room for simplifying tax procedures (the number of taxes due, in particular), and this should be exploited.

Public spending

- Aggregate fiscal planning needs to accommodate the costs of sound structural reform rather more than it has in the past.
- Innovative approaches to public financing and services, such as e-government and public-private partnerships, should continue to be pursued.
- Inefficiencies should be rooted out and dealt with; for instance, remuneration and pay scales in the public sector appear to be ripe for reform.

Budget processes

- At least technical changes to the spending rule will be needed at some point, and arguably it should anyway be replaced by a formulation anchored in a long-term debt-to-GDP goal with adjustment for the cycle.
- “Top/down” fiscal discipline should be augmented by a reduction in the number of budget lines, strengthened multi-year perspective in budgeting, increased transparency in the budget documents and an obligatory periodic report on the sustainability of public finances.
- A “fiscal council” along the lines of that, for example, operating Austria, Sweden, Canada and the Netherlands, might be considered; it could help devolve power from the Ministry of Finance.

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